

## **Full Manuscript**

### **Title:**

### **Medical student views of and responses to expectations of professionalism**

Evangeline A Stubbing <sup>1</sup> Esther Helmich <sup>2</sup> Jennifer Cleland <sup>1</sup>

#### **1. (Correspondence)**

Evangeline A Stubbing  
Centre for Healthcare Education Research and Innovation  
School of Medicine,  
Medical Sciences & Nutrition  
University of Aberdeen  
Foresterhill  
Aberdeen  
Scotland  
AB25 2ZD  
Email: [evangeline.stubbing@abdn.ac.uk](mailto:evangeline.stubbing@abdn.ac.uk)

- 2.** Dr. Esther Helmich  
University of Groningen  
University Medical Center Groningen,  
The Netherlands

- 1.** Professor Jennifer Cleland  
Centre for Healthcare Education Research and Innovation  
School of Medicine,  
Medical Sciences & Nutrition  
University of Aberdeen  
Aberdeen  
Scotland

## **Abstract**

### **Introduction**

To earn society's trust, medical students must develop professional values and behaviours via a transformative process, from lay person to doctor. Yet students are expected to epitomise the values and behaviours of a doctor from the outset of medical school, leading them to feel 'judged all the time' (in terms of their professionalism) Our aim therefore, is to extend knowledge exploring the expectations communicated to and perceived by medical students and to provide a conceptually-framed understanding of students' associated emotional tensions.

### **Methods**

We used a qualitative exploratory case study methodology within in a constructivist paradigm to explore the messages communicated about professionalism and students' perceived expectations of professionalism in one medical school. Data were collected in the form of a) regulatory and medical school documents b) focus groups with 23 participants in their first two years at medical school. We used thematic analysis to interpret the data and two theoretical lenses, Rasmussen/Amalberti et al's framework for system migration and Sinclair's adaptation of Goffman's dramaturgical theory, to critically analyse the results.

### **Results**

We found messages and perceived expectations of knowledge and competence, and the need to ensure trust. We also identified that the expectations of patients, doctors, society, family and friends are just as, if not more, influential than policy and

regulatory expectations for early years' medical students. Moreover, we found tensions with students feeling that the expectations of them from others were unrealistic for their level of training. With this came a sense of pressure to meet expectations that participants responded to by acting as if already competent.

### **Discussion/Conclusion**

Our findings suggest that external forces (expectations) drive early year's students to act as if competent. While this is part of student identity formation it could also have implications for patient safety and therefore necessitates recognition and support from educators.

## **Introduction**

To be professional underpins medicine's 'contract' with society (1). As students enter medical school, they are expected to exemplify certain professional values and behaviours (2,3) that enable patients and wider society to trust them as (future) doctors (4,5). Yet, to earn this trust, students need to first learn and develop professional values and behaviours in order to become and embody the identity of a professional (6,7). The process of professional identity formation is considered a transformative, cumulative process from lay person to doctor that occurs over time (8–15). Expecting students to epitomise the values and behaviours of a doctor from the outset of medical school while they have not had time to form their professional identities is likely to cause emotional tensions.

Research has explored what society expects of the medical profession and what it means to be a good doctor (16–18). These messages of external expectations of professionalism are typically communicated to students through external constructs that inform medical school curriculums, such as oaths, declarations, guidelines and codes of conduct (19–22). A number of studies have explored medical student (6,10,16,23–25), doctor (18), medical educator and other health professionals' (26) understandings of professionalism and the characteristics that make a good doctor. Students in some of these studies have acknowledged the significance of external expectations through social rules of conduct and expectations of professionalism as outlined in policies and guidelines (6,25). Moreover, the expectations of society, the medical school, peers, doctors and patients can also influence their understanding of professionalism (6). Other studies exploring students' views of professionalism and the

expectations of others identify an emotional dynamic. Students report 'severe anxieties' in terms of expectations and their professional behaviour (27), as well as feeling 'judged all the time' with this contributing to a disconnect between their personal and professional identities, and sense of losing their individuality (10). Similarly, students also convey a loss of individuality associated with a sense of resentment towards professional dress code expectations and the perception that they need to fit into a medical mould (25).

Considering the influence of policy documents as a means by which messages of professional expectations are communicated (6,25) we aimed first, to identify the expectations of professionalism articulated through formal medical education policy and "codes of conduct" documents provided to students as they enter medical school. Secondly, we sought to explore students' views of external expectations, whether these aligned with the policy documents, or not, and their experience and feelings associated with external expectations over the first two years of medical school. To aid conceptual generalisability and provide a novel lens for this issue, we adopted two theoretical lenses to aid our interpretation of the data: Rasmussen/Amalberti et al's framework of systems migration (28) and Sinclair's adaptation (29) of Goffman's dramaturgical theory (30). These are explained in more detail later in this paper.

Our ultimate objective with this study was to explore the expectations both communicated to and perceived by medical students. We also wished to provide a conceptually-framed understanding of any emotional tensions related to the

expectations of others that may merit support from faculty and those charged with developing policy and practice in medical education (31).

## **Methods**

### **Design**

We used an exploratory qualitative case study methodology positioned within a constructivist paradigm (32). A case study is considered to be an empirical enquiry investigating a current phenomenon occurring in a real context (33). A strength of a case study approach is the consideration of various perspectives of a phenomenon allowing for depth of investigation (34) supported by the use of multiple sources and methods for data collection (35). In this study, we utilised two data sources: national regulatory and local medical school documents and focus group discussion.

### **Context**

The study setting was a medium-sized UK medical school delivering a five-year, integrated programme to a mostly undergraduate population of students. The programme does not have a pre-clinical/clinical divide: students have early clinical exposure including patient home visits and time on hospital wards within the first few months of commencing their studies. During such clinical experiences, students are expected to develop their knowledge of the clinical environment, communication and examination skills, and professional behaviours with patients and health care professionals.

## **Data Collection**

We used documents and focus group data. Documents were the source of explicit expectations of professionalism the students needed to relate to at medical school and focus groups were utilised to gain an insight into the students' perceptions of expectations of professionalism. The use of more than one data source enabled us to address our aims from different perspectives (33,36,37) and to establish whether students' perceptions of expectations corroborated with the expectations outlined in the policy documents. Moreover, more than one data source provided the opportunity to gain further insights (from the focus group data) into students' emotional responses to these expectations.

## **Documents**

Working from the perspective that documents are windows into social and organisational realities (38), we identified relevant documents that set out expectations for medical students from two sources: the UK regulator of medical education, the General Medical Council (GMC), and the medical school where the study took place. We selected four national regulatory documents and five local medical school documents for analysis (Table 1). We selected these particular documents for analysis as they are fore grounded in the formal curriculum from the first day of medical school. They are emphasised in early lectures and course documentation, and discussed with the students in relation to their fitness to practice (ensuring professionalism and identifying and managing students of concern in terms of their conduct or health that may compromise or impair practice) (39).



**Table 1. National regulatory and local medical school documents subject to analysis**

<b>National Regulatory Documents</b> (Publication date relevant to time of focus group data collection)	<b>Description of Document</b>
1. GMC Tomorrow's Doctors Outcomes and Standards for Undergraduate Medical Education (2009)	Communicates the overarching knowledge, skills and behaviours medical students must be able to demonstrate by graduation in the UK
2. GMC Medical Students: Professional Values and Fitness to Practise Guidance from the GMC and the MSC (2009)	Outlines the professional behaviours expected of medical students, the scope and threshold of fitness to practice. Also guidance for decisions and fitness to practice arrangements
3. GMC The State of Medical Education and Practice in the UK (2012)	An annual report on the state of medical education in the UK highlighting prominent issues, the changing medical register and training and patterns of complaints
4. GMC Good Medical Practice (2013) (22)	Describes the professional values and behaviours expected from doctors registered with the GMC.  Forms the expectations of professional practice in medical students by graduation in Document 1
<b>Local Medical School Documents</b>	
1. Dress Guidance for Medical Students (2013)	Provides local guidance and expectations of a professional dress code for medical students
2. Professional Ethical Code for Medical Students (2013)	Outlines local professional and ethical principles expected of medical students. Includes a document to be signed by students to accept adherence of expectations
3. Policy on Taking Responsibility for Raising Concerns about Misconduct (2013)	Provides local expectations and guidance for medical students reporting misconduct
4. Guidance for Medical, Dental and Physician Assistant Students on the Use of Social Networking Sites and Other Digital Media (2013)	Outlines the local professional expectations of medical students and the use of social networking and other social media sites
5. Starting medical school, a guide. (2013)	A local guide providing useful tips for starting and studying at medical school also professional expectations of students. Cites regulatory documents (2,4 above)

## **Focus Groups**

We used focus groups to gain an understanding of students' views, experience and feelings associated with the external expectations of professionalism (40). Focus groups enable participants the opportunity to share and stimulate thoughts on experiences (41). As they listen, clarify, discuss and reflect upon other participants contributions, individuals can offer a considered, deep contribution to focus group discussions (42). We were particularly interested in the views of junior medical students given they were at the beginning of the trajectory of developing a professional identity.

We provided students with information about the study and invited them to participate in the focus groups via a whole-class presentation, poster advertisements and a cohort email (43).

Twenty-three students from the 2013 Year 1 cohort volunteered to take part in the study. We assigned students to one of four focus groups according to their availability (mostly dictated by curriculum timetabling) and those that continued within the study stayed in the same groups throughout the two-year data collection period. Focus groups occurred in: the first few weeks of starting medical school; the end of Year 1; then the start and end of Year 2. We present an overview of student socio-demographics and their ongoing participation in the study in Table 2.

**Table 2. Demographics of study sample, participant attendance/attrition and ratio of sample to first year student cohort.**

Demographic		First year student cohort	Participants	Participants Y1-T1	Participants Y1-T2	Participants Y2-T1	Participants Y2-T2
<b>Total Participants</b>			23	23	23	20	20
<b>Gender</b>	Female	102 (60%)	14 (61%)	14	14	12	12
	Male	67 (40%)	9 (39%)	9	9	8	8
<b>Academic entry</b>	School leaver	140 (83%)	17 (74%)	17	17	15	15
	Graduate	29 (17%)	6 (26%)	6	6	5	5
<b>Domicile</b>	UK	149 (88%)	20 (87%)	20	20	18	18
	EU	4 (2%)	0	0	0	0	0
	International	16 (10%)	3 (13%)	3	3	2	2

The focus groups were semi-structured, with questions drawn from the professional identity literature, and conducted by the lead researcher (ES). Data collection was iterative and modified as the study progressed through time. For example, in Year 1, ES used prompts to encourage early thoughts about becoming a doctor and interactions with patients (i.e. ‘What do you think your first interactions with patients are going to be like?’). In Year 2, questions shifted to explore experiences that made the students think about being a doctor (e.g.; ‘Tell me about an experience that has made you think about being a doctor’).

All focus groups took place on medical school premises. Participants consented to their focus group discussions being recorded. Participants received light refreshments but no other incentives to take part in this study.

## Data management and analysis

We used NVivo 10 qualitative data management software

[http://www.qsrinternational.com/products\\_nvivo.aspx](http://www.qsrinternational.com/products_nvivo.aspx) to manage the data. Focus groups were transcribed *verbatim* and identifiers removed at the point of transcription (44). We initially conducted a primary-level thematic framework analysis of the document and focus group data (45). ES undertook the process of preliminary coding for both data sources, providing an early sense of the data and enabling the research team to look for patterns of meaning (themes) and any other issues of interest associated with the research aim in the data. Coding and interpretation occurred iteratively and inductively, focusing throughout on the research aim (to identify expectations of professionalism in the documents and in the focus groups, the students perceived external expectations of professionalism, their experience and feelings associated with these perceptions). ES discussed and reviewed codes with EH and JC at regular intervals to assist with recognising and developing themes and to consider any researcher influence upon analysis. Themes of expectations of professionalism from the documents that converged with the focus group data were then identified. (37). ES then iteratively refined these themes, discussing these at regular intervals with EH and JC. Any coding disagreements were addressed via team discussion. Separate coding files were created within NVivo for the documents and each round of focus groups.

## **Theoretical lens**

After the themes were identified, and following further team discussion, we were struck by the emotions and behaviours described in relation to perceived expectations of professionalism. Given this, we extended beyond simple thematic analysis to critically analyse these results to help us understand, explain (46) and enhance the breadth and depth of our findings (47) whilst aiding conceptual generalisability (48). We did so through two theoretical lenses.

Rasmussen/Amalberti et al's framework model of system migration considers there are external factors that might lead to someone deviating from rules and standards which can lead to consequences for safety (28). Rasmussen (1997) observed workers in an industrial context and identified the experience of external pressures for increased performance and productivity. Responding to this pressure, workers were found to adapt or deviate from the rules and regulations to achieve these (perceived) organisational demands whilst providing individuals with a sense of reward or achievement. Deviation from the rules, however, also resulted in a shift towards the boundaries of safe practice, increasing the risk of harm and adverse outcomes (49). Amalberti et al. applied the stages of migration model in the healthcare context (50). Given our themes identifying a sense of pressure for students to live up to expectations of professionalism and the response to act as if competent (deviating from the rules of recognising limitations) we considered this framework an appropriate lens.

Different lenses can highlight or illuminate different aspects of a complex phenomenon (46). Thus, we also used Sinclair's (29) adaptation of Goffman's dramaturgical theory (30) to further make sense of the student behaviour to act and perform as if competent, and also to shed light on identity formation in relation to perceptions of family expectations. Based on a theatrical metaphor and the concept of self-presentation, Goffman considered the individual portrays an idealised and carefully crafted image of his/her self (51). Goffman refers to the 'front stage', 'backstage' and 'offstage', using the metaphor of a stage to represent social interaction in the context of an identity to be portrayed. The front stage is where the performance takes place, to portray, control and modify socially-acceptable impressions of the self while addressing others (the audience's) impressions. In contrast, the backstage is more relaxed and less formal, away from the audience and where we do not have to act - but where preparations take place for the front stage. Offstage is the context away from those of performance and preparation (30). Sinclair (29) extended this metaphor to include 'official' and 'unofficial' front and backstage regions. Official front stage activities include medical lectures, ward rounds and exams where students fulfil formal roles in relation to the 'manifest' curriculum and the associated audience (e.g., Faculty, patients). Official backstage activities are still associated with the formal curriculum but away from an audience (e.g., being in the library). Unofficial front stage activities are activities outside of the medical school curriculum but where the individual is still in the role of a medical student, such as university sporting events. The unofficial backstage context relates to students' social time but as a medical student, such as when at a student bar. Connected, but on the

periphery of these four areas is offstage, where activities outside the context of medical socialisation, the lay world, take place. See Figure 1. (29).

THE MEDICAL SCHOOL CONTEXT			
	OFFICIAL	UNOFFICIAL	OFFSTAGE
FRONT STAGE	Lectures	Sports Team	Lay world
	Ward Rounds Exams	Theatrical performances (e.g. Christmas shows)	
BACK STAGE	Library	Student bar	

Figure 1. Sinclair's adaption of Goffman's front/back/off stage model

## Reflexivity

Qualitative data analysis is influenced by the researchers' worldview and the context in which the research is performed (52). The research team included ES, who has a nursing background and is now a Medical Education Lecturer conducting the study as part of her PhD, as well as two experienced medical education researchers. JC has a clinical psychology background and is a director of a centre for healthcare education research and innovation. EH is an elderly care physician and senior researcher in medical education. Given researcher reflexivity is essential to reinforce trustworthiness (53), ES maintained a reflexive diary throughout the research process and the team regularly considered their positions and assumptions during collection and analysis (54).

**Ethical considerations**

Ethical approval was granted, and institutional consent obtained prior to data collection. All participants received verbal and written information in advance of the study, as well as assurances of confidentiality, anonymity and data security.



## Results

We identified multiple explicit (documents) and perceived (focus groups) descriptions of professional expectations. In this paper, we focus on the expectations which seemed significant to students in their first two years at medical school, and which were apparent in both data sources. These expectations were: to be knowledgeable and competent, and the need to ensure trust.

We found that students experienced tensions in living up to these expectations. They reported that patients, doctors, society (the public), as well as family and friends, granted them trust too easily, viewing them as knowledgeable and competent beyond their ability as junior medical students. As a result, students expressed a sense of pressure to live up to these expectations and described going beyond their limitations and acting as if already knowledgeable and competent.

We have integrated the data from both sources in this results section, as doing so best illustrates the tensions between external expectations and participants' experience and feelings associated with these expectations.

The data are presented as Regulatory Documents (see corresponding number in Table 1: e.g., RD (1)) or Local Documents and corresponding number (e.g., LD (1)). Focus group data are presented in the following format 'Female Student 1' (FS1)/'Male Student 8' (MS8). 'Focus Group 1' (FG1) represents the origin of the excerpt. Year1 (Y1), Year 2 (Y2), Time 1 (T1) at the start of, and Time 2 (T2) at the end of the academic year indicates focus group timing.

## **Expectations of knowledge and competence/tensions with knowledge and competence**

The regulatory and local documents set out explicitly the expectation of students to be knowledgeable and competent by the time they graduate as part of ensuring patient safety.

**RD4** 'You must be competent in all aspects of your work, including management, research and teaching'.

**LD5** 'Become well informed. Patients wish their doctors to be highly knowledgeable, not just to know the basic minimum to get by.'

Our students considered these expectations as relating to their perceptions of, and experiences with, patients, doctors, society and their family and friends. Yet there was also a tension, with the experience of assumptions that they do not know anything and expectations to be knowledgeable and competent concurrently.

**MS8-FG2-Y1-T1** "I think it's the expectation that different patients have on you as a first-year medical student... it ranges from thinking that we don't know anything at all to thinking that we do know quite a lot."

Students expressed a sense that they are expected to have a higher level of knowledge than they possess as first and second year students.

**FS5-FG1-Y1T2** "I think the whole kind of society separates people out... sometimes people feel they are kind of made to think that we're (medical students) cleverer than everybody else..."

**FS23-FG4-Y2T2** “He (the doctor) expected us to know a lot more than we did, he’s obviously used to dealing with third, fourth and fifth years and we hadn’t even done infections yet.”

The students were voicing a tension with this expectation. They expressed feeling they were treated as if they had a higher level of knowledge and competence compared to that of a lay person. Moreover, this was perceived to be inappropriate for their level being first and second year medical students and not yet having had the time or opportunity to fulfill this expectation.

**MS11-FG2-Y1T1** “Because now we’re a first year medic but they (family) still treat you as if you have a higher knowledge, higher understanding.”

**FS4-FG1-Y2T1** “Like even though you're... you've just done first year, I think they kind of think...you’ll know this stuff and you'll be able to help me.... I don't know anything...I think they...the general public, maybe, assume we have a lot more knowledge than we have...they (friends) ask you for advice...one of the girls got unwell and they all just came to me and were like oh, what do we do. And I was like, I don't know. [Laughter]. And that was probably only like half way through the first year. And they were like, but you're medical... But I don't know anything. Like we don't know... enough to be able to help.”

## **Ensuring trust/tensions around ensuring trust**

There was an expectation in the documents for students to uphold a position of honesty, transparency and sincerity, i.e. one in which the public could place their trust.

**RD2** ‘Good medical practice requires doctors to make sure that their behaviour at all times justifies the trust that patients and the public place in the medical profession.’

**LD4** ‘...healthcare students, as part of professionalism have a core responsibility to sustain the public’s trust in the medical profession’.

This expectation of ensuring trust was evident from the focus groups. Students in Year 1 perceived that as medical students they were trusted by society and patients as if they were doctors and were expected to ensure this trust.

**FS1-FG1-Y1-T2** “It’s like they’re (society) just trusting us (medical students), it’s like the white coat thing, like you can sort it out. There’s a man in a white coat, people immediately trusted them more. They just trust doctors.”

This perception of ensuring trust was another area of tension between expectation and experience. Students considered that this expectation, this unearned trust, was not commensurate with their ability as first and second year medical students.

**FS6-FG1-Y1-T2** “Yes, I guess it emphasises how much trust people will be putting on us in the future, and it’s quite scary to think that we’re going to have to be responsible for so many people’s lives and they’re just trusting us”.

**FS16-FG3- Y1T2** "... it's scary that they trust us so much that they (patients) would ask us about (their condition), like, as first year medical students..."

### **Pressure to live up to expectations**

We identified a sense of pressure linked to living up to external expectations from the focus group data. For example, in Year 1, one of the students contemplated their new identity as a medical student and how, as part of this, they felt they had a responsibility to fulfil the expectations of others.

**FS17-FG3-Y1T2** "So, like, if I meet someone in society and they say, "Oh, what do you do?" And I tell them I'm a student. "Oh, what do you do?" Medical student. They're, like, "Oh, blah blah blah", they already make a judgment on you. I think for me it's been coming to terms with the fact that I've adopted this, kind of, almost new identity and that I'm going to have to live up to societal expectations for the rest of my life."

This pressure was still prevalent in their second year: students experienced others who even identified them as if they were already a doctor.

**FS3-FG1-Y2-T1** "...he (member of the public) was like, "Oh, you're a doctor, you can help me"... So it was like, you should just sit down. And I was like, oh, god... I mean, obviously, technically, you know how to do it but you've never had it like experience of doing it."

### **Putting on a front and acting**

Embroiled with this sense of pressure was feeling the need to respond by putting on a front to meet expectations.

**MS8- FG2-YR1T1** “Because you feel as if you’ve got to have a front that you put on when you are dealing with patients.”

Students also discussed portraying a confident persona.

**FS23-FG4- Y1T1**...it’s not so much knowledge, it’s more about the way you present yourself and the way you interact with patients. I think it’s about a level of confidence as well.”

In Year 1, students talked about portraying confidence in front of patients but in Year 2 they talked about acting, in response to a sense of pressure, as if they were competent using language, props and performing actions that would meet external expectations, particularly from family, and to reinforce a persona of competence.

**FS6- FG1-YR2T1** “My gran was like, sure, just take my temperature there. There's the temperature probe. And I was just like reading all the instructions to work out how to do it. And they just, they put a lot of pressure on you. I kind of made it sound as if I knew what I was talking about. I was like, sure, see how it goes. Get loads of sleep. Drink loads of water.”

## Discussion

This study offers a valuable insight into junior medical students' perceptions of external expectations of professionalism, and their experiences and feelings associated with these perceptions. Our study contributes new evidence that, although student perceptions of professional expectations align with the documents that inform their education (6,25), expectations from others (patients, doctors, society and additionally family and friends) are at least as, if not more, influential than those expectations from formal sources. Moreover, we identified tensions with the students' experience of perceived expectations, feeling that others had unrealistic expectations of them given their level of training. This tension created a sense of pressure and feeling the need to portray an image of confidence and to act beyond their level of competency - as if a doctor rather than a medical student.

Medical students acting as if a doctor resonates with previous studies identifying that this behaviour is part of the students' understandings of professionalism (6,25) and as a way to live up to expectations of societal medical school and staff expectations (6,27). We add to this insight the finding that students also engage in acting as confident and/or competent to live up to family expectations. Moreover, we provide some understanding of the experience of this emotional tension, including a sense of pressure to live up to expectations. LaDonna et al. (55) also recently recognised acting as a response to the experience of the imposter syndrome, with doctors performing "as if" confident, and considering this to be as, if not more important than medical knowledge and skills (see also Patel et al. (56)). We identify this performance of

confidence over knowledge as early as first year of medical school. The performance is slightly different in second year students who tend to go beyond their limitations because they want to appear competent rather than merely confident.

Students' sense of pressure to live up to expectations of professionalism to be competent seems similar to the sense of pressure to enhance productivity identified by Rasmussen/Amalberti et al. (28). For our students, the external forces (or sources of expectations) were patients, doctors, society, family and friends. This behaviour could be seen as deviating from the rules and regulations (students are expected to acknowledge limitations (22)), and going beyond their capabilities as junior medical students which could in turn increase the possible risk of harm to others. This resonates with Rasmussen/Amalberti et al.'s concept of migration to the boundaries of safety, and with Shapiro's (2018) perspective that often failure to meet expectations of professionalism is not intentional (57). Yet, as suggested by Rasmussen/Amalberti et al., going beyond one's limits may also have positive outcomes for the individual i.e. the performance of competence may make students feel closer to the ultimate goal of encompassing the identity of a professional, competent doctor (6,25).

Research identifying and understanding perceptions and behaviours that lead to migration to the limits of safety in learners is rare. The few studies of this phenomenon have been carried out in postgraduate and continuing medical education (58–60). To the best of our knowledge, this is the first study that considers this issue in the context of undergraduate medical education.



Using Sinclair's (29) adaptation of Goffman's dramaturgical theory (30) helped us to make sense of students acting as if competent when with family. de Vries et al. (61) positioned family and friends as being offstage in the 'lay world' but found that students, preferred to open up to fellow students and medical friends about emotional experiences and still 'deliberated on what to share and with whom, adjusting their performances to impress the audience' and suggesting the need to impress other 'lay people' (p825) offstage. Similarly, our data identifies students adjusting their performance to impress other lay people, their family. Expectations of family are found to be just as significant as a formal (official) expectations of professionalism with students feeling a pressure to live up to these expectations. Given this performance, rather than family being 'offstage', they can instead be considered as an audience for the unofficial (not part of the manifest- curriculum) front stage and therefore influential for the formation of professional identity.

The use of theory allowed us to understand that, on one hand, acting and performing in this way is part of medical student identity formation, but the sense of pressure to act as if a doctor beyond their knowledge and competence could conversely have unintended consequences for patient safety. This brings forth more questions for future study, including how this sense of pressure and this behaviour to act as if a doctor changes throughout medical school, are there other contributing factors, and what is the impact of this phenomenon upon students? Further research could also explore the influence and experience of the expectations of family and friends upon the formation of professional identities, across different contexts, countries and education systems.

We employed strategies to enhance trustworthiness (53). To optimise credibility we undertook triangulation of the data to enable different perspectives on the same phenomenon (37,47). All authors performed coding checks and we utilised two theoretical lenses. To aid transferability, we provided details of the study context and participant demographics. (Interestingly, despite our voluntary sampling method, participants were representative of the Year 1 cohort). Transferability was also supported through use of theoretical lenses. Descriptions of data collection, analysis and reflexivity ensure the quality and integrity of this study. Finally, to ensure confirmability, we detailed engagement with coding checks and reflexivity (62).

Focus groups offered a safe environment in which students could share experiences (63) and respond to one another, thus stimulating thought generation and ongoing discussion (42). We used thematic analysis as this fitted with our constructivist stance. Rasmussen/Amalberti et al's system of migration framework and Sinclair's (29) adaptation of Goffman's dramaturgical theory also illuminated certain aspects of the data (46), specifically the experience of a sense of pressure and the response to act as if competent to live up to expectations of others, particularly family. We acknowledge that other methodological and analytic approaches may have enabled other perspectives into the relationship between external expectations, the learning environment, and professional identity formation. For example, it would be interesting to examine the language used by our participants, and the meanings behind their language use (64). Finally, this is one study, of specific groups of students, in one context – that of a medium-sized medical school with an integrated programme with a mostly undergraduate population of medical students and could be considered

a limitation. Examining the same questions in a different context may identify different external expectations of professionalism and/or different responses to such expectations.

Our study has implications for future practice and policy. Educators may need to help students reflect and make sense of expectations and to support them in negotiating pressures to live up to these expectations from the outset of starting medical school, to reduce the chance of migrating or crossing safety boundaries. Similarly, while regulatory and university policies must be responsive to ensuring patient safety, these also need to acknowledge the complexities of meeting potentially conflicting expectations and that becoming a professional is a transformative and cumulative process.

## **Conclusion**

We found that the expectations of patients, doctors, society, family and friends are just as, if not more, influential than policy and regulatory expectations for early years' medical students. We also identified tensions with students feeling that the expectations of them from others were unrealistic for their level of training. With this came a sense of pressure to meet expectations that participants responded to by acting as if already competent. While this is part of student identity formation it could also have implications for patient safety and therefore necessitates recognition and support from educators.

*Word Count 4878 minus tables and abstract.*



## References

1. Richard L. Cruess, Sylvia R. Cruess. Expectations and obligations: professionalism and medicine's social contract with society. *Perspect Biol Med*. 2008;51(4):579–98.
2. Leahy M, Cullen W, Bury G. What makes a good doctor? A cross sectional survey of public opinion. *Ir Med J*. 2003;96(2):38–41.
3. Abu-Hilal M, C Morgan E, Lewis G, Phail M, Malik H, Hocken D. What makes a good doctor in the 21st century? A qualitative study. *Br J Hosp Med*. 2006;67(7).
4. Freedman D., Holmes M. The teachers body embodiment, authority, and identity in the academy. Freedman D., Holmes M., editors. New York: State University of New York Press; 2003.
5. Boudreau J., Cruess S., Cruess R. Physicianship: educating for professionalism in the post-Flexnarian era. *Perspect Biol Med*. 2011;54(1):89–105.
6. Monrouxe L V., Rees CE, Hu W. Differences in medical students' explicit discourses of professionalism: Acting, representing, becoming. *Med Educ*. 2011;45:585–602.
7. Goldie J. The formation of professional identity in medical students: Considerations for educators. *Med Teach*. 2012;(34):641–8.
8. Hilton SR, Slotnick HB. Proto-professionalism: How professionalisation occurs across the continuum of medical education. *Med Educ*. 2005;39:58–65.

9. Cohen JJ. Viewpoint: Linking professionalism to humanism: What it means, why it matters. *Acad Med.* 2007;82(11):1029–32.
10. Finn G, Garner J, Sawdon M. “You’re judged all the time” Students’ views on professionalism: A multicentre study. *Med Educ.* 2010;44:814–25.
11. Holden M, Buck E, Clark M, Szauter K, Trumble J. Professional identity formation in medical education: The convergence of multiple domains. *HEC Forum.* 2012;24(4):245–55.
12. Wilson I, Cowin LS, Johnson M, Young H. Professional identity in medical students: pedagogical challenges to medical education. *Teach Learn Med an Int J.* 2013;25(4):369–73.
13. Monrouxe L V. Identity, identification and medical education: Why should we care? *Med Educ.* 2010;44(1):40–9.
14. Wald HS. Professional identity (trans)formation in medical education. *Acad Med.* 2015;90(6):701–6.
15. Sawatsky AP, Nordhues HC, Merry SP, Bashir MU, Hafferty FW. Transformative learning and professional identity formation during international health electives. *Acad Med.* 2018;93(9):1381–90.
16. Pfeiffer A, Noden B, Walker Z, Aarts R, Ferro J. General population and medical student perceptions of good and bad doctors in Mozambique. *Educ Heal.* 2011;24(1):1–12.

17. Chandratilake M, Mcaleer S, Roff S. Medical professionalism: What does the public think? *Clin Med (Northfield Il)*. 2010;10(4):364–73.
18. Fones CS, Kua EH, Goh LG. 'What makes a good doctor?' views of the medical profession and the public in setting priorities for medical education. *Singapore Med J*. 1998;39(12):537–42.
19. Miles SH. *The Hippocratic Oath and the ethics of medicine*. New York: Oxford University Press; 2005.
20. Parsa-Parsi R. The Revised Declaration of Geneva. *JAMA*. 2017;318(20):1971–2.
21. General Medical Council (UK). *Tomorrow's Doctors: Outcomes and Standards for Undergraduate Medical Education*. London; 2009.
22. General Medical Council (UK). *Good Medical Practice*. London; 2013.
23. Maudsley G, Williams EMI, Taylor DCM. Junior medical students' notions of a "good doctor" and related expectations: A mixed methods study. *Med Educ*. 2007;41:476–86.
24. Hurwitz S, Kelly B, Powis D, Smyth R, Lewin T. The desirable qualities of future doctors: A study of medical student perceptions. *Med Teach*. 2013;35(7):1332–9.
25. Cuesta-Briand B, Auret K, Johnson P, Playford D. "A world of difference": A qualitative study of medical students' views on professionalism and the "good doctor." *BMC Med Educ*. 2014;14(77):1–9.

26. Jha V, Bekker HL, Duffy SRG, Roberts TE. Perceptions of professionalism in medicine: a qualitative study. *Med Educ.* 2006;40(10):1027–36.
27. Haas J, Shaffir W. The Professionalization of Medical Students: Developing Competence And A Cloak of Competence. *Symb Interact.* 1977;1(1):71–88.
28. Amalberti R, Vincent C, Auroy Y, De Saint Maurice G. Violations and migrations in health care: A framework for understanding and management. *Quality and Safety in Health Care.* 2006.
29. Sinclair S. *Making doctors: an institutional apprenticeship.* Oxford: Berg; 1997.
30. Goffman E. *The presentation of self in everyday life.* London: Penguin; 1959.
31. Shapiro J. Perspective: Does medical education promote professional alexithymia? A call for attending to the emotions of patients and self in medical training. *Acad Med.* 2011;86(3):326–32.
32. Mann K, MacLeod A. Constructivism. In: Cleland J, Durning S., editors. *Researching medical education.* Chichester: Wiley Blackwell; 2015. p. 51–65.
33. Yin R K. *Case study research: Design and methods.* 5th edn. Thousand Oaks, CA: Sage Publications; 2014.
34. Merriam S. *Case study research in education.* San Francisco, CA : Jossey Bass; 1988.
35. Stake R. *The art of case research.* Thousand Oaks, CA: Sage; 1995.
36. Denzin N, Lincoln Y. *The Sage handbook of qualitative research.* 5th ed. Los



- Angeles: Sage; 2018.
37. Flick U. Doing triangulation and mixed methods. The Sage qualitative research kit. 2nd ed. Los Angeles: Sage; 2018.
  38. Atkinson PA, Coffey A. Analysing documentary realities. In: Silverman D, editor. Qualitative research: Theory, Method and Practice. 2nd ed. London: Sage; 2004. p. 56–75.
  39. General Medical Council (GMC). Medical Students: Professional Values and Fitness to Practise. London; 2009.
  40. Kitzinger J, Barbour R. Introduction: the challenge and promise of focus groups. In: Barbour R.S, Kitzinger J, editors. Developing focus group research: politics, theory and practice. London: Sage; 1999. p. 1–20.
  41. Cohen L, Manion L, Morrison K. Research methods in education. 7th ed. London: Routledge; 2011.
  42. Finch H, Lewis J, Turley C. Focus Groups. In: Riche J, Lewis J, McNaughton Nicholls C, Ormston R, editors. Los Angeles: Sage; 2014. p. 211–39.
  43. Ritchie L, Lewis J, Elam G, Tennant R, Rahim N. Designing and selecting samples. In: Ritchie J, Lewis J, McNaughton Nicholls C, Ormston R, editors. Qualitative research practice a guide for social science students and researchers. 2nd ed. Los Angeles: Sage; 2014. p. 111–42.
  44. Silverman D. Doing qualitative research. 4th ed. London: Sage; 2013.

45. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol.* 2006;3(2):77–101.
46. Bordage G. Conceptual frameworks to illuminate and magnify. *Med Educ.* 2009;43(4):312–9.
47. Denzin N, Lincoln Y. Introduction: the discipline and practice of qualitative research. In: eds, editor. *The Sage handbook of qualitative research.* Thousand Oaks, CA: Sage Publications; 2005. p. 1–32.
48. Gibbs T, Durning S, Van Der Vleuten C. Theories in medical education: Towards creating a union between educational practice and research traditions. *Med Teach.* 2011;33(3):183–7.
49. Rasmussen J. Risk management in a dynamic society: A modelling problem. *Saf Sci.* 1997;27(2/3):183–213.
50. Amalberti R. The paradoxes of almost totally safe transportation systems. *Saf Sci.* 2001;37(2–3):109–26.
51. Goffman E. *Interaction ritual. Essays on face to face behaviour.* Pantheon Books, editor. New York; 1967.
52. King N. Doing template analysis. In: Symon G, Cassell C, editors. London: Sage; 2012.
53. Lincoln Y, Guba E. *Naturalistic inquiry.* London: Sage; 1985.
54. Berger R. Now I see it, now I don't: researcher's position and reflexivity in

- qualitative research. *Qual Res.* 2015;15(2):219–34.
55. LaDonna KA, Ginsburg S, Watling C. “Rising to the level of your incompetence.” *Acad Med.* 2018;93(5):763–8.
56. Patel P, Martimianakis MA, Zilbert NR, Mui C, Hammond Mobilio M, Kitto S, Moulton, C. Fake it ’til you make it. *Acad Med.* 2018;93(5):769–74.
57. Shapiro J. Confronting unprofessional behaviour in medicine. *BMJ.* 2018;360(360:k102):1025.
58. Kennedy TJT, Regehr G, Baker GR, Lingard LA. “It’s a cultural expectation...” the pressure on medical trainees to work independently in clinical practice. *Med Educ.* 2009;43:645–53.
59. Vacher A, de Maurice G., Stainmesse E, Amamou N, Fornette M., Amalberti R, Auroy, Y. Study of rule related behavioural migrations in an anesthesiology department. In: *Proceedings of the human factors and ergonomics society annual meeting.* Los Angeles, CA: Sage; 2009.
60. de Saint Maurice G, Auroy Y, Vincent C, Amalberti R. The natural lifespan of a safety policy: violations and system migration in anaesthesia. *Qual Saf Health Care.* 2010;19(4):327–31.
61. de Vries-Erich JM, Dornan T, Boerboom TBB, Jaarsma ADC, Helmich E. Dealing with emotions: medical undergraduates’ preferences in sharing their experiences. *Med Educ.* 2016;50:817–28.

62. Miles M., Huberman A., Saldana J. Qualitative data analysis a methods sourcebook. 3rd ed. Thousand Oaks CA: Sage; 2014.
63. Barbour R. Making sense of focus groups. Med Educ. 2005;39(7):742–50.
64. Hodges BD, Kuper A, Reeves S. Discourse analysis. BMJ. 2008;337:879.