‘Sometimes I don't feel like an osteopath at all’- a qualitative study of final year osteopathy students' professional identities

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Background: Research suggests that professional identity has implications for standards of professionalism, patient care and work satisfaction. Professional identity develops during professional education and continues into working life. While osteopaths' professional identities and conceptions of practice have been outlined, the professional identities of osteopathic students are yet to be elucidated.
Objectives: To explore and describe final year osteopathy students' professional identities and their development.
Method: Semi-structured interviews were conducted with a purposive sample of eight final year osteopathy students from two osteopathic education institutions in the UK. Interviews were transcribed verbatim and constructivist grounded theory was used to conceptualise, collect and analyse data.
Results: Participants' professional identities varied and were illustrated by their thoughts and beliefs around their approach to patients, the osteopathic profession, learning experience and practice skills. There was also variation in the stages of development of participants' professional identities which lay on a continuum ranging from ‘under construction’, ‘transitioning’ and ‘constructed’.
Conclusions: The findings suggest that final year osteopathy students held differing professional identities, and four categories were constructed which describe this variation, these were: approach to patient care, view of osteopathy, learning experience and view of practical skills. Students' professional identities varied in their stages of development and related to three points along a profession identity continuum and are in accordance with role transition theory. A well-developed professional identity, which is also flexible in response to new knowledge and evidence, has positive connotations for students' confidence in practice, well-being and career success.

Introduction

The concept of professional identity has been described as the construction of a person's experience, qualities, beliefs and values that define their professional role [22,26,47,50]. Professional identity, therefore, is a changeable combination of biological, environmental, social and psychological factors, which provides a theoretical framework from which an individual approaches their professional role [22,64]. From the perspective of healthcare, professional identity begins to develop during an individual's professional education and as such the educational environment, curriculum and course structure play a role in constructing professional identity [16]. Furthermore, professional identity has been shown to be influenced by a range of factors preceding an individual's entrance into formal healthcare education, such as personal attitudes, motives and values [19]. Professional identity development during education has been researched in a range of healthcare professions including physiotherapy [38]; [29,30], nursing [63] and occupational therapy [23]. Research into the professional identities of medical students recommends a curriculum which explicitly cultivates students' professional identities with a view to inculcate the profession’s values and standards for the benefit of practitioners and patients [24].

Recent qualitative research developed a theory of osteopaths' professional identities and conceptions of practice in the United Kingdom (UK) [55]. This research suggested that there was variation in how osteopaths viewed themselves in relation to other healthcare professions, and osteopaths' professional identities

were related to their views of health and disease, their clinical decision making and their clinical approach with patients [54e56]. This research highlights the relationship between professional identity, clinical behaviour and decision making, and illustrates the importance of generating new knowledge of how professional identity develops in osteopathy students. Knowledge of students' professional identities may offer an insight into how the osteopathic curriculum may best support professional identity formation. A recent cross-sectional study using questionnaires with Australian osteopathic students' found that students had positive perceptions of an interprofessional curriculum and education [62]. However, qualitative research is necessary to obtain a more complete understanding of osteopathic students' professional identities and how these relate to their professional and inter-professional perceptions.

In physiotherapy, qualitative research has suggested that final year students' professional identities vary in relation to their perceptions of their role, practice, vision, beliefs and scope of practice as physiotherapists [29]. Adopting a phenomenological approach, Lindquist et al. [29] interviewed eighteen final year physiotherapy students from the UK and Sweden in the final month before leaving University, with the aim of exploring their learning experiences and professional identities. The findings outlined several attributes which defined physiotherapy students' professional identities including their learning style, the context in which they worked, perceived role and focus of their practice [29]. Similar research with osteopathy students has not yet been conducted. However, qualitative research also suggests that the professional perceptions of experienced osteopaths vary; in particular osteopaths' core conceptions of osteopathic practice, which were described as either 'practitioner-centred', 'collaborative' or 'empowerment' [55]. A qualitative understanding of the range of professional identities of osteopathic students may help to establish how these identities and conceptions develop and translate into working life as shown in other professions including teaching, occupational therapy, nursing and physiotherapy [23,29,31,58]. The aim of this study was to explore and describe osteopathic students' professional identities in their final year of study.

Methods

The consolidated criteria for reporting qualitative research (COREQ) were used to structure the methods section of this paper [59].

Study design and theoretical framework

From the outset of the study, the researchers assumed professional identity to be a socially constructed concept which develops from the social processes and interactions which occur between individuals in the "day-to-day and minute-to-minute social exchanges in the workplace" [45] (p471). With this assumption, a qualitative study design employing constructivist grounded theory method (GTM) was adopted in view of its' ability to generate explanatory theories and understanding of social processes from the perspectives by which they occur [4,57]. Constructivist grounded theory was used as a framework to conceptualise, collect and analyse data, and the study drew upon the following features of GTM: constant comparison of data during analysis, coding, memo writing, concurrent data collection and analysis and diagramming (Fig. 1) [4]. Semi-structured interviews were used as the method to collect data of participants' views and perceptions of their professional identity.

Participant sampling

As clinical work encompasses a significant part of professional osteopaths' practice, final year students were the focus of this study due to the extent of their clinical experience compared to earlier year groups and their proximity to professional working life. All seven UK based Osteopathic Education Institutions (OEIs) with a final year cohort (Table 1) were invited to participate in this study to facilitate the most diverse spread of data [4].

Following approval by the British College of Osteopathic Medicine Research Ethics Committee (BCOM REC), each OEI registrar was emailed an invitation to participate in the study. Participants were recruited through open invitation via posters and emails which were distributed by the registrar of each OEI. Student that expressed an interest were sent a participant information sheet via email, and general biographical information was obtained via a form (e.g. age, gender, educational background, particular

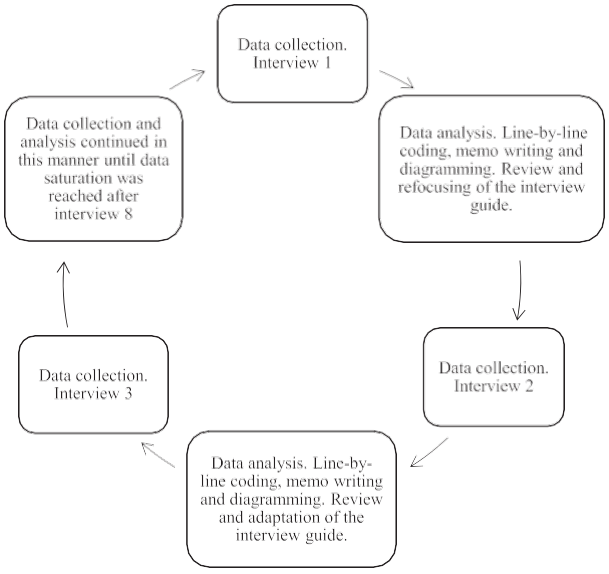

Fig. 1. Flow chart demonstrating concurrent relationship between data collection and analysis.

Table 1
List of UK based Osteopathic Education Institutions (OEIs) invited to participate in the study.

United Kingdom (UK) Osteopathic Education Institutions (OEIs)
The British College of Osteopathic Medicine (BCOM)
The British School of Osteopathy (BSO)
The College of Osteopaths (Middlesex programme)
The College of Osteopath (Staffordshire programme)
The European School of Osteopathy (ESO)
London School of Osteopathy (LSO)
The Surrey Institute of Osteopathic Medicine

Table 2
Inclusion and Exclusion criteria for participants.

Inclusion criteria
• Final year undergraduate osteopathic student • Attending one of the Osteopathic Education Institutions • Attending full- and part-time courses
Exclusion criteria
• Students under the age of 18 • Non-final year osteopathy students and graduate osteopaths • Non-English speaking students • Postgraduate 'fast track' osteopathy courses (for qualified health professionals)

Table 3
Participant characteristics.

Participant number	Gender	Age	Previous experience/education prior to starting the course	Self-described approach and interests as an osteopathic student	Osteopathic education institution (OEI)
P1	Female	34	Business/corporate Yoga teacher	Functional, Structural, Cranial Visceral, Nutritional	OEI 1
P2	Male	25	Business/corporate	Mindfulness	OEI 2
P3	Female	38	Massage therapist	Visceral, Harmonics Cranial, Naturopathic	OEI 1
P4	Male	45	BA MSc	None	OEI 1
P5	Male	21	A-levels	Structural, Classical osteopathy, Biopsychosocial	OEI 1
P6	Male	28	Healthcare	Structural, Biomechanical Rehab/Exercise	OEI 2
P7	Female	29	Insurance	Functional, Nutritional Rehab	OEI 1
P8	Female	25	A-levels and Military	Structural, Nutritional Classical osteopathy, Exercise	OEI 1

osteopathic approach/interests) which was then screened by the lead investigator to aid sampling and to ensure they met the inclusion criteria (Table 2). Purposive sampling was used to ensure a wide range of ages, backgrounds and viewpoints were obtained and that the findings were built from a diverse range of perspectives [6]. A minimum of one week cooling off period was scheduled between recruitment and interview to ensure informed consent without coercion [39].

A total of eight participants took part in this study, all of whom were purposively sampled to ensure a range of ages, occupational/educational backgrounds and clinical osteopathic interests (Table 3). All OEIs in the UK were invited to take part in the study, with the final sample of participants formed from two OEIs (Table 3). All participants completed the study.

Research setting and data collection

Interviews took place between October 2016 and January 2017 in a meeting room at each participant's OEI where only the participant and lead investigator were present. The lead investigator (HC) was a female mature student, with a background in the performing arts, and in the final year of the integrated Masters of Osteopathy course at BCOM, the co-investigator (OT) was an osteopath, educator and qualitative researcher. Prior to the start of the interview, participants were invited to read and sign consent forms and provide details of their backgrounds (Table 3). Participants were also given a briefing about the topic and purpose of the interview and the opportunity to ask the lead investigator any questions they had regarding the study and their taking part [27]. All interviews were conducted face-to-face and lasted approximately one hour, and were audio recorded. Participants were allocated a number which was known only to the lead investigator to anonymise all data.

An interview guide was developed from the current literature on professional identity and osteopathic education and following discussions between the two researchers (Table 4).

Table 4
Interview guide.

Interview guide questions
What do you consider to be your role in the healthcare of your patients?
What are your views about health and disease?
How do you see yourself in relation to other healthcare professions?
What are your views about the osteopathic profession?
What do you think about evidence based practice?
What sort of approach do you take with your patients?
What does education mean in relation to your patients?
What do you think about exercise prescription?
What do you consider to be your osteopathic skills?
Are there any key values or principles that underlie your practice?
What are your views of the body?
How do you see yourself practicing in 5 years' time?
Has there been anyone who has been central to your development as an osteopath? (Please refrain from using their name)

Table 5
Prompts and follow-up questions used in addition to the interview guide questions.

Prompts and follow-up questions
Can you tell me more about that?
Is this true or is this your theory?
Could you give some examples?
You said … … … what exactly did you mean by that?
Thinking about a patient you have treated in clinic, how did you examine and treat them?
You seem to feel … ….about that? Is that correct?
Have you experienced that often?
You mentioned … ….do you think about that often/how long have you thought that/why do you think you feel that way about that?

Table 6
Example of Line-by-line coding (underlined text relates to code generated).

Extract of transcribed data	Example of Line-by-line coding
……*I think that my expectations were so different* [when I first started the course] *and it's really changed as I'm now in my final year of studying.*	Expectations of role have changed over time
I guess being an osteopath means that you have the hands-on aspect.	Emphasising hands-on work
I feel like I'm still learning what that hands-on aspect can achieve, what I'm doing when I have my hands on a patient, how patients respond.	Still learning
I feel like until I treat loads more patients and more consistently than I'm necessarily treating here I won't necessarily know what that osteopath bit of the treatment is or maybe that is what an osteopath.	Learning through experience Uncertainty about what the role of an Osteopath is
Maybe an osteopath is a life coach stroke therapist stroke manual therapist stroke massage therapist.	Looking to other professional roles to describe own role.

Prior to the start of the study, one pilot interview was conducted with a final year student at BCOM who was not included in the final study. Critical reflection and analysis of the interview process and the data generated prompted revision of the interview guide. As such, clarity of questions was improved to better focus subsequent interviews to explore more deeply developing areas of interest to the researchers and test hypotheses generated from the analysis of earlier interviews [4]. The interview guide was then used to conduct semi-structured interviews using open ended questions. This style of interview facilitated freedom for participants to openly share their thoughts around the key research topic whilst allowing flexibility for new and individual topics to develop [4]. Table 5 outlines prompts and follow-up questions which were used to instigate further insight into participant responses and to avoid assumed meaning around topics and terminology familiar to the lead researcher [27].

Data analysis

Each interview was transcribed verbatim and all participants were emailed their transcribed interview to provide an opportunity for member checking for accuracy and honesty. No participants chose to amend their transcription. In accordance with GTM, inital line-by-line coding was used to define participants' actions, events and meaning expressed within the interview data. The lead investigator, who had undergraduate training in qualitative research methods, read each line of the transcription to form codes which represented the thoughts and actions of the participants (Table 6) [4]. The collection and analysis of data occurred concurrently such that interview questions were revised to accommodate new themes and areas of developing importance as outlined in Fig. 1.

Memo writing and diagramming were used throughout data collection and analysis to deepen the researchers' understanding of the data and further develop patterns and categories from the data. Memo writing also explicated the lead investigator's own views on the subject and highlighted potential biases, preconceptions and assumptions in relation to participants attending the same college as the lead investigator, so that they could be critically reflected upon and checked out with the data [4].

Codes were continuously compared and reviewed in relation to other codes and the categories [4]. Focused coding was later used to define five main categories. Data collection and analysis continued until data saturation was achieved [12], identified as the point where no new categories could be formed and the constructed categories and identity types continued to be upheld by the data [12].

Trustworthiness

In accordance with interpretive qualitative research, several strategies were used to safeguard the trustworthiness of this research which are laid out in Table 7 [28].

Findings

Data analysis resulted in the construction of five interrelated categories, each with three sub-categories, which collectively described participants' professional identities and their development. The categories were:

- Approach to patient care
- View of osteopathy
- Learning experience
- View of practical skills
- Professional identity development continuum

The professional identity development continuum category was considered a core category [7], and helped to organise the remaining categories, and to explain the variations in the nature and form of participants' professional identities. The categories are presented as distinct, in order to provide a broad differentiation of participants' identities to allow for comparison. However, in actuality categories could be considered on a continuum with some participants displaying a combination of different attributes. The categories are discussed in turn and supported with participants'

Table 7
Strategies used to enhance and evaluate the trustworthiness of the study [28].

Four criteria of trustworthiness	Description	Strategies
Credibility	Confidence that the research has obtained an accurate interpretation of the meaning of the data which reflects the experience of participants.	Immersion in the data meant that time was spent familiarising and contemplating the data. Member checking provided participants with an opportunity to read through their transcripts to check for accuracy in its' representation of the interviews and to make comments. Supervisor debriefing facilitated scrutiny and review of codes, categories and themes. Established research methods were used to collect and analyse the data
Transferability	The extent to which the ideas generated may be applied to other populations or situations, and maybe considered the theoretical generalisability of the findings.	Reflective memo writing was used throughout data collection and analysis to document researcher biases and their possible effect on the findings. Peer and supervisor discussion enabled the theory to be tested scrutinised. Thorough adherence to research methods
Dependability and confirmability	The degree to which the researcher can demonstrate that the findings relate to the data. Whether the findings of the study offer a dependable and realistic interpretation of the view held by the participants.	Audit trial in the form of interview transcriptions, memos and diagrams allow the reader to see the research process, the data collected and how theory was derived from the data. Participants were encouraged to speak freely and honestly in a judgement free environment in response to semi-structured open questions. Participants were briefed on the purpose of the study prior to the interview.

quotations from interview data. Fig. 2 illustrates the categories and the relationship between them.

Approach to patient care

How participants approached the patient-practitioner relationship and their perceived role in the clinical setting seemed to influence their treatment and interactions with patients. All participants worked as student osteopaths, under supervision at their respective OEI clinic, but their approach to this role and their patients (e.g. clinical examination, treatment, decision-making) varied. Three different approaches to patient care were constructed from the data, and formed the sub-categroies: 'experimenter', 'participator', and 'fixer' (Fig. 2). Participants approach to patient care which was described as 'experimenter' did not have one set method or theory which informed their approach to treating and examining patients:

> *I'm quite open minded, I'm constantly shifting perspective between what different tutors are saying and things I'm reading.* (P1)

Experimenters were not rigid in their approach to patient care, and each patient interaction and treatment varied:

> *I'm just trying to learn as much as I can so I don't have a set way … trying to work things out. I'm experimenting basically.* (P8)

In contrast, participants' whose approach to patients was described as 'participator' emphasised working alongside patients during the clinical sessions, forming a partnership:

> *I think one of the biggest skills is being able to sync with the patient regardless of who they are and how they are and just work it out together* (P4)

Participants described as participators engaged with patients verbally to better understand their expectations and concerns; this, enabled them to work closely with patients and to offer advice on management of their problem:

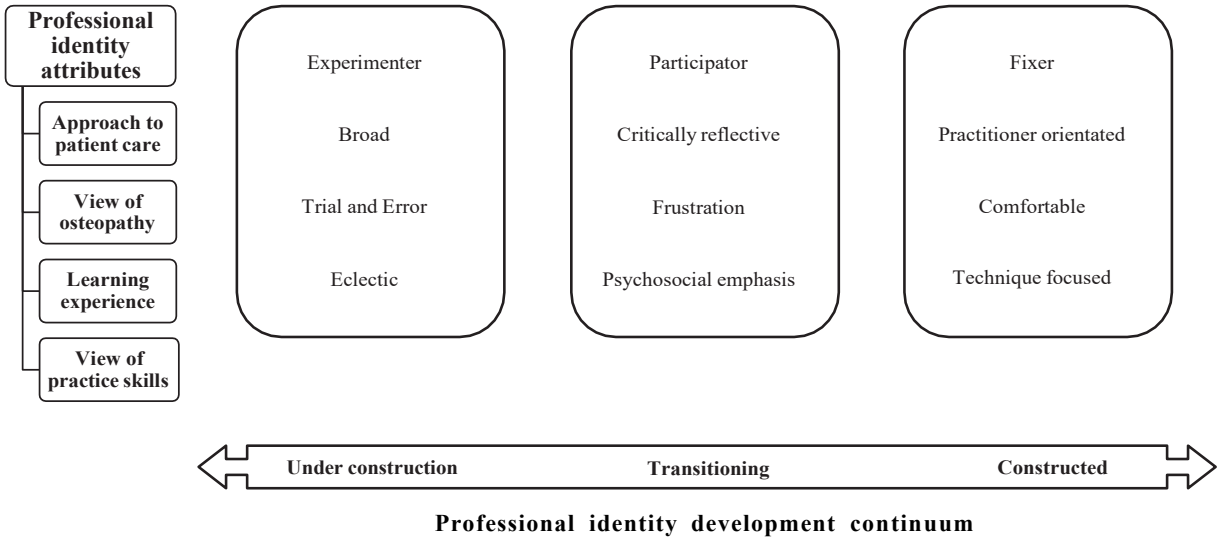

Fig. 2. Participants' professional identities and professional identity development continuum.

Listening, querying, questioning patients- in a way I'm questioning their beliefs, their thoughts in a way that they may think actually, 'why am I doing that?' I then offer them different approaches. (P5)

Understanding the goals of what the patient wants, I take it from the perspective of the patient and what they're willing and able to do to help themselves, I can only do so much. (P3)

Finally, there were some participants whose approach to patients was focused on the patient's problem (e.g. presenting pain and disability), and how best they could solve it. These participants viewed their approach to solve the patients' problem, and were described as 'fixers', for example:

If it hasn't got better since last time I'll make sure I've looked at another area that might be relevant to what's going on (P7)

I try to be quite structural, relying on the anatomy and physiology. There is some form of tissue that is causing the problem (P6)

Participants described as fixers appeared confident to lead the clinical situation and to direct the patient-practitioner relationship:

I would examine the patient … explain it all using diagrams, anatomy and physiology, treat the patient using osteopathic techniques and provide a management plan (P6)

Your first role is to get them better by giving treatment and then by education and whatever exercises you feel are relevant … my role is to just be a reliever of pain (P2)

View of osteopathy

Participants' views of osteopathy varied which included their thoughts on the profession as a whole, its relation to other healthcare professions and also what the practice of osteopathy meant to them. Three sub-categories described the different views of osteopathy as being either 'broad', 'critically reflective' or 'practitioner orientated'. Participants with broad views of osteopathy tended to make vague generalisations, and did not outline specific detail or strong opinions about the profession:

… you could say the profession is in an identity crisis because we're told we can be the practitioner we want to be … It's very broad which makes me excited … (P1)

It [osteopathy] *offers a positive on responsibility for health and what can be achieved …… I think osteopathy is just a reminder of what the body can really do …* (P8)

In contrast, other participants had more specific and considered views about the osteopathic profession. They formed these views by critically reflecting on what they had read, learnt, experienced and been told by educators in relation to osteopathy:

If you educate people well enough [about health], *will osteopathy be needed? To a percentage yes. Right now, too much of the population need help and they shouldn't -it starts with education* (P5)

Osteopathy is removing barriers to function in the classical osteopathic sense … we've lost the way trying to be what people expect; respectable, acceptable, payable by the state we don't put our foot down and stand for the principles of osteopathy (P4)

Participants who were critically reflective tended to have very clear ideas about what the idea of osteopathy meant to them which related specifically to their previous experiences and future career as an osteopath:

I see myself as a partial osteopath … I didn't do osteopathy to become an osteopath, it was the best course to help me be a holistic practitioner. I identify myself more as a therapist (P3)

Osteopathy is only a stepping stone there's plenty more to learn and understand and execute. Osteopathy's given me a good idea of what health is … my aim is to shift the population's idea of health. (P4)

Finally, some participants' views of osteopathy and the profession seemed to be centred upon the perceiving that osteopaths held specialist knowledge, professional roles, distinctive skills and experiences, and that it is these which should influence how they thought the profession should be. These views were considered practitioner-orientated, and are illustrated by the comments below:

Osteopathy is a genuine medical specialisation programme, it needs closer integration and implementation when it comes to medical practice. (P6)

Osteopathy is like a medical healthcare profession […] where we learn anatomy, physiology but what makes osteopathy different I think is the philosophy … I tend to apply techniques where I feel like the body is telling me. (P2)

Learning experience

Learning experience referred to participants' approach and management of the process of learning to be an osteopath. Participants' experiences of learning on their osteopathy course varied. Some participants' learning experiences was described as 'trial and error', whereby they continuously gathered and applied new and different knowledge and skills as the situation demanded. Through experimentation and experience these participants were learning to be osteopaths:

I'm still learning what that hands-on aspect can actually achieve. Until I treat loads more patients more consistently then I won't necessarily know what that osteopath bit of the treatment is (P1)

at the moment, I'm completely trial and error and I have no consistency to how I'm practicing because I'm trying to work out what it is that I like … to have one kind of approach doesn't suit all people (P8)

Other participants emphasised the frustration they experienced whilst learning and described a conflict between themselves and their learning environment. Their awareness of their pre-existing beliefs and skills highlighted disparity between their own philosophies and ideals and those expressed by tutors, educators and the requirements of their osteopathy course:

I feel torn in different directions, there's some tutors that share a philosophy with you [but] a lot of them are very exercise or biomechanical based and that's not something I'm really interested in (P4)

I find an educational setting is restricting somewhat. You're working towards your exams and what's expected is a certain picture. If you veer from that it's not that you're unsafe, it's just that that's not how they would expect you to approach it (P5)

In contrast, other participants didn't experience as much conflict or frustration, and appeared quite comfortable viewing tutors as a source of knowledge:

The tutors are quite varied so you get a bigger bank of information and approaches which has been helpful (P7)

These participants were 'comfortable' with overcoming challenges which were part of their learning experience:

I realise in clinic I need to know these techniques so I go back to the basics, learn it, apply it but at the end of the day you just find your own techniques (P2)

If I'm facing a problem with a patient I read about it instead of relying on the tutor's opinion. I know where to find the information, I've been in difficult situations before so I can deal with problem (P6)

View of practice skills

The category of 'practice skills' encompassed a wide range of skills which participants considered they valued in their clinical practice. Participants considered different elements of their practice skills to be more important than others and there was variation in how participants felt about their skills. The sub-categories of 'eclectic', 'psychosocial emphasis' and 'technique-focused' summarise these views.

Some participants had an 'eclectic' view of their practice skills. These participants did not give particular importance to any one skill and emphasised the continual process of learning new skills and adding to existing ones:

… you need empathy and communication skills but I need to work on practitioner/patient boundaries. I use soft tissue, massage and all of that. Nutrition is a real skill for an osteopath with the movement therapy/exercise, manipulations and emotional support. (P8)

I'm gathering loads of tools and I'm not rejecting any one of them. I'm not that into HVT's … but I see it's just as important as cranial as a tool in my tool bag (P1)

In contrast, other participants emphasised engaging with the psychosocial factors (e.g. family support, pain beliefs, anxiety) that effect patients as an important part of how osteopathy can help patients. These participants had a 'psychosocial emphasis' to their practice skills:

It's not what we do to a person that makes them better it's what they think we do … the minute they feel better that manifests itself throughout the rest of the body (P5)

my point of departure is understanding who that person is … not just coming to a differential on the basis of what they're telling you but reading between the lines … the background, their mental makeup (P4)

As a result, participants emphasising a psychosocial orientation placed importance on inter- and intrapersonal skills which enabled them to engage with patients:

I don't believe in just working on the physical, I believe in looking at everything in a person like their mental and emotional health, all those things I think play a role even if I'm not being psychoanalytical (P3)

I'm not sure to what extent these techniques are placebo. The skills we have are making people feel comfortable to relax, give you an insight into themselves, their pain world, their psychological makeup (P4)

Some participants considered their hands-on technique skills to be most important in their practice, and tended to focus on the biomedical aspects of the patient. These participants' views were technique-focused, and they emphasised their manual therapy techniques as being a key part of helping patients in their future role as professional osteopaths:

I try to understand the life of the patient, make sense of what's happening to the patient and then I tend to apply techniques where I feel like the body needs it … I listen to the tissues (P2)

They [manual techniques] *form the base, they are a starting point that necessarily has to be part of the whole management plan* (P6)

I'd rather spend the time on other things that they can't do on their own such as doing techniques - someone has to do that. (P7)

Professional identities and professional identity development continuum

The professional identity development continuum explains the qualitative relationships between the previous four categories described (approach to patient care, view of osteopathy, learning experience and view of practical skills), and also describes the variation between participants' professional identity development. Participants' professional identity development and lay on a continuum ranging from 'under construction' to 'transitioning' and to 'constructed'.

Participants whose professional identities were described as 'constructed' tended to feel confident and comfortable in their role as student osteopaths, and their future professional role:

I think some of my techniques and things that I do, I've mastered them, maybe not to the full extent of mastering them, but I do think they have an effect and I've seen quite a few patients doing a lot better. (P7)

One participant who had previously trained as a healthcare professional prior to studying osteopathy and two other participants had family members who were osteopaths. This gave the impression that their professional identities were more defined and established:

I definitely see myself as the healthcare professional that I already am [I combine] this practice with osteopathic treatment where it fits (P6)

In contrast, those participants whose professional identities

were 'under construction' were less sure of their future role as an osteopath and sought more clarity:

> *… I have these constant identity crises because I'm always shifting and changing depending what different tutors tell me or how a patient responds; I'm in constant reinvention of myself as an osteopath*. (P1)

These participants were unsure of how they saw themselves as osteopaths and felt that they were in the early stages of developing their professional identity:

> *Sometimes I feel more like a life coach or a therapist …* [and] *sometimes I don't feel like an osteopath at all. (P1)*

> *I'm learning by completely trial and error and so if I get three backs in one day I'll try three different treatments*. (P8)

Participants whose professional identities were 'transitioning' had formed initial and tentative ideas about different aspects of their osteopathic and healthcare roles. However, there was some tension and uncertainty about how they were going to put these views and preferences into practice:

> *I'm interested in the crossover between psychotherapy and body work, getting through the layers of the body … working with the mind through that hands-on approach. How I'm going do that I don't know.* (P4)

> *It's always there for me (background of healing) but I've disregarded the things that are important to me. Eventually I will bring the package together but I haven't understood how I'm going to do it.* (P3)

Discussion

This study describes the professional identities of final year osteopathy students in the UK. The findings indicated that there is variation in both the nature and development of final year osteopathy students' professional identities. Four categories were constructed from the data to describe the attributes of participants' professional identities, and these were labelled as approach to patient care, view of osteopathy, learning experience and view of practical skills. Similar variation in professional identities and their defining attributes have been identified through qualitative investigation of physiotherapy students in the UK and Sweden [29] and practicing osteopaths' in the UK [55]. Specifically, this present study described that students have different emphasises in their approach to patient care and the skills they valued for clinical practice. The finding that there is variation in the approach to patient care, view of skills and osteopathy are akin to the different 'therapeutic approaches' developed by Thomson et al., [54] to explain the variety of clinical approaches and identities adopted by qualified osteopaths in the UK. The range of views of approach and practice skills held by students affords a rich and diverse learning environment in which professional identities can be developed through students' professional socialisation and interaction [45].

Some students emphasised their hands-on technique skills as central to their practitioner-centred approach, as is consistent with therapeutic approaches adopted by qualified osteopaths' [54,56]. The finding that some students emphasised communication and interpersonal skills in addition to technical manual therapy skills is consistent with therapeutic approaches found amongst qualified osteopaths [54,56], and also qualitative research of physiotherapy students [29]. This focus on communication is encouraging, in view of recent research suggesting that practitioners' use of language with patients with low back pain can profoundly influence patients' health beliefs and subsequent behaviours [8e10,48,51]. As such, student osteopaths should have a critical awareness of how they communicate to patients in relation to common clinical presentations such as low back pain [51].

Student osteopaths expressed a variety of skills they used and valued for practice. These ranged from practitioner-centred approaches which emphasised manual therapy techniques, to psychosocial-orientated approaches which emphasised communication and interpersonal skills. A practitioner-centred approach has been widely critiqued over recent decades in favour of the person-centred and biopsychosocial models of practice which are more conducive to facilitating patient autonomy and collaborative decision making [11,53]. However, in a study of physiotherapy and chiropractic, patients reported a preference for practitioners with a reputation for technical skills over those with a reputation for interpersonal skills [2]. The contradiction in patient preferences highlights a possible requisite for varied professional approaches. As such, the predominantly private nature of osteopathic healthcare services may accommodate a variety of clinical approaches and professional identities. This is consistent with the findings from research by McGivern et al., on the dynamics of osteopathic regulation and professionalism in the UK, and which described the profession in the UK as encompassing varied interpretations of osteopathy ranging from "quasi-medical musculoskeletal manual therapy to osteopathy akin to esoteric healing" (p.44) [33].

Students' views of osteopathy were related to their learning experiences; the clearer their views of the profession and its meaning to them, the more comfortable they were in their learning experience. Some students felt they required a more stringent definition of what an osteopath 'is', and what the core values were that defined their future professional roles (e.g. the role of osteopathic theory and philosophy, scope of practice, professional distinctions). Having a conscious awareness of these values and identities would allow students to direct their learning goals and actions in a purposeful way, which could continue throughout their careers as professionals [44]. Research from other healthcare professions [14,21,26,37], and from healthcare regulators more broadly [43], suggests that a strong professional identity and sense of belonging can encourage professionalism and a clear sense of role and purpose. It has been postulated that a practitioner's professional identity may influence their adherence to regulatory governance through development of a set of internal standards and values which act to regulate a professionals' work [43]. Although there is no evidence in osteopathy to support this hypothesis, a research project commissioned by the GOsC in the UK suggests that osteopaths' professional identities may relate to their regulatory expectations [33], however further research is required in this area.

Critically reflecting on the values and epistemology which underpins osteopathy is crucial to the professions' development [52,60,61], and a range of perspectives and values have been offered, such as those rooted in evidence-based practice [18,35], patient-centeredness and the biopsychosocial model [41,53] and values which centre around traditional principles, knowledge and theories proposed early in the profession's development [5,40]. Interestingly, despite criticism that traditional osteopathic theories and principles are playing an over-prominent role in osteopathic practice and education, as has been argued theoretically [15,34,52,61] and empirically [17,25,54], students in this study did not express that they used or valued traditional models as a framework for practice.

Students who held critically reflective views of osteopathy and felt ambivalent towards aspects of the profession, experienced

frustration in their learning and they felt a conflict with what was expected of them in their education and their personal learning experience. This is congruent with research in physiotherapy which suggests that students begin their education with a range of views and perceptions of the profession which affect their perceived role and the development of their professional practice [44]. Professional socialisation is the process through which students learn the tacit rules, norms and skills of their profession, which starts in professional training and contributes to shaping their professional identity [45]. The findings of the present study and others in physiotherapy [38] [19,29,30]; suggest that educational planning which encourages professional socialisation would benefit both the profession's identity as a whole and that of individual student's through professionalization (e.g. engaging in the processes of professional unification, knowledge codification and standardisation [3]), and through the experience of professional practice [44,46].

The timing and character of role transition and professional identity development is dependent on social, cultural and individual factors relating to previous life experiences as well as professional education [1,42]. As such, variation in the stages of formation of participants' professional identity is in accordance with professional identity development and role transition theory [1,49]. A curriculum which facilitates students to construct a strong professional identity has been identified as an important factor in becoming a medical doctor and as such is included in medical education reform in the United States [24]. However, how these findings from medicine relate to osteopathy is unknown and further research is required to explore the precise structure and content of an identity-developing osteopathic curriculum. Although the stages of professional identity development identified in this study align with current evidence, it is not known how the curriculum and learning environment influenced this development specifically. This may be of interest for future research in this field. A curriculum design which supports professional identity development has been researched in medicine, occupational therapy, nursing and physiotherapy due to the positive implications of this for students in relation to professionalism, alignment of clinical approach with practice standards, and clinical reasoning and decision making [36,42,63,64]. Social interaction theory and involvement of professional practitioners in curriculum planning are therefore suggested methods of curriculum development [32,63].

A recent literature review by the Professional Standards Agency (PSA) in the UK, emphasise the impact of regulation on healthcare practitioners' professional identities, and suggest that the development of a well-defined profession identity can have positive effects on practitioners' practice (e.g. enhanced professional self-esteem, satisfaction and professional retention) [43]. However, an overly rigid regulation which narrows the scope for variation of individuals' professional identities may lead to profession-centred practice which limits opportunities for inter-professional integration [43]. A challenge of osteopathy educators and curriculum planners is to facilitate a rich learning environment which supports students' personal learning style and helps to develop their individual professional identities. Such professional identities should be sufficiently defined to enable personal curiosity, engagement and enthusiasm for learning, but also malleable enough to promote critical self-reflection, inter-professional collaboration, and openness so that they may respond and alter their professional views, beliefs and practices in light of new evidence and professional scope and opportunities.

Limitations

There are several limitations to the study which require highlighting. The lead researcher attended the same OEI as several participants, which could have predisposed bias during data analysis, such as the researcher's own learning experiences, which could inadvertently portray the OEI in a positive or negative light. However, it could be argued that the insights offered as an 'insider' [13] enhanced the lead researcher's sensitivity to important issues raised by participants, which facilitates interpretation of the data and link the findings with the extant literature. Furthermore, the researcher adopted a critically reflexive stance throughout the study, to construct a trustworthy interpretive portrayal of participants' views and experiences in line with the purpose of constructivist GTM [4].

Although students from all seven UK OEIs were invited to take part in the study, the recruitment process resulted in a final sample representing just two OEIs. Differences in curriculum and learning environment between colleges may affect students' professional identities [44]. Therefore, how the experiences of the students in this study relate to the wider population of final year osteopathic students in the UK (and throughout the world) requires further study. This study generated three broad professional identities from students studying at just two OEIs; sampling a greater range of students from all OEIs is likely to result is an even more diverse data set, and possibly the construction of a more sophisticated account of the different professional identities. Development of a questionnaire to test the generalisability of the findings with final year osteopathic students across all seven OEIs would be a valuable progression of this study.

Interviews were conducted part way through the academic year (October 2016 and January 2017) and as such provide a snap shot of participants' professional identities at this time. Professional identity continuously evolves, therefore a longitudinal study may provide valuable information on the development and reconstruction of professional identities over time, and across professional contexts, and as a result of further professional socialisation [19,46], education and interaction [1,30]. Finally, semi-structured interviewing was the method chosen for data collection in this study. However, it has been shown that there is often contradictions between peoples' beliefs and behaviour [20]. Therefore, incorporating additional methods of qualitative data collection, such as participant observation, diaries or video-recording, may assist participants' reflection and generate even more contextual and detailed data on how such identities and views are enacted, lived and embodied in clinical practice [20].

Conclusion

The findings of this study suggest that final year osteopathy students' held differing professional identities, and four categories were constructed which describe this variation, these were: approach to patient care, view of osteopathy, learning experience and view of practical skills. Students professional identities varied in their stages of development and related to three points along a profession identity continuum: under construction, transitioning and constructed. The different stages of professional identity development constructed are in accordance with role transition and professional identity development theory. The effect of osteopathic training on the professional identity development of these students is not known, and more research exploring the nature and effect of different osteopathic curriculum on professional identity is required.

Conflict of interests

Oliver Thomson is an associate editor for the International Journal of Osteopathic Medicine, but was not involved in any peer-review or editorial decisions in relation to this paper.

Ethical approval

This study was approved by the British College of Osteopathic Medicine Research Ethics Committee (BCOM REC).

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