The influence of linguistic and cultural factors on performance in the role-play assessment taken by International Foundation for Medicine students

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Acknowledgements

Abstract

The International Foundation for Medicine (IFM) programme is an English for Specific (Academic) Purposes course that seeks to prepare international students for the study of medicine at a UK university. On the course, the teaching of doctor-patient communication skills is an interesting pedagogical area to applied linguists. The crossover between linguistic and communicative competency is particularly pertinent for speakers of English as an additional language. Recent research by Roberts, Atkins and Hawthorne (2014) suggests that there are specific linguistic and cultural features that affect performance on clinical communication skills assessments. In this study a linguistic ethnographic framework was used investigate the clinical communication skills assessment on the IFM programme, the role-play assessment (RPA), in order to ascertain what constitutes a 'good' performance and what the influence of linguistic and cultural factors have on these performances. A sample of twelve video recordings were transcribed and subjected to broad-based and micro-level linguistic analyses. Ethnographic data was also collected from the key three stakeholders in the exam: the students, the simulated patients and the assessors. Tentative conclusions suggest that linguistic and cultural features do affect performance, and the analytical approaches used have served to specify what some of these are. Implications for teaching practice and assessment design have been identified, as well as the limitations of this project and areas for further research.

Contents

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List of acronyms

RPA = Role-play assessment
CSA = Clinical Skills Assessment
OSCE = Objective Structured Clinical skills Examination
LE = Linguistic ethnography
CA = Conversation analysis
ESAP = English for Specific Academic Purposes
EGAP = English for General Academic Purposes
ESP = English for Specific Purposes
EMP = English for Medical Purposes
EAL = English as an Additional Language
PC = Presenting complaint
PMH = Past medical history
FH = Family history
SH = Social history

1. Introduction

The International Foundation for Medicine programme at the research university is an English for Specific (Academic) Purposes course that seeks to prepare international students for the study of Medicine at a UK university. On the course, the teaching of doctor-patient communication skills is an interesting pedagogical area to applied linguists. The crossover between linguistic and communicative competency is particularly pertinent for speakers of English as a second language. A recent study on the Clinical Skills Assessment (CSA) by Roberts, Atkins and Hawthorne (2014) suggests that there are specific linguistic and cultural features that affect performance on clinical communication skills assessments. This research project aims to conduct a similar analysis on our own role-play assessment (RPA) to determine the positive and negative communicative features that our students employ.

This chapter will begin by describing the context for this research. The research focuses on the RPA, and it is important to provide both an institutional and pedagogical context for this. It will then provide a rationale for the study, drawing on the different stakeholders involved and the impact it could potentially have. The chapter will conclude with a full discussion of the research aims.

1.1 Research context

1.1.1 Institutional context

The English Language Teaching department at the research university has existed in its current format for 25 years. ELT provides a range of both pre-sessional and in-sessional programmes and services. The Centre of International Foundation Programmes (CIFP) provides the yearlong pre-sessional foundation programmes for undergraduate and post-graduate students. The obvious stakeholders in these programmes are the students themselves and the parents that pay for them. Their interests lie in accessing a course of their choice in a high-ranking British institution. The other important stakeholder is the university itself, which gains from attracting top fee-paying international students from around the world who have a foundation year being

prepared for academic study. Most of the foundation students at ELT progress to the research university, and the courses are tailored quite specifically to the departments within the university.

The learners in question are currently studying on the International Foundation Programme for Medicine. This is a high stakes course that offers students the opportunity to progress onto a BSc in Medicine at the research university should they pass all components with a competitive score. Students study undergraduate first year modules in biology, chemistry and psychology, as well as a spectrum of components aimed to prepare them for their future studies and careers in medicine in the UK. The programme has been designed in close collaboration with the School of Medicine at the research university, which is understandable considering the direct entry of the students on successful completion. As a result, the course is well tailored to the students needs and the mono-disciplinary nature of the course allows all components to be discipline specific. The students are all non-European international students with IELTS 6.5 and above.

One of the strands of the IFM is Communication Skills. This strand focuses on the skills needed by doctors to effectively communicate with patients. Students are formally tested on these skills three times during the year using the role-play assessment (RPA). This test also seeks to prepare the foundation students for the type of assessment they will experience in the School of Medicine: the Objective Structured Clinical skills Examination or OSCE.

In the RPA, students play the part of a student doctor who has been asked to gather information from a patient, before the patient then goes into see the doctor. The patient is played by an actor, known as a simulated patient who has been trained by the medical school at the research university. Before the RPA the simulated patient is given a patient history (see Appendix 1), which provides them with the details of the role they are to play. The student is provided with instructions on what information they are to gather as well as what they will be assessed on (Appendix 2). The students are assessed by an EAP tutor using the marking criteria (Appendix 3).

1.1.2   Pedagogical context

Broadly speaking this research is set within the context of the teaching and learning of English for Specific Academic Purposes (ESAP). The students completing the role-play assessment are hoping to progress onto an undergraduate degree in Medicine at a British university. It is ESAP rather than English for General Academic Purposes (EGAP), because it is an assessment that is only found in foundation programmes for Medicine, and it is based on the widely used assessments in medical schools and institutions, such as the OSCE and CSA. The vocational nature of a medical degree, and the fact that a medical student is essentially in training to become a medical professional, means that the pedagogy in question is also closely related to English for Specific Purposes (ESP), namely English for Medical Purposes (EMP). Doctor-patient communication has long formed a fundamental part of Medical English courses, with much of the literature focusing on providing healthcare professionals with the skills and vocabulary that they need to communicate with a diverse range of patients. The Cambridge Professional English series has a textbook devoted to Communication Skills in Medicine (McCullagh and Wright, 2008), which adopts a number of teaching methods, namely listening, discussion, role-play and vocabulary activities.

However, this study will also draw extensively on clinical and medical communication skills pedagogies, mainly those concerned with undergraduate teaching in UK medical schools. There have been a number of developments in communication skills teaching in medicine over the last two decades (Brennan et al., 2010). Communication is being increasingly recognised as a 'core clinical skill essential to clinical competence', and that this skill can be taught, and is not just a personality trait (Kurtz, Silverman and Draper, 2005: 14). The 'how' of communication skills curricula involves a range of techniques that focus on experiential learning. The communication skills strand on the IFM draws on both the Cambridge Professional English book and other ESAP materials, as well as materials and methods developed in conjunction with the medical school at the research university.

1.2 Key terminology

Key terms relevant to the different parts of the study will be defined throughout.
However, the terms outlined below are essential for reader understanding.

Term or concept	Definition
Linguistic ethnography	"Linguistic ethnography generally holds that language and social life are mutually shaping, and that close analysis of situated language use can provide both fundamental and distinctive insights into the mechanisms and dynamics of social and cultural production in everyday activity" (Rampton et al., 2002: 2)
Conversation analysis	"Conversation analysis is an approach within the social sciences that aims to describe, analyze and understand talk as a basic and constitutive feature of human social life" (Sidnell, 2010: 10).
Role-play assessment at the research university	"For this course you will be assessed on your ability to demonstrate your communication skills during an assessed role-play. You will perform this role-play with a **simulated patient.** The role-play will be assessed by one tutor and filmed for moderation and formative purposes. In the interview you will be expected to **initiate the session**, gather information on the **presenting complaint**, take a **past medical, family** and **social history** and **close the interview.** The interview should last for 10 minutes. **A mark will be taken off if you are over or under the time limit by more than 1 minute.** You will be marked using criteria based on the Cambridge-Calgary Guidelines for Patient-Doctor interviews. These are divided into 4 main criteria: **verbal, non-verbal, rapport** and **structuring the interview"** (University of St Andrews, 2014: 1).

1.3 Importance of study

> For teachers, a primary reason for doing research is to become more effective
> teachers. Research contributes to more effective teaching, not by offering definitive
> answers to pedagogical questions, but rather by providing new insights into the
> teaching and learning process.
>
> (McKay, 2006:1 cited in Dörnyei, 2007:16)

The primary reason for completing this research is improve my own teaching practice and perhaps contribute to others' through materials and curricula development. It focuses on the needs of international students who want to study a medical degree in the UK. These students may have English as an additional language, or may speak one of

the world Englishes, but all have grown up in a place distinct from where they now want to complete their undergraduate education.

The rationale for this study begins with two basic premises: that good communication skills are important in the medical profession and that these skills can be learnt (Kurtz, Silverman and Draper, 2005). Secondly, it assumes that linguistic analysis of this communication in action can deepen our understanding of what effective communication is and, subsequently, what should be learnt. Thirdly, it believes that by gaining an ethnographic perspective on the communication in action, understanding will be more comprehensive and the potential impact of the research, in the researcher's institution and beyond, more powerful.

1.3 Research aims

We know that discourse analysis is paramount to the pedagogies of English for Specific Purposes (ESP). How this discourse analysis is conducted is an area of contention leading some to ask how we can coordinate *emic* and *etic* perspectives (Coffin and Donahue, 2012). One framework that aims to bridge these two perspectives is linguistic ethnography (Creese, 2008; Roberts, Atkins and Hawthorne, 2014). 'Linguistic ethnography argues that ethnography can benefit from the analytical frameworks provided by linguistics, while linguistics can benefit from the processes of reflexive sensitivity required in ethnography' (Creese, 2008: 232). By applying a linguistic ethnographic framework to the study of the RPA it is hoped that a better understanding can be sought of both the linguistic and cultural factors at play. This will include the interaction that occurs at that moment (through the use of both broad-based and micro analysis of video recordings) as well as a broader understanding of the institutional context (through the use of post-RPA questionnaires for students and simulated patients plus the analysis of written feedback given by the assessors).

The two main research questions are explained in more detail below.

1. **What constitutes a 'good' performance in the RPA?**

As this research focuses on an assessment, student performance will be evaluated by the assessors. It is the aim of this research to investigate in fine detail what has constituted the 'good' or high scoring performances. Ethnographic data (particularly the assessors comments and the SP responses) will be of importance here. However, it is hoped that the microanalysis of the discourse, using tools from Conversation Analysis, will offer deeper insights into how effective interaction is achieved by the student. Similarly, the analysis will also investigate areas of 'communicative trouble' (Schegloff, 1987), particularly in the lower-scoring students, to better understand why students might be losing marks.

2. **To what extent do linguistic and cultural factors influence performance quality?**

Previous research has suggested that doctors trained overseas (international medical graduates or IMGs) or international medical students who are non-native speakers (NNS) of English tend to underperform in clinical skills assessments like the CSA and OSCEs (Roberts, Atkins and Hawthorne, 2014; Roberts et al., 2006; Woodward-Kron, 2015). This suggests that there are linguistic and/or cultural factors that are affecting the performance of these candidates. It is also possible that the specific conditions of the exam contribute to these discrepancies (Roberts, Atkins and Hawthorne, 2014). By adopting a linguistic ethnographic framework it is hoped that through detailed linguistic analysis of the interaction involved in the RPA, coupled with ethnographic data gathered from the key stakeholders in the assessments (students, assessors and simulated patients), this study will be able to shed some light on what these linguistic and cultural factors may be.

It is hoped that the findings from both research questions will contribute to the development of materials in the communication skills curriculum of the IFM. Similarly,

an analysis of how these data can be used will contribute to our understanding of the use of CA and other analysis of spoken discourse in EFL pedagogies.

1.4 Limits of the research

This study adopts a linguistic ethnographic framework to analyse the RPA. However, the ethnographic aspect of this is quite limited. Firstly, because of the size of the project it was not possible to conduct interviews and produce field-notes, partly because it would have produced too much data to analyse, but also because of the time constraints of both the student and simulated patient participants. Instead, questionnaires will be used. The linguistic analysis offers a snapshot of this assessment and does not attempt to offer any longitudinal data or mention of progress in the students. However, the ethnographic data will help to contextualise the transcripts and offer a broader understanding of the assessment.

2. Literature review

2.1. Introduction

Communication skills now form an integral part of medical curricula (Laidlaw and Holt, 2011). Growing evidence suggests that communication is vital for patient outcomes and a significant proportion of complaints against doctors concern problems or difficulties that have been caused by poor communication (Halperin, 2000; Taylor et al., 2002 cited in Laidlaw and Holt, 2011). Guidelines for medical schools by the GMC were published in 2009 in their document *Tomorrow's Doctors*. In this, the GMC outlines the three key areas of medical education: doctors as scholar and scientist; doctor as practitioner; and doctor as professional. Communication skills come under the 'doctor as practitioner' outcomes and, as with all of the outcomes, this must be effectively taught and rigorously assessed. Most medical schools use the Objective Structured Clinical skills Examination (OSCE) to assess this objective. Communication skills are also assessed outwith of medical schools. One such assessment is the Clinical Skills Assessment (CSA), which is part of the training procedure to become a practising GP with the Royal College of General Practitioners (RCGP). The CSA aims to 'test a doctor's ability to gather information and apply learned understanding of disease processes and person-centered care appropriately in a standardised context, make evidence-based decisions, and communicate effectively with patients and colleagues' (RCGP, n.d.). These exams are both highly relevant to this study as, although they include the assessment of the application of clinical knowledge, something that is not part of the RPA, they also both emphasise the importance of interpersonal communication skills and demonstrating patient-centered care.

For both the OSCE and the CSA there is evidence to suggest that speakers of English as an additional language (EAL) consistently underperform (Roberts et al., 2003; Roberts, Atkins and Hawthorne, 2015). Some argue that the cultural bias of such exams add a further disadvantage for those coming from outside the UK, especially those that are trained abroad (Roberts, Atkins and Hawthorne, 2015). Due to the talk-heavy nature of these exams, it is understandable that speakers of EAL might be at a disadvantage, particularly if their understanding or fluency is limited. However, because of the

relatively subjective way that the assessments are marked, it is important to disentangle what features are causing this apparent disadvantage, and whether they are linguistic, cultural or both. The students taking the RPA are all non-EU international students, but a number have English as their first language, one of the many world Englishes, including Malaysian English and Indian English (see table 1).

The previous paragraphs outline some of the reasons why there has long been an interest in gleaning a deeper and more detailed understanding of how we should teach, learn and assess the communication skills of potential doctors. As a result, interaction between doctors and patients has been subject to rigorous analysis for at least 50 years. Most of the approaches involve some form of discourse analysis; there has, for example, been a long tradition of medical conversation analysis (CA). These early studies helped to identify what needed to be taught in medical schools. Now, in the growing field of medical education, researchers are turning their attention to the effectiveness of communication skills curricula, including the way that these skills are assessed. A framework that can combine some of the tools of CA, whilst allowing for a broader understanding of contextual elements to be gleaned, is linguistic ethnography (LE). In these studies, researchers typically spend an extended period of time in the institution, observing practice and gathering data from all of the stakeholders involved, as well as completing detailed analysis of the doctor-patient discourse.

In this study, I will be adopting a linguistic ethnographic framework in order to investigate the communication skills assessment at my own institution: the role-play assessment (RPA). I am hoping that the investigation will help to answer two key questions:

1. What constitutes a 'good' performance in the RPA?
2. What are the linguistic and cultural factors that influence performance in the RPA?

Due to the nature of the course (ESAP) that the RPA assesses, a review of previous research will consider literature from a range of fields. To this the end, this literature review will be organized as follows. First, it will consider the impact of medical CA and

other types of studies on our understanding of doctor-patient communication. Second, it will review the studies that have been conducted on the different communication skills assessments and what they have told us about the nature of these exams and the difficulties speakers of EAL may have.

2.2 Medical Interaction

There is already a well-established and rich tradition of conversation analysis (CA) in the medical context. The early work was driven by an acknowledgement by some scholars that what was being taught in medical schools was somewhat distant from the day-to-day reality of working on the wards, particularly in the US (Gill and Roberts, 2013). Frankel (1983: 21 cited in Gill and Roberts, 2013: 576) argued at the time that as medical practice so often "consists of concerns and problems that arise and are managed at the level of discourse", that the analysis of medical encounters should form the foundation for the improvement of medical education. Over the past 30 years or so medical CA has developed several distinct research fields. These broadly constitute three main areas: doctor-patient interaction; patient-patient or patient-other medical professional interaction; and interaction between medical professionals. All of these sub-fields inherently share the ethnomethodogical values of CA itself, in that analysts are trying to uncover what is being done and how it is being done, but do not venture conclusions as to why the participants behave as they do. Any conclusions are taken directly from the interactions themselves. Overall:

> *The goals of medical CA are to understand and document what social actions and activities are accomplished by participants in medical encounters and how participants use interactional resources and sense-making practices to accomplish their goals, with the aim of identifying recurrent patterns of interaction* (Gill and Roberts, 2013: 577).

It has been argued that CA analyses have far-reaching implications for medical practices (Heritage and Maynard, 2006; Antaki, 2001 cited in Robinson and Maynard, 2014), but

it is not immediately apparent how these might be integrated into medical education. Often the descriptions in CA transcripts are so 'thick' that they can be difficult to interpret. However, for the purposes of this study, an overview of medical CA research can offer insights into the patterns and features of medical discourse that have already been identified. The remainder of this section will consider, firstly, some of the features of medical interaction that have been identified through the analysis of discourse and then how this can be integrated into medical curricula.

2.2.1 Discourse patterns in doctor-patient interaction
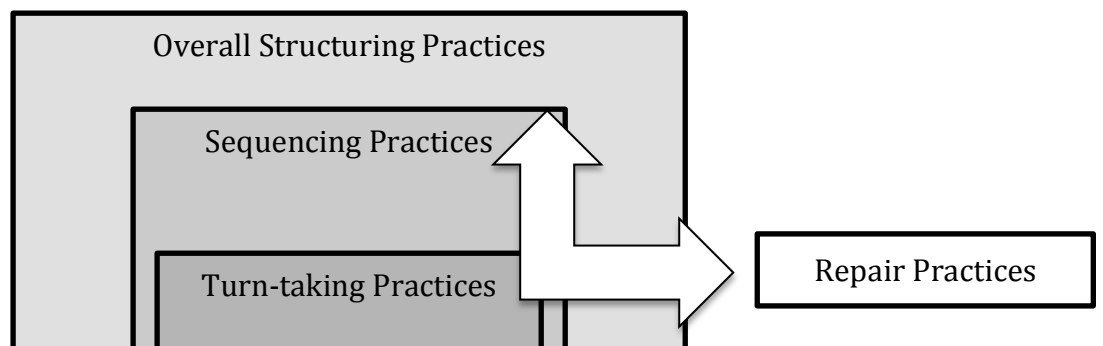
Figure 1. Model of Interaction Practices (Wong and Waring, 2012: 8)

Perhaps the most developed area of research within medical CA, doctor-patient interaction, has received much attention, especially since the publication of Byrne and Long's (1976 cited in Heritage and Maynard, 2006) *Doctors talking to Patients*. These first studies were criticized for being too doctor-centric and failing to consider the patients' input at all (Heritage and Maynard, 2006). However, it was the first time the doctor-patient interview had been 'anatomised' (Heritage and Maynard, 2006), and this tradition has been continued by many CA and DA enthusiasts to give us the wealth of literature that we have today. Analyses of the primary care interview usually fall under one of the three levels of interaction outlined in Figure 1. In terms of overall structuring, the doctor-patient interview has an overt structure. Robinson (1998, 2001b, 2003 cited in Heritage and Maynard, 2006) ascertained that the doctor-patient interview is highly structured. This structure (opening / presenting complaint / examination / diagnosis / treatment / closing) has long formed part of medical training. Patients too have come to expect this structure and it can be interesting to see how both

the doctor and patient negotiate the boundaries between them. The structure is particularly apparent in acute care doctor-patient interactions (one involving the presentation of a new illness or concern) compared to follow-up or routine visits (Heritage and Maynard, 2006), which is what the RPA is based on. Interestingly it is argued by the conversation analysts that in identifying this structure they do not seek to create a taxonomy which must be rigidly followed in a medical visit, whereas in the CSA candidates are penalised for 'poor organisation' if they deviate too much from this (Roberts, Atkins and Hawthorne, 2014). This is also true of the RPA.

Sequence organisation is "the engine room" of interaction, it is where the activities and tasks central to the medical visit take place. Sequencing practices refer to participants' ways of connecting two or more turns (Wong and Waring, 2012). The sequences are frequently made up of adjacency pairs (Sacks and Schegloff, 1972 cited in Stivers, 2012) which are defined as two turns, one following the other where 'given the first utterance, the second is expectable' (Stivers, 2012: 192), such as greeting – greeting, invitation – acceptance/declination, or request for information/informative answer. Studies focusing on sequence organisation have tended to focus on giving diagnoses and treatment options, or preparing patients for bad news, none of which are directly relevant to this study. However, applying looking at patterns in opening questions (request for information) and the patient responses could be an interesting area for analysis using these techniques.

Finally, in order to understand the sequence, we also need to consider what's happened in each turn. Turn design, what is *done* in each turn, is:

> [An] arena in which participants to the medical interview unavoidably exhibit the trade-offs to be made between getting medical tasks done while paying attention to issues of knowledge and authority, solidarity and distance, understanding and misunderstanding, and many other features (Heritage and Maynard, 2006: 19).

One such dilemma is that of the patient's problem, which is "achieving a culturally appropriate balance between involvement and detachment, so as to be seen as a

reasonable, credible patient' (Halkowski, 2006: 89). In his analyses, Halkowski (2006) has focused on how the patient presents his or her complaint in order to appear 'balanced'. The very act of being in the doctor's consulting room predetermines that the patient has decided that this is a 'doctor-able problem' (Halkowski, 2006: 93). At the same time the patient wants to 'cover his back' in case he is wrong and his condition is not worthy of a visit to the doctor. This often results in patients balancing their presenting complaint as both possibly connected to a routine problem and something more serious. Halkowski's example (2006: 92) demonstrates this:

a. an:d ah (.hh) I don't know whether its ah (hh) ah hernia, (0.4)
b. or (ah) (.) something in<u>side</u> there causing it ((cough))
c. but ah ((cough)) it- is- ah little lop sided
d. maybe I'm just growing that way

This one turn by the patient demonstrates that he thinks it could be connected to a previous or routine problem ('hernia' and 'maybe I'm just growing that way') but also something more serious ('something inside there causing it'). In his very next turn the patient confirms his reasoning for the visit: "But I think it's something that ought to be looked at" (Halkowski, 2006: 92). Other significant areas of turn-design research in medical CA have focused on doctors' phrasing of questions (Robinson, 2006) and questioning (Heritage, 2002a; Stivers and Heritage, 2001 cited in Heritage and Maynard, 2006). It will be interesting to see how the simulated patient's turns are designed in the RPA assessment. They are playing the role of a patient and a comparison of their turn design with CA studies on patient turn design in real life encounters should shed light on to what extent these interactions are simulating the real.

There is little doubt that all levels of analysis offer important insights into what is done in medical interaction. However, it is important to this study to understand how this analysis has been used in medical education, which will be the focus of the next sub-section.

2.2.3. Medical CA and medical education

In more recent years medical CA has sought more practical applications for its research, namely in the field of medical education (Maynard and Heritage, 2005; Barnes, 2005; Robinson and Heritage, 2014). Maynard and Heritage's (2005) review of medical CA begins to outline some practical ways that the findings from the analyses could be used to enhance medical practice through education or training. The examples that they use include that of 'lifestyle questions', particularly relevant here as these form part of the RPA. Analyses have shown that medical interviews invariably contain a moral element. When asking about smoking or drinking habits, doctors will try to maintain a neutral tone. However, patients will still orient towards a morally normative stance, and this affects how they answer (Sorjonen et al., 2006). This means that even if the doctor 'pretends' not to judge in order to make the patient feel more relaxed (and therefore give a more honest answer), the patient will still apply what is normatively right and wrong about their habits and reply accordingly. Sorjonen et al., (2006) recommend that doctors learn to use patient's own evaluation of discredited behaviours in order to help them develop the right advice to tackle these concerns.

Another way that CA has been used in medical education, and one that is particularly pertinent to this review, is that of CA-informed reviews. These take the form of small group tutorials in medical schools, with the students reviewing video recordings of them performing medical interviews with simulated patients. Halkowski (Halkowski, 2005) has used this arrangement to allow students the opportunity to analyse parts in the interaction that they found confusing or problematic. He also used this to focus students' attention on some of the findings of his own research, namely that of opening sequences and how patients 'appropriately' seek care (Halkowski, 2006).

What is clear from both these examples is that the intersubjective nature of CA makes it well placed to inform and support the teaching and learning of a patient-centred approach to medicine. However, what has been suggested more recently is that in order for CA to move from making 'informal recommendations' to more formal intervention in medical education and practice, the findings need to be linked with cross-sectional data which connect the findings with some form of outcome (Robinson and Heritage, 2014).

Interestingly, this is what some of the LE studies do with medical assessments: link the analysis of the discourse (using some of the CA tools and traditions) with, for example, the outcomes of the exam (pass and fail cases, or high and low scoring candidates). These will be considered in more detail in the next section.

2.3 Medical communication assessments

Communication skills training and teaching has become a vital part of medical education. Consequently the assessment of such communication skills has come under intense scrutiny. Much research has involved statistical analysis focusing on the psychometric properties and replicability of these tests (Atkins et al., 2016). However, with a growing interest from applied linguists and sociologists, it has become apparent that DA and LE approaches also make an important contribution to the understanding of these assessments from the social-cultural context in which they are performed. This section has been organised according to the findings of these studies which could be of particular relevance to the study of the RPA at the research university.

2.3.1 Power relations

Some of this research has focused on the power relations between the simulated patient and the student and how this can differ in subtle ways from that of doctors and patients (de la Croix and Skelton, 2009). Contrary to the typical asymmetary of power in favour of the doctor in regular consultations, it has been suggested that in simulated contexts 'knowledge and judgement rest with the simulation patient' (Hanna and Fins, 2006 cited in de la Croix and Skelton, 2009: 696). Additionally, because it is an assessment, it is the student, rather than the patient that is under the most intense scrutiny (de la Croix and Skelton, 2009). De la Croix and Skelton (2009) felt therefore, a more in-depth analysis of the discourse of these encounters was justified. Their study focused on two aspects of turn-taking: interruptions and the amount of doctor and patient talk. Interestingly, their results found a positive correlation between total amount of talk (both student and patient) and grade, a finding that complements much of the teaching around patient-centred consultations. De la Croix and Skelton (2009) suggest that 'at this level, the achievement of a degree of fluency is interpreted as evidence of

confidence and thus of competence in communication skills'. There was also a positive correlation between higher levels of simulated patient (SP) talk and grade, signalling that the student's ability to allow the patient to 'open up' was awarded. The results regarding interruptions were more complex. The data seemed to suggest a positive correlation between the student interrupting the patient and grade. Although this seems to contradict a patient-centred approach, it could be that the examiner interprets these interruptions as confidence on the part of the student. However, de la Croix and Skelton stress that more research is needed to understand better the nature of these interruptions.

2.3.2 Simulated consultation as a proxy for the real

In their analysis of simulated consultation assessments, Atkins et al. (2016) also consider the simulated consultation as a proxy for the real, and the impact this has on the interaction itself. They argue, that as an assessment, there is a requirement for standardisation and replicability. However, the simulated patient – in order to simulate a real consultation – cannot reproduce a script robotically. Atkins et al. (2016) draw on the work of Goffman to understand what 'maintenance work' needs to be done by both interlocutors in order to maintain the semblance of reality. In his seminal work 'Frame Analysis', Goffman (1974) describes frames as a socially defined reality built on the to and fro of interaction. 'The frame constitutes what is happening and also works as a filtering process through which general principles of conduct apply' (Atkins et al., 2016:18). In doctor-patient interaction the participants in the talk move through different frames (greeting, giving reassurance, offering and receiving advice), and linguistic features evidence changes between frames (Atkins, 2016). Importantly, Goffman (1974) argues that at any one point we can be involved in multiple frames (Goffman, 1974). In the simulated role-play assessment this is perhaps more true than ever. An example given by Atkins et al. (2016:18) is that 'in a OSCE-style exam, the frame of showing empathy to a role-playing patient is nested in a frame of displaying competence to an examiner, which in turn is nested in the institutional frame of the overall assessment process'. In this way, they ultimately argue that only through detailed linguistic analysis can the communicative competencies required for these kind

of assessments be understood and that, more controversially, these may be different from what is required in a real consultations (Atkins et al., 2016).

2.3.3 Identifying 'good' and 'poor' performance features

Applied linguists have also sought to engage with the clinical communication skills pedagogy by providing insights into what constitutes 'good' and 'poor' performances in simulated role-play assessments (Roberts et al., 2003; Roberts, Atkins and Hawthorne, 2014). Roberts et al. (2003) argued that the nature of the simulated patient as the holder of knowledge and (potentially) power to grade their performance in the OSCE exams has the effect of triggering more formulaic responses from weaker candidates. This is due to the fact that the patients are more vocal about their feelings and attitudes than they would be in a real consultation (Roberts et al., 2003). Other areas that Roberts et al. (2003) identified as having an impact on the quality of the communicative style of the candidates were the thematic staging that they used and the values and assumptions that they displayed. In terms of the thematic staging, it was concluded that candidates with 'highly rated communicative style stage the themes in a responsive way, designing the progress of the consultation to fit the particular local interactional context produced by the patient' (Roberts et al., 2003: 199), which suggests a display of patient-centred care. In terms of the values and assumptions they displayed, Roberts et al. (2003) identified that the values and assumptions of candidates could affect their performance in an OSCE style exam. These referred to the beliefs, values and ideologies about the candidate's relationship with the patient and also more deeply held views regarding the social issues around alcohol, sex and drugs. Candidates who were able to balance a position of personal authority and conviction with a reliance on the authority of medical evidence procedures were the most successful (Roberts et al., 2003). They found that those who would rely too soon on patient-centred elicitations (for example, "How do you feel about that?") would generally be weaker as they had not found the right balance of authority.

2.3.4 Achieving empathy

Empathy has long been an important part of patient-centred care and consequently of clinical communication skills pedagogy. In assessments like OSCEs, the CSA and our own RPA 'empathy' and 'building rapport' play an integral role in the criteria. For example the Calgary-Cambridge Guide, used widely by medical schools both in the UK and further afield to gauge students ability to communicate effectively, has as one of its criteria for 'developing rapport':

> Uses empathy to communicate understanding and appreciation of patient's feelings or situation; overtly acknowledges patient views and feelings (Kurtz, Silverman and Draper, 2005:48)

However, empathy is an 'inner emotional experience' (Roberts, Atkins and Hawthorne, 2014: 32) and it is debatable how much this can be evaluated from the outside. There is also the 'doubly subjective' nature of assessing how a simulated patient is feeling, or how they are acting to feel (Roberts, Atkins and Hawthorne, 2014: 32). Therefore, the question of empathy in role-play assessments becomes an interesting facet to be examined under the illuminating lens of micro-level analyses of discourse such as CA.

Roberts et al. (2003) used discourse analysis in their study of OSCEs to identify two communicative styles that had an impact on how successfully the candidates performed in the exam. They termed these empathetic and retractive styles. The empathetic style was characterised by attentive responding, joint problem solving, and contextualising and face saving (Roberts et al., 2003). Roberts et al, (2003) provide excerpts to highlight examples of each of these facets. For example, for 'joint problem solving' they use the example of a candidate (can) explicitly reassuring the patient (pat):

> *can: right ok well let me tell you first of all that (.) whatever we talk about in here*
> *is completely confidential ok (.) you don't have to worry about anything like that*

> *pat: all right*

can: erm I'm going to ask you some questions about what went on if that's all right and erm (.) you we can see if we can work something out together

(Roberts et al., 2003:196)

The fact that the candidate has used the term 'we' suggests inclusiveness, and the pausing indicates giving the patient an opportunity to respond, clearly demonstrating this empathetic strategy. In contrast, the retractive style is characterised by inappropriate responding, schema driven progression and patient labelling, storage failure and insensitivity to patient levels of understanding. Clearly seen as 'negative' strategies, Roberts et al. (2003) highlight the positive relationship between the retractive style and poor marks. However, they were keen to emphasise that no single response is necessarily retractive or empathetic, it can only be categorised through its context

More recently, Roberts, Hawthorne and Atkins (2014), in their study of the CSA, termed the linguistic action at play in empathetic encounters as 'alignment'. Alignment is a concept first introduced by Stokes and Hewit (1976 cited in Roberts, Hawthorne and Atkins, 2014). The term, as it is used in the CSA study, refers to the way that interlocutors bring their talk into line with each other to achieve a common goal (interactional alignment) as well as strategies in turn design to show understanding and agreement (Roberts, Hawthorne and Atkins, 2014). In their study of the CSA, Roberts, Hawthorne and Atkins found that alignment was produced in collaboration between the candidates and the simulated patients, and how the SP responds to the candidate is often an important factor on which the candidates are judged.

2.4 Chapter summary

This literature review has given an account of some of the types of discourse analyses that have been employed with medical communication between doctors and their patients. As my own study aims to use tools from conversation analysis, it has been important to understand some of the patterns and features that have already been identified through this process. Previous work on overall structuring, sequence organisation and turn design (Heritage and Maynard, 2006) will inform my own

analyses and also provide a useful data comparison between real-life consultations and those that are simulated for assessment purposes.

The second half of the review, which focused mainly on LE studies of different communication skills assessments, has been essential in offering a brief overview of what has been learnt about these assessments so far, particularly from a linguistic perspective. By combining the detailed analysis of the exams with data collected from interviews with assessors, candidates and simulated patients, as well as grades the candidates have achieved, these studies have managed to provide valuable links between thick descriptions of discourse and real-life outcomes. This highly accessible approach to research has provided me with a model with which to investigate the RPA at the research university, as well as insights into the interactional work that takes place in these examinations.

3. Methodology

3.1 Introduction

In order to ascertain the influence of linguistic and cultural factors on performance in the RPA, this study focuses on two main research questions:

    1. What constitutes a 'good' performance in the RPA?

    2. To what extent do linguistic and cultural factors influence performance quality? This chapter will give detail of the methodological approaches used in an attempt to answer these questions. First, it will explain the key research approach adopted: linguistic ethnography. Next, it will outline the types of data collected and the approaches to analysis. Finally, it will detail the procedures used, including ethical considerations.

3.2 Research approach

The research approach adopted for this study was linguistic ethnography (LE). As the name suggests, this approach brings together the two fields of linguistics and ethnography. It is believed that the two complement each other, as apart they have quite different agendas. As Rampton (2002:4) highlights, LE has the power of 'tying ethnography down and opening linguistics up'. It is argued that ethnography can benefit from the analytical frameworks provided by linguistics and, likewise, linguistics can benefit from the 'processes of reflexive sensitivity' (Creese, 2008:232) required in ethnography. The LE framework has been chosen for this study as the talk-heavy nature of the RPA lends itself to detailed linguistic analysis, yet the ethnographic data will enable a contextualisation of these analyses. It is believed that this, in turn, will allow the findings of this study to be more easily integrated into the IFM communication skills curricula, both in terms of the assessment and materials development.
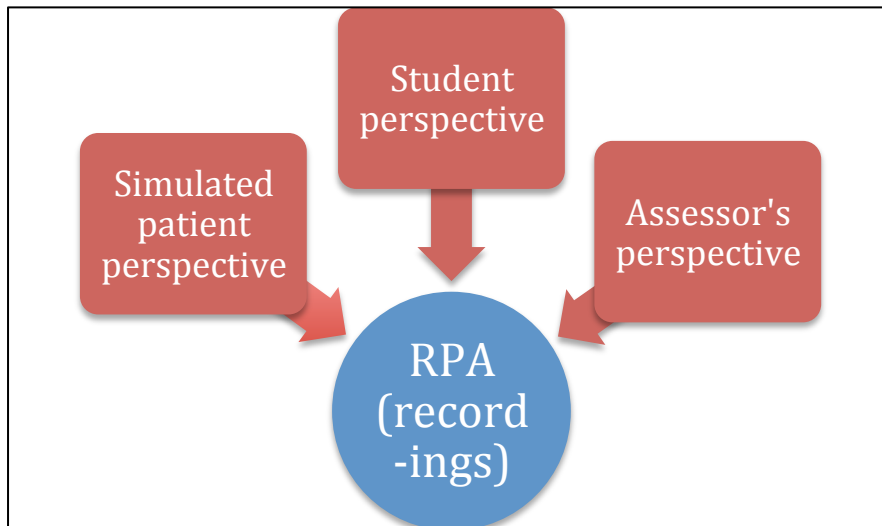
Figure 2: Linguistic and ethnographic data sources

The linguistic and ethnographic approaches can be identified through the different types of data collected (see Figure 2). The focus for the linguistic analyses is the RPA recordings. The ethnographic part of the research focuses on the differing actors in the RPA and gleaning their perspectives. These actors are the students, the simulated patients and the assessors.

3.3 Data collection and analysis

This chapter will now focus on each type of data and explain how and why it was collected, as well as describing the how the analysis was conducted.

3.3.1 Recordings of the RPAs

The principal source of data for linguistic analysis comes from the RPAs themselves. Each RPA was video-recorded for moderating purposes and these videos provided the data for linguistic analysis. Due to the small-scale nature of the project, it was decided that a sample would need to be established. The selection of the sample was based on three criteria:

1. high scoring and low scoring students, as well as some that had a grade close to the average

2. the linguistic profile of the students
3. the cultural profile of the students (including gender)

By taking these three criteria into consideration a representative and therefore useful sample could be formed. The 12 students, along with their profiles based on the three criteria above are listed in table 1.

Student	Grade LS/MS/HS	Linguistic profile	Cultural profile
Mark	18 HS	English is 1st language	Male – Malaysian
Kate	15 MS	Chinese is 1st language, English learnt at school	Female – Malaysian
Henry	17 HS	Tamil is 1st language, English from age 3	Male – Malaysian
Beatrice	13 LS	English is 1st language, Mandarin is 2nd	Female – Malaysian
Emily	16 MS	English is 1st language, Malay 2nd	Female – Malaysian
Samuel	13 LS	Malay is 1st language, English from age 4	Male – Malaysian
Edwin	13 LS	English is 1st language, Malay from age 5	Male - Malaysian
Daniel	13 LS	Korean is 1st language, English from unknown	Male – South Korean
Sally	14 MS	Chinese is 1st language, English from age 8	Female - Chinese
Berta	19 HS	Arabic is 1st language, English from age 3	Female - Omani
Alice	14 MS	1st language Arabic, English from kindergarten	Female - Kuwaiti
Susan	17 HS	1st language English	Female – Indian

Table 1: Pseudonyms, grades, and linguistic and cultural profiles of sample

In total there are 4 low scoring students, 4 mid-scoring and 4 high scoring. In terms of linguistic profile, there are 5 students who have English as their first language, and 7 who do not. In terms of cultural profile the sample includes 7 female and 5 male, as well as 7 Malaysians, and 5 of other nationality. Although the sample is biased towards the Malaysian nationality, this is representative of the cohorts normally undertaking this RPA at the institution.

Initial transcripts were then produced using oTranscribe (www.otranscribe.com). This online application was very simple to use, yet sufficiently sophisticated to be an extremely useful aid in producing the twelve initial transcripts.

3.3.1.1 Mapping and annotating the transcripts
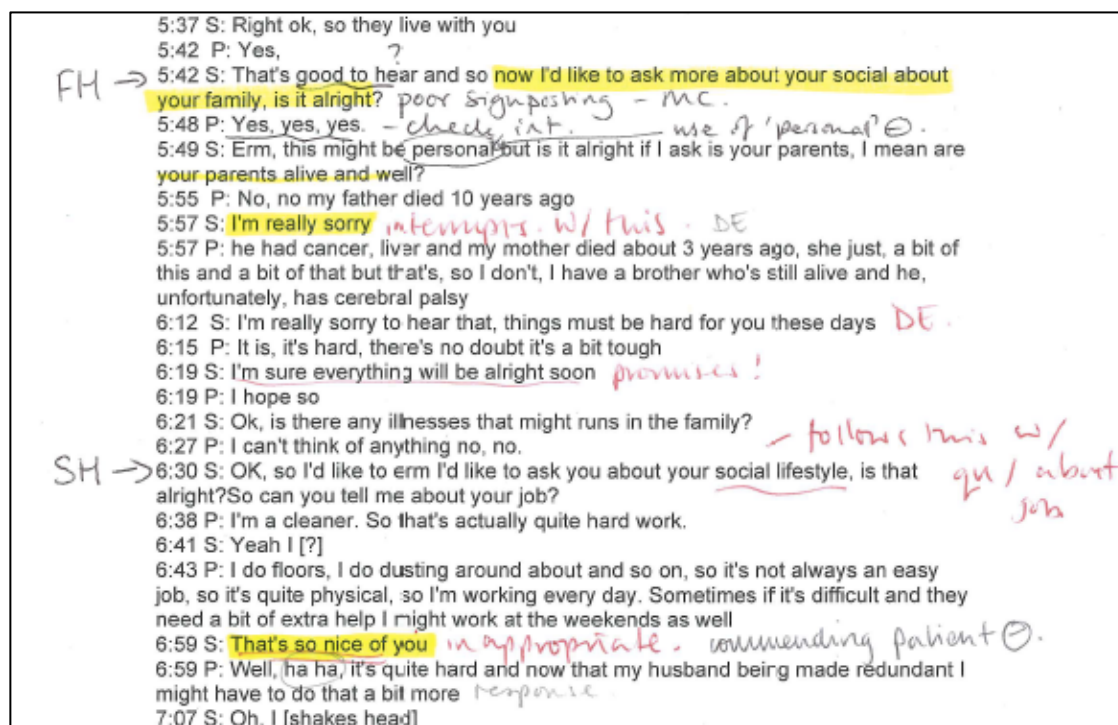
Figure 3: Example of mapped and annotated initial transcript

Before completing the more detailed analysis, each transcript was mapped and annotated according to the different types of analysis to be carried out. For example, for the structure and timing, each phase of the interview was identified and marked. Instances of alignment and misalignment were also annotated, including points where the students 'did empathy' (DE) or meta-communicated (ME). Assessor's feedback was also used at this point so that areas in the interview that they had identified (either positively or negatively) could be scrutinised in more detail. The mapping and annotating was completed in phases, starting with the structure and timing, followed by alignment and then misalignment. This meant that these initials transcripts were read and re-read, each time with a new purpose. An example of a mapped and annotated transcript is shown in Figure 3.

These transcripts, along with the recordings, were then subjected to broad-based and micro linguistic analysis. These analyses are based on a larger-scale but similar study carried out by Roberts, Atkins and Hawthorne (2014) entitled 'Performance features in clinical skills assessment'. Their study used both quantitative and qualitative linguistic analysis (as well as extensive ethnographic data), some of which have been replicated for the purposes of this study.

3.3.1.2 Broad-based analysis

Two types of broad-based analyses were carried out: structure and timing, and corpus linguistics.

1. Structure and timing

As described above, the initial transcripts were mapped in terms of the different phases of the interview. The time spent on each phase were then calculated using Excel.

2. Corpus linguistics

The twelve initial transcripts were uploaded to the lexical online tools SketchEngine (www.sketchengine.com) . This created a corpus of the RPA which could then be used to complete a more quantitative analysis of the transcripts, focusing on key words and phrases of the RPA

.

3.3.1.3 Micro-level analysis

In Roberts, Atkins and Hawthorne (2014) study of the CSA, they carried out micro-analysis on three key areas: interactional and affiliative alignment; formulaic talk; and explanation phases. The final area is not applicable to the RPA because there is no explanation of diagnosis or treatment. As a result of the reading completed for the project and my own experience of teaching and assessing on the IFM, the focus was on interactional and affiliative alignment.

This decision was also influenced by initial readings of the transcripts described in 3.3.1.1. The analysis of interactional and affiliative alignment focus on the following areas:

1. Interactional alignment

This refers to the way that the two interlocutors bring their talk in line with each other to reach a common goal (Roberts, Atkins and Hawthorne, 2014).

2. Affiliative alignment

This is identified when 'either speaker expresses agreement or explicit orientation to the concerns, feelings or expectations of the other' (Roberts, Atkins and Hawthorne, 2014: 37). It can be achieved in a number of ways:

    i) Conversationalising the consultation

        This refers to strategies such as indirectness, vague/mitigating language that serve to make the interaction more like everyday conversation.

    ii) Metacommunicating

        A common feature of the RPA, this refers to signposting language as well as other more subtle commentaries on talk.

    iii) 'Doing empathy'

        This essentially refers to instances where students respond to SP's difficulties with empathy tokens.

    iv) Misalignments and repair

        This refers to missed opportunities for alignments and how these may be repaired.

    v) Misunderstandings and repair

        These refer to instances where one or both interlocutors misunderstand or mishear talk and how these might be repaired.

All of these analytical approaches will be described in more detail in Chapter 4.

3.3.2 Simulated patient questionnaire

Simulated patient questionnaire

Simulated patient: SD/JD
Name of student:_____

1. To what extent do you feel the *student* (where 1=very little and 5=very large)

was friendly towards you?	1	2	3	4	5
built a good rapport with you?	1	2	3	4	5
listened carefully to you?	1	2	3	4	5
understood what you were saying?	1	2	3	4	5

2. To what extent do you feel that *you* (where 1=very little and 5=very large)

were able to express everything that you had come to say?	1	2	3	4	5
felt comfortable with the student?	1	2	3	4	5
understood what the student was saying to you?	1	2	3	4	5

Any further comments:

....
....
....
....

Annotations:

First root question requires SP to focus on the interactional behaviour of the student.

First 3 questions relate to Rapport criteria. Last question relates to Verbal criteria as well as linguistic competence of student.

Second root question requires SP to focus on their own interactional behaviour.

First 2 questions relate to Rapport and Structure and Questioning criteria. The last question relates to Verbal criteria as well as linguistic competence of student.

SPs given opportunity to add any further comments that could relate to previous questions, or not.

Figure 4: Simulated Patient questionnaire with annotations

As part of the ethnographic aspect of the study, it was important to get the perspective from the simulated patient on each of the RPAs conducted. Because of financial constraints, it was necessary for the simulated patients to give feedback on each of the students directly following each RPA, before the next student arrived. Therefore, it was imperative that the mode of feedback be brief and easy to complete. For this reason, a brief questionnaire was designed that would only take the simulated patients one to two minutes to complete. The design of the questionnaire was influenced by this need for brevity. It was designed in relation to how the students were being assessed via the marking criteria (Appendix 3). Figure 4 shows how each question relates to the marking criteria.

3.3.3 Student questionnaires

This study consisted of two questionnaires completed by the students undertaking the role-play assessments. The first was a brief questionnaire (Appendix 4) completed prior to the role-play taking place, which consisted of questions relating to coding data (name), cultural features (nationality) and linguistic features (mother tongue, plus 2nd, 3rd and 4th languages).

The second questionnaire was conducted as one of the ethnographic parts of the study. It was deemed that the student perspective on RPA was important as the key stakeholder in the event. It is important to note here that the original intention was to conduct interviews with the student participants. This would have been a more valuable ethnographic technique because of the freedom it would have afforded the student participants in their responses. However, because of institutional constraints (the students were under significant academic pressure at the time), it was not considered appropriate to ask the students to take part in time-consuming interviews. Instead, a questionnaire was sent to the student participants using the software Qualtrics (www.qualtrics.com), and this was kept relatively brief. A hard copy of the questionnaire is shown in Appendix 5, and a brief explanation and justification for the questions are given below.

After name and nationality, the third question used seven Likert scales, all with a five-point scale ranging from strongly agree to strongly disagree, to collect attitudinal responses from the student participants regarding their own performance in the RPA. The scales were based on aspects of the marking criteria. These Likert scales were used to allow the student participants to quickly analyse and reflect on their own performance, thereby adding their voice to this study on their performance. Like the simulated patient feedback forms, these scales were designed based on the marking criteria with the aim of having comparable data from each source (the student, the simulated patient and the assessor).

The second half of the student questionnaire was dedicated to questions that reflected more closely issues of test validity and communicative practices that are actually taking

place in this interaction. The justification for some of these questions stems from debates in the literature concerning the type of communication that is being assessed: professional communication or the ability to produce a credible version of such communication (Atkins, 2016).

All questionnaires were piloted with colleagues and no amendments were made.

3.3.4 Grades and assessors' feedback

The third ethnographic perspective on the RPA was that of the assessor. The assessor gave a grade, completed a marking criteria (Appendix 3), and gave detailed written feedback for each student. In this section, detail will be given on the 20-point scale used at the institution where the RPAs took place. It will also briefly describe the marking criteria and the nature of the feedback given.

For the RPA, the students are assessed on a 20-point scale. The points are categorised into different band. 17-20 is a distinction, 14-16 a high merit, 11-13 a merit and 7-10 a pass and 0-6 a fail. It is worth noting here that, although 7 is the pass mark, students on the foundation programme must achieve an overall grade of 14 or above for the entire module (of which the RPA is part) in order to progress onto the BSc in Medicine.

The marking criteria used in the RPA (see Appendix 3) was developed in collaboration with the medical school, and is based upon the Calgary-Cambridge Guide (Kurtz, Draper and Silverman, 2005), which, in turn, was developed for the purpose of teaching clinical communication skills in medical schools. The criteria used are verbal, non-verbal, rapport and structure and questioning. Each criterion has a set of descriptors. The criteria are firmly set in the interpersonal skills (IPS) domain (Roberts, Atkins and Hawthorne, 2014) for two key reasons. First, the students are all pre-med students and have not had any formal clinical training at the time of taking the RPA. Aside from this, the assessors themselves are linguists and TESOL teachers and not trained to assess clinical aspects of communication. Second, the criteria also reflect a more broader shift in doctor-patient communication to the IPS domain. There has been a paradigm change to 'patient-centeredness' which is now taught as a matter of course in UK medical

schools and elsewhere (Kurtz, Silverman and Draper, 2005). This shift from 'detached concern' (Fox and Lief, 1963) has meant an increased focus on IPS and skills such as empathy and rapport.

The assessors highlight the criteria in accordance with the performance of each student in the RPA. They also give written feedback to complement this. As this is quite extensive, it forms an important part of the ethnographic data for this study.

3.4 Procedure (including ethical considerations)

There were 24 students studying on the foundation programme at the time this research took place, and all were approached to take part in the research. In order to do this, each student was given a participant information sheet (PIS – Appendix 6) to read in order to make an informed decision about whether or not to take part in the research. The PIS gave detail about what the study was about, whether participation was compulsory (it was not), what the participants would be required to do and approximately how long this would take, and how the data would be used. At the meeting the students were given the opportunity to ask questions about the research and what participating would involve. The Participant (student) Consent Form for Coded-Data were then handed out for the students to read and sign (see Appendix 7). The reason why a coded-data consent form was required was because initially the responses in the questionnaires that the participants were to fill out could not be anonymous. They were required to provide their name so that their responses could be matched with their RPA recording, feedback from the simulated patient and feedback from the assessor. Once these data were matched the responses could then be anonymised. Of the 24 students on the course, 21 agreed to take part.

Similarly the simulated patients (SP) were given a their own PIS (Appendix 8) and consent form (Appendix 9). These were emailed to the SPs one week before the data collection was due to take place and the opportunity for any questions to be asked was given. The SPs signed the consent forms on the day of data collection. They completed the questionnaires after each RPA. The assessors were also given their own PIS and

consent form (see Appendices 10 and 9), which they signed prior to their data being collected.

An ethical application was made to and accepted by the Sheffield Hallam University MA TESOL Research Committee prior to commencing with data collection.

3.5 Chapter summary

This chapter has given an overview of the research approach, linguistic ethnography and specified the types of data that were collected. A clear description and justification of the data collection and analysis procedures were given, including the ethical considerations.

4. Analysis and discussion of results

4.1 Introduction

In order to ascertain the influence of linguistic and cultural factors on performance in the RPA, this study focuses on two main research questions:

1. What constitutes a 'good' performance in the RPA?
2. To what extent do linguistic and cultural factors influence performance quality?

In order to answer these questions a linguistic ethnographic framework has been used to collect data from the RPA. In this chapter the data will be analysed and discussed, drawing on both the linguistic and ethnographic data collected, as well as other studies in the field. The chapter will be organised according to the type of analysis. First, it will offer the broad-based analysis, focusing on structure and timing, and corpus linguistics. Second, it will focus on the micro-level analysis. This will be split into several sections, starting with interactional alignment, followed by affiliative alignment (looking at 'conversationalising' the case, metacommunicating and 'doing empathy'). Finally, it will consider misalignments, misunderstandings and repair.

4.2 Broad-based analysis

4.2.1. Structure and timing

The RPA that the candidates complete at pre-undergraduate level only involves the data gathering part of a traditional doctor-patient consultation. This is primarily because the students have not yet been taught any clinical knowledge. However, this part of the interview can still be subdivided into a number of stages. In short the interviews typically following the structure outlined below (for more detail on each phase please see Interview Summary Appendix 14):

- Introduction (INTRO)
- Presenting Complaint (PC)

- Past Medical History (PMH)

- Family History (FH)

- Social History (SH)

- Summary and close (SUM)

Candidate	INTRO	PC	PMH	FH	SH	SUM	TOTAL
Berta	0:36:00	3:47:00	0:27:00	0:45:00	2:58:00	2:01:00	10:34:00
Mark	0:22:00	3:06:00	1:22:00	1:13:00	2:15:00	1:14:00	9:32:00
Henry	0:21:00	2:37:00	1:47:00	0:36:00	2:54:00	1:19:00	9:34:00
Susan	0:33:00	4:19:00	2:01:00	0:45:00	3:08:00	2:02:00	12:48:00
Emily	0:33:00	1:54:00	2:14:00	0:30:00	2:08:00	1:25:00	8:44:00
Kate	0:32:00	3:36:00	1:34:00	0:41:00	1:05:00	1:33:00	9:01:00
Alice	0:31:00	1:37:00	1:16:00	0:41:00	3:17:00	2:33:00	9:55:00
Sally	0:28:00	1:21:00	3:06:00	0:48:00	1:53:00	3:09:00	10:45:00
Daniel	0:29:00	3:50:00	1:39:00	1:02:00	3:10:00	3:11:00	13:21:00
Edwin	0:38:00	1:08:00	1:14:00	0:31:00	1:27:00	2:53:00	7:51:00
Beatrice	0:30:00	1:52:00	2:04:00	0:18:00	2:31:00	1:04:00	8:19:00
Samuel	0:31:00	2:36:00	2:20:00	0:14:00	1:39:00	1:34:00	8:54:00
Total	6:04:00	31:43:00	21:04:00	8:04:00	28:25:00	23:58:00	119:18:00
Average	0:30:20	2:38:35	1:45:20	0:40:20	2:22:05	1:59:50	9:56:30
StDeviation	0:04:46	1:01:59	0:38:32	0:15:56	0:42:34	0:44:02	3:27:48

Table 2: Total time spent on each phase for each candidate (mm:ss:ms)

Table 2 shows that the average time that students spent conducting the interview was 9:56 minutes. This is unsurprising as the guidelines stipulate that the students should spend 10 minutes conducting the interview (see Appendix 2) and more than one minute shorter or longer than this length results in a penalty of minus one mark (Susan, Daniel, Beatrice and Edwin all received a penalty). In terms of the time spent on each phase, on average the students spent the most amount of time on the presenting complaint and the social history and the least amount of time on the introduction (this is formulaic and there was very little variation in the time that students spent on this (standard deviation 00:04:46)) and the family history.
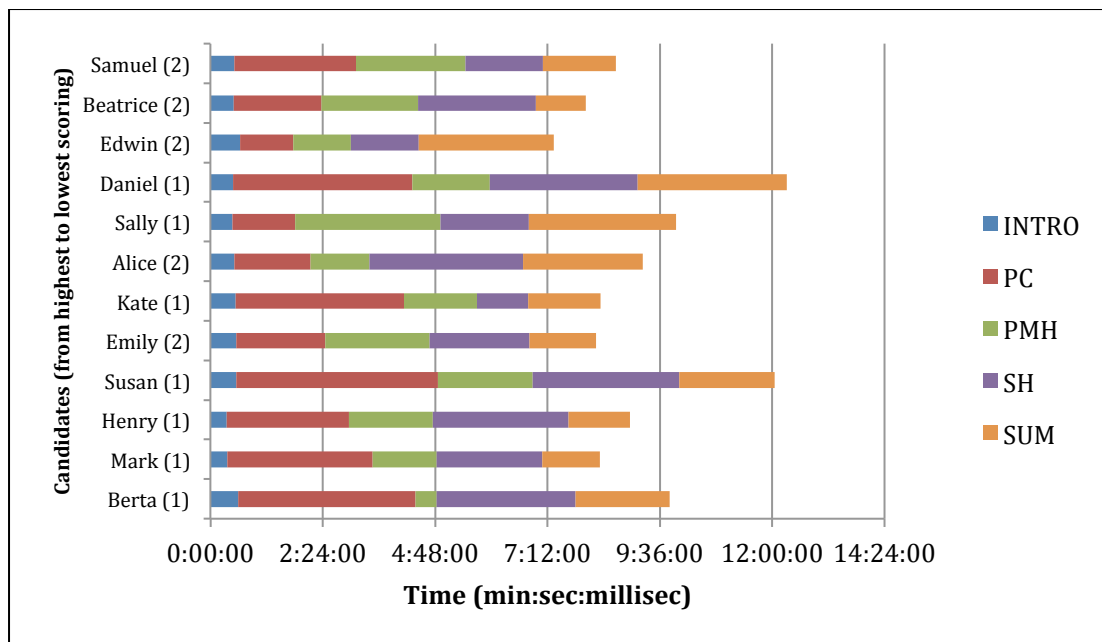
Graph 1: Time spent on each interview phase by candidate according to assessment score

The graph offers a visualisation of the time spent by each candidate on each phase of the interview. It shows the highest performing candidates towards the bottom of the graph (Berta = 19) and the lowest performing ones towards the top (Samuel, Beatrice, Edwin and Daniel = 13). The PC is the phase where there is most irregularity between candidates, with a standard deviation of over one minute. Arguably, this is the most important stage in the data gathering process. The top four scoring candidates have all spent over two minutes on the PC, emphasising the importance of this stage and indicating that thorough data gathering during this stage of the interview could lead to higher marks.

At the lower scoring end of the graph we have four candidates who have spent under two minutes on the PC. One stand out case, Edwin, spent only 1:08 minutes and it appears he may have tried to compensate for this in the summary phase, but his interview still falls very short of the required 10 minutes at 7:51. This seems to have had an impact on the quality of the interview. The assessor highlights that he is missing key information at the beginning of the interview:

In addition, the simulated patient reported that she had not felt able to express everything that she had come to the doctor's to say (see Appendix 11)

However, there are as many similarities between the candidates as there are differences. There are two candidates (Daniel and Sarah) who have both been penalised for their interviews being too long. The graph shows that there is little variation between the ways that they have structured their interview, meaning that the difference in their scores (Susan = 17, David = 13) was due to other factors. Similar to the findings of Roberts, Atkins and Hawthorne (2014), despite a couple of standout cases, what is notable is how similar the interviews are, indicating that whether or not candidates are weak or strong, they know how to structure an interview.
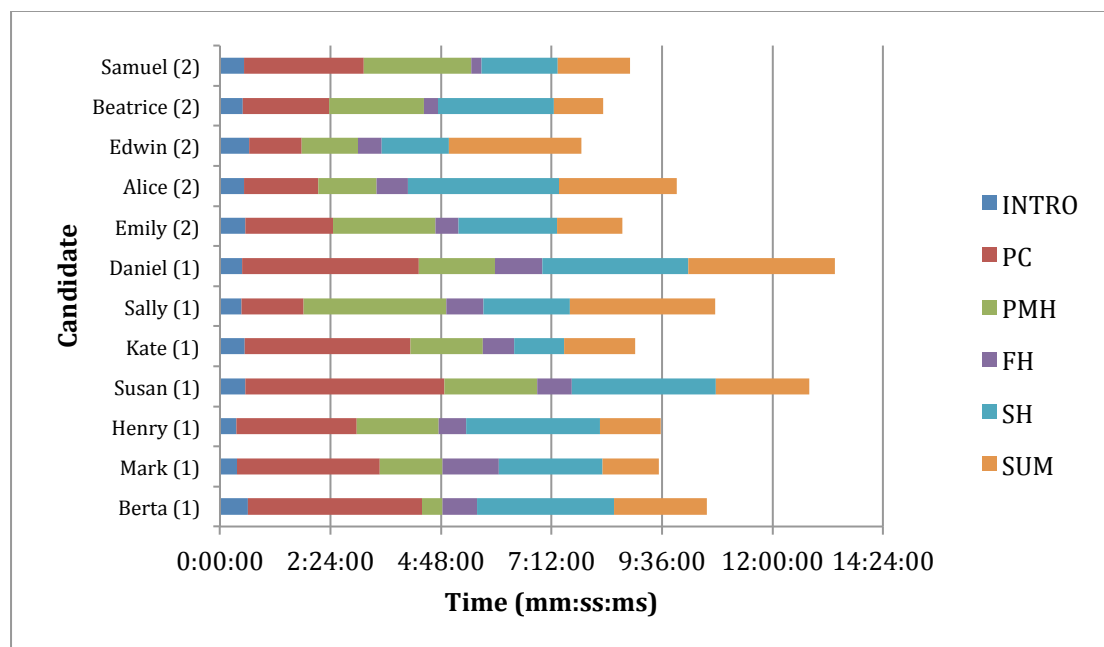
Graph 2: Time spent on each phase by candidate, with candidate organised according to simulated patient.

Graph 2 is showing the same information, but this time the candidates are organised according to whether they were interviewing simulated patient 1 (1) or simulated patient 2 (2). We can see that all of the interviews that were too short (under 9 minutes) were with SP 2. We can also see that the two cases that were too long (over 11 minutes) were both with SP 1. In fact, if we remove Alice as an outlier, SP 1 interviews were all longer than SP 2 interviews. Although it is difficult to know without looking in more detail at the transcripts why this pattern occurs, it could suggest that what Atkins et al (2016:20) describe as 'the shift of power to the role-player' could be influencing the structure and timings of the interviews more than anything else. The pattern noted above could indicate that the way the simulated patient is playing their part is having an impact on the length of interview.

4.2.2. Corpus linguistic analysis

A corpus was made of the twelve sample cases, using the online software SketchEngine. The corpus consists of 21,393 words, which is too small to make larger contextual assumptions about what any patterns might suggest. For this you would need at least 80-100,000 words (Roberts, Atkins and Hawthorne, 2014). For the purposes of this study compiling a small corpus helps us to understand what was said in those interviews, on that day, and little more. However, because of the specificity of the assessment, it is felt that some findings from the corpus, and the corpus itself, could potentially provide tools and materials for use in the teaching and learning of communication skills in the institution where this study took place.

In order to better understand the language used for the RPA compared to other spoken encounters, a comparison was made between the RPA corpus and the British National Corpus (BNC) of Spoken English. Lists of the most frequently used words in each of the corpora were created using the software and then these were compared using Excel (see Appendix 12 for the Excel spread sheet). Much of the language is very similar and showed a similar ranking in the most frequent to least frequent table; however, there were a few exceptions. Firstly, language associated with interviews was slightly more frequent in the RPA corpus, which was to be expected. For example, 'yes', 'no' and 'do' were more highly ranked in the RPA corpus, all of which are associated with the

answering and forming questions. There was also one content word – 'pain' – which was very highly ranked in the RPA corpus, reflecting the nature of the interview. Interestingly, vocabulary associated with the other symptom that the simulated patient was presenting with, blood in her stools, was not ranked nearly so highly. In fact, 'blood' was the only one that featured in the first 200 words. This could indicate reluctance in the students to engage with this part of the presenting complaint.

There were non-content words that featured considerably higher in the RPA corpus than the BNC Spoken one. The most significant of these are shown in the table below.

Word	# in RPA	# in BNC Spoken
so	9	28
just	19	110
any	24	118
okay	40	131
know	45	124
anything	47	177

Table 3: The comparative rank of words in RPA and BNC Spoken corpus

By using the corpus to check these words in context (concordances) it can be determined that some of the words (highlighted in blue) are used predominantly by the candidates, rather than the simulated patient. 'So' (see extract 1) is used by both students and SPs, but more frequently by the students. Students tend to use it as a discourse marker ('*So* what's your name'), either to introduce a question or a new topic, whereas the SPs tend to use it for more functional purposes such as cause and effect (I've got three children *so* I was in hospital having them) or in fixed expressions (because I'm going to the loo *so* much).

file3625701	see the doctor if that's okay with you. So what's your name? 0:25 P: It's Mrs Paula
file3625701	40 P: Fifty-five 0:40 S: Fifty-five. Okay so Mrs Smith what brings you in here today
file3625701	...it's just pain there [?] 1:28 S: I see. So you haven't experienced anything weird
file3625701	sharp, severe pain. 2:17 S: I see. Okay, so if it's alright with you I'd like to ask
file3625701	past illnesses. 2:22 P: Yeah sure. 2:22 S: So have you been admitted to a hospital previously
file3625701	I was twenty and I've got three children so I was in hospital from having them. 2:37
file3625701	ongoing thing called irritable bowel syndrome so every day I take stuff called fibre gel
file3625701	None at all? 3:41 P: No. 3:42 S: Alright, so if it's okay with you I'd like to ask you
file3625701	your lifestyle. 3:49 P: Yeah, sure 3:50 S: So how would you tell me about your lifestyle
file3625701	: Yes, I have a job. I work as a cleaner so I am very physically active. 4:08 S: And
file3625701	knees or up or lifting stuff or things. So yeah it isn't stressful in that I've got
file3625701	in a council house in St Andrews 5:12 S: So would you say that the environment is...
file3625701	date on your vaccinations? 5:56 P: I think so . I haven't had any for ages but then we
file3625701	specific medicines? 6:08 P: No, don't think so . 6:09 S: And to food? 6:10 P: Because of
file3625701	the last few months I've just been feeling so tired and down that we haven't done much
file3625701	just not been feeling well. 6:53 S: And so have you had any other pains - other than
file3625701	your mother's side? 7:28 P: No, no. 7:31 S: So it was only her. Alright then, just to
file3625701	rated a nine on a scale from one to ten so it is quite disturbing pain. 8:04 P: Yeah
file3625701	affected your life. You work as a cleaner and so I would imagine that that would require
file3625701	other thing is because I'm going to the loo so much I've got really quite a sore bottom

Extract 1: Concordance table to show the use of 'so' in the RPA

In extracts 2 and 3, concordances from the RPA corpus for 'any' and 'anything' show that these words are used much more frequently by the students than the SPs.

file3625701	day? 1:19 P: Yeah 1:20 S: And are there any other symptoms? 1:23 P: When I think to
file3625701	S: That's good to hear. And have you had any operations? 2:48 P: No. 2:48 S: And any
file3625701	any operations? 2:48 P: No. 2:48 S: And any injuries, accidents as a child maybe? 2
file3625701	nothing major 3:04 S: Yeah. And are you on any medications currently? 3:09 P: Yes. I have
file3625701	: Yeah 3:25 S: I see. And are you taking any over the counter medicines? 3:31 P: Well
file3625701	vaccinations? 5:56 P: I think so. I haven't had any for ages but then we haven't gone anywhere
file3625701	needs them. 6:03 S: Mmm. And do you have any allergies to specific medicines? 6:08 P
file3625701	eat what I like. 6:23 S: Mmm. Do you have any hobbies or interests 6:28 P: Well we used

file3625710	damp. But I don't know that the GP can do anything about that. 9:30 S: Well, I'd be glad to
file3625711	And apart from the pain, have you noticed anything else? Apart from the pain and the bleeding
file3625711	looking to do that. 3:04 S: Mm. Is there anything that seems to improve the situation for
file3625711	'm not sure about that. 3:24 S: Was there anything that made the situation worse? 3:27 P:
file3625711	S: So apart from this bleeding is there anything else you're concerned about? 4:13 P: No.
file3625711	speak to the doctor about this. Is there anything else you would like to do for you? 4:56
file3625711	serious, no. 5:55 S: And are you allergic to anything ? Food or medication? 6:00 P: I don't think
file3625711	in the past? 6:43 P: No, I don't remember anything . I probably had the same, the usual thing

Extracts 2 and 3: Concordance tables to show the use of 'any' and 'anything' in the RPA

These all show the frequency of questions in the students talk. The high number of questions (and discourse markers like 'so' which go along with them) makes these words common. The use of 'anything' is all encompassing and vague, and in that sense is

also an example of affiliative alignment (see 4.2.1), as they 'index a tenor of casual conversation' (Roberts, Atkins and Hawthorne, 2014: 41).

4.3 Micro-level analysis

That conversation is achieved through moment-by-moment talk is clear, but the complexities of managing this become hidden.

(Roberts, Atkins and Hawthorne, 2014: 34)

As is indicated above, without micro-level analysis of interaction it is difficult to ascertain how the interaction is managed. It is important to this study to know how interactions in the RPA are managed (or mismanaged) in order to know how best to prepare students for both the assessment and their future degree programme and career. In Chapter 2, an overview of what CA and LE studies have already told us about medical interaction and assessment was provided. Here, similar micro-level techniques will be used to analyse the RPA, focusing on interactional and affiliative alignment, as well as misalignment, misunderstandings and repair.

4.3.1. Interactional alignment

As discussed previously, alignment offers a social behavioural approach to assessing the value of interactional contributions in the RPA, as opposed to looking for the psychological states of empathy and rapport. Interactional alignment 'describes how speakers bring their talk into line with each other in trying to reach a common goal and sustain the flow of interaction' (Roberts, Atkins and Hawthorne, 2014: 36). The most striking difference in interactional alignment in the RPA data is between the two simulated patients (SPs). The structure and timing analysis in 4.1.1 indicated that there seemed to be a correlation between SP and amount of time spent on the presenting complaint.

```
EDWIN – MALAYSIAN – MALE – LS

 1   S:   Fifty five, great. So what brings you here today?
 2   P:   It's a pain in my my tummy.
 3   S:   I see. Can you describe a bit more about this pain?
 4   P:   It just comes on every so often. It's a really
 5        really sharp, stabbing, cramp-y pain right low
 6        across my tummy.
 7   S:   I see. And does it travel anywhere else?
 8   P:   No, no.
 9   S:   And are there any other pains that come with erm
10        these cramps?
11   P:   No, it's just this one sharp severe pain.
12   S:   I see. And is-, um, have you taken any medications
13        for it?
14   P:   I take paracetamol.
15   S:   Paracetamol. Erm, is there anything that makes it
16        worse?
17   P:   No it just seems to come at random.
18   S:   I see. It's er pretty random throughout the day, is
19        it?
20   P:   Yeah
21   S:   I see. Erm er I'd like to move on and ask about your
22        general [health]
23   P:   [yes]
```

Extract 4: Opening sequence between Edwin (LS) and SP 2

Edwin (extract 4) uses a formulaic opening question (what brings you here today?) and the patient replies with 'It's a pain in my my tummy'. This short response is interesting for a number of reasons. Firstly, it gives the student some information (pain, tummy) but not much. With 'pain' students would know to assess the pain using, for example, the SOCRATES mnemonic (see Appendix 13). Edwin does do this and is evaluated positively for it by the assessor ('Questions to gather information at the beginning are good'). However, as we saw in Graph 1, Edwin spent very little time overall on the presenting complaint which seemed to impact the whole interview and his grade. Secondly, from an interactional perspective the SP's behaviour suggests a reluctance to align with the student, especially as her turns continue to be quite short throughout this sequence. CA research into these particular sequences in real life doctor-patient consultations indicate that patients are primarily concerned with justifying their reason for being there (Heritage and Robinson, 2006), suggesting a willingness on the part of the patient to align with the doctor's agenda. The SP's turn in Edwin's RPA does not suggest that this was her primary concern. This, along with the stumble on 'my'

suggests the SP is playing the part of a patient who gives short answers and is reluctant to elaborate.

Susan's opening (extract 5) plays out very differently. She begins with a modified version of Edwin's formulaic opening question. She has made it indirect (an example of affiliative alignment identified by Roberts, Atkins and Hawthorne, (2014)) by introducing the structure 'would you mind telling me' which, because of the linguistic connotations of tell (tell a story, tell a tale etc.), could help to indicate to the SP that a longer response is required. We can see from extract 5 that this SP (different from Edwin's) divulged much more information with minimal interactional effort from Susan. In fact Susan's turns are all small tokens of language (mmm, mmm) that demonstrate 'active listening' to both the SP and the assessor (see marking criteria in Appendix 3). The SP's response includes a number of 'moves' that are highlighted alongside extract 5. Some of these would normally be found at later stages of the interview (PMH and SH). Previous studies suggests that when patients are presenting with a complaint that is outside of their usual illness schemata they will often provide longer narratives, particularly of the discovery (Heritage and Robinson, 2006).

```
SUSAN – INDIAN – FEMALE – HS

1   S:  17.10.60. Well, can you begin by telling me what
2       brought you here today?
3   P:  Yes. I just haven't been feeling all that good         =comparison to
4       recently. Usually I'm quite fit and [well]=            normal health
5   S:                                         (mmm, mmm]
6   P:  =with lots of energy  and I just haven't been          =general health,
7       feeling like that more recently. Now, I've had         IBS (part of PMH)
8       irritable bowel syndrome for five [years]=
9   S:                                        [mm huh]
10  P:  =and usually I can monitor that by watching what I'm   =diet (part of SH)
11      eating: I don't eat too much spicy food and I watch
12      my coffee intake and that's okay. However, four        =PC1 bleeding
13      weeks ago I went to the toilet as usual and I had
14      bleeding
15  S:  mmm huh
16  P:  I've had that subsequently=
17  S:  =hmm mmm
18  P:  =and that's alarmed me a bit because I used to go       =specifies where
19      once or twice a day <bowel movement> I've been going   blood was
20      much more often=
21  S:  =hmm mmm
22  P:  =??XXX?? now I'm so sore, having gone so often. I've    =PC2 stomach pain
23      felt general pain a stomach pain er a bit like a
24      cramp or an abdominal pain=
25  S:                             [hmm mmm]
26  P:  =but it's not there all the time, it comes and goes=    =assessment of
27  S:  =hmm mmm                                                pain
28  P:  And I'm trying to think 'why is sore at this time
29      and not at other times' and I can't quite work that
30      one out.=
31  S:  =[hmm mmm]
32  P:       [erm] so generally speaking, it has made things   =home life (SH)
33      a bit worse at home my husband was recently been
34      made redu- redu- redundant sorry and it's been just
35      a bit miserable at the moment=
36  S:  =hmm mmm. (0.5) So you mentioned your stomach cramps
37  P:  yes=
38  S:  =and you said that it just comes and goes
39  P:  yes=
40  S:  =with no specific time as such, right?
```

Extract 5: Opening sequence between Susan (HS) and SP 1

What is clear from these two examples is that the students are presented with two very different kinds of patients. SP2 gives short answers and does not elaborate or volunteer additional information, whereas as SP1 gives a lot of additional information unprompted. Ethnographic data would suggest that a more talkative patient makes the student feel more confident and less nervous:

Although I was a little nervous before my assessment, a good start with the patient helped me build a good rapport and increased my confidence. This helped me to interact the patient well and obtain the necessary information from her.

<div align="right">Susan: Q7 Post RPA student Questionnaire</div>

She refers specifically to the 'good start', highlighting the importance of interactional alignment at the beginning of the interview for students' confidence levels. This, coupled with the impact we can see the SP's interactional style had on Edwin's outcomes, and possibly others (see 4.1.1), call into question the examination experience that the students are having and whether there is a need for this to be more standardised. Although CA analyses of real-life encounters reflect the varying nature of real-life personalities, transcripts of OSCEs and the CSA reveal a much more standardised approach (see Roberts et al, 2003 and Roberts, Atkins and Hawthorne, 2014).

4.3.2 Affiliative alignment

Affiliative alignment 'is identified when either speaker expresses agreement or explicit orientation to the concerns, feelings or expectations of the other' (Roberts, Atkins and Hawthorne, 2014:37). Due to the increasingly patient-centred nature of doctor-patient consultations, any assessment of potential doctors' communication skills will involve a focus on interactional moves, which can be termed as affiliative alignment. Some examples of these identified by Roberts, Atkins and Hawthorne (2014) in their study on the CSA are: conversationalising the consultation; metacommunicating; and 'doing empathy'. All of these will be looked at in more detail below.

4.3.2.1 'Conversationalising' the consultation

"This was an excellent interview. You started well and put the patient at ease, through your empathetic manner and good body language'.

<div align="right">Assessor 2 on Berta</div>

By 'conversationalising' the consultation, students can 'put the patient at ease' and demonstrate an 'empathetic' manner, which are both indicators of a successful performance in the RPA. One way that students can do this is by aligning themselves with the patient's feelings and commending their behaviour (Roberts, Atkins and Hawthorne, 2004:46). There are a number of examples of this in the RPA dataset.

Firstly, Berta (extract 6) in her opening sequence flatters the patient about not looking her age.

```
BERTA – OMANI – FEMALE - HS

1    S:    so Paula can you please tell me your date of birth=
2    P:    =17 10 60 I'm 55
3    S:    oh well you definitely don't look it I must say
4    P:    (laughs) well that's very kind (breaks gaze)
5    S:    (laughs) so could you tell me what brings you in
6          today?
```

Extract 6: Introductory sequence between Berta (HS) and SP 2

Although a little risky (this kind of flattery may not be socially or culturally appropriate depending on the context) on this occasion it works. The patient laughs and breaks her gaze, signalling a certain level of embarrassment, but as the student laughs too and holds her gaze the patient comes back smiling. All this has a positive effect on the important opening stages of the interview, which is reflected in the positive feedback given by Assessor 1 above. Berta also demonstrates this 'manner' later on in the interview when talking about the patient's children (extract 7).

```
BERTA – OMANI – FEMALE - HS

1    S:   so you've mentioned your three children^
2    P:   yes
3    S:   erm are they all healthy and well
4    P:   Yes ((laughs))
5    S:   ((laughs))
6    P:   [Yes]=
7    S:   [er-]
8    P:   =20, 15 and 13 yes the twenty year old works but the
9         other two are still in school
10   S:   that's good to hear that's good to hear erm could you
11        tell me a bit more about your job so you've mentioned
12        that you're a cleaner?
```

Extract 7: From the SH phase between Berta (HS) and SP 2

Here Berta responds to the patient's 'laugh invitation' (Jefferson, 1984) showing alignment with patient's feelings about her children (pride), despite being culturally distinct from the patient (she is younger than the patient's oldest child and has no experience of having her own children).

There is a less successful example of conversationalising the consultation in Kate's interview (extract 8).

```
KATE – MALAYSIAN – FEMALE - MS

1    P:   I'm a cleaner
2    S:   mmm mmm
3    P:   so that's actually quite hard work=
4    S:   [Yeah I understand that]
5    P:   =[I do floors], I do dusting around about and so on,
6         erm so it's not always an easy job=
7    S:   [yah]
8    P:   [so] it's quite physical, so I'm working every day.
9         Sometimes if it's difficult and they need a bit of
10        extra help I might work at the weekends as well=
11   S:   =That's so nice of you
12   P:   well, ha ha, it's quite hard=
13   S:   it [is]
14   P:   =[and] now that my husband being made redundant I
15        might have to do that a bit more
16   S:   Oh, I ((shakes head))
17   P:   We'll just wait and see how this pans out
```

Extract 8: From the SH phase between Kate and SP 2

The student attempts to align with the patient's feelings about her work by commending her for doing the extra work. However, the use of the phrase 'that's so nice of you' instead highlights the gulf in social and cultural understanding between the student and patient. The patient reacts to this with a sardonic laugh (ha, ha) and by repeating to the student that it is 'hard' and revealing that her husband has been made redundant, therefore explaining (indirectly) that the reasons for the weekend work are financial rather than altruistic.

These examples show that it is important for the student to align with the patient in terms of their everyday lives, helping to conversationalise the consultation, making it more patient-centered. However, for some of the students this is quite difficult, especially considering the intercultural nature of the consultation. The students and patients have distinct social (age, sometimes gender), economic and cultural backgrounds that do seem to have an impact on alignment.

4.3.2.2 *Metacommunicating*

"You had a very good transition into the next part, and showed that you had been listening to the patient by bringing up the children, you do this well in the latter parts too which is great. The transition into the next part is not so natural, patients wouldn't really know what 'social history' is so think about how you would say that."

Assessor 1 on Susan

How well a student transitions between turns and sequences is, in part, determined by their metacommunication. The most obvious form of metacommunication, which is 'the talk we do 'about talk'' (Roberts, Atkins and Hawthorne, 2014), is signposting – letting the patient know where the consultation is going. Roberts, Atkins and Hawthorne (2014) also emphasise the subtler metacommunication that occurs about and 'above' the literal message, such as signalling why information is being gathered or how information should be interpreted. In a scenario such as the RPA where there is a third, overhearing party (the assessor), metacommunication serves a double purpose: students can use it to signal their intentions to both the patient and the assessor. As Roberts, Atkins and Hawthorne (2014:42) point out '[i]t shows the examiner the

structure you are working to, why you are doing something and how attentive you are to patient-centeredness'. They found that it was a feature of many successful candidates' talk in the CSA.

In the RPA, all students are metacommunicating to a greater and lesser extent. The higher scoring students are doing this more regularly and more successfully. In extract 9, the highest scoring candidate, Berta, demonstrates the use of referring to previous instances of the patient's talk to successfully emphasise patient-centeredness.

```
BERTA - OMANI - FEMALE - HS

1   S:  So, you haven't really experienced any significant
2       difference with the symptoms
3   P:  Just all been a bit difficult, can't can't imagine
4       that it's anything that's improved the situation
5   S:  And you mentioned that the pain comes as a shock
6       (0.8) so is it triggered by anything [o::r]
7   P:                                        [Well], yes I
8       work as a cleaner and so I'm using a lot of physical
9       exercise if you like I'm using heavy machines and
10      sometimes I'm doing something and that's when I ah
11      wow and then other times I could be sitting like
12      quietly and I'm just aware of it
13  S:  [oh]
14  P:  [it's not] so so severe
15  S:  mmm, so you've mentioned that you work as a cleaner
16  P:  mm [hmm]
17  S:     [do you] find that this pain has affected your
18      work or your daily life?
19  P:  Well, yes, in that sometimes I'm thinking well that
20      was sore it's making me stop for a moment before I
21      can continue with the work, yes
```

Extract 9: From the PC phase between Berta (HS) and SP 2

She does this is in line 5 (and you mentioned that the pain comes as a shock) and line 15 (so you've mentioned that you work as a cleaner). These also have the metacommunicating function of indicating to the patient why the questions are being asked.

```
SALLY - CHINESE - FEMALE - LS

1   S:  does this pain travel anywhere else except the abdo-
2       abdominal and anal?
3   P:  no, no.
4   S:  okay. Now, I hope you can rate this pain for me. So
5       from the scale of 1 to 10 and 10 is the [worst]
6   P:                                           [yes][yes]
7   S:                                                [where]
8   S:  is your pain?
9   P:  five to [seven]
10  S:          [five] to seven [alright]
11  P:                          [at different] times
12  S:  so now I'm going to ask you a few question about
13      your past medical [history]
14  P:                     [Sure] that's [ok]
15  S:                                   [Yes], so how would
16      you describe your health in general?
17  P:  generally speaking (.) <apart from the irritable
18      bowel> I would've said I was pretty fit and healthy
19      (0.5) until recently
20  S:  yes (.) and do you have any childhood illnesses?
```

Extract 10: From the PC/PMH phases between Sally (MS/LS) and SP 2

In Sally's interview (extract 10), there is a lack of metacommunication, which makes the sequence seem more disjointed. For example, in line 9 the patient describes her pain (at the instruction of the student) to which the student responds by repeating the information. However, in line 11 the patient adds further, new information. The student shows no response to this, instead moving on to a whole new stage of the interview, the PMH. In addition, this is introduced without metacommunicating why she will be doing this or signposting it in a way that is clear to a layperson. The use of 'history' here could be considered as jargon. The question in line 20, although logical, is a product of the student's own agenda (gathering a comprehensive PMH) rather than sensitive to patient cues ('until recently').

4.3.2.3 'Doing empathy'

'Although you generally have an empathetic manner, you don't always follow up with appropriate responses/questions, for example when she mentions her difficulties, you just respond with 'ok''

Assessor 2 on Henry

Although empathy, because of its strong association with patient-centeredness, is important in many aspects of doctor-patient interaction, one area where it is often noticed by assessors is how students respond to patients' expressions of life difficulties (Roberts, Atkins and Hawthorne, 2014; Roberts et al. 2003). In the CSA assessment Roberts, Atkins and Hawthorne (2014) found that all candidates 'do empathy' in response to hearing bad news from the patient (for example, the death of a parent) but there was some variation to how well this was executed. In contrast, in the RPA not all students are doing empathy at the appropriate moments, which is evident from the assessor's comment above, and there is also certainly contrast in how successfully this is achieved. This is most likely due to the stage that the RPA students are at (pre-undergraduate) compared with the CSA (post-medical school).

In the RPA the patient's parents are both dead. The students are most likely to discover this when gathering the family history. Below are some examples of how students first elicited and then responded to this news.

```
MARK – MALAYSIAN – MALE - HS

1   S:  okay, right, and are your parents alive and well?
2   P:  no, sadly no. my father died ten years ago: he had
3       cancer, liver cancer; and my mother died three years
4       ago: she was an elderly lady.
5   S:  I'm sorry once again. Erm, I understand that this
6       might be quite difficult; could you tell perhaps
7       tell about any conditions that run in your family
8       any medical conditions.
9   P:  I don't think there were any=
10  S:  =okay
11  P:  I can't think of anything
12  S:  And do you have any children?
13  P:  Yeah, three
14  S:  Okay↑ that's wonderful. And do they visit you?
```

Extract 11: From the FH phase between Mark (HS) and SP 2

```
ALICE – KUWAITI – FEMALE – MS/LS

 1   S:  I see. >erm er and er< and how are your parents?
 2   P:  Oh, I'm afraid they're both dead.
 3   S:  I see. And er were they having any medical
 4       conditions?
 5   P:  Well my father died from liver cancer and my mum was
 6       a diabetic. She died from complications with
 7       diabetes.
 8   S:  I see. Is diabetes something common in your family
 9       from your mother's side?
10   P:  No, no.
     S:  So it was only her. Alright then, just to summarise
         what I've said...
```

Extract 12: From the FH phase between Alice (MS/LS) and SP 1

In extract 11 Mark, a high scoring student, responds to the news that both the patient's parents are dead with the empathy token 'I'm sorry once again'. He does this quickly but without interrupting the patient, which allows her to provide the important information about how they died. He also precedes his following question with 'I understand this might be quite difficult', which also shows alignment to the how the patient might be feeling about discussing the illnesses in her family. He also seems to demonstrate relief ('Okay↑) when the conversation takes a more positive turn at the discovery that she has three children. Again this shows that the student is aligned with the patient's feelings and not just thinking about his own agenda. Interestingly, when asked post-RPA if he was more focused on the patient or the assessor, he was one of the few students who said that he was only aware of the patient. He commented:

> *I did not focus on the examiner as I wanted to give the 'patient' my full attention at all times. This also helped me to pick up on cues as I was more focused on the patient.*

> Mark; post-RPA questionnaire; Q11

In contrast, Alice elicits the information using a question that lacks appropriacy (see Extract 12, line 1). It presumes that the parents are alive, which proves problematic, and also suggests that she knows them or has met them before. It was perhaps unplanned and the result of nerves as it was preceded by an elongated stretch of fillers and hesitations. Alice's response 'I see' could be considered a 'sequence-closing token'

(Roberts, Atkins and Hawthorne, 2014: 44), letting the patient know that the information has been understood but offering no or little alignment to her (possible) feelings. Alice seems much more focused on her own agenda proceeding with questions, and then quickly moving on to a summary, indicating the end of this family history phase of questioning.

4.3.2.4 Misalignments and repair

In the discussion above about alignment, there are many examples of what Schegloff (1987) might call 'communicative trouble'. Cases have been highlighted where students have failed to respond to patient cues and, as a result, have missed opportunities to 'do empathy' or metacommunicate. Misalignment can also cause students to miss important information, which subsequently may lead to communicative trouble later in the consultation. In the excerpt from Samuel's interview below it becomes clear that he moved on from 'paracetamol' too quickly.

```
SAMUEL – MALAYSIAN – MALE – LS

1    P:   no↑. It just lasts for a few minutes.
2    S:   a few minutes.
3    P:   [yes]
4    S:   [does] it come often though?
5    P:   quite often, yes. Several times a day.
6    S:   mmm mmm  and Do you do anything or do you take any
7         medications to...?
8    P:   Paracetamol.
9    S:   Paracetamol. Right so, before I move on I'd just like
10        to give a summary of what I've er been told so far.
11        So you have this pain at your lower tummy, [across]=
12   P:                                              [yes yes]
13   S:   =it's relatively bad - you rate it about eight to
14        nine [for it]
15   P:        [Yes yes]
16   S:   taking paracetamols have ma:y↑ relieve the pain↑?
17   P:   Yes but just temporarily.
```

Extract 13: From the PC phase between Samuel (LS) and SP 1

Samuel (extract 13) begins his summary only to find that he needs more information about the paracetamol. In line 16 his summary 'taking paracetamols have' returns to data gathering by using 'ma:y↑', indicating a question through his intonation. This type

of repair, close to the initial misalignment, is more favourable than repairing much later in the interview. However, it still makes the interview seem disorganised if summaries are interrupted. Emily's extract (14) shows how by aligning to the patient's feelings about the paracetamol she maintains conversational flow.

```
EMILY – MALAYSIAN – FEMALE – MS/HS

1    S:   on a scale of one to ten c-, erm with er ten being
2         the most severe ??xxx??
3    P:   when it comes it's about an eight or nine, it's
4         really=
5    S:   so it's very severe. alright, and have you been any
6         medication for this pain?
7    P:   uh I've been taking paracetamol
8    S:   and has it helped?
9    P:   it helps temporarily=
10   S:   mmm
11   P:   =but the paracetamol wears off=
12   S:   yes
13   P:   =and the pain can come back just anytime
14   S:   has the pain been affecting your daily activities?
```

Extract 14: From the PC phase between Emily (MS/HS) and SP 1

```
BEATRICE – MALAYSIAN – FEMALE - LS

1    S:   so just to sum everything up and make sure I've got
2         everything right so you have this pain in the lower=
3    P:   [yeah]
4    S:   =[part] of your tummy and you rated an eight eight or
5         nine=
6    P:   =yes
7    S:   you've been taking paracetamol for it but you really
8         want to just get it fixed
9    P:   yeah
10   S:   You're generally physically active with your work as
11        well
12   P:   yeah
13   S:   and er (0.8) I forgot to ask are your parents alive
14        and well?
15   P:   no. I'm afraid they're both dead.
16   S:   oh. I'm sorry to hear that. But do you know of any
17        medical conditions that run in your family?
18   P:   no I don't think so.
19   S:   okay so (0.5) er (.) just to make sure I got all of
20        this right er (.) you're physically active and you're
21        (0.5) not sure whether you have any inheritable
22        conditions that are running in your family.
23   P:   no I don't think there's anything
```

Extract 15: From the SUM phase between Beatrice and SP 1

Extract 15 from Beatrice's interview offers a further example of repair, but much later on in the interview, that is, seven minutes in when she is giving her final summary. At line 16 she realises that she has failed to ask about the patient's parents. She rushed this and does not ask in a sensitive manner. She 'does empathy' ('I'm sorry to hear that') but follows this with 'but' which serves to almost neutralise the act of empathy. She also seems to doubt the patient's version of event ('you're not sure whether you have any inheritable condition that are running in your family'), which demonstrates a failure to interpret the assumptions of the patient. Both Samuel and Beatrice scored poorly on the Structure and Questioning part of their assessment, with the assessors highlighting that patient's were not able to fully express themselves through 'inappropriate or limiting' questioning techniques. However, it was only Beatrice that was rated very poorly by the simulated patient, who gave a 1 (very little) for the extent to which she (the patient) was able to express what she had come to say.

4.3.2.5 Misunderstandings and repair

There are instances in all talk where communicative trouble is caused by misunderstanding, mishearing or misremembering. This could be more frequent where there is a linguistic and/or cultural contrast between the speakers. Daniel from South Korea who, unlike some of the Malaysian and Middle-Eastern students has not been hearing English since birth, had difficulty remembering some of the key terms in the interview, as extract 16 demonstrates.

```
DANIEL - SOUTH KOREAN - MALE - LS

1    S:    fifty-five, okay thank you. Erm so Paula, what
2          brought you here today?
3    P:    Yes, I haven't been feeling my usual self
4    S:    =mmm mmm
5    P:    I'm kind-of lacking in [energy]=
6    S:                           [ok]
7    P:    =I'm usually quite a fit person. Been having a lot of
8          stomach pain, cramps, and I was diagnosed with
9          irritable bowel syndrome five years ago and over that
10         period I've been trying to monitor what I eat to make
11         sure it doesn't flare up again.
12   S:    mm mm
13   P:    However, four weeks ago, went to the toilet, bowel
14         movement and I had a lot of bleeding.
15   S:    oh
16   P:    and that's continued for the next four weeks
17   S:    okay
18   P:    so instead of going once or twice to the toilet as I
19         normally would I'm going a lot. So I'm very sore
20   S:    okay
21   P:    and the blood is continuing so I'm a bit concerned
22         about that.
23   S:    ah okay, er I'm sorry but what was the syndrome
24         again?
25   P:    irritable bowel syndrome
26   S:    irritable bowel syndrome
27   P:    yes, uh huh.
28   S:    Okay, then erm could you just is there any pain
29         related to the your stomach?
```

Towards end of interview

```
1    S:    and you've been taking paracetamol but you don't find
2          any enhancement for it. And (1.0) also you mentioned
3          that you had (.) erm bowel syndrome (.)
4    P:    mmmmm
5    S:    could you?
6    P:    irritable bowel syndrome.
7    S:    irritable bowel syndrome, alright. and (.) for your
8          medication, other than the paracetamol, you've not
9          taken=
10   P:    =there's Fybogel stuff that I take
11   S:    Fybogel
12   P:    Fybogel
```

Extract 16: From PC and SUM phases between Daniel (LS) and SP 2

In extract 16, Daniel asks the patient to repeat the name of the syndrome when she finishes describing her presenting complaint. However, the repair in itself is problematic. He repeats the name (presumably to help him remember it) but he does not then use the information to ask further questions about the syndrome and the effect it has on her life. This is a shame as it would have served to smooth over the misunderstanding (Roberts, Atkins and Hawthorne, 2014), instead here it is very obvious. The fact that he then has to ask the patient to tell him the name for the third

time during the summary ('could you?' line 5) further emphasises the communicative trouble.

As we saw in the corpus analysis, all of the students in the sample were reluctant to engage with the main presenting complaint: blood in the stool. The students focused on the pain for the main part. However, for some students, misunderstanding or mis-*assuming* the details of the presenting complaint caused them communicative trouble, which is demonstrated in by Samuel in extract 17.

```
SAMUEL - MALAYSIAN - MALE - LS

1    S:   temporarily. And this pain has reoccurred at very
2         random occasions for a few minutes and this has
3         happened five weeks ago.
4    P:   oh off and on since then
5    S:   often on since then. And you also mentioned er that
6         you went er you went and found blood in the urine.
7    P:   no, it's not in the urine.
8    S:   <oh it wasn't in the urine> okay (.) sorry (.) >what
9         was it in then<?
10   P:   in poo.
11   S:   okay, I'm so sorry you had to repeat that. So uhm now
12        would like to ask a couple questions to get a clearer
13        picture of your health in general if that's okay. So
14        uhm how has your health been?
```

Extract 17: From PC phase between Samuel (LS) and SP 1

When summarising the patient's presenting complaint, Samuel incorrectly states that the patient found blood in her urine. The patient then has to correct Samuel. There are several interactional features that highlight Samuel's discomfort with this subject. Preceding his error he avoids using the word 'toilet' ('you also mentioned that you went er that you went and found blood in the urine'). Also, when he says 'I'm sorry you had to repeat that' it seems he is apologising for the fact that the patient had to say the word 'poo'. This can be assumed because after making this (very important) discovery, he does not ask any further questions about it.

4.4 Summary of chapter

This chapter has summarised the key findings of both the broad-based and micro-level analyses of the sample RPA transcripts. It was found that, although all students know how to structure the interview, there were discrepancies over how well this was achieved, which may, in part, have been influenced by the simulated patient they conducted the assessment with. A brief look at the corpus of the RPA transcripts revealed words that had a higher frequency ranking in the RPA compared with the BNC of Spoken English. Contextualising some of these words in concordance tables showed who was using these words, and how, highlighting in particular the heavy load of questioning delivered by the student.

In the micro-level analysis, the evidenced behaviour of alignment has been scrutinised, as an alternative to the assumed feelings of 'empathy' and 'rapport' (Roberts, Atkins and Hawthorne, 2014). This allowed for the clear identification of how speakers align to each other through interaction to achieve common goals, and also how the students align themselves to the feelings and assumptions of the simulated patient to show caring and understanding. Examples of misalignment and misunderstandings were also identified. Although examples of each could be found in both high and low-scoring students, cross-referencing the analysis with ethnographic data allowed for the identification of what constitutes a 'good' performance.

In the next chapter a full conclusion will be drawn including a response to the questions posed at the beginning of this research project. The conclusion will also offer recommendations for teaching practice and further research, before reflecting on the limitations of the research design and execution.

5. Conclusion

5.1 Introduction

The aim of this project was to investigate the influence of linguistic and cultural factors on performance in the role-play assessment taken by International Foundation for Medicine students. In order to do this, two research questions were proposed:

1. What constitutes a 'good' performance in the RPA?
2. To what extent do linguistic and cultural factors influence performance quality?

This chapter will first address these questions directly, drawing on the findings from Chapter 4, as well as the literature from the field. It will then discuss the possible implications for both teaching practice and further research. Finally, there will be a discussion of the limitations of the study.

5.2 Research questions and summary of findings

5.2.1 What constitutes a 'good' performance in the RPA?

Due to the constraints of the size of this study, it was impossible to consider all of the factors that constitute a 'good' performance in the RPA. However, in Chapter 5, several key aspects were explored and evidence offered in the form of both quantitative and qualitative data. Here they are summarised in relation to this research question:

1. Structure and timing.
   This is important to a good performance. The data suggested that all the students knew how to structure their interviews, but some did this more successfully than others. The analysis in 4.2.1 also suggested that those who spent longer on the presenting complaint phase performed better. Assessors' comments also supported these findings
2. Interactional alignment.

Many of the discrepancies in terms of interactional alignment appeared to be due to the SP performance, rather than the students'. However, the analysis of the two extracts in 4.3.1 did demonstrate a disparity between how the students elicited the presenting complaint. Susan, with her more indirect question 'well, can you begin by telling me what brought you here today?', with the narrative instruction 'tell', elicits a much longer response than Edwin, who used a direct question.

3. 'Conversationalising' the case

   Some of the ethnographic evidence from the assessors' comments seem to indicate that students were scoring more highly because of their 'empathetic manner'. In 4.3.2.1 we saw how Berta 'put the patient at ease' through flattering the patient and responding to 'laugh invitations' (Jefferson, 1984). However, this did prove difficult for some of the students to do successfully, as will be discussed in 5.2.3 below.

4. Metacommunicating

   Signposting is very important to a good performance in the RPA, as is evidenced by the marking criteria (Appendix 3) and the number of times it was picked up by the assessors. Another type of metacommunication that was identified in 4.3.2.2 was talking about previous instances of talk. By doing this the student aligns with the patient, acknowledging what she has brought to the interview and what is important to her.

5. 'Doing empathy'

   A more obvious way of aligning with the patient was through empathy tokens. Even though all students were friendly and had good rapport according to the SPs, the assessors would frequently pick up on instances where candidates successfully 'do empathy' and also where they do not. In this sense, these empathy tokens can be described as a feature of a good performance (see 4.3.2.3).

5.2.2 To what extent do linguistic factors influence performance quality?

From the summary above, we can see that there are a number of linguistic factors that influence performance quality. This is a talk-heavy exam and students are assessed on

how well they manage that talk. In terms of linguistic competence, this study was able to compare students who have been speaking English all their lives (particularly the Malaysian students, a number of whom had English as their first language) with others that learnt it during their childhood. In Chapter 5, we looked at instances of 'communicative trouble' which presented some clear evidence for how linguistic competence could influence performance quality. For example, Daniel's trouble remembering 'Irritable Bowel Syndrome' (see 4.3.2.5) indicated that he was being presented with a noun phrase with at least two, perhaps three, new lexical items. Other instances of communicative trouble were also linguistic in nature, but at a macro-level, for example, the way that Beatrice organised her questioning.

5.2.3 To what extent do cultural factors influence performance quality?

The RPA is a culturally-specific exam. The lack of any medical aspects means that students are being judged on largely mono-cultural norms of talking and interacting. These judgements are also highly subjective, coming from just one assessor, who themselves are part of the mono-culture. This means that international students have the added complication of making subtle adaptations to their talk to fit the norms of British conversation. One feature of alignment identified by Roberts, Atkins and Hawthorne (2014) was the ability of the students to 'conversationalise' the consultations. On the whole, despite the students' linguistic competence, it was difficult to identify many cases where this was taking place. This was perhaps due to student confidence and awareness in the cultural norms of talking in a British context, but also because of the cultural gulf that existed between the student and SP, in terms of age, gender, socio-economic class and ethnic background, that made this particularly difficult for them. One stand out case where this was not successful was demonstrated by Kate in 4.3.2.1. All the students also had difficulty discussing the main presenting complaint 'blood in the stool' which, from one perspective, shows the inability of the students to fully take on the culturally powerful role of the doctor.

5.3 Implications for teaching practice

This section will summarise some of the implications for teaching and assessment design highlighted by the findings discussed in Chapter 4.

5.3.1 Implications for teaching

In the broad-based analysis, as well as the micro-level analysis on interactional alignment, it was found that the two simulated patients were responding in quite distinct ways. This highlights the importance of having students practising with both chatty and reticent patients. By comparing transcripts from the two opening sequences shown in 4.3.1, students could discuss the impact these two different types of interaction could have on the outcomes of the whole interview. Strategies to cope with both should be identified with the students.

The corpus of RPA transcripts represents a useful learning tool for students and teachers. Concordance tables could be used to look at frequent words and how they are used in RPAs. The analysis in 4.2.2 looked at the discourse marker 'so' and the frequent use of 'any' and 'anything'. Both of these highlighted the importance of questioning in the RPA and using the corpus could help students to understand how interactional work (in this specific context) is done.

The communicative trouble that we saw students having when conversationalising the consultation suggests a need for materials that will help students make their communicative style more conversational. These materials would need to highlight particular words, phrases and strategies related to British conversational norms. Listening to patients talk (for example, at www.patientvoices.org.uk) could be a useful way of doing this, or analysing transcripts of real doctor-patient interaction.

Metacommunication is obviously a vital part of the RPA, both in terms of signposting and more subtle forms of talking about talk. It makes the consultation more patient centred which improves the quality of the performance. It would be useful for students to analyse some of the transcripts from this study (for example, Extracts X and X) and to

have them identify the metacommunication and the effect this has on the tone of the interview. This would also be important in terms of 'doing empathy' and the examples of empathy tokens discussed in 4.3.2.3. What was also apparent from this discussion was the way that students elicit sensitive information is vital. These transcripts can help to raise awareness of this in the students.

The cases of misalignment shown in 4.3.2.4 clearly demonstrate how important it is to 'pick up on patient's cues (verbal and non-verbal)' (see marking criteria Appendix 3). By analysing the transcripts, students should be able to identify where this is taking place and the impact this has on the organisation of the interview. Students often find that 'following patient cues' can conflict with how they have been told to structure the interview. However, these extracts show how the reverse is true and that following patient cues improves the organisation of the overall interview. What was also pertinent in these extracts was how the students repaired misalignments. Students need to know strategies of repair for when misalignment occurs.

Finally, in the cases of misunderstanding, this usually occurs with medical terms or layman's terms for bodily functions. On the IFM clinical knowledge is not explicitly taught, however, as a language (ESAP) course, there is a rationale for exploring medical terminology. This could be incorporated through the teaching of vocabulary through games and activities around explicit lexical items. Alternatively, materials could be designed using medically themed readings, video and audio files, allowing the students to learn vocabulary in context. However, medicine is know for its content heavy nature and the list of terms that students have to learn is extensive and could not be covered in the IFM. Therefore, perhaps more importantly, students also need to learn strategies to effectively deal with unknown terms in the RPA. Also, the clinical content of the RPA should be carefully considered, which will be discussed in 5.3.2 below.

5.3.2 Implications for assessment design

Some of the findings in this research project also have implications for assessment design. These are summarised in the three key points below:

1. There should be congruency between what students have learnt about and what they are tested on in the exam. It was clear from this analysis that none of the students in the sample engaged with one part of the presenting complaint, blood in the stool. They did not seem to know what questions to ask and were perhaps reluctant to engage with this embarrassing topic. This is something that students will eventually need to deal with, but there needs to be closer links to what is done in class and what they are assessed on in the RPA. It was clear that they had learnt about 'assessing pain' as is evidenced by the questioning during the PC phase (see, for example, Edwin Extract 4).

2. Linked to the first point is each RPA needs to have a clear focus in terms of what is being assessed. For example, for the first RPA the focus could be questioning during the presenting complaint. Students could practice three or four different types of presenting complaint during the semester (for example, pain, breathlessness, discovering a lump) and be tested on one of them in the exam. In short, each part of the syllabus should have explicit aims, which are then tested in the corresponding RPA.

3. Finally, linked to both points 1 and 2, what is being tested depends in part on the way that the simulated patient behaves. The discrepancy between the two simulated patients in this RPA could have been avoided with more explicit guidelines being given before the assessment. As the students are not tested on clinical knowledge, the focus could be more firmly located within the IPS domain. For example, SPs could be given very specific instructions about how she will present her complaint (for example, reticently) and then each student can be judged more fairly on how they deal with that interpersonal challenge.

5.4 Limitations of study

5.4.1 Ethnographic data versus self-reported data

One of the main limitations of this study was that some of the ethnographic data had to be self-reported data in the form of questionnaires. This was due to the time constraints

of the participants. The students were at a particularly crucial point in their semester and therefore it was not appropriate to ask them to devote time to an interview or focus group. The simulated patients were on paid time and so it was not feasible to ask them to come in, unpaid, for an interview. The other reason these techniques were avoided is that it would produce additional data in a project that was already data heavy. Although interviews and observations would have been more in line with ethnographic traditions, the data from the questionnaires and feedback forms were available from almost all the participants and provided a valuable ethnographic angle to the research.

5.4.2 Limits to linguistic analysis

This study was perhaps too ambitious for the size of project required. By choosing a linguistic ethnographic framework, there was the time-consuming challenge of transcribing and completing detailed linguistic analyses. The long tradition in the analysis of medical discourse also provided a wealth of possible approaches to my own analysis. By deciding to focus on linguistic and cultural features of the exam, the analysis was perhaps too broad in places. However, the findings have produced a comprehensive overview of the linguistic and cultural features at play in the RPA and provide many avenues for further research which can be explored in more detail.

5.5 Recommendations for further research

There are many avenues for further research within the field of medical interaction that could stem from this project. However, here those that seem most relevant will be briefly outlined.
Using the same sample it would be useful to look at prosodic features of talk in the RPA. These can be particularly important when offering empathy tokens (Roberts, Atkins and Hawthorne, 2014). How successful empathy tokens are is often determined by prosody.

Further research into how student do and could 'conversationalise' the case is needed. This is vital if the students are to get the tone of the consultation right. The corpus could be used to look at vague and mitigating language and how this is used. Also, further desk research is needed to understand the role of culture in these types of assessment.

One interesting focus with this sample could be to focus on Malaysian English and the influence of this on a culturally-specific exam such as the RPA.

Finally, it would be fascinating to get a clearer perspective from the student about how they feel conducting the examination. This could help to further shed light on the validity of the exam and to what extent the they are being assessed on skills to negotiate the exam (for example, metacommunicating to the assessor) rather than true to life doctor patient communication. In order to do this, more detailed ethnographic data would need to be collected.

16,504 words

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Appendices

Appendix 1: Patient history

Name: Paula Smith age 55.
Patient history:

You are normally fit and well but quite stressed as you work as a cleaner and have 3 children aged 20, 15 and 13 and your husband has recently lost his job. You smoke 20 cigarettes a day on average and generally have a mild cough. You have had irritable bowel syndrome for the past 5 years. You have tried to live with it and avoid spicy food and coffee which makes it worse.

4 weeks ago you passed bright red blood in your motion and there was quite a lot of blood in the toilet. You have noticed blood on a number of other occasions since then. Your stools were small and round but now are a lot looser. You are now going to the toilet more often also, whereas you used to go only once or twice a day. You have intermittent pain your abdomen and cramps. You have sores around your anus which are painful. You have become increasingly tired and are not coping as well as you had before with life, kids and your job. You have noticed that you are less hungry than normal and have lost about 5 kilos. Your father died of cancer of the liver about 10 years ago. Your mother was diabetic and had high blood pressure and died 3 years ago. You have a brother with cerebral palsy. You had your appendix out when you were 20. You take Fybogel daily for your bowel and a lot of paracetamol.

You don't like your house as it is damp and small (council house). You feel worn out but not depressed as you enjoy your kids and your friends are very supportive. Your husband is depressed and this is becoming hard to deal with.

Appendix 2: Student RPA task guidelines

You have 10 minutes to complete your interview. In this interview you need to gather the following information:
- Presenting complaint
- Past medical history
- Family history
- Social history

If you are more than 1 minute over or 1 minute under then 1 mark will be deducted from your score.

Appendix 3: RPA Marking criteria

IFM	17-20	14-16	11-13
Verbal	Excellent use of voice (intonation, word stress, pronunciation is clear). Instructions during the examination are polite and use a range of appropriate vocabulary (able to provide lay terms when appropriate).	Good use of voice (intonation, word stress, pronunciation) although occasional inaccuracies with pronunciation or inappropriate intonation/word stress. Occasional instances where instructions could be more polite. Occasional misuse or overuse of vocabulary (jargon).	Satisfactory use of voice (intonation, word stress, pronunciation) although there may be many inaccuracies with pronunciation or inappropriate intonation/word stress. Requests are not always polite . There is overuse and misuse of vocabulary (unexplained jargon).
Non-verbal	Excellent awareness of and use of eye contact, posture, position, movement and facial expression.	Good awareness of eye contact, posture, position, movement and facial expression. Occasional nervousness is evident but affects the patient minimally.	Some attempt has been made to alter facial expressions and movement, positioning and posture. However, nervousness is apparent and affects the patient.
Rapport	Picks up on patient's non-verbal and verbal cues. Acknowledges and accepts patient's point of view and is empathic. Patient is put at ease at all stages of the interview through sensitive treatment of issues. Active listening is obvious but natural.	Picks up on most of the patient's non-verbal and verbal cues. Acknowledges most of the views expressed by the patient and expresses some empathy. The patient is put at ease at most stages of the interview by mostly sensitive treatment of issues. Active listening is apparent.	Occasionally picks up on non-verbal and verbal cues Some of the patient's views are acknowledged and empathy is occasionally offered. The patient may seem a little ill at ease through slightly insensitive treatment of issues. Active listening is not always apparent.
Structure and questioning	Allows for patient to express themselves through excellent use of open and closed questioning. Picks up on details and follows them up with appropriate questions. Meaningful summaries are provided at the end of each stage of the interview. Progresses from one part of the interview to the next using signposting and transitional statements. Develops the interview logically.	Patient is on the whole able to express themselves although the questioning techniques are sometimes not appropriate. Picks up on some details and follows them up with largely appropriate questions. Summaries mostly follow at the end of each stage of the interview, although they might not be entirely correct or concise. Signposting and transitional statements used at most stages of interview and interview is generally developed in a logical fashion.	The patient is generally able to express themselves but may be influenced by inappropriate or limiting questioning techniques. Summaries may be inaccurate and not occur as regularly as they should. Signposting is rarely used. The development of the interview may appear illogical at times.

IFM Communication Skills Role-play Criteria	7-11	0-7
Verbal	Little awareness or use of intonation, word stress. Pronunciation is unclear and leads to occasional break down in communication.	No awareness or use of intonation and word stress. Pronunciation is unclear and leads to total break down in communication
Non-verbal	Little or no awareness of body language and non-verbal cues from the interviewer. Little attempt to understand or pick up on those of the patient.	No awareness of body language. No pick up on non-verbal cues. No attempt to exhibit appropriate non-verbal behaviour.
Rapport	Little attempt to establish a rapport and show sensitivity and empathy. Little politeness shown and slightly inappropriate language used in examination.	No attempt to establish rapport. No sensitivity or empathy is shown. The interviewer may appear rude. No signposting or appropriate language used for examinations.
Structure and questioning	Questions are slightly inappropriate or unclear and are not logical. Little summarising occurs and may be slightly inaccurate and misleading.	Questions are inaccurate and inappropriate. The is no logic to the development of the interview.

Comments:

Appendix 4: Student questionnaire (short)

Questionnaire

Please complete the following two questions. The first question will be used for coding purposes only. Once the data from the questionnaire is matched with the video recordings, all data will be anonymised.

1. Name: ………………………………………………………………………

2. Nationality: ………………………………………………………………

3. Please complete the following:

	Language	When did you start speaking/learning this language?
1st Language (mother-tongue)		
2nd language		
3rd language		
4th language		
5th language		

Appendix 5: Student post role-play questionnaire

Q1 Name

Q2 Nationality

Q3 Reflecting on your interaction with the simulated patient in today's role-play assessment (RPA), please indicate to what extent you agree with the following statements.

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
I was friendly towards the patient (1)	❍	❍	❍	❍	❍
I built rapport with the patient (2)	❍	❍	❍	❍	❍
I listened attentively to the patient (3)	❍	❍	❍	❍	❍
I demonstrated empathy (4)	❍	❍	❍	❍	❍
I allowed the patient to express everything that he/she needed to (5)	❍	❍	❍	❍	❍
I understood what the patient said to me (6)	❍	❍	❍	❍	❍
The patient understood what I said to them (7)	❍	❍	❍	❍	❍

Q4 To what extent did you feel that today's RPA was a good representation of your communication skills?
- ❍ It was a very good representation of my communication skills (1)
- ❍ It was a fairly good representation of my communication skills (2)
- ❍ It was not a very good representation of my communication skills (3)
- ❍ It did not represent my communication skills at all. (4)
- ❍ None of the above (5)

Q5 Please explain your answer to question above.

Q6 To what extent do you feel that nerves affected your ability to communicate in today's role-play assessment?
○ Nerves affected my ability to communicate a lot (1)
○ Nerves affected my ability to communicate quite a lot (2)
○ Nerves affected my ability to communicate a little (3)
○ I did not feel nervous (4)
○ None of the above (5)

Q7 Please explain your answer to above.

Q8 To what extent did the interaction with the simulated patient in the RPA feel like a real (true to life) interaction?
○ It felt very real (1)
○ It felt quite real (2)
○ It didn't feel very real (3)
○ It didn't feel real at all (4)
○ None of the above (5)

Q9 Please explain your answer to the question above.

Q10 During the RPA, were you thinking more about the simulated patient or the assessment/assessor? Please choose an option that best describes how you felt.
○ I was only thinking about the simulated patient. (1)
○ I was mostly thinking about the simulated patient but I was also aware of the assessment/assessor (2)
○ I was equally thinking about the simulated patient and the assessment/assessor (3)
○ I was mostly thinking about the assessment/assessor but I was aware of the simulated patient (4)
○ I was only thinking about the assessment/assessor. (5)
○ None of the above (6)

Q11 Please explain your answer to question 10.

Appendix 6: Student PIS

PARTICIPANT INFORMATION SHEET (STUDENT)

Project Title

The influence of linguistic and cultural factors on performance features in the role-play assessment (RPA) taken by International Foundation for Medicine students.

What is the study about?

Teachers and course leaders of English for Academic Purposes (ESAP) courses, such as the International Foundation Programme for Medicine (IFM), are always seeking to better understand their students' needs. By conducting a detailed analysis of the role-play assessment in the IFM it is hoped that language and/or cultural factors that enhance or impede performance can be identified. The research will involve the recordings of your assessments being transcribed and analysed both broadly and at a micro level. It is hoped that the findings can then be used to further enhance the teaching and learning of communication skills during the foundation year.

Do I have to take part?

This information sheet has been written to help you decide if you would like to take part. It is up to you and you alone whether or not to take part. If you do decide to take part you will be free to withdraw at any time without providing a reason.

What would I be required to do?

If you decide to participate in this research you will be asked to complete a consent form and a short questionnaire. The questionnaire will ask for your name and the details of the languages you speak. Your name will only be used for coding purposes, to match your response to the questionnaire to the video of your interaction with the simulated patient, as well as the grade and the feedback you were given. It is estimated that the questionnaire will only take 3 minutes to complete. After you complete the role-play assessment, you will be asked to complete another short questionnaire. It is predicted that this will take no longer than 10 minutes to complete. Once you have completed the consent form and the two short questionnaires, there is no further action required of you.

Will my participation be Anonymous and Confidential?

Only the researcher and her supervisor will have access to the data which will be kept strictly confidential.

What will happen to the results of the research study?

The results of the analysis will be written up as part of the researcher's MA TESOL. This research forms the dissertation part the Master's course. Any person participating in the research will have access to the dissertation on completion, should they wish to read it.

Are there any potential risks to taking part?

No.

Questions

If you have any questions about the research prior to completing the consent form and short questionnaire, please contact Georgina Lloyd using the contact information below.

Contact Details

Researcher:	Georgina Lloyd
Contact Details:	gl33@st-andrews.ac.uk
	01334 462269
Supervisor:	Dr. Helen Donaghue
Contact Details:	Helen.donaghue@shu.ac.uk

Appendix 7: Student Coded-Data Consent Form

Participant Consent Form
Coded Data

Project Title
The influence of linguistic and cultural factors on performance features in the role-play assessment (RPA) taken by International Foundation for Medicine students.

Researcher(s) Name(s)
Georgina Lloyd
ELT, University of St Andrews
gl33@st-andrews.ac.uk
01334 462269

Helen Donaghue (Supervisor)
TESOL Centre, Sheffield Hallam University
helen.donaghue@shu.ac.uk

The researchers and the institutions that they represent attach high priority to the ethical conduct of research. We therefore ask you to consider the following points before signing this form. Your signature confirms that you are happy to participate in the study.

What is Coded Data?
The term 'Coded Data' refers to when data collected by the researcher is identifiable as belonging to a particular participant but is kept with personal identifiers removed. The researcher(s) retain a 'key' to the coded data, which allows individual participants to be re-connected with their data at a later date. The un-coded data is kept confidential to the researcher. If consent is given to archive data (see consent section of form) the participant may be contacted in the future by the original researcher(s) or other researcher(s).

Consent
The purpose of this form is to ensure that you are willing to take part in this study and to let you understand what it entails. Signing this form does not commit you to anything you do not wish to do and you are free to withdraw at any stage.

Material gathered during this research will be coded and kept confidentially by the researcher with only the researcher having access. It will be securely stored on a password-protected university computer.

Please answer each statement concerning the collection and use of the research data.

I have read and understood the information sheet.	☐ Yes	☐ No
I have been given the opportunity to ask questions about the study.	☐ Yes	☐ No
I have had my questions answered satisfactorily.	☐ Yes	☐ No
I understand that I can withdraw from the study at any time without having to give an explanation.	☐ Yes	☐ No

Secondary Data Permission/Decline

I agree to my data (in line with conditions outlined above) being kept by the researcher and being archived and used for further research projects by the same researcher.	☐ Yes	☐ No
I have been made fully aware of the potential risks associated with this research and am satisfied with the information provided.	☐ Yes	☐ No
I agree to take part in the study	☐ Yes	☐ No

Appendix 8: Simulated patient PIS

PARTICIPANT INFORMATION SHEET (SIMULATED PATIENT)

Project Title

The influence of linguistic and cultural factors on performance features in the role-play assessment (RPA) taken by International Foundation for Medicine students.

What is the study about?

Teachers and course leaders of English for Academic Purposes (ESAP) courses, such as the International Foundation Programme for Medicine (IFM), are always seeking to better understand their students' needs. By conducting a detailed analysis of the role-play assessment in the IFM it is hoped that language and/or cultural factors that enhance or impede performance can be identified. The research will involve the recordings of the role-play assessments being transcribed and analysed both broadly and at a micro level. It is hoped that the findings can then be used to further enhance the teaching and learning of communication skills during the foundation year.

Do I have to take part?

This information sheet has been written to help you decide if you would like to take part. It is up to you and you alone whether or not to take part. If you do decide to take part you will be free to withdraw at any time without providing a reason.

What would I be required to do?

If you decide to participate in this research you will be asked to complete a consent form. This consent form will grant the researcher permission to analyse the video recordings of the role-play assessments, in which you will play the patient. On the day of the role-play assessments you will be asked to complete a post role-play questionnaire for each of the participating students. It is estimated that each questionnaire should take no more than 2 minutes.

Will my participation be Anonymous and Confidential?

Only the researcher and her supervisor will have access to the data which will be kept strictly confidential.

What will happen to the results of the research study?

The results of the analysis will be written up as part of the researcher's MA TESOL. This research forms the dissertation part the Master's course. Any person participating in the research will have access to the dissertation on completion, should they wish to read it. It is hoped that the findings of the research will also help enhance the teaching and learning of communication skills at ELT.

Are there any potential risks to taking part?

No.

Questions

If you have any questions about the research prior to completing the consent form and short questionnaire, please contact Georgina Lloyd using the contact information below.

Contact Details

Researcher: Georgina Lloyd

Contact Details:

Supervisor: Dr. Helen Donaghue
Contact Details: Helen.donaghue@shu.ac.uk

Appendix 9: Simulated patient and tutor participant consent form

Participant Consent Form

Project Title
Using a linguistic ethnographic framework to identify the influence of linguistic and cultural factors on performance features in the role-play assessment (RPA) taken by International Foundation for Medicine students.

Researcher(s) Name(s)
Georgina Lloyd
ELT, University of St Andrews
gl33@st-andrews.ac.uk
01334 462269

Helen Donaghue (Supervisor)
TESOL Centre, Sheffield Hallam University
helen.donaghue@shu.ac.uk

The researchers and the institutions that they represent attach high priority to the ethical conduct of research. We therefore ask you to consider the following points before signing this form. Your signature confirms that you are happy to participate in the study.

Consent
The purpose of this form is to ensure that you are willing to take part in this study and to let you understand what it entails. Signing this form does not commit you to anything you do not wish to do and you are free to withdraw at any stage.

Material gathered during this research will be coded and kept confidentially by the researcher with only the researcher having access. It will be securely stored on a password-protected university computer.

Please answer each statement concerning the collection and use of the research data.

I have read and understood the information sheet.	☐ Yes	☐ No
I have been given the opportunity to ask questions about the study.	☐ Yes	☐ No
I have had my questions answered satisfactorily.	☐ Yes	☐ No
I understand that I can withdraw from the study at any time without having to give an explanation.	☐ Yes	☐ No

Secondary Data Permission/Decline

I agree to my data (in line with conditions outlined above) being kept by the researcher and being archived and used for further research projects by the same researcher.	☐ Yes	☐ No
I have been made fully aware of the potential risks associated with this research and am satisfied with the information provided.	☐ Yes	☐ No
I agree to take part in the study	☐ Yes	☐ No

Appendix 10: Assessor PIS

PARTICIPANT INFORMATION SHEET (TUTOR)

Project Title

The influence of linguistic and cultural factors on performance features in the role-play assessment (RPA) taken by International Foundation for Medicine students.

What is the study about?

Teachers and course leaders of English for Academic Purposes (ESAP) courses, such as the International Foundation Programme for Medicine (IFM), are always seeking to better understand their students' needs. By using a linguistic ethnographic framework to conduct a detailed analysis of the role-play assessment in the IFM it is hoped that linguistic and/or cultural factors that enhance or impede performance can be identified. The research will involve the recordings of the role-play assessments being transcribed and analysed both broadly and at a micro level. It is hoped that the findings can then be used to further enhance the teaching and learning of communication skills during the foundation year.

Do I have to take part?

This information sheet has been written to help you decide if you would like to take part. It is up to you and you alone whether or not to take part. If you do decide to take part you will be free to withdraw at any time without providing a reason.

What would I be required to do?

If you decide to participate in this research you will be asked to complete a consent form. Once the role-play assessments are complete you will be asked to submit the grades and feedback given to each of the participating students.

Will my participation be Anonymous and Confidential?

Only the researcher and her supervisor will have access to the data which will be kept strictly confidential.

What will happen to the results of the research study?

The results of the analysis will be written up as part of the researcher's MA TESOL. This research forms the dissertation part the Master's course. Any person participating in the research will have access to the dissertation on completion, should they wish to read it. It is hoped that the findings of the research will also help enhance the teaching and learning of communication skills at ELT.

Are there any potential risks to taking part?

No.

Questions

If you have any questions about the research prior to completing the consent form and short questionnaire, please contact Georgina Lloyd using the contact information below.

Contact Details

Researcher: Georgina Lloyd
Contact Details: gl33@st-andrews.ac.uk

Appendix 11: SP assessment of Edwin

Simulated patient questionnaire

Simulated patient (initials):
Name of student: ....   *Edwin.*

1. To what extent do you feel the *student* (where 1=very little and 5=very large)

	1	2	3	4	5
was friendly towards you?	1	2	3	4	*5*
built a good rapport with you?	1	2	3	*4*	5
listened carefully to you?	1	2	3	*4*	5
understood what you were saying?	1	2	3	*4*	5

2. To what extent do you feel that *you* (where 1=very little and 5=very large)

	1	2	3	4	5
were able to express everything that you had come to say?	1	2	*3*	4	5
felt comfortable with the student?	1	2	*3*	4	5
understood what the student was saying to you?	1	2	*3*	4	5

Any further comments:

was a little confused in his language.

Appendix 12: RPA/BNC Corpus wordlists

	RPA transcripts			BNC Spoken	
Rank	Word	Frequency	Rank in BNC	Word	Frequency
1	i	1160		the	410,738
2	you	771		i	309,460
3	and	707		you	268,648
4	that	535		and	261,947
5	the	496		it	251,965

6	it	457		to	234,245
7	to	450		that	227,364
8	a	443		a	206,650
9	so	350	#28	of	175,108
10	do	302	#14	in	140,684
11	have	293		n't	126,341
12	your	277	#62	we	108,703
13	n't	241		is	105,338
14	of	230		do	99,629
15	yes	217	#46	they	96,676
16	no	210	#35	er	88,452
17	in	191		was	83,821
18	but	176		yeah	81,615
19	just	166	#110	on	81,247
20	for	162		have	77,423
21	pain	159		what	75,721
22	is	157		he	75,447
23	not	156		there	73,085
24	any	152	#118	for	67,183
25	about	147		but	66,083
26	there	144		erm	62,413
27	my	133		well	61,894
28	had	129		so	61,001
29	been	127		be	60,114
30	with	123		this	58,308
31	me	122		one	58,056
32	well	118		know	57,788
33	as	113		oh	52,271
34	was	112		not	48,779
35	or	104		no	48,630
36	this	103		got	48,532
37	like	100		if	48,407
38	at	100		are	48,221
39	would	99		at	47,708
40	okay	96	#131	with	47,143
41	are	91		all	44,058
42	what	86		as	43,198
43	think	84		she	42,880
44	on	83		think	41,221
45	know	81	#124	just	40,106
46	all	79		yes	39,708
47	anything	79	#177	like	38,234
48	see	77		can	37,142
49	very	74		about	36,093

50	work	72	then	36,057

Appendix 13: SOCRATES mnemonic for assessing pain

Site - Where is the pain? Or the maximal site of the pain.
Onset - When did the pain start, and was it sudden or gradual? Include also whether if it is progressive or regressive.
Character - What is the pain like? An ache? Stabbing?
Radiation - Does the pain radiate anywhere? (See also Radiation.)
Associations - Any other signs or symptoms associated with the pain?
Time course - Does the pain follow any pattern?
Exacerbating/Relieving factors - Does anything change the pain?
Severity - How bad is the pain

Appendix 14: Interview summary

Stage	Possible questions
Introduction (receiving the patient)	Welcome patient Introduce yourself - I'm ……………………… I'm a student on the International Foundation Programme for Medicine. I'd like to ask you a few questions before you go in and see the doctor today. Is that ok? Could you tell me your name and date of birth? How would you like me to address you? What brings you here today? What would you like to discuss today?
Presenting complaint	Have you had anything like this before? Can you indicate where the pain is? Can you describe the pain to me? On a scale of 1-10, if 1 is no pain at all and 10 is the most intense, severe pain, what number would you give your pain. Are you taking any medication for [this complaint]? Are you on any other medication?
Past medical history	Could you tell me about any illnesses that you might have had in the past? Have you had any operations in the past? Are you up to date with you immunisations? Do you suffer from any allergies? Are you allergic to any medications that you know of? Are you taking any medications at the moment? When did you start taking ___?
Family history	Do you have any brothers and sisters? Do you have any children? Could you tell me about any illnesses that might run in the family? I have to ask, how did [your father] die? I understand this may be painful for you, but could you tell me how [your son] died? Is there any history of [breast cancer] in your family / on the female/male side of the family?

Social history	Do you live alone? Who lives with you? You mentioned your wife, how long have you been married? How old are your children?/ Do they go to school/ nursery? What's your occupation? Do you enjoy your job? How would you describe your working day? Do you have any hobbies or interests? What about exercise? If you don't mind me asking, do you smoke? Could you tell me how many units of alcohol you drink a week?
Summary and close	**PROVIDE A SUMMARY OF WHOLE INTERVIEW** Is there anything else you would like to discuss today? Thank you very much for your time, I will pass all of these details onto your doctor.