Reflections: an inquiry into medical students’ professional identity formation

Anne Wong1 & Karen Trollope-Kumar2

CONTEXT Professional identity formation plays a crucial role in the transition from medical student to doctor. At McMaster University, medical students maintain a portfolio of narrative reflections of their experiences, which provides for a rich source of data into their professional development. The purpose of this study was to understand the major influences on medical students’ professional identity formation.

METHODS Sixty-five medical students (46 women; 19 men) from a class of 194 consented to the study of their portfolios. In total, 604 reflections were analysed and coded using thematic narrative analysis. The codes were merged under subthemes and themes. Common or recurrent themes were identified in order to develop a descriptive framework of professional identity formation. Reflections were then analysed longitudinally within and across individual portfolios to examine the professional identity formation over time with respect to these themes.

RESULTS Five major themes were associated with professional identity formation in medical students: prior experiences, role models, patient encounters, curriculum (formal and hidden) and societal expectations. Our longitudinal analysis shows how these themes interact and shape pivotal moments, as well as the iterative nature of professional identity from the multiple ways in which individuals construct meaning from interactions with their environments.

CONCLUSIONS Our study provides a window on the dynamic, discursive and constructed nature of professional identity formation. The five key themes associated with professional identity formation provide strategic opportunities to enable positive development. This study also illustrates the power of reflective writing for students and tutors in the professional identity formation process.
INTRODUCTION

The transition of medical students into doctors has traditionally been studied through an ethnographic and sociological lens. Recently, interest has focused on students’ perspectives in order to examine the ways in which they construct their professional identities during their training. As medical students form their professional identities, they begin to move from ‘peripheral’ to ‘full’ participation in the community of doctors. Therefore, professional identity formation is seen as a crucial component of medical education and professionalism.

Identity, the understanding of who one is, develops from an interplay of meaning-making from self and others. Professional identity formation can be conceptualised as the process by which an individual self-defines as a member of that profession based on the acquisition of the requisite knowledge, skills, attitudes, values and behaviours.

Older theories view professional identity as static traits or societal roles. Stage theories view identity formation as a progressive development through a series of stages. For example, Hilton and Slotnick theorised that medical students undergo the stage of ‘protoprofessionalism’ before acquiring ‘mature professionalism’ through ‘phronesis’ (wisdom) as a result of experience and reflection on experience. They conceptualised professionalism and professional identity development to be a linear progression to a stable state at ‘maturity’.

On the contrary, contemporary constructivist theories of identity formation conceive identity to be a dynamic phenomenon that is continually negotiated and co-constructed within a social and relational environment. Primary identifications, such as gender, ethnicity and social class (which are less malleable), interact in different ways with new experiences and circumstances. described the process as that of ‘becoming’ rather than ‘being’ a professional. Rather than reaching a final endpoint, Scanlon and others conceive professional identity as a multidimensional, evolving and lifelong process throughout one’s career.

Many studies have shown that students acquire beliefs, values and attitudes of being a doctor from the hidden curriculum, defined as the ‘set of influences that function at the level of organizational structures and culture’. Although the ‘hidden curriculum’ is undoubtedly important, a broader research approach is needed to study the range of influences on professional identity formation during the early phases of medical education. This approach would yield a more nuanced view of the ways in which students negotiate new understandings of themselves.

Recently, Monrouxe et al. reported that exposure to early patient encounters and opportunities for discussion in clinician-led small groups help students develop a rich and multifaceted understanding of professional identity. Central to this process is reflection, the process by which students learn to make sense of complex human experience. The use of narrative to promote reflection has gained considerable attention in medicine. Many medical schools have incorporated learning portfolios for students to record and reflect on their clinical experiences. Portfolios can be valuable tools for developing skills in reflective practice and ethical decision making. The narratives within the portfolios can provide a window into a medical student’s experiences in professional identity formation.

In the present study we analysed medical students’ written narratives during the pre-clerkship period of their training. We asked: what are the key influences that contribute to the professional identity formation of medical students during their first 15 months of training and how do they shape professional identity over this time period? Using Scanlon’s constructivist concept of ‘becoming’, we examined the ways that students actively construct their professional identities through interactions with patients, mentors and colleagues, within complex learning environments. We used exemplar narratives to highlight the longitudinal development of professional identity. Our study adds to a growing body of literature on professionalism and identity formation in medical education.

CONTEXT OF THE STUDY

At the Michael G. DeGroote School of Medicine at McMaster University, the 15 month (pre-clerkship) professional competencies course addresses non-medical expert domains such as professionalism, self-awareness, communication skills and moral reasoning. Students meet weekly with tutors in small groups. The sessions begin with a ‘check-in’, an informal time when students can discuss clinical experiences and challenges, creating the ‘pedagogi-
cal space \cite{30} needed for the formation of professional identity. During the course, students are asked to write narratives under two categories: the ‘Medical Student Journey’ (to reflect on personal development as a doctor) and the ‘professional competencies moment’ (to reflect on a compelling clinical incident related to one of the professional competency domains). Students produce two narrative reflections (one of each category) after their fourth, sixth, eighth, 10th and 15th month of pre-clerkship training, for a total of 10 reflections. These reflections are not graded, but are read and given written formative feedback by their tutors.

**METHODS**

Narrative analysis is defined as the ‘family of methods for interpreting texts that have in common a storied form’ \cite{35}. In this research methodology, narratives are analysed in their entirety rather than in de-contextualised pieces. In this study, we used the thematic approach to narrative analysis, which consists of the collection and analysis of narratives in order to discover themes that typify the experiences of a group. \cite{35} A typology of narratives is thus inductively created, conceptually organised by thematic categories and illustrated by exemplar narratives or vignettes. \cite{35,36} The finding of common thematic elements across a number of participants or cases is used to develop a descriptive framework of professional identity formation. \cite{36} Narratives are then analysed longitudinally over the 15 months to examine how these themes evolve over time.

**Participants, recruitment and sampling**

After securing institutional ethics approval, all members of a single undergraduate medical class cohort at McMaster University were invited to allow their reflective narrative portfolios to be analysed. Information about the study was disseminated through e-mail and an oral presentation. Participants sent their signed consent forms to the research assistant. Of the total class population of 194, 65 students (46 women: 19 men) consented for their portfolios to be analysed, yielding a total of 604 narrative reflections (Table 1). There was a slight predominance of female participants in the study population (71%) compared with the total class proportion (63%).

Sampling in qualitative research is not statistically determined, but occurs until information saturation is reached (the point of redundancy where no new information is obtained by further sampling). \cite{36,37} This sampling criteria was used to determine the emergent themes related to professional identity formation. These themes were then examined longitudinally within each participant portfolio to determine how they are negotiated and evolve over time.

**Data collection and analysis**

Initially, 10 portfolios were subjected to a preliminary analysis in order to develop a consistent coding system for thematic analysis. Each co-investigator analysed and coded the same reflective narratives in each of the 10 portfolios. Common or recurrent codes across participants’ narratives were identified. The codes were merged under larger subthemes and themes in order to develop a typology of thematic categories. This initial inductive analysis yielded a wide range of themes related to medical students’ experiences within and across each narrative. However, the majority of the themes clustered under several thematic categories that related to some aspect of what it means to be a doctor. These categories were classified under the overarching concept of professional identity formation.

After the thematic coding scheme for professional identity formation was developed, the remainder of the portfolios were analysed. The investigators held regular meetings to discuss findings and resolve differences in the coding. The final thematic analysis yielded five themes that were used to develop the descriptive framework of professional identity formation.

To further develop this framework, we then reviewed reflections chronologically (at 4, 6, 8, 10 and 15 months) in individual portfolios to examine how

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<th>Table 1</th>
<th>Demographics of the study population</th>
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<td>Population size</td>
<td>Female</td>
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<td>Class total: 194</td>
<td>122 (63% of class population)</td>
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<tr>
<td>Study total: 65</td>
<td>46 (71% of study population)</td>
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the students’ professional identity evolved over time with respect to these themes. Our longitudinal analysis compared processes within and across individual portfolios. Rigour was ensured by regular checks for consistency and consensus in data analysis and interpretation, adequate sampling for information saturation, member checking and peer review.36

RESULTS

The narrative data yielded rich insights into professional identity formation. Our thematic analysis revealed five major themes associated with medical students’ professional identity formation: prior experiences, role models, patient encounters, curriculum (formal and hidden) and societal expectations. Our longitudinal analysis revealed the dynamic and evolving ways in which these themes interact as students construct their professional identities over the 15 month pre-clerkship period. We discuss our findings in more detail.

Major thematic categories of professional identity formation

The five major themes and subthemes (in italics) are summarised and illustrated with exemplar quotes in Table 2.

Prior experiences

This theme refers to personal and professional experiences and identities prior to medical school. Narratives describe students’ challenges in negotiating these prior identities with the realities of the new environment.

Role models

Narratives in this theme refer to the influences of both positive and negative role models on students’ developing professional identities. They reveal the important and often pivotal roles that teachers play in students’ understanding of what it means to be a doctor.

Curriculum

This theme includes the subthemes of the formal and hidden curriculum. Narratives associated with the former discuss its value in preparing for clinical practice. Narratives associated with the hidden curriculum discuss the ‘unwritten rules’ of conduct, power imbalances and ethical dilemmas.

Patient encounters

This theme refers to the influence of patients on shaping professional identity formation. It includes subthemes of learning from patients, profound life moments (e.g. witnessing birth and death) and empathy versus efficiency (balancing empathy for the patient with the need for efficiency of clinical practice). Some of the most poignant narratives show the profound effect of human suffering on medical students’ emotional and physical responses.

Societal expectations

This theme refers to the influence of societal expectations on students’ understanding of their professional roles and identities. It includes the subthemes of power and responsibilities of the profession to patients and society. Students write about the dramatic changes in the way that others perceive them and whether they would be able to handle the responsibilities associated with their profession.

Longitudinal analysis: development of professional identity formation over time

The following three exemplar narratives illustrate the different ways in which the themes interact as students construct their professional identities through their experiences in the academic and clinical environments. We provide a summary of the analysis for each exemplar. Detailed quotes and associated themes at each narrative interval are provided in Table 3.

Exemplar 1

P12 is a young male student with a science background, with limited life experience. Several themes are interwoven in his narrative: the curriculum, patient encounters, societal expectations and role models.

In his first reflection, P12 writes about his fear of not being able to master the knowledge that he feels is necessary to be a doctor. However, at 6 months, the student makes an important shift in his perceptions. By observing the learning approaches of doctors, he reconciles this fear of inadequate knowledge: ‘I now have the confidence to say “I’m not sure, let me look that up”’.

Although P12 gains confidence in his ability to navigate the intellectual challenges of medical school,
<table>
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<th>Themes and subthemes (in italics)</th>
<th>Exemplar quotations</th>
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<tr>
<td>Prior experiences</td>
<td>Having spent my first month in medical school I have become keenly aware that my new journey is marked both by beginnings, where we accept and embrace the unknown and exciting future that lies ahead, as well as endings, where we say goodbye to aspects of our lives that are known and familiar... I am mourning many losses, both personally and professionally. Just weeks before classes started, I was by (my father-in-law’s) side in the ICU as we made the decision to pull him off a ventilator and say our final goodbyes... In addition to this personal loss, my professional identity (in the field of business administration) has also come to end. In this role I felt a sense of mastery and comfort with the knowledge base I had acquired over the past 15-20 years. These feelings vanished the day I started medical school and I realised that I would have to give up clinging to this feeling of mastery and control and exchange these notions with a new sense of inquiry, uncertainty and unpredictability that accompanied my discovery and learning (P44)</td>
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<td>Role models</td>
<td>Positive role models I was impressed with the way my preceptor intermingled the straight medical facts behind the tumour with empathy and sympathy for their situation... It was amazing to watch this interaction unfold before my eyes and hard to refrain from crying as my preceptor embraced the woman and her husband... I hope that 1 day I can be as fluid and attuned to the patient’s emotional cues (P38) Negative role models She was rude to the nurses working in her office, told a patient he wasted her time by coming to the clinic and often said nasty things about patients to me in private... Finally, the physician would tell me how much she did not enjoy her job and continuously warned me about how I too would become cynical about medicine one day (P11)</td>
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<td>Patient encounters</td>
<td>Learning from patients This patient was an elderly lady and my preceptor informed us she had been admitted to the hospital due to an exacerbation of a chronic disorder. From the moment we walked into her room, this patient was extremely pleasant, willing to help and very enjoyable to talk to. Later, I was surprised to hear my preceptor say during our debriefing, ‘She won’t make it’. Though I was shocked to hear this, it is quite possible that the patient already knew this and was making the best of what she had left and this involved helping future doctors get the most out of their clinical experiences (P51) Profound life moments What I understood (from meeting this dying woman) was my immediate urge to help her. I initially thought this urge would go unfulfilled as she was dying; a diagnosis with no medical cure. What I realised later was that I had helped her simply by being there and listening silently to what she said (P24) Empathy versus efficiency I must hold on to my humanity in order to be a good physician... On the other hand, this experience in the ER taught me that in order to effectively treat the patient, I must be able to ‘rise above’ my humanity and concentrate on the task at hand (P57)</td>
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he further learns what it means to be a doctor from a challenging patient encounter, 8 months into his training. After giving the diagnosis of HIV to a patient, the student’s clinical preceptor leaves the room to pick up some forms. The student, left alone with the patient, describes sitting in ‘deafening silence for what seemed like ages’. Later, the patient thanks the student for being there, much to the student’s bewilderment.

This patient encounter creates a pivotal teaching moment. The clinical preceptor helps the student understand the importance of his role as a witness to the man’s suffering. The student’s compelling description of his feelings of inadequacy during the patient encounter is followed by a thoughtful reflection on the important role that he may play even at this early stage of his training.

At 10 months, P12 attends a session on the ethics of abortion. This session helps him to explore his own moral stance and other views on this controversial topic. He reflects on how he now understands that his future role as a doctor is to provide ‘unbiased information for … patients to make a truly informed decision’ regardless of his own personal views.

In his final reflection, 15 months after the start of medical school, P12 writes a thoughtful critique of an oral examination, suggesting that professional behaviours should be assessed during each examination station. The tone of this final narrative has changed dramatically from that of the early reflections. Positive doctor role models have helped this student overcome his anxieties about the learning demands of medical school. When he is faced with the emotional demands of patient care, another doctor helps deepen his understanding of the patient–doctor relationship. Challenges posed in the formal curriculum allow him to refine his values and clarify his future role. Ten months after starting medical school, he demonstrates a growing identification and deepening understanding of his professional role, which is further developed in his final reflection in which he discusses ways of assessing professional behaviour. He is now writing confidently in the first person: ‘As a physician…’.

Exemplar 2

P46 is a young male student with an interest in surgery. Themes interwoven in this narrative include the curriculum (formal and hidden), role models...
### Exemplar 1 (P12) quotations

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<thead>
<tr>
<th>Time and themes</th>
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<tr>
<td><strong>4 month</strong></td>
<td>As I start on this academic journey, the sheer volume of knowledge that I am going to need to know seems nigh impossible to internalise in three scant years. Frankly, this scares me more than anything else</td>
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<td><strong>Formal curriculum</strong></td>
<td>A solid knowledge base is important, but you cannot hope to survive in this ever-changing field without the ability to research and learn effectively…Having seen so many different physicians fall back on that skill of lifelong learning, I now have the confidence to say ‘I’m not sure, let me look that up’</td>
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<td><strong>6 month</strong></td>
<td>As the patient stood to leave, he turned to me and said, very deliberately, ‘Thank you’. Completely bewildered, I mumbled an incoherent response. Why was he thanking ME? I think we all need to step back and appreciate how ever-present we are in these moments in people’s lives, and how even the little inconsequential things we do can make profound impacts on a patient’s experience</td>
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<td><strong>Profound moments</strong></td>
<td>I just sat there in deafening silence for what seemed like ages before the doctor returned with the forms.</td>
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<td><strong>Role model</strong></td>
<td>The doctor honoured her wish not to delve into too much detail about her disease. It seemed odd to me that the woman did not want to know too much about her condition because that was in stark contrast to my own values and something that I would want to know if I were to find myself in her place. The aside to this clinical encounter is that, during her previous visit, the lady had refused any sort of surgical intervention for her malignancy, and the doctor was also willing to honor this wish so long as the patient could appreciate the consequences of her decision</td>
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<td><strong>8 month</strong></td>
<td>As a physician, I am the guide for my patient’s decision, but I am not the decider. Ultimate responsibility for these tough choices lies in the hands of the patient, and the truly responsible doctor provides unbiased information for his or her patients to make a truly informed decision</td>
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<td><strong>Societal expectations</strong></td>
<td>Tailor the testing scenarios themselves to include elements of proper physician conduct and interviewing skills; reward the student who can tactfully ask the shy, non-forthcoming 15 year old girl about her vaginal pain, or the student who reassures the patient getting a lymph node exam for fear of blood cancer. By doing that, you can truly integrate the professional competencies experience into a worthwhile and persistent pattern of behaviour that will aid us as we continue our adventure into medicine</td>
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<td><strong>10 month</strong></td>
<td>The surgeon showed no hesitation in absolutely humiliating the resident before us, harshly criticising his lack of fundamental knowledge…Witnessing the public spectacle that night surely sent chills down my spine as I contemplated my ability to handle such frank criticism as a resident…</td>
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<td><strong>Hidden curriculum</strong></td>
<td>It is amazing how quickly I saw myself becoming desensitised to the smell of burning flesh and the sight of exposed anatomical structures, and I am wondering how seasoned surgeons are able to maintain a sense of human connection with their patients as they lay covered and draped on the operating table…Moving forward, I think it will be extremely important to develop a holistic view of patient, knowing that the individual on the operating table is more than just a specimen…</td>
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<td><strong>15 month</strong></td>
<td>It has been, simultaneously, the weirdest and most refreshing feeling to experience tutorials where the only goal is to discuss and share your knowledge…This level of freedom and independence has invoked a genuine interest for learning…(However), there still remains some fear that… I will slip through the cracks and arrive at the end of medical school with patchy knowledge that has not left me well prepared</td>
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### Exemplar 2 (P46) quotations

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### Table 3 (Continued)

#### Time and themes (in italics)

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<th>Exemplar 2 (P46) quotations</th>
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<tr>
<td>12 month</td>
<td><strong>Role model</strong></td>
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<td></td>
<td>He (the surgeon) offered a voice of reason and gave her an opportunity to truly express herself. His proper bedside manner, calm and encouraging demeanour really showed me that there is indeed a place for proper communication when it comes to surgeon–patient interactions.</td>
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<tr>
<td>15 month</td>
<td><strong>Hidden curriculum</strong></td>
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<td></td>
<td>The autopsy brought to the forefront the mystique and reverence that I associate with the human body—especially as an aspiring surgeon. My every waking thought as a professional must be about minimising harm to the patient, using any means necessary to protect the integrity of the human condition. And on that day, standing in that morgue, I saw the very fabric of this philosophy shred into pieces.</td>
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<tr>
<td>4 month</td>
<td><strong>Prior experiences</strong></td>
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<td></td>
<td>Friends exclaimed that they hoped I didn’t lose myself, and, therefore, that they didn’t lose me too. I found myself reassuring everyone that I would be fine, that my passion and conviction was too strong to just disappear… At about week 2 of medical school, I began to think otherwise. A combination of the fierce pace for ‘catching up’ with the academic knowledge of the students who did a science degree and the constant bombardment of ethical, emotional, and personal issues, I began to wonder if I was the right person to be in medical school. And so here I am. Medical school isn’t really what I thought it would be, and I feel like an outsider a lot of time. I feel as though my motivations for being here and for wanting to do this programme are different than that of my fellow students. I had a variety of unpleasant encounters with the health care system when my mom became ill… I also began to work with communities that have traditionally been marginalised from our health care system—those who are street involved and Indigenous people… Would being a doctor help me to create spaces where I could work to promote change?</td>
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<td>6 month</td>
<td><strong>Role model</strong></td>
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<td>A clinical preceptor, Dr M, said that the therapeutic relationship between the patient and the physician begins as soon as the physician walks into the room. She spoke to us about the healing power of words, of body language, of facial expression… the relationships we form with them allow for the trust that will lead to this support. This support is a central part of healing.</td>
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<tr>
<td>8 month</td>
<td><strong>Societal expectations</strong></td>
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<td>I was uncomfortable in presenting the information to the patient in a one-on-one way because I felt that it created a power dynamic within the group that reinforced that notion of the physician as the ‘top of the hierarchy’…Second, I was uncomfortable with my level of knowledge about the patient’s particular disease of diagnosis…(Since then) I have been trying to make sense of why I was feeling so uncomfortable with the power and knowledge that I feel was expected of me because of my position as a medical student. I think that becoming comfortable with the concept of being a holder of medical knowledge is something that will become increasingly natural for me…</td>
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<td>10 month</td>
<td><strong>Formal curriculum</strong></td>
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<td>During those electives, I found myself, for the first time in my medical education, feeling like I had a sense of place within medicine, instead of struggling with carving a space for myself.</td>
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<td>15 month</td>
<td><strong>Prior experiences</strong></td>
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<td></td>
<td>And without fail, it seems to be these days that I am interacting with patients, hearing their stories, being a part of their daily lives, that I feel certain of my motivation, of my desire to be in medical school and to be a physician…each week I feel a bit more in touch with the values that have brought me to medicine—empathy, justice, compassion, dignity.</td>
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(positive and negative), patient encounters and societal expectations.

His first reflection expresses excitement about the problem-based small group learning style of the medical school, writing ‘this level of freedom and independence has invoked a genuine interest for learning’. This student then plunges enthusiastically into clinical environments. At 6 months, he describes watching a surgeon deliver bad news to a patient and his surprise that the patient did not want to know too much about her condition, ‘in stark contrast to my own values’. Through this compelling patient encounter, the student learns that the doctor must respect the right of the patient to make health decisions.

The student’s next reflection describes witnessing a surgeon harshly humiliate a resident. This shocks him, causing him to question his own ability to handle such criticism. This example of the hidden curriculum, where public belittlement and humiliation (described as the ‘culture of abuse’ in some medical teaching environments) stands in stark contrast to the previous open learning environment of the student’s small groups.38,39 Despite this negative incident, P46 continues to follow his interest in surgery. Ten months into his medical studies, the student writes: ‘I am wondering how seasoned surgeons are able to maintain a sense of human connection with their patients as they lay covered and draped on the operating table’. As he explores the theme of the ‘detached doctor’,7 this student sensitively reflects on strategies to avoid this pitfall: ‘Moving forward, I think it will be extremely important to develop a holistic view of patient, knowing that the individual on the operating table is more than just a specimen…’.

In his 12 month reflection, P46 writes eloquently about being inspired by a particular surgeon as a role model whose ‘proper bedside manner, calm and encouraging demeanour really showed me that there is indeed a place for proper communication when it comes to surgeon–patient interactions’.

In the final reflection at 15 months, the student writes about seeing a forensic autopsy for the first time. The body of a young suicide victim lies naked and exposed on a steel table in the morgue. The student describes how the examiner slices into the body and eviscerates the abdomen with one hand, and then later peels the scalp off the corpse’s head. Profoundly disturbed, the student writes about the impact of the experience on ‘the mystique and reverence that I associate with the human body… On that day, standing in that morgue, I saw the very fabric of this philosophy shred into pieces’.

This disturbing and pivotal incident abruptly ends the longitudinal narrative. This time, the student does not try to come to terms with an incident that is at odds with his values. In previous reflections, he had always attempted to put challenging experiences into perspective, using the words ‘moving forward’. Interacting with mentors and peers, he was creating a professional identity in a dynamic and discursive way. But the autopsy episode seems to have shattered this progress and the abrupt end to the portfolio leaves no resolution.

**Exemplar 3**

P59 is a female, who is older than most students, with a background in the humanities and public health. Interwoven in this narrative are all five themes of prior experiences, curriculum (formal and hidden), role models, patient encounters and societal expectations.

As P59 begins medical school, she notes that her friends worry that she will ‘lose herself’. She finds her new environment bewildering and challenging: ‘I feel like an outsider a lot of the time. I feel as though my motivations for being here and for wanting to do this programme are different than that of my fellow students...’. This excerpt illustrates what Costello40 has described as ‘identity dissonance’, where students experience significant distress in trying to reconcile the conflicting elements of the professional role with their former identities. Unlike her peers, who feel supported by a bond of ‘professional inclusivity’,6 P59, who has had a previously established professional identity, feels like an outsider, intensifying her struggle to shape a new identity.

In her second reflection, she searches for ways to reconcile the identity dissonance by writing about her past experiences working with marginalised communities and wondering whether being a doctor could help her create further spaces to promote change. In this way, she could incorporate elements of her past identity with an emerging identity as a doctor.

In her second reflection, she searches for ways to reconcile the identity dissonance by writing about her past experiences working with marginalised communities and wondering whether being a doctor could help her create further spaces to promote change. In this way, she could incorporate elements of her past identity with an emerging identity as a doctor.

At 6 months, P59 writes about an influential clinical preceptor role model who helps her to understand the power of the therapeutic relationship and ‘the healing power of words, of body language, of facial
expression...’. She begins to appreciate that the doctor’s role involves deeply human dimensions.

At 8 months, P59 becomes aware of hierarchies in the health professions after attending an interprofessional event in which she is asked by the other students to take the lead in communicating a diagnosis to a patient. She reflects on her discomfort with the power associated with the medical profession and how to reconcile this with time.

Ten months into her medical education, P59 attends clinical placements in remote communities and inner city settings. In this narrative, she finally discovers a degree of professional identification – a pivotal moment: ‘I found myself, for the first time in my medical education, feeling like I had a sense of place within medicine, instead of struggling with carving a space for myself’.

In her last entry before her clerkship, P59 writes: ‘Each week I feel a bit more in touch with the values that have brought me to medicine – empathy, justice, compassion, dignity’. Her reflections over 15 months describe a remarkable journey of identity formation from the defiant young woman who refuses to ‘lose herself’ to an unhappy ‘outsider’ among her peers to an individual struggling to make sense of her emerging role as a ‘holder of medical knowledge’ and then finally to a confident student who feels she has found a place in medicine that affirms her deepest values.

DISCUSSION

Our study of medical students’ narratives support Scanlon’s concept of professional identity formation as a dynamic, evolving and co-constructed process of ‘becoming’. Some of our themes relating to professional identity formation have been previously described in the literature. For example, similar to our finding, role models have been identified as major influences on professional identity formation. Ibarra showed that observing and imitating role models was a key component in the identity formation of junior professionals. We found a predominance of student narratives related to this theme. As illustrated in our exemplars, teachers as role models are instrumental in shaping pivotal moments in professional identity construction. Moreover, profound patient encounters are fertile ground for the development of professional identity and good role models are invaluable for students who are struggling to make sense of human suffering. Conversely, poor role models have an important negative impact, especially with respect to the hidden curriculum.

Consistent with the literature, we also found many instances of the hidden curriculum that centre around power imbalances, as seen in lapses of professionalism, student experiences of ethical dilemmas and denigration. Although the role of the formal curriculum has been de-emphasised in the literature, students in our study often refer to its importance in preparing them for their professional roles. The influence of societal expectations is reflected in students’ growing awareness of how they are viewed differently as well as the implications of the power, prestige and responsibility of the profession. The societal expectations theme parallels Monrouxe’s description of the ‘privilege narrative’ in medical students’ audio diaries.

Our study further advances the understanding of professional identity in two important ways. First, unlike others, we were able to find evidence of all five themes in our student narratives. Second, because these narratives were produced sequentially, we had the unique opportunity to examine how all five themes interact by following the progress of an individual student as he or she begins to build a professional identity during the first 15 months of medical school.

Students enter medical school with pre-existing identities that have been shaped by a variety of prior experiences. As they progress through their training, they often express anxiety about losing precious aspects of these identities in the process, such as becoming insensitive to suffering. In each of the three narratives, we see how they experience challenges and the different ways in which each struggles to construct meaning from the experiences in order to integrate their pre-existing identities with nascent professional identities.

Some, such as exemplar 1, show increasing self-awareness and positive role-consciousness over time, an example of what Costello called ‘identity consonance’. Positive doctor and teacher role models who provided nurturing, supportive environments seemed to have been important for how he negotiated his professional identity.

Others, such as exemplar 3, undergo painful experiences of being an outsider and ‘identity dissonance’ from multiple levels of conflict as they struggled to synthesise a previously developed identity with an
emerging one as a doctor. The evolution of this narrative is particularly interesting in that all five themes are represented and through a combination of positive experiences in the formal curriculum, patient encounters and role models, she was able to arrive at an integrated professional identity.

We see evidence of the pivotal role of both positive and negative role models, patient encounters and the hidden curriculum on the outcomes of these narratives. The negative impact of these interactions is particularly stark in exemplar 2, who starts out as an idealistic enthusiastic medical student, inspired by the formal curriculum, who is then profoundly changed by witnessing harsh treatment from a negative role model and a traumatic clinical encounter at an autopsy. One wonders if this pivotal moment may herald the growing cynicism and disillusionment that is associated with progression through clinical training. This excerpt draws attention to the importance of feedback on student narratives. One hopes that the student’s facilitator has been able to comment sensitively about this experience, helping him to integrate even this painful episode into a positive emerging professional identity.

Our three exemplar longitudinal narratives highlight several important findings: the iterative and negotiated nature of professional identity and the multiple ways in which individuals construct meaning from events and interactions with others in the academic, clinical and community environments. In particular they reveal how pivotal moments can potentially alter the course of professional identity formation, thus providing insights into opportunities for change.

A recent review on empathy decline among students during medical training highlights learner distress as a potentially major factor, thus suggesting where action could be directed. Branch et al. have shown that humanistic qualities in established faculty members can be enhanced through faculty development, pointing to the malleable nature of professionalism and professional identity that can be continually developed and refined throughout a doctor’s career.

The themes from our analysis suggest further strategies for improvement. We affirm the utility of the formal curriculum, particularly in professional competency domains. Learning about these domains may give students the metacognitive and reflective skills they need to develop their emerging professional identities. It can also further develop students’ understanding of societal expectations. Our data also reveal the presence of a hidden curriculum and support ongoing research to investigate and uncover its sources. The common concern of empathy decline suggests the importance of ongoing support and inclusion of professional competencies domains in residency training.

Role modelling, both positive and negative, emerges as a powerful theme in the narratives. Our findings suggest that faculty members need to be better aware of the important influence that role modelling plays on students’ professional identity formation. Professional development for faculty members to ensure alignment between their behaviour and the values of the profession could help to close the gap between formal teaching on professionalism and experiences in the clinical setting. If students have the opportunity to discuss their clinical experiences with faculty members, this could also help to address hidden curriculum issues as they arise. As our exemplars show, faculty members can support students during pivotal moments and potentially alter the course of their professional identity formation.

Finally, this study highlights reflective narratives as an important tool for professional identity formation. These narratives are reviewed by faculty members in the professional competencies programme in order to calibrate and support student progress. Weekly small group sessions create a space where students can reflect and explore their new insights with peers and tutors, enabling them to integrate these new experiences into a rich process of professional identity formation.

The development of skills in reflective practice has significant implications for medical education. The enhanced self-awareness developed through reflective writing can improve the ability of students to integrate concepts learned in the formal curriculum into clinical environments. For medical educators, the analysis of students’ reflective writing provides important insights into the processes by which students build their professional identities. These insights can be used to create opportunities to deliberately address hidden curriculum issues, ethical dilemmas and power imbalances. In this way, medical educators will foster more supportive learning environments and cultivate positive development of professionalism.

There are several limitations of this study. It was conducted in one institution, with a third of the class, therefore the findings may not generalise else-
CONCLUSION

Our study of medical students’ reflective narratives provides a window on the dynamic, discursive and iterative nature of professional identity formation. Students co-construct their identities through encounters with patients, colleagues and mentors in a variety of contexts. As students move through the first 15 months of training, they build on what they have learned and develop increasingly sophisticated understandings of professional identity. Our study also provides insights into where opportunities exist to promote its positive development. We conclude with an excerpt from a student narrative, which eloquently illustrates the power of reflective writing for tutors and students in the construction of professional identity:

Scribing my thoughts on “paper” has really helped me put my intentions into proper perspective and more objectively evaluate my decision-making process. I hope that reading this reflection will shed some light on the inner workings of my mind, as reading this over has done wonders for my own conviction in what I hold to be my guiding compass in this journey through medicine.

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