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QUALITATIVE RESEARCH REPORT



## What does it take to graduate? A qualitative exploration of the perceptions of successful physiotherapy graduates from one university in the UK

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### ABSTRACT

Little is known about the complex factors that underpin persistence and success for preregistration physiotherapy students. This article presents findings from a qualitative study which explored the perceptions of eight recent graduates from one UK university about their experiences of their physiotherapy undergraduate degree program, and what they considered important in their success. Data were collected via one-to-one, semi-structured interviews. An in-depth thematic analysis was undertaken from which three overarching themes were inferred. First, successful learning was portrayed as a fundamentally social activity, embedded in tight learning communities of peers and tutors which conferred a firm sense of belonging. Second, participants recalled having a strong sense of commitment to their future identity as physiotherapists which may have helped them to resist some of the difficulties they encountered as students. Finally, a minority of these successful participants reported overcoming hardship on clinical placement by drawing on a range of personal and institutional resources. Crucially, these successful students' sense of belonging, and their alignment with the norms and values of the program, may have been critical to accessing and using these formal and informal resources.

### ARTICLE HISTORY

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### Introduction

Approximately 8% of students leave higher education programs in England in their first year of study, while up to 42% consider leaving (Thomas, 2012). Students who think about leaving university report less satisfaction with their university experience compared to their peers, less engagement with their peers and their institution, and commonly refer to problems fitting in to university life, feelings of social isolation, and worries about their potential to achieve their future aspirations (Thomas, 2012). Uncertainty about the ability to study, absenteeism, lack of ambition, and feeling anonymous in the university setting may also contribute to attrition (Georg, 2009).

Little is known about attrition in physiotherapy education. Entry to physiotherapy programs in the UK is highly competitive, and yet an attrition rate of 17% (approximately 1 in 6) has been reported for first year physiotherapy students at one university in the UK (Ryan, Poitier, Sherwin, and Cassidy, 2018). Physiotherapy students may face high levels of academic and personal stress (Tucker, Jones, Mandy, and Gupta, 2006; Walsh, Feeney, Hussey, and Donnellan,

2010), but the reasons why, despite these pressures, most physiotherapy students persist while others discontinue their studies have not been extensively investigated.

University students who stay at university tend to report a better understanding of university processes, and positive relationships with peers (Bell, 2014; Thomas, 2012), as well as meaningful, frequent and sustained interactions with their tutors (Bell, 2014; Richardson and Radloff, 2014; Thomas, 2012). Previous experience of university-level study and university life, as well as a history of success in higher education, are also associated with persistence (Mørcke, O'Neill, Kjeldsen, and Eika, 2012). A sense of vocation, friendship groups, personal resilience (Williamson, Health, and Proctor-Childs, 2013), high levels of motivation and determination, active engagement in learning, and effective support systems (Bell, 2014), as well as critical thinking skills, and support-seeking behaviors (Pitt, Powis, Levett-Jones, and Hunter, 2012) are thought to be instrumental to student nurse retention. These attributes are not necessarily closely linked with pre-entry qualifications, but higher admissions qualifications and higher admissions

scores are associated with a stronger likelihood of course completion for students studying medicine and nursing (Maslov Kruzicevic et al., 2012; Mørcke, O'Neill, Kjeldsen, and Eika, 2012; O'Neill, Wallstedt, Eika, and Hartvigsen, 2011; Pitt, Powis, Levett-Jones, and Hunter, 2012; Pryjmachuk, Easton, and Littlewood, 2009).

A strong sense of belonging which relates to a student's sense of connectedness to the institution is also critical to student retention and success (Moore, Sanders, and Higham, 2013; Thomas, 2012). High levels of staff–student contact, respect for diverse learning styles, supportive peer relationships, and meaningful interaction between staff and students are thought to be key ingredients for developing a sense of belonging (Thomas, 2012). The constituents for success are therefore strongly embedded in the learning culture of the university, rather than the personal attributes of individual students. The people who shape the institution, in terms of its cultural, structural, attitudinal and environmental contexts, are thought to play a significant role (Beer and Lawson, 2017; Ramsden, 1992; Thomas, 2012; Tinto, 2006; Urwin et al., 2010).

Emotional commitment, long-term career goals, and activities that strengthen the development of an academic and scholarly identity are thought to have a strong impact on retention and persistence (Whannell and Whannell, 2015). Commitment to a particular identity is thought to connect a person to a stable set of self-meanings which in turn produce consistent activities and behaviors that work to sustain that identity (Burke and Reitzes, 1991). Rewards and positive evaluations of the student identity (i.e. passing academic assessments) strengthen the cognitive basis of identity formation, while connections with others as sources of “we-ness and warmth” strengthen the socio-emotional basis (Burke and Reitzes, 1991, p. 245). This understanding of the importance of the socioemotional as well as the cognitive aspects of identity commitment may be relevant to physiotherapy students who aspire to a particular professional identity at the same time as taking on a specific student identity.

Attrition has a negative impact on students, institutions, professions, and society (Maher et al., 2013). While some degree of attrition in healthcare programs is inevitable, and ethically and professionally appropriate if standards of practice are to be maintained (Urwin et al., 2010), even modest attrition from physiotherapy qualifying programs will have an impact on workforce planning and may have serious consequences at a time when demand for physiotherapists exceeds supply (Chartered Society of Physiotherapy, 2016; Landry et al., 2016). Little

attention has been given to understanding retention and success from the perspective of physiotherapy students. However, it is unlikely that answers will be found simply from understanding the causes of attrition (Urwin et al., 2010). This study therefore aimed to explore the perceptions of recent graduates about undertaking a physiotherapy undergraduate degree program in one university in the UK, and to understand what these participants considered important in underpinning their success. For this study, success was defined as completion of the program, in the usual timeframe or following delay, culminating in the award of a Bachelor's degree (BSc) in physiotherapy.

## Methods

### *Theoretical perspective*

Qualitative research methods are appropriate for exploring complex subjective experiences which are embedded in particular personal and sociohistorical contexts (Packer, 2011). We asked physiotherapy graduates to talk about their previous lives as student physiotherapists. The accounts were therefore constructed at a distance from actual events, and offered an historical version of a specified period in participants' recent but past lives, as perceived from the perspective of the present. It is therefore understood that the remembering-self in this situation is not the same as the historical-self who participated in these recalled events (Neisser, 1994; Sparkes and Smith, 2008). Consistent with our contextualist and critical realist position (Madill, Jordan, and Shirley, 2000), we recognized that participants would offer multiple different accounts and interpretations of their experiences, and that broad social contexts would impinge on these understandings. We expected some of the findings to converge, but we also anticipated divergences. These divergences would reside in the particular contexts relevant to each participant. We also understood that what was “real” for each of them (i.e. their experiential claims) would differ across these contexts. The temporal dimension at play in the recall and reconstruction of the past, and the interaction between the researcher (s) and the participant(s), and the researcher(s) and the data, means that the accounts were inevitably co-constructed, and are not representative of an assumed underlying or general “truth” (Packer, 2011). The findings of such studies are therefore local, selective, provisional, and partial, bounded in time and place in the contexts from which they were drawn. Nonetheless, findings derived from qualitative research may

challenge everyday assumptions and beliefs, and have the potential for practical application (Packer, 2011).

### **Research ethics procedures**

Research ethics approval was granted by the University Research Ethics Committee. An independent researcher, in his early thirties, experienced in undertaking qualitative research in youth and community work, but with no direct experience of working with students on healthcare programs, recruited and interviewed participants, and transcribed and fully anonymized the accounts. This approach was adopted so that participants would not feel obliged to participate by being directly contacted by their former tutors, and so that they could speak freely during the interview. A detailed information sheet was provided electronically prior to participation in the study, and questions about the study were answered via email or telephone. All participants gave written informed consent. The independent researcher assigned pseudonyms and blurred other personal information to preserve the anonymity of participants, as well as staff who may have been mentioned by name in the interview.

### **Recruitment**

A purposive sampling strategy was used to recruit former students who had completed the 3-year, full-time, BSc (Hons) Physiotherapy program within the previous 6 years, a period of stable program design and curriculum provision. This period of time was considered recent enough to the direct experience to facilitate engagement with the remembering-self which is consistent with the theoretical perspective. As it is not unusual for students to experience some disruption to their studies e.g. for personal reasons or reassessment, students who did not complete the program in the typical timeframe but who ultimately met qualifying standards, and graduated with a BSc (Hons) Physiotherapy, were included. Participants were recruited via an advertisement posted on a social media site for alumni of the physiotherapy program at the host university, as well as via emails sent to all program alumni for whom the contact details were available. Participants were encouraged to use snowballing techniques (Sadler, Lee, Lim, and Fullerton, 2010) to contact other potential participants who did not respond to, or might not have accessed, email and social media recruitment strategies.

### **Data collection**

Data were collected via one-to-one semi-structured interviews. This method afforded latitude with respect

to what was talked about in the interview and is consistent with our commitment to prioritize participants' perspectives over and above what might already be considered known about the topic. The first interview acted as a pilot to check the utility of the interview guide and the acceptability of the questions. As no significant changes were made to the content or structure of the interview schedule, data from this first interview were incorporated into the final analysis. Each interview began with a "grand tour" question inviting participants to tell the interviewer about themselves and why they chose to study physiotherapy. Other broad questions focused on what participants found most and least enjoyable about the program, their views about why some students did well while others failed or discontinued their studies, and perceived differences between campus-based studies and clinical placements. Further questions were asked to probe the emerging account, and to elicit views about friendships and relationships with academic staff, and the impact of other commitments such as work or caring responsibilities. See [Appendix A](#) for the semi-structured interview guide that informed each interview. Interviews ranged from 26 to 60 minutes (median 34 minutes).

### **Participants**

Eight former students, two men and six women, were interviewed; one face-to-face and seven telephone interviews. All participants successfully completed the full-time Physiotherapy BSc (Hons) program no more than 6 years prior to data collection. Half the sample reported academic failure in one or two assessments at the first attempt. None had a previous degree. One participant had started a previous degree in a health-related field but voluntarily withdrew in the first year of study. At the time of the interview, all participants were in clinical practice, working as qualified physiotherapists. [Table 1](#) provides further details.

### **Data analysis**

The first phase of analysis involved EC, MN, and the independent researcher discussing the transcripts, and eliciting perceptions and insights that had been gained through undertaking the interviews and transcription. As an outsider, a person who is not familiar with the context, setting, or people involved in the research (Hellawell, 2006), we were not looking to the independent researcher for his "uncontaminated" or "objective" view, but through our discussions, we hoped to open up dimensions of understanding that, as researchers familiar with the field,

Table 1. Participant characteristics.

Participant (pseudonym)	Duration of interview (minutes)	Gender	Age at start of training	Completed training	First choice university	Mode of study		Work experience prior to training	Family	Self-described Ethnicity	Extra-curricular commitments
						Academic	Mode of study				
Sumi	30	Female	18 yrs	2012	Yes	Year 1 on campus Year 2 off campus	FT	Not reported	No information	Indian	Worked part time
Tom	60	Male	21 yrs	2012	No	Year 3 at home Year 1 on campus Year 2 off campus Year 3 on campus	FT	Yes	Siblings went to university	White British	Tried not to work as committed to studies
Shalini	26	Female	19 yrs	2012	No	Year 1 on campus Year 2 and 3 with family	FT	Yes	Sibling went to university	Asian-Indian	Nothing regular
Katie	32	Female	18 yrs	2008	Yes	Year 1 on campus Year 2 and 3 off campus	FT	Yes	Sibling went to university, parents no HE	White British	Worked part time
Prakash	30	Male	19 yrs	2008	No	At home all years	FT	Yes	Siblings went to university. Parents no HE	British Asian	Worked weekends
Anna	35	Female	18 yrs	2012	No	Year 1 on campus Year 2 off campus Year 3 on campus	FT	Yes	Sibling went to university. Parents no HE	White British	None
Mel	35	Female	18 yrs	2011	Yes	Year 1 on campus Year 2 and 3 off campus	FT	Yes	Parents and siblings attended university	White other	Sports team in final year. No part-time work
Jo	40	Female	18 yrs	2010	Yes	Year 1 on campus Year 2 off campus Year 3 on campus	FT	Yes	One parent and siblings attended university	White European	None

FT = full time; HE = higher education.

we may have overlooked. This approach is consistent with Hammersley's (1993) view that "the chances of findings being valid can be enhanced by a judicious combination of involvement and estrangement" (p. 433). Following this first phase of analysis, further analysis was undertaken by EC and MN, both women in early mid-life, physiotherapists, qualitative researchers, and academics. Reading and re-reading the interview transcripts helped to familiarize the researchers with the participants' perspectives. EC led the in-depth analysis, using a thematic approach (Braun and Clarke, 2006, 2013) which involved coding all the data relevant to the research aims, through identifying words or phrases that captured the essence of what was being said. Memos were used to record emergent ideas and interpretations. Patterns of recurring features in the data were clustered together and used to construct candidate themes. Using a critical reflexive approach (Shaw, 2010), candidate themes were discussed with MN and reviewed for coherence before agreeing the final overarching themes. MN's role was not to verify the analysis as a "truthful" account but to engage in a critical dialogue (Greenhalgh, 2014) which opened up the analysis, questioned the interpretations, and ensured that the final analyzed account was grounded in the data. We were aware that, as lecturers in physiotherapy, we would have certain expectations about topics that may have been discussed during the interview, and that our assumptions about what makes a successful student may influence data analysis. As far as possible, we attempted to acknowledge our preconceptions, but informed by an understanding of interpretation as a double hermeneutic (Smith, Flowers, and Larkin, 2009), critical reflection of these prior-understandings, rather than absolute bracketing, and immersion in the data, allowed us to refine what we thought we already knew and created the space for new understandings to be inferred during the analysis.

## Findings

Three overarching themes, inferred from the analysis, captured the most important perspectives recounted by participants during data collection. The contents of each theme, and its relevance to the participants in this study, are presented below using written commentary and direct quotations selected for being the most powerful and illustrative of the topic.

Theme 1 "You're so Close to the People you're Working with": Tight Friendships, Genuine Respect; Catalysts for Successful Learning

Physiotherapy undergraduates spend between 20 and 25 hours a week in the classroom; nearly double that of students on typical non-clinical undergraduate

programs (Crosbie et al., 2002). Practical, hands-on learning is prioritized from the beginning of the first term. Extending beyond the lecture theatre, physiotherapy students learn on each other by working together and practicing hands-on skills in small groups. In this context, the students themselves become resources for learning; everyday movements are critically observed and analyzed, limbs are moved and palpated. High contact time therefore not only refers to time spent in the classroom with others but also physical contact time spent practicing-on and practicing-with each other. The intertwining of learning about, alongside, and on other students was described as an essential feature of the successful preregistration physiotherapist:

Anna: *You get to know your cohort so well, you know, in the first couple of weeks you get to know each other's arms and legs and all that. I felt it was really good for you. In our year we had a group where we set up practicing together, or going out [socially] together in a slightly smaller group, so I definitely felt that you got to know your fellow students quite well.*

Anna referred to two ways of "knowing," first, in the sense of social knowing, making friends with other students on the program, learning about each other in social settings, and enjoying non-academic time together, and second, acquiring knowledge with others in learning groups and about fellow students as a living anatomy ("arms and legs and all that"). She emphasized that working and socializing were woven together, constituting the fabric of her everyday life. Learning was regarded as a social activity. There is also a sense that the students were at ease with each other, inside the classroom as well as outside. These relationships, shaped in the early weeks of the program, were identified as important in the majority of accounts, and formed one of the consistent features of these successful students, as emphasized by Katie:

Katie: *With physiotherapy, because we had a lot of practical sessions, which people really enjoy and are really interested in, I think it made us quite a close network of friends. Not only were you doing something that you enjoy but also because you're so close to the people you're working with, you enjoy it even more. You see each other a lot, everything is quite laid back, the whole teaching style there is, I don't know, very group orientated, which is good because it makes you work within the team [...] The practical sessions, the group feel, you really connect.*

Similar to Anna, Katie emphasized the quantity of practical classes and how she saw these function to bring students together. By referring to networks, teams, closeness, and connectedness in this account, Katie placed an important emphasis on the strengths of the bonds between fellow students. As with other accounts, the stress was on tight friendships rather than casual acquaintances. Katie also highlighted the atmosphere in the classroom as relevant in this context, and as with Anna, she described being at ease and relaxed in class. Katie, and others, described a collaborative learning environment held together by shared interests and commitments, as well as a sense of belonging and enjoyment that stemmed from the being and doing of learning to be a physiotherapist with similar others.

The development of strong friendships with fellow physiotherapy students in academic and non-academic social environments seemed typical of the experiences recounted by the majority of participants in this study. For these successful students, working together became a habit, a way of being:

Jo: *we always went to the library together, always worked together.*

Mel: *We used the library study rooms, we were always booking them, I think they had 12, and we had a study group going, and then also we would book out the practical rooms, with the equipment and we were practising there.*

Interviewer: *What helped you get through the course?*

Mel: *The people that I studied with. I found it quite difficult going to the library and studying by myself, so you know, working in a group was very motivating. And people would make you go and do your work. And it can also be quite enjoyable, you know, a bit more social.*

Jo: *I was really enjoying it. It was a struggle, but my friends ... we all worked as a team. And we all, because, I think, because of the support we all gave each other, it helped us. Because everyone was in shock in the first year, and so again, because of the support that we got from one another, teaching each other you know, in a library, and having a discussion ...*

Sumi: *especially in the first year when uni is quite new, and loads of new topics and stuff like that, and you just meet up [with your friends] and go through them, during exams and, you just help each other. I was mostly hanging out with people in my [class] group, meet up and go through things if you weren't sure about things.*

Participants also recalled the lengths fellow students went to support each other:

Jo: *if I missed the lecture [...] my friend would sit with me and talk me through the whole lecture. Some people would even, one boy would record them, and he would send you the recording.*

The experiential claim here attests to the generous assistance offered by other students. Close friends did not just lend lecture notes but would spend time carefully helping Jo to make sense of the complete lecture. Jo seemed to be making a particular point that students who were not necessarily in the same friendship groups would still make a special effort to help another student.

A shared knowledge and experience of the rhythms of the physiotherapy program, its flow of work and stress, also enabled students to support each other in a way that students on other programs could not:

Anna: *having friends on the course definitely helps because they are the people who are going through the same stress as you, essays and placements etc., so you have someone who knows what you mean.*

By contrast, friends outside the program provided a means of decompression, a way of escaping from the "little bubble," (Mel) of physiotherapy:

Anna: *having friends from different courses is also important, cos it means you're not always switched on physio, you could just switch off and have a conversation about, you know normal things, and catch up and get grounded and not be too driven by the same thing all the time.*

Tom: *we chose to live in rooms next to each other, we just wanted to have ... we didn't want to be purely with other physios cos we thought we'd never have anything else in our life, but we wanted to live with another physio who understood what we were going through.*

These quotations reveal that while a focused commitment to physiotherapy may have characterized these successful students, they also looked to fashion a sense of equilibrium between physiotherapy and other interests. It suggests that these successful students were able to balance perhaps intense in-group learning with outside interests. Jo's account suggested that not all successful students were able to as effectively manage competing social and academic demands, but as indicated above, she believed her friendship groups and study groups provided valuable support:

Jo: *I struggled a lot in fact, you know, trying to get into the routine of ... trying to manage the social life,*

*and campus life ... it's very difficult ... very hard ... I did struggle.*

Tom's account (above) suggested that those inside the program were best placed to understand the particular program-related difficulties faced by students and to offer support. Subject tutors and personal tutors were not seen as insiders in the same way. However, all participants suggested that tutors possessed key personal qualities that also made it possible for students to seek support not only at a time of crisis but at any time, inside or outside the classroom:

Prakash: *the teaching staff, they were really good, very friendly and helpful, very approachable as well [...] you were not just another number.*

Mel: *Really, really helpful. You know, very approachable, I felt confident enough to discuss other issues besides physio. Generally she [personal tutor] seemed to care, and really made you feel at ease. Physio is a very stressful course to do, and I think at one point or another everyone goes through a little bit of a wobbly phase and when I did my personal tutor was brilliant about it.*

Elsewhere in her account, Mel talked about course-related factors such as the intensity of the course (i.e. the number of contact hours per day and per week compared to other courses) and its potential to test her time management and prioritization skills as the most stressful part of being a physiotherapy student. Mel believed that she would have been unable to combine studying with working:

Mel: *I didn't have a part-time job, but I know people who did, and I don't know how they did it, that's insane! I think these people were well organized with their time, I personally wouldn't have been able to do that.*

However, not all participants struggled with the same issues, for example, Sumi, Katie, and Preet described working part time as unproblematic or at least a good learning experience in time management and self-organization:

Katie: *you have less time to study, but then, in the long-term, I think it probably helped because I had to learn to manage my time better.*

Overall, all participants, as might be expected, struggled with academic aspects of the course or experienced difficulties in their personal lives at some point in the

program, but reported that they felt able to approach academic staff for support:

Katie: *the lecturers were very friendly, really supportive, very knowledgeable, easy to approach if there's any problem. I don't think I ever felt worried about asking them about anything, or going to them with any problems I had. They were all supportive and helpful. [...] Always willing to help you out really. Always got emails straight back.*

Preet: *The teaching staff, they were really good as well, very friendly and helpful, very approachable as well.*

Academic staff were praised by all participants for being helpful, friendly, available, approachable, responsive, and supportive. Specialist knowledge and expertise were taken for granted, but participants in this study seemed keen to stress the personal qualities of individual tutors as important in creating not only a positive learning environment but offering support during the more stressful aspects of life as a preregistration physiotherapy student. Spending time in the classroom, working closely with students in a practical situation, and showing a genuine interest and concern for students as individuals seemed to be at the root of these positive staff appraisals and perhaps facilitated the development of strong student–tutor relationships.

Overall, this theme articulates the view that high-quality contact time between students, and between students and tutors, may provide the catalyst for developing friendships, professional relationships, and learning practices that make up essential ingredients of an effective preregistration learning environment. The hours students spent together seemed important in these accounts, but how and what was done in those hours, and with whom, also seemed crucial. Participants' accounts described a relational educational world populated not only by students but also by physiotherapy tutors who knew them by name, and offered support and encouragement inside and outside the classroom. This theme emphasizes the personal qualities of staff and students, as well as the cohesive group dynamics, the importance of social interaction in academic and non-academic environments, and program-specific factors that might constitute the building blocks from which successful learning was constructed. As with any meaningful but challenging academic endeavor, allies in the form of friendship-based study groups, and interaction with interested and responsive academic tutors, may constitute important resources that may be critical for success. This means that the responsibility for success may not simply lie within the



individual student but rather students and academics collectively contribute to create an environment in which students may thrive.

Theme 2 “You Want To Be A Physio In The End”:  
Commitment To The Idea Of A Future Positive Self

Having embarked on a program leading directly to qualification as a physiotherapist, participants reported having formed a strong sense of their future selves. They saw themselves succeeding, even if they struggled at certain points in their journey:

Prakash: *One thing leads to another. Once you’ve started it, let’s finish it. That’s one of the reasons. I have actually enjoyed it. That would be the second reason. Yeah . . . I enjoyed it. I found it really challenging, I enjoyed the challenge you know, it’s important . . . academically to create your prospects . . . so yeah the combination of those three really.*

Shalini: *I think it’s personal determination [...] yeah, it’s about motivation, definitely [...] having a clear goal. Failure is when you have the wrong expectations.*

Sumi: *it’s how much you really want it, really. If you enjoy it, and you want your degree, and you want to be a physio in the end, [...] if you like the course, and are prepared for hard work, hard work for three years [...] and if you’re ready to get help, and get the degree, that’s where people do well on the course.*

Tom: *I said to myself this is it, this is what I’m going to do, and that’s it for the rest of my life. So that was a big incentive for me to get through it. And I couldn’t see myself doing anything else.*

These successful participants described what they saw as an almost inevitable progression toward becoming a physiotherapist. Self-belief underpinned by determination and an expectation of success provided the momentum from which their goal could be realized. Each participant put a different emphasis on these factors. Prakash, for example, talked of creating his own prospects. Part of his satisfaction derived from overcoming the challenges he faced and how these efforts contributed toward building his future-self. Personal motivations and a commitment to endure, to finish, to be a physiotherapist, to have a degree, and to be the person they imagined they might become contributed the particular bricks from which the foundations for success were built.

Most participants had undertaken only limited work experience (1–2 days) before starting the undergraduate program. In recalling their previous selves, participants remembered a desire to work with people (Jo), to help

people (Sumi), or not to work at a desk (Sumi). Participants also emphasized an early interest in a specific topic, for example, pediatrics (Shalini), sport (Anna, Prakash, and Sumi), biology (Jo and Prakash) and physiology (Prakash). Mel had family connections to physiotherapy but admitted gaps in her understanding of physiotherapy when she started the program. Tom came to physiotherapy via personal training and family connections in the National Health Service (NHS). Overall, participants did not seem to be propelled by a particularly strong sense of vocation, in the sense that they did not describe feeling an innate sense of fitness or suitability for the profession. There certainly seemed to be a strong desire to finish the program, and a firm commitment to an idea of physiotherapy or being a physiotherapist, but there was no clear sense that the majority of students knew at the beginning of the program what it was that qualification and the practice of physiotherapy might really entail:

Sumi: *It wasn’t really what I was expecting but it was good anyway, so . . . I was really interested in sports [...] but then I realized, when I started the course, that it wasn’t that much sports related, but I ended up liking it anyway, so that was fine.*

Prakash: *I didn’t expect a lot of things that were in the program [...] I didn’t think it would be about all those other aspects, beyond musculoskeletal aspects, you know, I thought it would be more sports like.*

Shalini: *I went into it a little naïve, like there’s a lot of aspects of physiotherapy that I didn’t know about.*

Preet: *I didn’t expect a lot of things that were in the program [...] I didn’t think it would be all about those other aspects, beyond musculoskeletal aspects, you know. I thought it may be more sports like . . .*

We assumed, drawing on our experience with admissions procedures for physiotherapy programs, that a strong understanding of physiotherapy would be fundamental to eventual success on a professional program such as physiotherapy. These accounts revealed, to our surprise, that this might not be the case. Participants reported that they had little knowledge of physiotherapy on entry to the program; however, they revealed a strong commitment to their future selves which may have shielded them against some of the difficulties they faced on their journeys toward graduation.

Theme 3 ‘I Would Spend the Whole Day there Trying to Survive’: Succeeding through Adversity

Physiotherapy students in the UK are required to undertake approximately 1000 hours of assessed clinical education. This commitment to practice-based learning constitutes approximately one-third of the BSc (Hons) program and represents a considerable investment of students' time and energies in the context of their overall studies. All participants in this study recounted positive clinical placement experiences both in terms of their preplacement preparation and their on-placement learning and interactions with their clinical educators, as well as the support provided by visiting tutors from the university. The following comments were typical in this regard:

Anna: *In terms of placements, when we did them, that seemed to work out well [...] throughout my course I felt perfect for my placements really. [...] I had a mix of telephone updates as well as tutor visiting. I thought they were very communicative, kept up to date on how I was doing, as well as talking to my educators in the placement.*

Preet: *I really enjoyed placements because they are essential to qualify, the hands-on experience. I enjoyed practising what we had learned and trying out what we had learned.*

Problems with placements were reported by a minority of participants. Most of these concerns centered on personal financial difficulties, long commutes to some placements, and occasional problems in the relationship between students and practice placement educators. These in turn adversely affected personal well-being as well as overall placement experience and potentially their overall success:

Katie: *the other problem with placements is that sometimes they are away from London and you have to travel, and live away from your home. [...] I know some people didn't enjoy placements because they were so far from home, and had to travel so long ....*

In the following quotation, Prakash explained how a requirement to pay upfront accommodation costs affected his overall placement experience:

Prakash: *You had to pay for your [placement] accommodation beforehand and obviously I didn't have the money to rent, so I couldn't pay first, and then get reimbursed, because I didn't have the money, so I had to travel instead. [...] I had to travel 3 hours each way, so in total six hours of travelling each day. [...] I was doing 8.30-4.30 on my placement, so I*

*was leaving my house at 5.30am, starting work at 8.30, finish by 4.30, by the time I was at home it was 7.30/8 o'clock. I then had some food and went straight to sleep [...] and then working full days at weekends. That was pretty tough.*

It is interesting to note the lack of reference to friends and helpful tutors in this quotation. In contrast to the university setting, it seems as if Prakash faced this particular struggle alone, without the bolstering of his peers and tutors, and that perhaps made it all the more difficult to endure. The primary criticism in Prakash's account lies in the expectation that students can afford to pay upfront fees with delayed reimbursement. However, the personal financial problem that Prakash described is embedded in a more complex context that encompasses local commuting costs and public transport efficiency, and a pan-London issue concerning the location of clinical placements relative to students' homes or term-time accommodation. In this situation, Prakash struggled with a lengthy commute because he felt that he had no other option. Tom recounted similar experiences:

Tom: *I just didn't have the money [...] I hated borrowing from my parents, so I first used all my credit limit, and my overdraft before I asked for money because I didn't want to be dependent on them. [...] there was no way I could afford to pay for my student hall when I wasn't living there and then pay upfront for accommodation at the hospital at the same time, regardless that we would be refunded. I just didn't have the money in the first place.*

Tom and Prakash emphasized the financial hardship they faced as students despite being on a fees-paid program. Both, it seems, wanted it understood that financial constraints made these long commutes unavoidable, and both emphasized extremely long hours, as well as forgoing sleep and social activities. On the whole, it seemed that our participants faced these particular struggles alone.

These findings suggest that students who have limited funds, those who have to work their way through university, and those whose financial status changes for the worse over the course of their studies may find themselves in an invidious position when faced with unplanned for placement costs and slow reimbursement procedures. Expenses such as these form part of the hidden cost of preregistration healthcare programs. This analysis also shows that, for these students, personal financial hardship interacted with and was compounded by broader sociopolitical issues (e.g. transport

costs and transport infrastructure), as well as health education policies and procedures (e.g. clinical placement location, bursary arrangements, reimbursement policies for transport, and accommodation costs). Although only three of the eight participants talked about these issues, the impact on this minority seemed significant. Under these circumstances, although these students successfully completed their placements by managing their personal and financial resources as best they could, on these particular placements they were perhaps less likely to excel.

Concerns about the relationship between students and practice placement educators, and the impact poor relationships may have on personal well-being were also recounted by a minority of participants. However, the impact of these issues was also significant:

Tom: *I received a lot of warning: 'be careful when you meet this educator, he enjoys making students feel nervous'. He [the clinical educator] was just very intimidating, unlike the other educators I had which were much more like a mentor, he was very much ... trying to trick you all the time. [...] it was extremely hard. [...] I did actually have a breakdown; burst into tears at one point because of the pressure [...] it was just so harsh.*

Tom described a distressing placement experience, which, from his perspective, became a struggle for survival. The clinical educator was portrayed as a Machiavellian figure, scheming, difficult to please, aware of, and willing to use his power to intimidate a vulnerable student. Without minimizing the distress contained in this account, it is interesting to see what resources Tom drew on to help him endure and ultimately succeed:

Tom: *there was a girl in the year above me, she gave me lots of support [...] I kept in regular contact with her ... she'd actually done the placement I was talking about [...] had the same educator, and so that was useful for me, that she's actually done it, and got through it, and I think she probably made the biggest difference ... in terms of mental health, having someone who's actually done it, knowing how they felt, just to ... [...] one of my friends said something similar about a similar situation at his placement, he just said that's how it is, and it gave me ... kind of ... like I felt I'm not the only one, it was ... then when I thought I was failing.*

Tom described on-campus tutors and his personal tutor as very helpful but in the above quotations he referred to a network of informal support that offered different kinds of help. The first, the warning about what to expect

on this particular placement, perhaps enabled him to prepare for what lay ahead. Conversely, it may also have generated a degree of anxiety and dread. The second, linking up with another student (not a close friend) who had successfully completed the same placement offered hope that he too could complete this placement. The final offering consisted of Tom's friend who talked about his experiences in facing similar problems, and, by doing so, perhaps evoked a sense that Tom belonged to the same world and was not alone. These offerings, the telling of these stories, seemed to provide a sense of a collective experience of endurance that was important for Tom. These stories, even the scary ones, could be seen as an articulation of a form of resistance, students using their own cultural resources to collectively claim back power in situations where they felt most vulnerable and exposed. In the first instance, Tom accessed and utilized these support structures, and in turn, Tom's peers showed him that it was possible to overcome his difficulties and distress.

A further example from Tom suggested that, at times of adversity, students may weigh the value of staying on the course against the psychological cost. When that balance cannot be effectively maintained and/or the commitment to the program is not as high, it may result in the student choosing to leave:

Tom: *I wouldn't say he [a friend on the course] got bullied, but they made it a really hard time for him. In a similar kind of way to myself on my last placement. His educator had this attitude to put as much pressure on him. [...] And when he came up against these challenges, instead of staying and trying to get through it, he just said 'well that's it, it's not worth it', and he left, basically.*

The move from the safe haven of campus-based studies to what was perceived as the less well-regulated contexts of clinical placement was recounted as particularly troubling by a minority of these successful students. Sumi, for example, perceived that a lack of university oversight contributed to an uneven distribution of power that put students at a disadvantage:

Sumi: *the [clinical educators] were quite awkward, you do get that, and sometimes I think people get lost, because they are not that supported [...] It's just hard to control the clinical placement, and [the University] has no control over that.*

The majority of participants remembered clinical placements as enjoyable and recalled feeling well supported. Nevertheless, the impression from a minority of participants suggested that relationships with clinical educators could be uncertain and difficult. In facing

adversity, participants did not identify a particular intervention or resource that enabled them to succeed where their peers may have failed. Instead, they described a complex combination of factors that helped them to endure. In countering particularly distressing and difficult circumstances, these successful students drew on personal resources (e.g. resilience, perseverance, and friendship groups) and institutional structures (e.g. personal tutoring) as well as an accumulation of social capital derived from informal, self-generated networks with other students. However, they seemed to have little power to overcome ingrained structural issues such as financial hardship and recalled facing this type of problem alone.

## Discussion

Our participants identified multiple interacting factors that may have contributed to their success. In the first theme, participants drew attention to their experiences of, and the importance they placed on cooperative and collaborative learning, strong student–tutor relationships, peer-support, high face-to-face in-class contact time, and positive interaction with peers and tutors in academic and non-academic environments. Two key issues emerged from these findings that resonate with the international literature in both healthcare education and tertiary-level education in general.

The first of these supports the view that effective learning is an inherently social endeavor (Thomas, 2012; Tinto, 2006). Environments that actively involve students in learning, especially with other students, encourage students to spend time together, as well as time studying together inside and outside the classroom, tend to generate greater quality of effort, and in turn greater persistence (Tinto, 2006, 2012). Such engagements are thought to lead to social affiliations, and social and emotional support, and to greater involvement in learning activities, and the type of learning associated with academic success (Tinto, 2012). In the healthcare field, Richardson and Radloff (2014) have similarly argued that students and their tutors should ideally be seen as “allies” in learning because sustained and significant contact between these two groups increases student engagement and satisfaction, and lowers attrition. Online teaching methods are increasingly used in physiotherapy programs because they offer an efficient and flexible means of providing learning content to large numbers of students who are not necessarily co-located. Research in this field is at an early stage, but while remote learning technologies have been positively appraised by physiotherapy students, concerns have been raised about their detrimental

effects on student interaction, the development of learning communities, and rapport building between staff and students (Divanoglou, Chance-Larsen, Fleming, and Wolfe, 2018). Further research is required but broad-based adoption of these methods across the curriculum, without further consideration of their impact on the in-class, collaborative, and social factors that our participants believed were critical to their success as physiotherapy students, may have a detrimental effect on student engagement and persistence.

A sense of belonging, typified by feelings of connection to the institution, feeling personally accepted, respected, and included is associated with high student retention and success (Moore, Sanders, and Higham, 2013; Thomas, 2012). This sense of rootedness forms the second key issue to emerge from the literature that resonates with our findings, as articulated in our first theme. The successful graduates, who participated in our study, recalled readily falling in step with the norms and practices of the program, which may have nurtured a sense of belonging. They made friends easily inside and outside the classroom, engaged with their tutors, participated in class, and developed self-structured learning opportunities with others. The importance of in-class and outside-class friendships to academic persistence has been identified in non-traditional nursing students and medical students, and seems particularly important to reducing social isolation (Jeffries, 2007; Maher et al., 2013). The factors that contribute to the development of in-class friendship groups have not been investigated in depth. However, in-class friendships are thought to develop from a sense of community underpinned by mutual understanding of the stresses and strains of undertaking qualifying programs, and a concerned regard for fellow students (Knight et al., 2012). Student nurses have also reported that within-program friendship groups helped to forge a sense of belonging and were an important determinant of persistence, particularly at times of stress (Williamson, Health, and Proctor-Childs, 2013). Thomas (2002) has further argued that academic staff who care for and respect students may not only help to impress a strong sense of belonging, but may also help to quickly resolve personal and academic problems that may otherwise escalate into early withdrawal. In contrast, students who occupy an outsider status, whose social and cultural practices feel inappropriate and undervalued are thought to be more at risk of withdrawing early (Thomas, 2002, 2012).

Institutionally established social and cultural biases, and priorities, are thought to contribute to a student’s sense of belonging, and to unfold in the relationships between staff and students, and between students

(Thomas, 2002). The physiotherapy profession in practice and education lacks ethnic, social, and cultural diversity (Mason and Sparkes, 2002b; Nicholls, 2018; Yeowell, 2013). In the UK, student physiotherapists from minority ethnic groups report feeling isolated and unsupported while studying physiotherapy and perceive physiotherapy to be a White profession (Yeowell, 2013). Covert bias and negative ethnic stereotyping amongst assessors may account at least in part for physiotherapy students from non-White ethnic and disability groups having greater odds of achieving lower assessment marks than their White peers (Norris et al., 2018). Ethnicity was also the strongest predictor of attrition among physiotherapy students at one university in the UK as well as the strongest predictor of academic failure at the end of year 1 (Ryan, Poitier, Sherwin, and Cassidy, 2018). Students who find themselves at odds with the cultural orientations of the profession they had hoped to join, as well as with their higher education institution, and their tutors, for example, through their ways of speaking, behaving, and interacting, may not only have difficulty working with and relating to their peers and tutors (Thomas, 2002), but, we argue, may also find it difficult to break into the tight, and at times, intense learning communities described by our participants. These communities of learning are perhaps formed by and attract only those who more readily fit in.

Baumeister and Leary (1995) argued that the need to belong is a fundamental motivation and central to human psychological function. This need is satisfied when individuals experience social relatedness and acceptance, and frequent and regular contact in stable and mutually beneficial on-going relationships. Failure to have these needs met may lead to social isolation, and adverse effects on health and well-being (Baumeister and Leary, 1995). While a sense of belonging cannot be imposed on an individual, physiotherapy program developers should ensure that the learning communities that seem so instrumental to success are equitable, inclusive, and accessible to all those admitted to the program. Without a strong commitment to inclusivity, diversity, and acceptance, academic tutors may, albeit unwittingly, produce in their students simply replicas of themselves (Clouder, 2016), while excluding others who are in some way atypical. Educators who unknowingly or otherwise encourage only those students who more readily fall in step with the culture, practices, and ways of thinking with which tutors are familiar will not meet requirements for widening participation (Mason and Sparkes, 2002a) or help the profession to move forward. Academics may therefore find it fruitful to explore ways to uncover

implicit assumptions about program design and delivery, and teaching and learning practices that serve to marginalize individuals, such as those who live off campus, or who come from non-traditional backgrounds. A form of cooperative and inclusive enquiry may help to uncover assumptions and practices that exclude some students, for whatever reason, and ensure that all students, not simply those who easily fit in, feel that they belong, and are valued and respected.

In the second theme, our participants described a strong sense of commitment to becoming a physiotherapist, and to completing the program, despite not having a particularly good understanding of physiotherapy prior to starting their studies. Students who are highly motivated toward their future career are more likely to succeed or persist with their studies (Salamonson et al., 2014; Wray, Aspland, and Barrett, 2014), and to sustain efforts to complete the program in spite of adversity (Knight et al., 2012). Our participants, who described their student selves as fully committed to their future selves as physiotherapists, and to completing their studies, may therefore have already been more likely to succeed than their less committed peers. The reasons for this may lie in a closer examination of identity theory. Students who have strong identity drivers for attending university, particularly those who have career-orientated reasons for embarking on a particular course, are less vulnerable to set-backs (e.g. due to academic failure) compared to those who lack long-term career goals (Whannell and Whannell, 2015). Hoelter (1983) argued that identity salience not only increases with respect to the degree of commitment to the identity, but also as the assessment of the performance of roles inherent to the identity become more positive. Further, positive emotions, derived, for example, from pride in one's achievements help to establish and maintain identity and self-esteem in learning situations (Ingleton, 1999). In this sense, identity formation is understood not only as an internal process of self-verification but also as a construct that is influenced by external social structures, for example, how others respond to identity claims (Stryker and Burke, 2000). These processes may be open to manipulation through external activity. Whannell and Whannell (2015), for example, have argued that efforts targeted at developing a strong student identity should focus, at least initially, on formative experiences that allow the student to demonstrate some form of mastery which reinforces identity through internal mechanisms such as self-verification. We argue that the development of friendship groups and collaborative learning practices may work in the same way, as a form of identity confirmation through positive reinforcement via implicit validation of membership credentials.

Punitive or summary assessments in contrast, risk inducing a sense of shame through failure or poor performance which in turn may erode the salience of an identity, and by doing so, threaten meaningful interaction with others who belong to the same identity group (Whannell and Whannell, 2015). We also argue that occupying an outsider status, or not readily fitting into group norms, may have a similar negative impact on identity formation. These arguments, and our findings, suggest that exposing students to positive learning experiences that enhance their developing identity as a university student, and as a future physiotherapist, may help not only to reinforce that identity but also to protect against attrition. Ensuring that all activities are inclusive and welcoming to those who do not necessarily feel a strong sense of belonging or acceptance may also be critical for retention, particularly within the first few weeks of starting a program when these friendship groups tend to form. For admission purposes, looking for students who articulate a strong commitment to physiotherapy as a profession and as a career goal may be more profitable than targeting those who have a good knowledge of physiotherapy. This approach may complement a values-based recruitment strategy (Health Education England, 2016).

The third theme to be inferred from our analysis found that a small but important minority of these successful graduates recalled facing financial and relational problems as students. Financial worries were concerned with the upfront expenditure required for clinical placements. Healthcare students who worry about money tend to accumulate a high level of debt, may struggle with their health and well-being (Wray and McCall, 2007), and tend to perform less well than their peers (Ross, Cleland, and Macleod, 2006). Financial problems have been reported by: UK nursing students (Hamshire, Willgoss, and Wibberley, 2013; Wray, Aspland, and Barrett, 2014); occupational therapy students (Hussain, Higginson, Pickering, and Percy, 2015); and UK medical students (Ross, Cleland, and Macleod, 2006). Travelling times, and the cost of travelling to placements, are thought to add to the burden of undertaking clinical placement, and the financial outlay required in advance for on-site accommodation is thought to place unexpected financial hardship on students (Hamshire, Willgoss, and Wibberley, 2013). Further research is required to fully understand the complex issues that may underpin the financial burden experienced by many healthcare students. This issue may become critical following the replacement of bursaries with a student loan system for physiotherapy students in the UK from 2017 (Department of Health, 2016).

A minority of our participants reported difficult clinical placement experiences which centered on problematic relationships with their clinical educator. Physiotherapy students' relationships with clinical educators are known to be a significant cause of stress (Thomson et al., 2014). Bullying, usually by a clinical educator (Whiteside, Stubbs, and Soundy, 2014), is a significant problem, and may be experienced by up to 25% of physiotherapy students (Stubbs and Soundy, 2013). Our participants did not describe the behavior they encountered as bullying, but the definition of bullying as "any action taken that makes another feel intimidated, excluded or unsafe" (Chartered Society of Physiotherapy, 2010) could apply to the situations recalled by participants in our study. Qualitative and quantitative studies have revealed that bullying may adversely affect physiotherapy students' performance, as well as their health and well-being, but students may be reluctant to report their experiences to their academic tutors (Stubbs and Soundy, 2013; Whiteside, Stubbs, and Soundy, 2014).

Our participants described actively seeking out a range of support systems to counter their difficult interpersonal relationships with clinical educators. Resources included an accumulation of social capital that involved extended networks of peers, close friends, and personal tutors. Biró, Veres-Balajti, and Kósa (2016) reported that social support may provide physiotherapy students with a sense of resilience. The use of peer support by our participants may also have acted as a form of cultural and community resilience that may help groups, such as healthcare students, deal with adversity (McAllister and McKinnon, 2009). In addition, an accumulation of social capital may have bolstered personal attributes that typify resilient individuals, such as pro-social behavior, empathy, internal locus of control, a positive self-image, and optimism (McAllister and McKinnon, 2009). In agreement with arguments advanced by Jackson, Firtko, and Edenborough (2007), our participants' commitment to their future selves, as part of a positive, coherent, future-orientated life story may also have sustained their capacity to move forward and to resist adversity and hardship. The assistance provided by members of our participants' networks may have helped them to resist oppressive and controlling clinical educators, but perhaps did little to address broader, macro-level constraints such as the financial hardship endured as a result of the advanced expenditure required for clinical placement accommodation. Although individual physiotherapy students can learn resilience through psycho-education (Delany et al., 2015), our findings have shown that it may be important to also look at ways

that physiotherapy students can use the power of their collective voice not only to help each other in times of crises, but to challenge broader sociopolitical issues that may hamper their progress.

In summary, our findings suggest that in the context of this study, success might be best understood as an emergent concept, a product of the interaction between a number of individual and other factors. We argue that students who enroll on a physiotherapy qualifying program, and are successful, exploit intrinsic and individually situated factors that may contribute to their success. These factors include, but are not restricted to, a strong sense of identity as a physiotherapist in the making, and reinforcement of this identity through positive interactions with similar others who confer a sense of belonging to a valued group. This sense of belonging may be supported by other intrinsic factors such as pro-social behavior, empathy, and an internal locus of control that in turn enable students to firstly accrue social capital, and secondly, to draw down on that capital if required. We have also shown that these intrinsic factors may be mutable and subject to manipulation in a positive or negative direction by external factors, such as the support and interaction offered by academic tutors, institutional structures (e.g. resources, process and procedures), program design and delivery (including implicit sociocultural beliefs and behaviours), and the capacity of the student body to voice and act on wider political and organizational concerns that have a direct impact on student life. It is perhaps obvious to say that physiotherapy students occupy a position of both being and becoming, in the sense of the development of their professional and personal identities. However, we argue that, if student success is an emergent property, strongly influenced by a sense of identity, it is also potentially a fragile property whose safeguarding cannot be guaranteed simply through the efforts of a single individual. We suggest that student success is a collective responsibility which operates at many levels and which demands collective effort not just from the student, but from the faculty, the institution, and the student body.

In acknowledging the limitations of this study, the following points should be considered. Our findings were derived from the perspectives of a small group of recent graduates from one physiotherapy program in the UK. Not all physiotherapy programs are the same, and students' perceptions of local conditions, and the impact of institutional sociocultural norms, behaviors, and expectations will differ. Our findings are therefore necessarily context-dependent and are not meant to create broadly applicable knowledge. However, the context of this study has been described in detail so that

readers may interrogate the findings and arguments presented here and, through a process of analytical generalizability (Kvale and Brinkmann, 2009), explore unexamined assumptions about their own programs, and evaluate the evidence presented in relation to their existing professional and experiential knowledge. It is impossible to say what motivated our participants to volunteer to take part in this study. However, as both enjoyable and difficult experiences were recounted, it would suggest that we recruited neither just those who had particular grievances that they wished to air nor those who simply had a very straight forward path to graduation. While it is possible that some students who leave early simply change their minds, it would nonetheless be useful to hear from those who struggled and ultimately left the program despite their best efforts to stay. Recruiting such individuals for research purposes is difficult (Williamson, Health, and Proctor-Childs, 2013), but in-depth qualitative studies would help to uncover the potentially complex reasons that cause some students to leave while others remain to complete their studies. This type of research would complement quantitative studies and may offer a more rounded understanding of this complex issue.

### **Implications**

Physiotherapy educators may profit from understanding that student success is a collective responsibility involving not only the students themselves, but also educators and the institutional structures and processes that shape the learning environment. In respecting the moral obligation to do the best for all students who are admitted to study physiotherapy, we suggest that university staff and tutors have an ongoing responsibility to critically examine sociocultural factors within physiotherapy programs that may marginalize students, particularly those who struggle to develop a strong sense of belonging. These factors may undermine their potential to successfully complete the program. Further research is needed to understand why some students fail to persist when others prevail despite facing similar hardships. Participatory action research, involving students and staff, may help to uncover implicit assumptions about social and educational practices and cultures that have a negative impact on persistence. Some of the difficulties that our successful graduates described, such as financial hardship, difficult relationships with clinical educators, and long commutes to clinical placements, should continue to be addressed at local, regional, and national levels, through advocacy, and policy directives, from both student and academic bodies, as well as from within the professional body.

## Conclusion

Participants identified several overlapping and interacting factors that may have helped them to succeed. These factors not only operated at an individual level but also, and perhaps importantly, within a broader framework. Significant others, particularly friends within the program as well as outside the program, peers, and tutors, were perceived to contribute to participants' success. Our findings point toward an understanding of student success that principally lies in a sociocultural sphere. Individual factors such as being highly motivated, socially adept, culturally aligned, and resilient to hardship may not offer sufficient protection against attrition if considered purely at the level of the individual, but may be strengthened, and function more effectively, through cooperative action with others, particularly peers and tutors. Crucially, it would seem, our successful students felt comfortable and confident with the cultural norms and values of the institution and its members (i.e. staff and students), and sufficiently invested in the culture to draw on available resources when needed.

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## Appendix A

### Semi-structured interview guide – Indicative questions

Basic demographic details including: date of program commencement and conclusion, involvement in physiotherapy prior to undertaking the program, part-time or full-time study, age at start of the program, self-defined identity.

Grand tour question: What brought you onto the course? Why did you want to study physiotherapy?

- Was it what you expected?
- Was this university your first choice?
- Why did you decide to study at this university?
- Did the university live up to your expectations?

Thinking about your overall experience of the course, what did you enjoy most and why?

- Personal
- Academic

What do you think helped you on the course?

- If appropriate explore personal commitments, study pattern awareness, previous experience, parental support, etc.
- Consider; personal tutor support, university academic support, peer support.

What did you find most difficult and why?

- Did you fail anything?
- Was that a surprise or did you expect it?
- Did you do anything differently for the resit (if applicable), for example access support, change revision methods, and attend a study group.
- If not, why not?
  - Barriers
  - Confidence in approaching staff/peers for help
  - Time/other commitments

As you'll know some people unfortunately are not successful in completing the course. In your experience, why do you think people may not succeed (ask if the participant can think of a specific example(s) to discuss)?

- Personal factors
- Social factors
- Course related
- Academic...

In your experience, why do you think some students may do extremely well (potentially ask for a specific example(s) to discuss)

- Personal factors
- Social factors
- Course related
- Academic...

Was there a difference in your experience of academic (campus-based) studies and clinical placements?

- What were differences?
- Why did they arise?

Was the course what you expected?

Professionalism is a key part of the course in terms of time keeping, deadlines, dress, etc. How did this focus impact on you individually?

- Prompt did professional behavior come naturally/did you struggle?
- Did you think you achieved what was required of you?
- Do you think the professionalism requirements impacted on your experience of training at all? How?

When you were a physiotherapy student did you have other commitments outside the course?

- Prompt on working life, family commitments, other factors, e.g. sport
- What bearing did these things have on your studies?

Did you form strong friendships with students on this course/other courses?

- How important were these friendships to your study?

Did you live on or off campus?

- What influenced that decision?
- Would you make the same choice again?
- Did your living arrangement have any bearing on your studying?

How would you describe your relationship with the academic physiotherapy staff?

- How did that relationship influence your studies?

Is there anything else you would like to discuss that we have not covered already?