# "Everyone happy with what their role is?": A pragmalinguistic evaluation of leadership practices in emergency medicine training

Małgorzata Chałupnik [a, *], Sarah Atkins [b]

[a] University of Nottingham, University Park, Nottingham, NG7 2RD, United Kingdom
[b] Aston University, Aston Institute for Forensic Linguistics, School of Languages and Social Sciences, Aston Triangle, Birmingham, B4 7ET, United Kingdom

A R T I C L E   I N F O

A B S T R A C T

This article reports a study of simulated interactions between emergency medical teams, as they are used in education for specialist trainee doctors. We focus on a key area of communicative competence that trainees are assessed on: the performance of leadership skills. Using videos of simulated trauma cases recorded within a training department of a large teaching hospital in the UK, we analyse how trainee doctors delegate tasks to their teams, matching up their linguistic performance, in particular their use of requests, to how they are assessed in the simulation overall. This allows us to establish the types of linguistic leadership performance that are evaluated positively in this setting and therefore are attributed to success. Through fine-grained, qualitative analysis, we examine the interrelationship between 'efficiency', evidenced by the subsequent successful completion of an action by the team, and the use of indirect and mitigated requests, finding that a high number of indirect forms are successfully used to make requests of others in this time-pressured setting. We discuss the theoretical implications of our observations, revisiting claims about linguistic behaviour in urgent contexts, and also consider the practical implications of the study, including professional practice and training.

## 1. Introduction

This article reports on a detailed analysis of simulated interactions between teams of health professionals working in emergency medicine. Through the analysis of their interactions, we shed light on the pragmalingustic performance of leadership in urgent settings, focusing in particular on the incorporation of rapport-building (Spencer-Oatey, 2000) strategies and the use of (in)directness in the delegation and performance of urgent tasks. In the paper, we empirically test the theoretical claims about the link between directness, clarity and efficiency put forward both in the pragmatics (Brown and Levinson, 1987) as well as the medical communication literature (Apker et al., 2005; Orasanu and Fischer, 2008), and examine the extent to which the urgency of a task can warrant being more direct.

---

\* Corresponding author.
E-mail address: Malgorzata.Chalupnik@nottingham.ac.uk (M. Chałupnik).

Adapting Blum-Kulka et al.'s (1989) coding framework, based on work by Chałupnik (2015), we classify and compare the types of requesting and modification (imposition mitigating and strengthening) strategies used in seven video-recorded trauma simulations. The analysis addresses the relative success of these strategies (a) in achieving joint actions within the team (evidenced endogenously in interaction through the completion of tasks) and (b) with respect to their evaluation by an observing medical practitioner and healthcare staff involved in the simulation (evidenced exogenously, through assessment information and feedback). This enables empirical-linguistic testing of the framework itself and the interactional effectiveness of the types of requesting strategies used in a setting where communicative 'clarity' is important to getting tasks achieved.

In the 'Background' section below, we outline the rationale for conducting such a study, highlighting the need for this type of pragmalinguistic analysis of inter-professional communication - particularly in emergency contexts - and the insights that may be afforded by the examination of (in)directness and mitigation in the delegation and the performance of urgent tasks. An overview of the data collection and methodology are given, followed by the results of applying our adapted coding framework from Blum-Kulka et al. (1989). We provide a quantitative overview of the types of requesting and mitigation strategies that are found in the seven simulated scenarios, comparing the performance of high and low-scoring doctors in the assessment. We then explicate these results further through a detailed, qualitative analysis of interactions between them and members of their teams.

Our conclusions highlight the insights these findings offer for linguistic theories of and assumptions about (im)politeness and (in)directness, particularly assumptions about how efficiency and clarity are communicatively achieved in urgent, time-pressured contexts as exemplified by emergency medicine. These findings also have some implications for professional practice and training in clinical settings, particularly in terms of the discursive performance of leadership (Fairhurst, 2007) in medical teams.

## 2. Background

Communication between team members, patients and other participants is crucial in emergency medical contexts, with poor communication routinely evidenced as a key reason for critical incidents and mistakes across the world (Eggins and Slade, 2015, 2016; US Joint Commission, 2014; Rider and Keefer, 2006). Medical errors, particularly in critical situations, are often traced back to inter-professional communication issues between team members (e.g. Bromiley, 2008; Leonard et al., 2004; Lingard et al., 2004; Sutcliffe et al., 2004; Gawande et al., 2003), highlighting the need to carry out linguistic analyses of such interprofessional talk. The majority of studies on critical incidents within professional teams have addressed relatively broad issues, such as how power differentials between members of the clinical team can lead to communication problems and failures of care. Such retrospective analyses of critical incidents certainly illustrate the importance of communication within medical teams, indicating that individual competence and clinical knowledge alone are not sufficient in ensuring patient safety. The team, whatever their individual competencies, need to interact effectively together if they are to ensure a collective competence (Lingard et al., 2004). This therefore creates a complex role for medical professionals leading such teams, since they must foster rapport and communication between all team members — ensuring, at the same time, that instructions provided to their colleagues are also clear.

With interprofessional interactions in urgent contexts being often characterised by such emphasis on effective team communication and the efficient completion of joint tasks, examining how tasks are allocated to different members of interprofessional teams helps provide insights into how leadership is discursively negotiated and performed. With directives being defined as "attempts […] by the speaker to get the hearer to do something" (Searle, 1976: 11), we consider these — similarly to other professional communication scholars (Mullany, 2007; Holmes, 2009; Schnurr, 2009; Baxter, 2010) - a crucial feature of the performance of leadership and also something that is routinely observed in contexts such as the one presented here. Following Sinclair and Coulthard (1975) and Vine (2004), we distinguish between directives concerned with eliciting verbal responses as well as these preoccupied with eliciting a physical response, 'requests for action' as they are labelled by Garvey (1975). Similarly to Blum-Kulka et al. (1989: 11) and Culpeper and Archer (2008), we focus on the analysis of the latter, with requests being defined as "pre-event act[s]" which express "the speaker's expectation of the hearer with regards to some prospective action". This function-driven approach recognises nevertheless the overlaps between certain types of speech act categories (for discussion, see Jucker and Taavitsainen, 2000; Culpeper and Archer, 2008).

With speech act theory being concerned with how a variety of actions are achieved through talk and the different forms that speech acts take, many pragmatics publications have attempted to elucidate the reasons why such diversity is observed. Among these, Brown and Levinson's (1987) politeness theory, in which the speech act of requesting has been seen as intrinsically face-threatening, explaining why requests are often modified to mitigate their face-threatening force. Speakers can therefore soften a request through a variety of linguistic strategies, one of them being the use of indirectness (Fraser, 1988). The (in)directness of a speech act in turn is linked to the explicitness with which its illocutionary force is expressed, with Searle (1975: 60) linking this closely to linguistic form (locution) and defining indirect speech acts as "cases in which one illocutionary act is performed indirectly by way of performing another". For Brown and Levinson (1987), the need to go 'on record' — so the need to be direct and clear - and the need to avoid coerciveness are nevertheless viewed as polar opposites, something that we will address in this paper as well.

The concept of (in)directness has developed enormously since the introduction of the classic speech act theories of Austin (1962) and Searle (1969), highlighting many contexts, motivations and cultures in which directness between speakers may flout Brown and Levinson's (1987) original circumstantial model for politeness and actually become a preferred means of performing speech acts. Nevertheless, a fundamental assumption has remained from Brown and Levinson (1987); that the need for efficiency in more urgent contexts of communication warrants the use of direct speech acts, enabling a tacit agreement between speakers that face wants can be sidestepped (Brown and Levinson, 1987). This assumption certainly holds true in most studies of communication between medical teams, where clarity and directness are key recommendations (Apker et al., 2005; Orasanu and Fischer, 2008). Apker et al. (2005), for example, address how power differentials are managed through a wide repertoire of communicative strategies by nurses in medical teams, using interviews and work-shadowing as the methodology for identifying these. They highlight that, although physicians in senior roles "expected nurses to function as active problem solvers and contribute to decision making", the nurses felt they "had to accommodate the hierarchy by using indirect forms of communication for fear that their suggestions would be rejected or discounted if too overt" (Apker et al., 2005: 111). Greater directness from physicians in communicating their expectations, they argue, would in turn enable nurses to contribute more directly to decision-making. However, with Apker et al.'s (2005) study drawing upon interview data and observations made while work-shadowing, their supposition on the efficacy of 'directness' in interaction would be useful to test from an empirical linguistic perspective, something that this paper sets out to achieve.

The assumption that directness is warranted when efficiency is required in urgent contexts, while communication skills guidance also emphasises the need to linguistically collapse power asymmetries, flags up a key communicative tension. In British English-speaking contexts, where the data for this paper was collected, fostering a more symmetrical relationship between team members, particularly in ad hoc teams the individual members of which may have not met before, may require the type of management of rapport that takes more time and is seen as less efficient than giving direct orders. Indirect and mitigated speech acts, used - for example - when making requests, are a means of demonstrating mutual respect and concern for the feelings of addressees (Holmes and Stubbe, 2003), particularly between professionals where there are power differentials to be overcome in establishing open communication between all. However, as suggested by Apker et al. (2005: 111), attending to hierarchies "by using indirect forms of communication" is viewed as undesirable and research on communication by healthcare professionals suggests indirectness or mitigation may risk others misunderstanding a request (Orasanu and Fischer, 2008; Linde, 1988), since indirectness is generally thought to place an increased burden on the hearer to try and understand what is being said.

The communicative contingencies of the emergency departments are certainly unlike any other, both in medicine and more generally, with the time-restricted nature of cases, the continual intake of patients and sometimes the lack of resources to deal with them, all leading to a more pressured interactional environment (Eisenberg et al., 2005; Rosenzweig, 1993). Often therefore the use of more direct communicative strategies is deemed to be necessary, and is equated with "explicit and efficient language" (Orasanu and Fischer, 2008: 39). Similarly to Brown and Levinson's claims (1987), literature on urgent healthcare communication (Apker et al., 2005; Orasanu and Fischer, 2008) presupposes an existence of a potential tension between making clear requests and fostering the kind of rapport that can flatten out hierarchies between team members.

The means of fostering rapport with patients in emergency settings has been highlighted by various studies (Rosenzweig, 1993), but the means of achieving rapport with other members of the medical team, in a manner that also aids efficiency, is under-researched, particularly in emergency settings. Slade et al. (2008) compare functions performed by doctors and nurses in dialogue with patients in an Emergency Department, finding that nurses attended to the interpersonal relationship with the patient more than doctors did. However, given that their study suggests the work done in emergency clinical settings is "dependent on numerous other professional expertises and practices...to achieve their clinical outcomes" in a chain of care (Slade et al., 2008: 273), it is worth investigating the inter-professional, collaborative communication between team members further. The communication of an emergency department (ED) doctor and nurse do not necessarily have to be set in contrast to one another, but rather as a part of the whole team-based interaction.

One practical recommendation for achieving clear, inter-professional collaboration in contexts such as the operating theatre has been the checklist, which a medical team talks through prior to performing a procedure (Lingard, 2012). The checklist itself contains practical prompts for patient information (such as relevant medical history) and any procedural issues (such as an operative plan), rather than recommendations for communication per se. However, it functions as an important scaffold for the team members to gather together and communicate issues prior to the procedure. The checklist has achieved near universal adoption as a simple, proven means of improving patient safety. However, as Bosk et al. (2009) highlight, the 'simple checklist' overlooks the more complex sociocultural issues around patient safety and, in terms of communication, "team members should be in a position to speak up at any moment before, during or after the operation", not just at the point of the initial checklist discussion (Bezemer et al., 2016: 755). These more complex communicative issues can be explored further by empirically analysing how teams interact with one another.

There is wide scope then for greater linguistic research on team interactions. What is missing from assertions about the problematic nature of asymmetric participant power in fostering communication identified by previous studies, as well as indirect versus direct communication in team interactions, is a detailed understanding of the interactions themselves, as they unfold. Close, interactional analysis of team-based professional communication has only begun to take place in more recent years, with studies such as Hindmarsh and Pilnick (2002), Korkiakangas et al. (2014) and Bezemer et al. (2011, 2016) demonstrating the useful contribution to be made by close, microanalysis of videoed team interactions and its ability to show how actions, such as requests for instruments, are interactionally achieved between the medical team members, often through coordinated bodily conduct. Conversation analytic (CA) approaches avoid an intentionalist thesis of speech acts and instead address utterances in their sequential, interactional co-text and environment. They also often analyse the participants' orientations, whereby a participant's response to an utterance can display how the action of the previous turn was understood. Such an empirical approach can reveal phenomena not possible to hypothesise. For example, Curl and Drew (2008), building on Brown and Levinson's (1987) work, identify a key difference in request forms by analysing phone conversations and out-of-hours call to the doctor. Schegloff (2007: 64) identifies how speakers make an effort to elicit offers rather than make a request outright. CA's empirical approach to identifying action formation in talk-in-interaction has enormous value then in identifying how speech acts actually function in context.

In this paper, we primarily draw upon pragmatic theories rather than conversation analysis but, similarly to the conversation analytical approach, believe that it is necessary to consider the immediate discursive context of utterances, in this case speech acts, in order to establish how speech acts are not only produced but also responded to. In the study, we draw upon pragmatic frameworks, principally Blum-Kulka et al.'s (1989) coding scheme, to categorise requests, assess their levels of (in)directness and mitigation, and finally empirically test their levels of relative success. We examine thus not only the production but also the uptake of requests in the context where urgent tasks are to be jointly performed. This gives a detailed picture of the linguistic choices which trainee doctors make, particularly the patterns in the highly-rated doctors' talk, and the impact that these choices have on the tasks that are to be achieved. A pragmatic analysis of the performance and the uptake of (in)direct and mitigated requests in ad hoc settings therefore, we argue, is novel and has much to offer with regards to testing some of the theoretical claims put forward both in the pragmatics and in the healthcare communication literature.

Though simulated, the scenarios examined in this article provide a valuable opportunity to look at how team interactions between emergency medical professionals are managed and led by junior doctors during their training. Evidence from linguistics suggests simulated interactions necessarily demonstrate some differences to 'real-life' clinical interactions, particularly in the audience-design of utterances for an overhearing third party (Seale et al., 2007; Roberts et al., 2014; Atkins et al., 2016) and it will be important to acknowledge the complex power relations in a setting where the team 'leader' is ultimately under the examination of a more powerful assessor and arguably more powerful role-playing interactants (Atkins and Roberts, 2018). Nevertheless, these simulations may still provide a valuable insight into how the linguistic performance of requests and directives can lead to the successful or unsuccessful achievement of tasks between the clinical team members, all within a deliberately time-pressured setting. As well as being able to observe the endogenous evidence of interactional success in performing joint actions, this type of educational setting also provides the analyst with valuable ethnographic insight into the types of interactional styles deemed to be effective by experienced medical professionals, in the form of an external assessment by the overseeing examiner as well as simulation participants. More generally, if the culture-change necessary to achieve 'collective competence' between medical professionals is to occur (Bezemer et al., 2016; Lingard, 2012), a communicative insight into understanding of this type of simulated training, which is near-universal in medical education, will be a useful one. Examining the discursive practices employed in clinical training helps to uncover how communication skills, and leadership skills specifically, are fostered at this early stage of the specialists' careers, shedding light on the development of the trainees' linguistic repertoires which are hypothesised to influence their future interactions as specialists.

## 3. Data

In order to explore the complexities of interaction within ad hoc medical teams, we analyse videos of seven trauma simulations and seven debrief sessions which give feedback on the practitioners' performance, all recorded in a clinical skills training session of a large UK teaching hospital over the course of one working day.

The setting we address here is a simulated trauma case, designed to help junior doctors prepare for a summative exam for specialism in emergency medicine in the UK and Republic of Ireland — the Fellowship of the Royal College of Emergency Medicine final exam (FRCEM). This is a high-stakes, professional assessment which consists of several simulated tasks. Preparatory exercises, such as the simulated trauma case examined in this paper, are therefore common practice in the run up to the FRCEM. The particular exercise recorded here is a scenario in which junior doctors are expected to manage a small team of emergency healthcare professionals, preparing for the arrival of a trauma patient and then overseeing and directing appropriate care from all team members once the patient arrives. The six roles outlined in

the simulation include: a patient, a paramedic, a nurse, a foundation doctor (F2), a radiographer and a surgical consultant (Fig. 1).
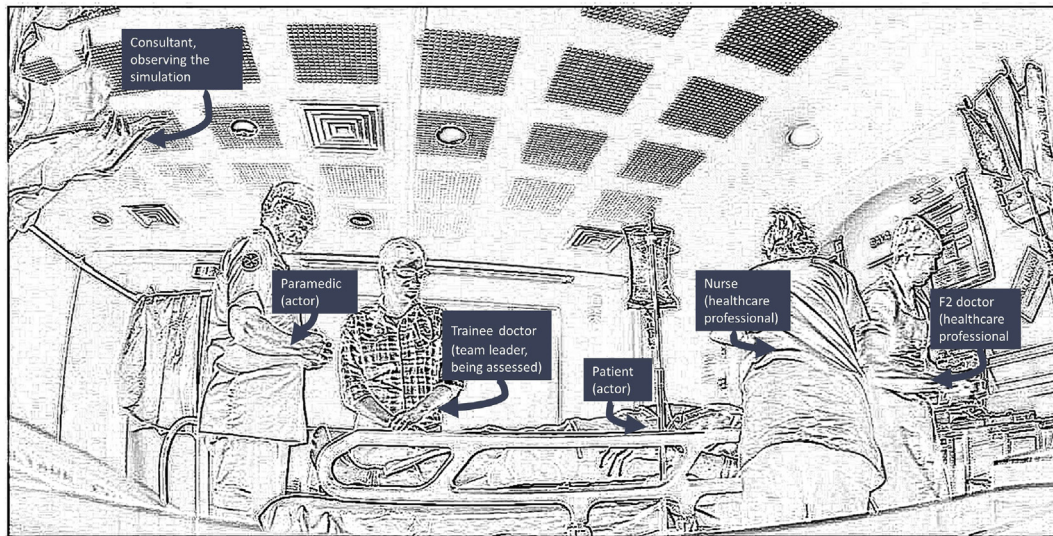


**Fig. 1.** The main participants of a simulation (l-r): consultant observing the simulation; paramedic (actor); trainee doctor; patient (actor); nurse (healthcare professional) and F2 doctor (healthcare professional).

With the exception of the roles of the paramedic and the patient, all of the remaining parts are carried out by experienced healthcare professionals. In real-life practice, some of them hold positions more senior to those of the trainees, which may have implications for the power asymmetries in the interaction analysed below. The entire case is timed, meaning that the candidates must quickly complete tasks assigned to them within the allotted 14 min, all the while being observed by an experienced consultant in emergency medicine who is assessing their clinical performance and will later collate feedback on their leadership skills. Each trainee doctor's simulation is based on the same scenario, which enables us to compare how quickly they perform all of the tasks outlined in the marking sheet and establish whether they dispatch the patient to an operating theatre — one of the main objectives of the task.

While being assessed, the junior doctors are informed that this station will test their 'leadership abilities', but not the particular communicative strategies this might entail. Communication skills tend to make up a core component of most simulated objective structured clinical examination (OSCE) scenarios, including the FRCEM examinations for which these doctors are preparing (each station is provided with a pie chart indicating what percentage of the marks will be based on communication skills), and so also feature heavily in preparatory sessions such as the one analysed here. More detailed guidance on particular communicative strategies is not specified, a feature comparable to research on other simulated, OSCE-style assessments of clinician performance (e.g. Atkins et al., 2016), in which the guidance for assessors giving marks is often fairly general, asking them to indicate, for example, whether the doctor 'establishes rapport' with the patient. While trainee doctors will have received guidance in developing communication skills throughout their medical training, the typical models such as Calgary-Cambridge (Kurtz et al., 2004) focus more on doctor-patient communication than they do on the inter-professional communication skills and there is, therefore, arguably a gap in some of the training literature they will have received in terms of enacting leadership.

Each simulation and subsequent debrief session, in which participants give feedback on the junior doctor's enactment of leadership, was video-recorded from two different camera angles and supplemented by fieldnotes, produced by the researcher observing the simulation. The PI was extensively involved with the research participants and the simulation itself, contributing to its setup and operation. For researchers with a background in linguistics and the social sciences, seeking to understand institutional settings such as healthcare through fieldwork and involvement with participants is useful, not only for the practicalities of gaining access, but also for gaining a richer understanding of the research site and data through a collaborative relationship with the professionals, a process described by Rampton et al. (2015: 40) as bearing "resemblance to the classic anthropological task of becoming familiar with the strange". By becoming a member of that professional community,

one can get closer to the "life world" or "lived experiences" of that community than solely on the basis of "visiting" a research site, interviewing "research participants" and studying fieldnotes and video-recordings in isolation.

(Bezemer, 2015: 221-2).

A linguistic ethnographic approach to studying communication typically aims for a 'rich description' of the research site, including through the use of fieldnotes which "provide evidence of the lived stuff from which the analyst abstracts structure" (Creese et al., 2015: 282). In this study, fieldnotes enabled the researchers to more fully understand the educational aims of the simulated training sessions as well the 'real-life', day-to-day social and professional interactions of the participants who took part in these emergency scenarios, be they members of staff in the Emergency Department or patient volunteers. In keeping with the premise of this 'rich description' and collecting a wealth of contextual information to aid the analysis, we use documents provided to healthcare professionals prior to the training in order to better understand the different roles played by them in the simulation itself and the criteria used by them when marking the trainees' clinical as well as leadership skills.

The assessment of candidates' leadership skills in turn is expressed both in the comments made by the participants of the simulation on the candidate's performance and the marks given to the trainees. After each trauma case, those taking part in the simulation accordingly are asked by the observing consultant to evaluate the trainee's leadership performance by marking the trainee on the scale of 1—5, 5 denoting the highest mark, also providing a commentary on how well they felt the trainees managed the team overall. Scores and comments produced in response to each simulation were used in our research to identify high and well-performing trainees, and those trainees whose leadership performance was assessed less favourably in the training. Out of the seven candidates who took part in the training, three candidates were identified as high-performing. These candidates all received the highest mark of 5, along with very positive comments from those assessing the trauma simulation. The well-performing trainees constitute three members of the group. They were awarded marks of between 4.5 and 3.5. One of the trainees was evaluated significantly less positively. While no mark was mentioned after the simulation, the candidate received very negative comments, with participants of the simulation assessing it as an unsuccessful one. In this paper, we match up the feedback and the marks awarded to the trainee doctors as well the overall speed with which they complete the station (Table 1) with the discursive strategies employed by them in the interaction, focusing in particular on the delegation of tasks performed through issuing requests.

**Table 1**
The overall speed of station completion.

|  | Candidate | Station completion time | All of the key clinical tasks performed (Yes/No) |
|---|---|---|---|
| High performers | Candidate A | 13:50 | Yes |
|  | Candidate B | 12:03 | Yes |
|  | Candidate C | 10:58 | Yes |
| Good performers | Candidate D | 12:36 | Yes |
|  | Candidate E | 14:00 | No |
|  | Candidate F | 14:00 | No |
| Candidate assessed less favourably | Candidate G | 14:00 | No |

## 4. Analytical framework

In unpicking how leadership is performed in this type of setting, we focus primarily on the way that trainee doctors delegate tasks to other members of their team. We look specifically at trainee doctors' production of requests for action (Garvey, 1975), using a modified version of the CCSARP ('Cross-Cultural Study of Speech Act Realization Patterns') coding manual (Blum-Kulka et al., 1989) to categorise the various components of requests produced by the seven candidates (see Tables 2 and 3).

In adopting the CCSARP coding manual, we took the precaution of viewing the manual as a 'model for' rather than a 'model of' (Duranti, 2005) differentiating between the various types of requests. To this end, the framework that we adopted was importantly modified in such a way as to only map out components of requests identified in our data. Based on the modified version of Blum-Kulka et al.'s (1989) model, we examined the main structural components of requests, that is the head act and its internal and external modification (Tables 2 and 3). Following Blum-Kulka et al.'s (1989) work, head acts were defined as parts of speech acts which can realise them independently. External modification ('supportive moves' in the original model), on the other hand, was defined as modification that can occur before or after the head act and mitigate or aggravate its force (Blum-Kulka et al., 1989), that is soften or strengthen it. Internal modification, finally, constitutes a collection of devices that "modify the impact of an utterance" (Vine, 2004: 93) that are internal to the head act. Tables 2 and 3 provide specific examples of these structural components taken from our data.

**Table 2**
Types of requesting head acts (based on Blum-Kulka et al., 1989).

|  | Strategy | Example |
|---|---|---|
| Direct | Mood derivable | *Get me an F2.* |
|  | Obligation statement | *We need to get someone to come down and put a drain in.* |
|  | Want statement | *Just want to get a chest x-ray.* |
| Indirect | Suggestory formulae | *Let's make sure we've got the chest drain trolley.* |
|  | Query preparatory | *Can we put the trauma call in?* |
|  | Hint | *You did give me a GAS but I don't think I actually did [see it].* |

**Table 3**
Internal and external modification of head acts (based on Blum-Kulka et al., 1989).

| Internal | Lexical |  |
|---|---|---|
|  | a) Hedging | *Could you **perhaps** help?* |
|  | b) Understaters | *Linda, can you **just** let radiology know that we'll need an x-ray?* |
|  | c) Subjectivisers | *John, can you get IV access **for me**?* |
|  | d) Downtoners | *We should **probably** put in a drain on the right-hand side.* |
|  | e) Politeness markers | *Can we get a handover then, **please**?* |
|  | f) Collective pronouns | ***We** need to activate major haemorrhage protocol.* |
|  | g) Time intensifiers | *Okay, so we need to transfuse him **straight away**.* |
| External (supportive moves) | Preparator | ***Have we got a trauma team here?** Can we put a trauma call out?* |
|  | Grounders | *So, **if they haven't arrived then**... yes, let's get him down so we can do a DPL.* |
|  | Disarmers | *I'm sorry... **you're busy** but can we get some fluids ready as well?* |
|  | Promises of reward | *If we can get the chest drain in then **that would be fantastic**.* |
|  | Imposition downgraders | *I think we should probably put a binder on his pelvis guys **when we get a chance**.* |
|  | Appealer | *Set him up in here before we start. **Is that alright?*** |

While adapting the model, certain categories from the CCSARP coding manual were excluded while new categories, such as collective pronouns, were included in the coding scheme due to their prevalence in the data. Appealer, which would be classed as a type of internal modification in the original framework, was moved to the external modifications (supportive moves) category. This was due to the fact that we interpreted this category as consisting of types of independent clauses which followed head acts as opposed to internally modifying them. We also moved away from drawing a link between forms and functions of specific types of external or internal modifications, based on the assumption that they cannot be viewed as inherently mitigating or strengthening. This in turn was based on the hypothesis that the function of an utterance is subject to context-specific variables, which is why it is important to examine utterances in the interactional contexts in which they occur.

Once the different types of requesting and modification strategies were quantified in relation to each simulation, we explored whether there were any similarities or differences in how those whose leadership skills were assessed very positively or − conversely - very negatively, delegated tasks to their teams. The examination of interaction through the lens of speech act theory, which was - in this case - supplemented by the analysis of hearers' commentary and assessment, provided us with an effective mechanism for the systematic investigation of the interrelationship between linguistic form, its evaluation and uptake. We have been able accordingly to combine speaker and hearer-orientated analyses of leadership and construct linguistic profiles of each of the candidates. This proved beneficial when addressing the key research questions posed in this paper; that is, how candidates perform leadership when delegating urgent tasks in this particular context and whether directness in the employment of requests always led to efficiency and clarity.

Despite speech act theory being critiqued for its preoccupation with a sentence-based mode of analysis (for discussion, see Schegloff, 1988; Brown and Levinson, 1987; Mills, 2003), the adoption of the modified version of Blum-Kulka et al.'s (1989) taxonomy allowed us to extend the analysis of delegation of tasks by moving "beyond the level of utterance" (Vine, 2004: 4) and analysing longer stretches of text. In the context of how this framework was applied by us, this was crucial to ensuring that it was suitable for the examination of more complex requesting strategies, which frequently spanned a number of turns, as it was the case with other analyses of naturally-occurring data where the coding scheme has been used in the past (Vine, 2004; Culpeper and Archer, 2008; Merrison et al., 2012; Chałupnik, 2015). The critique of the speaker-orientation of speech act theory, on the other hand, was counterbalanced by the consideration of the uptake of requests for action, both in the form of their immediate textual context and also the overall assessment of the trainee's leadership skills.

Despite the model's robustness, the application of the CCSARP model was also associated with certain limitations, which we will discuss here. Similarly to Culpeper and Archer (2008), who provide a more extensive review of the model, we have also found it difficult to classify specific types of requests at times. This was due to the fuzzy nature of speech acts and overlaps between certain requesting strategies. As argued by Culpeper and Archer (2008), in the case of hints for example, there are no formal

features that would characterise them at all. With the model being tailored to elicited data collected through discourse completion tasks (DCTs), we have also found that, in the case of false starts for example, the categorisation of request was more complex as well. These more problematic cases were highlighted during the coding process but were ultimately catalogued in the coding scheme on the basis of the analyst's interpretation. Despite the more problematic cases being significantly less frequent than the ones that fell neatly into the specific coding categories, we acknowledge this to be a limitation of the analysis that was carried out. We wish to argue that the coding scheme is to be refined further but, irrespectively of its limitations, has provided a useful mechanism for the quantification of requesting strategies and then examination of their uptake in the context of the joint completion of urgent tasks.

## 5. Analysis

In presenting our findings, we divide the 'Analysis' section into two parts. In the first one, we provide an in-depth examination of the communicative practices of 'high-performing' trainee doctors, whose leadership enactment was assessed the most positively, and, in the second one, an analysis of a 'poor-performing' trainee doctor, whose leadership was assessed less favourably. In keeping with the adoption of this contrastive approach, we enumerate the distinguishing features of their discursive practices as identified in the quantitative analysis before discussing specific extracts from their interactions in section 5.1 below. The description of the trainee doctors' linguistic profiles, we hope, will help shed light on the types of communicative practices which are afforded a prototypical status in relation to leadership in this simulated setting and relate these to their ultimate success or failure in the assessment. This success or failure, as noted previously, is nevertheless not based on researchers' evaluation of the candidates' performances but on the commentary and evaluation provided by those managed by the trainee.

In addition to exploring the relationship between how trainee doctors perform leadership and then how this performance is assessed, we also determine which types of leadership practices accompany the more efficient and faster completion of tasks. We examine thus how quickly each trainee completes the station (see Table 1), completing sequentially a series of tasks outlined in the marking sheet. This way, the validity of association of particular communicative strategies with greater efficiency and avoidance of misunderstandings (see Background) will be tested as well.

### 5.1. High performers

The identification of a broad distinction between how indirectness and mitigation is employed by high and well-performing candidates, and the candidate whose leadership was assessed less favourably was uncovered early on in the process of examining how trainees delegated tasks to others. As demonstrated in Figs. 2 and 3, it was the high and well-performing trainees who employed indirect requesting strategies more frequently than the poorer-performing Candidate G, who used indirectness in 44% of all instances when tasks were being assigned to members of his team (15 requests out of 34). Higher-performing trainees showed greater preference for the utilisation of indirectness, employing it between 69% (22 requests out of 32) and 82% (23 requests out of 28) of the time.

It is important to observe here that the more tangible discrepancy between the levels of directness employed by both high (Candidates A-C) and well-performing trainee doctors (Candidates D-F) and the trainee whose leadership skills were assessed less favourably (Candidate G) was associated with starker differences in how they were evaluated. There is however less variance in how high and well-performing trainee doctors were assessed. This is coupled with the observation of fewer discrepancies between how frequently the two groups employed the specific sub-categories of requests, direct and indirect ones.



**Fig. 2.** Percentage of direct versus indirect requests (counts provided in parentheses) employed by each trainee doctor (candidates ordered by evaluation of their leadership − highest to lowest score).
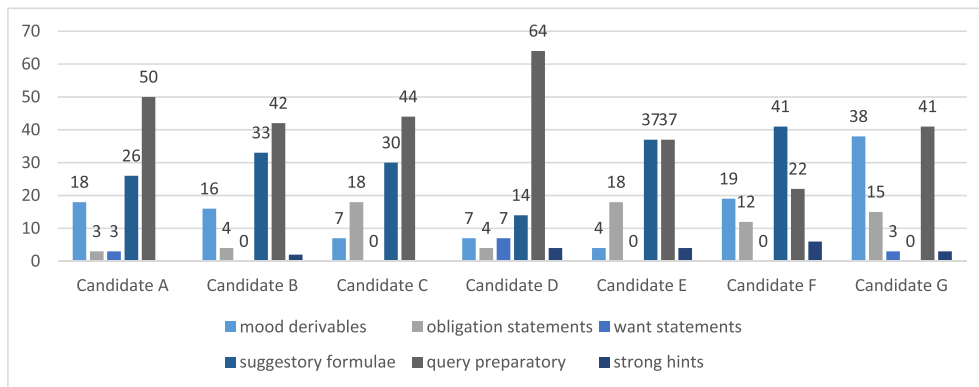
**Fig. 3.** Percentage of different requesting sub-strategies employed by each trainee doctor (candidates ordered by evaluation of their leadership - highest to lowest score).

The contrast between communicative behaviour of well and poor-performing trainees was also further evidenced in their use of supportive moves — predominantly grounders (see Table 3), the greater levels of which - as illustrated in Fig. 4 — were observed in instances where the candidates' leadership skills were assessed more positively as well. The well-performing candidates were accordingly more likely to, for example, explain why a specific task was allocated to a member of the team. The more elaborate nature of requests used in particular by high-performing Candidates A, B and C provided an important indicator of this behaviour, as observed through the systematic, case-by-case analysis of the functions of the supportive moves employed by them, to minimise the imposition of the requests for action that were used. The three candidates whose leadership was evaluated most favourably in the simulation accordingly all used supportive moves more often than other candidates, employing supportive moves at least 48% of the time.
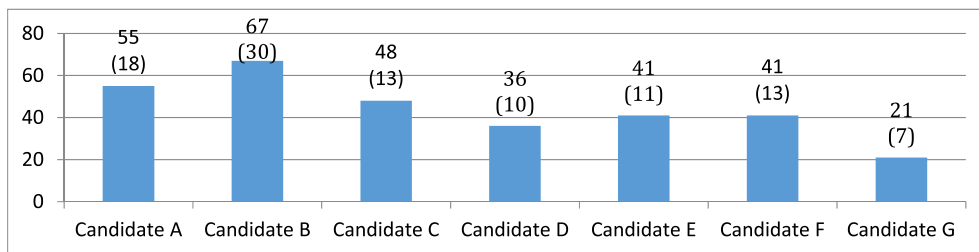


**Fig. 4.** Percentage of instances (count provided in parentheses) when supportive moves (predominantly grounders) were used to modify requests by the trainees (candidates ordered by evaluation of their leadership — highest to lowest score).

A significant finding highlighted here is the observation that the high-performing trainees, despite frequently using more complex and lengthy linguistic forms, were also observed to complete their stations the fastest, performing and getting others to perform all of the tasks required for the successful completion of the station ahead of others (Table 1). Their increased use of indirect and mitigated requests then was coupled with the successful attainment of clinical goals outlined in the marking sheet. This link between the emphasis placed on the relational aspect of interaction and efficient completion of tasks provided a significant counterargument for the claim that the employment of authoritative leadership necessarily facilitates more effective and efficient communication, particularly in urgent settings. Correspondingly, it challenged assumptions that efficiency and clarity in urgent settings can only be equated with directness. This in turn has implications for the communicative recommendations to simultaneously linguistically flatten out hierarchies in emergency medical teams and also communicate efficiently and effectively when completing joint tasks. It appears, from this dataset at least, that these communicative aims are not incompatible and that the establishment of rapport and particular types of indirect strategies can be performed successfully in a time-limited interaction.

In order to illustrate how these more indirect and, as indicated through the examination of individual extracts, mitigated requests were used by high-performing trainees in their simulations, we present an extract of an opening section of a trauma scenario enacted by a candidate who employs the highest number of supportive moves. One of the key considerations in selecting the opening sequence of this simulation is the fact that, as argued by Baxter (2015), the initial phases of interaction frequently provide a crucial insight into the emergence and negotiation of leadership. They also importantly constitute a vital platform for the establishment of rapport between interlocutors. This in turn provides a useful mechanism for exploring the interrelationship between collaboration and leadership.

The visible attentiveness to both relational and transactional aspects of communication (McCarthy, 1991: 136), so the balancing of 'getting business done in the world' and 'the lubrication of the social wheels' that enables it, is also explored in Extract 1.

### Extract 1

*Candidate B (Colin, 'CAN') greets members of his team. He listens to what one of its members, Linda ('NRS'), has to tell him about the patient who is soon to arrive in the ED before delegating tasks to Linda and an F2 junior doctor, Ganesh ('F2D'), in preparation for the arrival of the patient and the paramedic. Real names have been changed here for anonymity. For transcription conventions, see Appendix.*

```
 50  CAN: hiya
 51  F2D: hi
 52  NRS: ⌈hi the:re ⌉
 53  CAN: ⌊hi guys  ⌋
 54  NRS: is it Colin↑
 55  CAN: it is↓ ⌈yeah ⌉
 56  NRS:        ⌊Colin ⌋ I'm Linda
 57  (ges):  (Colin and Linda shake hands)
 58  CAN: ⌈hi Linda            ⌉
 59  NRS: ⌊I'm one of the nurses⌋
 60  F2D: I'm Ganesh F2 doctor
 61  (ges):  (Colin and Ganesh shake hands)
 62  CAN: Ganesh excellent nice to meet you both ⌈so:⌉
 63  (ges):  (Colin points at Linda)
 64  NRS:                                        ⌊cool⌋
 65  NRS: I've just ⌈had ⌉
 66  CAN:          ⌊erm ⌋
 67  NRS: a phone call e:rm
 68  NRS: so paramedics are bringing in abou- (.) man of about sixty
 69  NRS: they don't know how old he is and
 70  NRS: he was found next to a erm smashed car
 71  NRS: he's got a head injury ⌈he's got a low GCS BP ninety⌉
 72  F2D:                        ⌊he's had a serious accident⌋
 73  NRS: ninety over seventy
 74  NRS: the only other thing I know is he's gonna be here in two minutes↓
 75  CAN: great have we put a trauma call out↑
 76  NRS: no
 77  CAN: okay can we put the trauma call ⌈out please⌉
 78  (ges):  (points in the direction of Linda)
 79  NRS:                                 ⌊yeah   ⌋
[…]
132  CAN: can we get erm a bear hugger- a warmer underneath↑
133  NRS: on the trolley↑ ⌈yeah            ⌉
134  CAN:                ⌊if that's alright⌋ yeah (1.0) fantastic
135  CAN: make sure we've got the fluid warmer in case we need it as well
136  CAN: let's look at some tranexamic acid given his hypotension
137  CAN: and a pelvic binder
138  F2D: yeah we've got a pelvic binder
139  NRS: pelvic binder got that ready there it is
140  F2D: and I assume ⌇it's there⌇
141  NRS: yeah yes: (.) yeah tranexamic's ready (.) cool we're all set
142  CAN: everyone happy with ⌈what their role is ⌉
143  F2D:                     ⌊yeah I'm ready yeah⌋
144  NRS: yeah
145  F2D: mhm
146  CAN: super
```

In Extract 1, the interactionally-emergent leadership practices of the doctor leading the team are visibly orientated to-wards the relational aspects of the interaction, as evidenced in Colin's introduction to other role-players and the means of the delegation of tasks to various members of the team. The collaborative nature of the exchange is marked initially not only by a number of completed adjacency pairs in the form of greetings, observed in lines 50—53, 56—58 and 60—62, but also in Colin's lexical choices. In line 53, for example, the informal term of address, "guys", is used to express collegiality, downplaying vertical power asymmetries between participants of the simulation and the roles that they inhabit in its context and outside. The utterance "excellent nice to meet you both", which is used by Colin in line 62, while formulaic, is also similarly associated with the orientation towards attending to the relational aspect of communication through its inclusion of the positive

evaluation "excellent". We see a similar strategy with the positive evaluation "super" in line 146, after the team have confirmed that they are happy with what they are asked to do. The presence of such positive evaluative language is also a feature of Colin's discourse overall.

Later on in the exchange, when Colin starts issuing requests, we observe that two out of the three speech acts uttered by him are indirect. These include a query preparatory, "can we get erm a bear hugger-a warmer underneath […] if that's alright", produced by Colin in lines 132 and 134 and one request taking a suggestory formulae form, "let's look at some tranexamic acid given his hypotension", uttered in line 136. The only instance of a direct request in this exchange is observed in line 135, where Colin uses a mood derivable, "make sure we've got the fluid warmer in case we need it as well", but even here he uses a mitigation strategy - the grounder "in case we need it as well" - to justify the reason for his request, a phenomenon explored further below.

There are a number of lexical and syntactic means used to modify the requests uttered in lines 132 and 135–136. The collective personal pronoun "we" in particular is used over a number of turns to mitigate the force of requests produced by the trainee. We also observe that grounders are used twice in the extract (lines 135 and 136) to provide a justification and also an explanation as to why a specific task is assigned to one of the members of the team.

The use of grounders, the elevated levels of which can be observed in the high-performing trainee doctors' talk more generally, is significant for a number of reasons. Of fundamental importance to this more pronounced presence of grounders in the discourse more likely to be attributed to the performance of leadership is their ability to simultaneously fulfil functions of a mitigation strategy and a means of emphasising one's expertise for the benefit of the overhearing third party (see Background). The latter in particular can be interpreted as a form of identity construction with trainee doctors presenting themselves as competent clinicians not only to the participants of the simulation but also to the overhearing examiner. The grounders used in this setting thus allow trainees to not only provide a justification for why a specific request is issued but also to demonstrate their awareness of the medical condition of their patient, something that is also visible in Extract 1.

This visible demonstration of clinical expertise combined with elevated levels of indirectness and mitigation in the delegation of tasks is something that can be observed not only in the context of Extract 1 but also in simulations of other high-performing trainees. Extract 2 below presents an opening sequence of one such scenario, acting as a point of reference for the patterns observed in Extract 1.

**Extract 2**

*After introducing himself to the ad hoc team he is about to manage, Linda (nurse, 'NRS') and Jim (F2 doctor, 'F2D'), Candidate A (Jason, 'CAN') starts delegating tasks to its individual members in preparation for the arrival of the patient in the ED.*

```
33   NRS:   hi (.) hi are you the    [doctor in resus today    ]
34   CAN:                            [hi I'm Jason I'm the      ]
35   CAN:   A&E   [reg this evening              ]
36   NRS:         [yeah nice to meet you I'm      ] Linda
37   NRS:   I'm one of the nurses
38   CAN:   hello
39   F2D:   (.) I'm Jim one of the F2s
40   CAN:   hi Jim
41   NRS:   erm we've just had a ??red phone?? coming through
42   CAN:   yes
43   NRS:   erm ??the various details?? are up on the board
44   CAN:   [yeah ]
45   NRS:   [erm  ] h- he's possibly been in an RTC
46   NRS:   he's been found next to a (.) a ??smashed?? car
47   NRS:   he's DEFINITELY got a head injury he's got low GCS
48   NRS:   and his - his     [BP's about ninety-sixty ]
49   CAN:                     [okay (.) have we got a  ] trauma team here
50   NRS:   yeah do you want to give them a call
51   CAN:   can we put a trauma    [call out first please    ]
52   NRS:                          [alright okay             ]
53   CAN:   can you get IV access for me please
54   F2D:   yeah no worries
55   CAN:   (.) and then we can ??get some blood samples??
56   F2D:   blood samples
57   CAN:   er::h so IV access and all that- all that sort of stuff
58   F2D:   okay
59   CAN:   is that alright
60   F2D:   cool
```

```
[...]
105   CAN:   so as soon as they arrive Linda if you -
106   NRS:   yeah
107   CAN:   if we can get monitoring over   [here      ]
108   NRS:                                   [will yep   ]
109   CAN:   once we've had a handover
110   NRS:   [yep]
111   CAN:   [and] Jim as I say (.) if you're happy to do erm IV access
112   F2D:   no worries
113   CAN:   if he hasn't got his (.) erm (.) head immobilised can you do that
114   CAN:   first
115   F2D:   yeah [yeah        ]
116   CAN:        [before       ] we get IV [access    ]
117   F2D:                                  [okay      ]
118   PPP:   (0.7)
119   CAN:   until we've got him (.) secure is that alright
120   F2D:   yeah no worries
```

Similarly to what has been observed in Extract 1, in Extract 2, Candidate A — Jason — is also seen to allocate tasks to specific members of the trauma team primarily through indirect means. Immediately after the initial introductions and Linda's handover accordingly, Jason draws upon two query preparatory requesting strategies, "can we put a trauma call out first please" and "can you get IV access for me please" (lines 51 and 53). As argued by Gibbs (1986), through their verbalisation, such requesting forms check the other person's ability to perform an action and, in doing so, identify any obstacles as to why this should not be the case. While highly conventionalised in English (Blum-Kulka, 1987), they importantly leave room for other interlocutors to opt out of performing a particular task that is requested of them, meaning that less imposition is placed on the hearer when such delegation of tasks is made. In Extract 2, this particular strategy is frequently employed, as it is the case in other simulations where the candidates' leadership skills are assessed well. The two requests observed in lines 51 and 53 are followed by two suggestory formulae, "so as soon as they arrive Linda if you-if we can get monitoring over here once we've had a handover" (lines 105, 107 and 109) and "and Jim as I say (.) if you're happy to do erm IV access" (line 111). The query preparatory form is finally used again in lines 113—114, 116 and 119, when Jason utters "if he hasn't got his (.) erm (.) head immobilised can you do that first before we get IV access until we've got him (.) secure is that alright".

Multiple forms of mitigation can be observed in this opening sequence of Jason's simulation as well. Internal modification is present in the form of a subjectiviser 'for me' (line 53) and lexical items, such as the plural personal pronoun 'we' (lines 51 and 107) or the politeness marker 'please' (lines 51 and 53). There are also multiple external modifications present in the exchange. In line 49, a preparator "have we got a trauma team here" is used as means of information-checking but also pre-warning the team that a request will be issued. There are two appealers in the form of "is that alright", used in lines 59 and 119, which function also as a means of checking whether the request will be complied with.

Evidence of the emphasis placed by the candidate on this less authoritative means of task allocation is visible throughout the simulation, mirroring simultaneously the communicative behaviour of Candidate B - and other high performing trainees generally. While the articulation of the communicative features of such style may not form an explicit part of the assessment criteria, the similarities in the communicative performances of those candidates who are assessed well suggests there being a tacit understanding of what constitutes 'good' leadership performance in this context, associated with such less direct and more mitigated means through which allocation of tasks is performed.

### 5.2. Poor performer

Contrasted with this more tangible emphasis on the delegation of tasks through indirect and mitigated means is the linguistic behaviour of Candidate G. Being assessed significantly less favourably than the other trainee doctors, Candidate G is seen to adopt a more authoritative enactment of leadership. His delegation of tasks is marked therefore not only by the greater preference for the adoption of directness (Fig. 2) but also by fewer instances of mitigations in the form of supportive moves (Fig. 4), as well as the inclusive personal pronoun 'we'. Being more likely to compete for the conversational floor, the candidate also predominantly attends to the transactional aspects of communication that is observed in the context of this simulation, something that is illustrated in Extracts 3 and 4 below.

In Extract 3, we present accordingly a fragment of an opening sequence of this simulation. The rationale for selecting this particular fragment of the interaction, similarly to that of Extracts 1 and 2, is associated with evidencing how the enactment of leadership and the establishment of rapport is attended to early on in the simulation. In Extract 3, there are nevertheless some visible discrepancies between how Candidate G and Candidates A and B attend to the relational aspect of their exchanges with members of the clinical team.

**Extract 3**

*Candidate G (Norbert, 'CAN') introduces himself to the team ('NRS' and 'F2D') before starting to delegate tasks to its individual members.*

```
32 CAN:  hello and you are↑
33 NRS:  Linda
34 CAN:  Linda (.) and you are↑
35 F2D:  I'm Simon ⌈I'm the⌉ F2
36 CAN:          ⌊Simon⌋
37       you are F2 ⌈Linda you are    ⌉
38 (ges): (points in Linda's direction)
39 NRS:             ⌊are you the regis-⌋ I'm a nurse- ⌈staff nurse ⌉
40 CAN:                                             ⌊and you are= ⌋
41       =the staff nurse
42 NRS:  nurse are you the reg in here today↑
43 CAN:  I am the reg here
44 NRS:  okay great have you heard about our red phone's coming in
45 CAN:  yes I have heard that erm (.) about this ⌈red come-      ⌉
46 NRS:                                           ⌊sixty year old=⌋
47       =chap ye:ah (.) maybe an RTC
48 CAN:  that's ⌈fine⌉
49 NRS:         ⌊head⌋ injury low GCS might need ⌈some ATLS⌉
50 CAN:                                          ⌊it looks like it's⌋
51       quite significant injury we need to organise our team
52 NRS:  ⌈okay ⌉
53 CAN:  ⌊okay↑⌋
```

In the opening section of the simulation presented in Extract 3, and up until line 39, it is Candidate G, Norbert, who initially produces first pair parts, enquiring about the names and roles of the different members of the clinical team he is just about to manage. A request for information is then produced by Linda in line 39, this being interpreted as a preamble to the handover she is about to deliver to Norbert — something that is observed also in Extracts 1 and 2. Linda's utterance is nevertheless cut short by an interruption and she is only able to repeat the question in line 42. Once the question is asked again and responded to by Norbert, Linda provides him with information about the patient who is about to arrive in the ED (lines 44—47 and 49). During the course of this brief handover, she is interrupted again, with Candidate G issuing an obligation statement "it looks like it's quite significant injury we need to organise our team" (lines 50 and 51) to mark the beginning of the allocation of tasks to the clinical team. The interruption that is observed in the case of the utterance produced in lines 50 and 51 importantly results in Norbert not being able to receive all the information that is provided to other trainees at this point, demonstrating how the communicative behaviour observed in the context of the simulation can have potential implications for the trainee's clinical performance overall.

Similar emphasis placed on the more authoritative enactment of leadership can be also observed later in the interaction, with Extract 4 providing an example of this being the case.

**Extract 4**

*The team is still waiting for the arrival of the patient in the ED.*

```
62  CAN: okay so we need to put a trauma call out
63  (ges): (gestures in the direction of a whiteboard)
64  NRS: okay
65  CAN: okay we ⌈need an airway- yeah ⌉
66  NRS:        ⌊I'll go and do that  ⌋
67  CAN: put the trauma call out first
68  (ges): (follows Linda, initially has his back towards Stuart)
69  CAN: okay we organise our trolley (.) okay
70  (ges): (turns towards Stuart, gestures in his direction)
71  CAN: are you erh happy once the patient's come in
72  NRS: (speaking over the phone) hello trauma team to resus please
73  CAN: to quickly assess the airway
74  (ges): (points at himself)
75  CAN: okay (.) and give feedback to me↗
76  NRS: ⌈trauma call's out ⌉
77  CAN: ⌊okay↑             ⌋ (.) and sorry your name↗
78  NRS: Linda
79  CAN: Linda
```

In Extract 4, similarly to what has been illustrated in Fig. 2, Candidate G is observed to predominantly employ direct requests, putting forth his wishes in a more authoritative way. Out of the four requests uttered by the candidate in lines 62, 65, 67 and 69, there are two that are formulated as obligation statements (lines 62 and 64) — "okay so we need to put a trauma call out" and "okay we need an airway-yeah", and two verbalised as mood derivables (lines 67 and 69) — "put the trauma call out first" and "okay we organise our trolley". Only in line 71 is the trainee seen to introduce an indirect request, the employment of which is not met with any response from its addressee, so the F2. The F2 doctor's silence in this case, and also due to the interrogative mood of the turn, can be interpreted as a dispreferred response, the presence of which might be indicative of the erosion of rapport between the two members of the team. Later, in line 77, Candidate G is observed to ask Linda about her name. As Candidate G uses it a few lines before, the question produced by him can be interpreted as one that can arguably transgress Linda's sociality rights (Spencer-Oatey, 2000), so the personal and social entitlements that Linda can claim for herself. The linguistic practices employed by the candidate in this context can be contrasted with the more relationally-orientated communicative strategies of other, higher-performing trainees.

## 6. Discussion and conclusions

Emergency medical training constitutes a fruitful site for analysing the linguistic performance of leadership in high-pressure environments, providing a useful context for studying how the delegation of tasks contributes to the joint attainment of time-sensitive goals. The analysis presented in this paper, using an adapted version of Blum Kulka et al.'s (1989, adapted by Chałupnik, 2015) coding framework, was able to show a clear distinction between the relatively high levels of indirect and supportive utterances used by trainee doctors who were rated highly in the assessed scenarios, compared to those who achieved lower marks, and particularly Candidate G - who performed very poorly in the assessment overall, using a high number of direct requests in his interaction with the team. The trainee doctors using indirectness and mitigation strategies when making requests were found to actually achieve tasks and complete the station faster, suggesting that they encountered fewer interactional difficulties during the short team interaction. Their overall success in these assessed simulations, evidenced in marks received from the examiner and team members, therefore seems to be corroborated by evidence from within the interactions themselves, particularly the completion of tasks allocated to members of the medical team by the trainee.

Though simulated, these scenarios and the joint tasks to be achieved are still highly-pressured and time-limited. The linguistic findings here suggest that the use of certain types of indirectness and other rapport-building strategies might be much more efficient than previously thought, both in the pragmatic and the medical communication literature. Successful candidates seem able to use these strategies effectively in communicating with team members while achieving joint tasks quickly. It is important to emphasise the role of conventionalisation of specific linguistic forms in reducing the cognitive effort required to understand them; one such example includes the highly conventionalised query preparatory strategy for performing requests ("Can we get..."). Nevertheless, even if conventionalisation of this form potentially makes these requests faster to process, the finding that the doctors leading the teams use these less direct strategies is still empirically important, in a setting that has traditionally been seen not to require them.

In the Background to this study, we addressed a key tension in the healthcare communication literature on emergency medical team interactions; the potentially contradictory recommendations for team leaders to foster rapport across professional hierarchies but also to be direct and clear in giving instructions. There is a substantial body of work which evidences how miscommunication between clinical team members routinely leads to critical incidents and mistakes, calling for communicative practices associated with minimising power asymmetries and fostering collective competence. This perspective places emphasis on collaborative inter-professional communication, in which team members from across the medical hierarchy should be able to speak up confidently and successful clinical outcomes be jointly achieved. This perspective is however somewhat contradicted by recommendations which equate efficiency in emergency medicine with directness, the latter being associated with the more authoritative enactment of leadership. These potentially contradictory recommendations on what constitutes efficient team interaction can only be addressed by a rigorous pragmalinguistic analysis of situated talk. Through such empirical means, theories of communicative best practice can be tested and an understanding gained of how task-related efficiency is achieved.

The fact that enactment of leadership in more collaborative and non-coercive ways was evaluated more positively both in the simulated setting, as presented here, and also in real-life practice (Bromiley, 2008) has implications for understanding the communication skills required for training clinicians in greater linguistic detail. The findings highlight the particular communicative strategies that can be employed in effectively achieving collaborative competence between team members, the employment of which will be helpful in their future career. Fostering the ability to utilise interactional styles which simultaneously aid the achievement of clinical outcomes and build relationships may have implications in preventing critical incidents and mistakes in emergency healthcare settings. The evidence from this research also highlights how collaborative competence is employed at all stages of ad hoc team interaction and cannot be constrained to just the initial stages of team interaction, as is the case with employment of checklists.

There are of course limitations to the claims we can make based on this study. Due to the ethics of video recording professional interaction, even a simulated scenario such as this one, we were only able to gain permission to store the performance of one poor-performing trainee doctor in this small dataset, protecting his anonymity as much as possible. It would be helpful to conduct further analysis of these scenarios, particularly involving other doctors who perform poorly overall. Furthermore, we must acknowledge that the scenarios are still simulated and, although they are constructed in a way

to create time-pressures for the candidate doctor, they do not create the same 'real-life' contingencies of urgent medical settings. As noted earlier in the analysis, the role-played medical team members were sometimes, in 'real-life', more senior members of staff to the junior doctor in the leadership role, potentially impacting on the perceived requirement for deference in the doctor's interactional strategies. The impact this might have on the interaction could be investigated further with data from real-life emergency medical cases.

A key issue worth exploring in greater detail is also the use of rapport-building strategies observed in the data analysed vis-à-vis the candidates' backgrounds and various socio-cultural factors. The positive evaluation of indirect forms stereotypically attributed to British English politeness, and more specifically the British middle classes (Mills, 2017), for example, calls for the interrogation of the degree to which this has an impact on the performance of speakers who use British English as a second or a foreign language and speakers from non-middle class backgrounds. In the paper, the candidates who were evaluated well in their simulations and completed the station faster all used British English as their L1. The person who was evaluated less positively, however, did not and was originally trained overseas. Though a very small sample size, this raises questions about the extent to which the communicative practices that have developed in this setting are influenced by particular cultural norms. Training and assessing what makes for effective communication is acutely sensitive to culture and context in today's diverse societies and the pragmatic competence that successful candidates perform, being indirect and building relationships while also being fast and efficient in their achievement of tasks, may be no exception to this. This aligns with findings by Roberts et al. (2000) as well as later work by Roberts et al. (2014), investigating the assessment of communication in general practice contexts, in which pragmatic norms become tacit 'rules of the game' for assessment, with certain speakers of British English better able to manage them.

The situated nature of the practices observed in this paper importantly highlights the value of pragmatic enquiry into highly context-dependent issues such as indirectness and rapport in medical contexts. In the paper, we hope to have highlighted the role played by systematic pragmalinguistic analysis in elucidating how task-orientated aspects of workplace talk are underpinned by its interpersonal dimension. Pragmatics offers a means of intricately sketching out the mechanics of leadership performance through the granular analysis of the production of speech acts and the role played by (in)directness and mitigation in completing tasks successfully. Analysing the linguistic strategies employed by junior doctors in simulations, combined with evidence of their overall performance in leading the clinical team, provides crucial insight into what constitutes efficient communication in the completion of urgent tasks. Through this linguistic approach, the paper provides some broader theoretical insights into politeness and indirectness. The analysis of the data collected in a pressured emergency setting provided empirical substance to challenge the theoretical claim linking directness with efficiency in urgent contexts. As evidenced in the paper, quick and efficient completion of tasks was often achieved through the employment of indirect and mitigated requests, those often taking more elaborate forms than their direct and unmitigated equivalents. This challenges previous assumptions that the urgency of a task can warrant forgoing the use of rapport-building strategies, providing an important catalyst for further research into pragmatic features of leadership performance, particularly in urgent contexts.

## Funding

## Acknowledgements

## Appendix

| | |
|---|---|
| ges: | Gesture, described in () brackets |
| PPP: | Pause indicated as a turn |
| (0.8) | Pause timed to tenth of a second |
| (.) | Pause of less than (0.2) seconds |
| hhh | Inhalation |
| er::m | Extended word/sound |
| bi- | Unfinished word/sound |
| ↗ | Rising intonation |
| ↘ | Falling intonation |
| → | Level intonation |
| ?? | Unsure of transcription |
| xxx | Inaudible sound |
| +≈ | Speech latched to previous turn |
| | Half brackets indicate overlapping speech, for example: |
| [] | F2D: I'm Simon [I'm the] F2 |
| [] | CAN: [Simon] |

# References

Apker, Julie, Propp, Kathleen M., Zabava Ford, Wendy S., 2005. Negotiating status and identity tensions in healthcare team interactions: an exploration of nurse role dialectics. J. Appl. Commun. Res. 33 (2), 93—115.

Atkins, Sarah, Roberts, Celia, 2018. Assessing institutional empathy in medical settings. J. Appl. Ling. Prof. Pract. 13 (1—3), 11—33.

Atkins, Sarah, Roberts, Celia, Hawthorne, Kamila, Greenhalgh, Trisha, 2016. Simulated consultations: a sociolinguistic perspective. BMC Med. Educ. 16 (16), 1—9.

Austin, John, 1962. How to Do Things with Words. Clarendon Press, Oxford.

Baxter, Judith, 2010. The Language of Female Leadership. Palgrave Macmillan, Basingstoke.

Baxter, Judith, 2015. Who wants to be the leader? The linguistic construction of emerging leadership in differently gendered teams. Int. J. Bus. Data Commun. 52 (4), 427—451.

Bezemer, Jeff, 2015. Partnerships in research: doing linguistic ethnography with and for practitioners. In: Julia Snell, Shaw, Sara, Coupland, Fiona (Eds.), Linguistic Ethnography: Interdisciplinary Explorations. Palgrave, Basingstoke, pp. 207—224.

Bezemer, Jeff, Murtagh, Ged, Cope, Alexandra, Kneebone, Roger, 2016. Surgical decision making in a teaching hospital: a linguistic analysis. ANZ J. Surg. 86 (1), 751—755.

Bezemer, Jeff, Murtagh, Ged, Cope, Alexandra, Kress, Gunther, Kneebone, Roger, 2011. "Scissors, please": the practical accomplishment of surgical work in the operating theatre. Symbolic Interact. 34 (3), 398—414.

Blum-Kulka, Shoshana, 1987. Indirectness and politeness in requests: same or different? J. Pragmat. 11, 131—146.

Blum-Kulka, Shoshana, House, Juliane, Kasper, Gabriele, 1989. Cross-Cultural Pragmatics: Requests and Apologies. Ablex, Norwood.

Bosk, Charles L., Dixon-Woods, Mary, Goeschel, Christine A., Pronovost, Peter J., 2009. Reality check for checklists. Lancet 374 (9688), 444—445.

Bromiley, Martin, 2008. Have you ever made a mistake? Bull. Roy. Coll. Anaesth. 48, 2442—2445.

Brown, Penelope, Levinson, Stephen C., 1987. Politeness: Some Universals in Language Usage. Cambridge University Press, Cambridge.

Chałupnik, Malgorzata, 2015. Beyond Politeness: Shifting Focus to the Management of Relations and Tasks in the Analysis of Workplace Discourse. Unpublished PhD thesis. University of Nottingham.

Culpeper, Jonathan, Archer, Dawn, 2008. Requests and directness in Early Modern English trial proceedings and play texts, 1640—1760. In: Jucker, Andreas H. , Taavitsainen, Irma (Eds.), Speech Acts in the History of English. John Benjamins Publishing, Amsterdam, pp. 45—84.

Curl, Traci, Drew, Paul, 2008. Contingency and action: a comparison of two forms of requesting. Res. Lang. Soc. Interact. 41 (2), 129—153.

Creese, Angela, Takhi, Jaspreet Kaur, Blackledge, Adrian, 2015. Metacommentary in linguistic ethnography. In: Julia Snell, Shaw, Sara, Coupland, Fiona (Eds.), Linguistic Ethnography: Interdisciplinary Explorations. Palgrave, Basingstoke, pp. 266—284.

Duranti, Alessandro, 2005. On theories and models. Discourse Stud. 7, 409—429.

Eggins, Suzanne, Slade, Diana, 2015. Communication in clinical handover: improving the safety and quality of the patient experience. J. Publ. Health Res. 4 (3), 197—199.

Eggins, Suzanne, Slade, Diana, 2016. Contrasting discourse styles and barriers to patient participation in bedside nursing handovers. Commun. Med. 13 (1), 71—83.

Eisenberg, Eric M., Murphy, Alexandra G., Sutcliffe, Kathleen, Wears, Robert, Schenkel, Stephen, Perry, Shawna, Vanderhoef, Mary, 2005. Communication in emergency medicine: implications for patient safety. Commun. Monogr. 72, 390—413.

Fairhurst, Gail T., 2007. Discursive leadership. In: Conversation with Leadership Psychology. Sage, Thousand Oaks.

Fraser, Bruce, 1988. Conversational mitigation. J. Pragmat. 4 (4), 341350.

Garvey, Catherine, 1975. Requests and responses in children's speech. J. Child Lang. 2 (1), 41—63.

Gawande, Atul A., Zinner, Michael J., Studdert, David M., Brennan, Troyen A., 2003. Analysis of errors reported by surgeons at three teaching hospitals. Surgery 133 (6), 614—621.

Gibbs, Raymond, 1986. What makes some indirect speech acts conventional? J. Mem. Lang. 25 (2), 181—196.

Hindmarsh, Jon, Pilnick, Alison, 2002. The tacit order of teamwork: collaboration and embodied conduct in anaesthesia. Socio. Q. 43 (2), 139—164.

Holmes, Janet, 2009. Men, masculinities and leadership: different discourse styles at work. In: Pichler, Pia, Eppler, Eva (Eds.), Gender and Spoken Interaction, pp. 186—210.

Holmes, Janet, Stubbe, Maria, 2003. Power and Politeness in the Workplace. Longman, London.

Jucker, Andreas H., Taavitsainen, Irma, 2000. Diachronic speech act analysis: insults from flyting to flaming. J. Hist. Pragmat. 1 (1), 67—95.

Korkiakangas, Terhi, Weldon, Sharon-Marie, Bezemer, Jeff, Kneebone, Roger, 2014. Nurse-surgeon object transfer: video analysis of communication and situation awareness in the operating room. Int. J. Nurs. Stud. 51 (9), 1195—1206.

Kurtz, Suzanne, Draper, Juliet, Silverman, Jonathan, 2004. Teaching and Learning Communication Skills in Medicine. CRC Press, London.

Leonard, Michael W., Graham, Sean A., Bonacum, Doug, 2004. The human factor: the critical importance of effective teamwork and communication in providing safe care. BMJ Qual. Saf. 13, i85—i90.

Lingard, Lorelei, 2012. Rethinking competence in the context of teamwork. In: Hodges, Brian, Lingard, Lorelai (Eds.), The Question of Competence: Reconsidering Medical Education in the Twenty-First Century, pp. 42—69.

Lingard, Lorelei, Espin, Sherry, Whyte, Sarah, Regehr, Glenn, Baker, G. Ross, Reznick, Richard, Bohnen, John, Orser, Beverley, Doran, Diane, Grober, Ellen, 2004. Communication failures in the operating room: an observational classification of recurrent types and effects. Qual. Saf. Health Care 13 (5), 330—334.

Linde, Charlotte, 1988. The quantitative study of communicative success: politeness and accidents in aviation discourse. Lang. Soc. 17 (3), 375—399.

McCarthy, Michael, 1991. Discourse Analysis for Language Teachers. Cambridge University Press, Cambridge.

Merrison, Andrew John, Wilson, Jack J., Davies, Bethan L., Haugh, Michael, 2012. Getting stuff done: comparing e-mail requests from students in higher education in Britain and Australia. J. Pragmat. 44 (9), 1077—1098.

Mills, Sara, 2003. Gender and Politeness. Cambridge University Press, Cambridge.

Mills, Sara, 2017. English Politeness and Class. Cambridge University Press, Cambridge.

Mullany, Louise, 2007. Gendered Discourse in the Professional Workplace. Palgrave Macmillan, Basingstoke.

Orasanu, Judith, Fischer, Ute, 2008. Improving healthcare communication: lessons from the flightdeck. In: Nemeth, Christopher (Ed.), Improving Healthcare Team Communication. University of Chicago Press, Chicago, pp. 23—46.

Rampton, Ben, Maybin, Janet, Roberts, Celia, 2015. Theory and method in linguistic ethnography. In: Julia Snell, Shaw, Sara, Copland, Fiona (Eds.), Linguistic Ethnography: Interdisciplinary Explorations. Palgrave Macmillan, Basingstoke, pp. 14—50.

Rider, Elizabeth A., Keefer, Constance H., 2006. Communication skills competencies: definitions and a teaching toolbox. Med. Educ. 40, 624—629.

Roberts, Celia, Atkins, Sarah, Hawthorne, Kamila, 2014. Performance Features in Clinical Skills Assessment: Linguistic and Cultural Factors in the Membership of the Royal College of General Practitioners Examination. King's College London with the University of Nottingham, London.

Roberts, Celia, Sarangi, Srikant, Southgate, Lesley, Wakeford, Richard, Wass, Val, 2000. Oral examinations-equal opportunities, ethnicity, and fairness in the MRCGP. BMJ 320, 370—375.

Rosenzweig, Steven, 1993. Emergency rapport. J. Emerg. Med. 11 (6), 775—778.

Schegloff, Emanuel, 1988. Presequences and indirection: applying speech act theory to ordinary conversation. J. Pragmat. 12 (1), 55—62.

Schegloff, Emanuel, 2007. Sequence Organization in Interaction: A Primer in Conversation Analysis. Cambridge University Press, Cambridge.

Schnurr, Stephanie, 2009. Leadership Discourse at Work: Interactions of Humour, Gender and Workplace Culture. Palgrave Macmillan, Basingstoke.

Seale, Clive, Butler, Christopher, Hutchby, Ian, Kinnersley, Paul, Rollnick, Stephen, 2007. Negotiating frame ambiguity: a study of simulated encounters in medical education. Commun. Med. 4 (2), 177—187.

Searle, John R., 1969. Speech Acts: an Essay in the Philosophy of Language. Cambridge University Press, Cambridge.
Searle, John R., 1975. Indirect speech acts. In: Cole, Peter, Jerry, L., Morgan (Eds.), Syntax and Semantics, vol. 3. Academic Press, New York, pp. 59–82.
Searle, John R., 1976. A classification of illocutionary acts. Lang. Soc. 5, 1–23.
Sinclair, John, Coulthard, R.M., 1975. Toward an Analysis of Discourse. Oxford University Press, Oxford.
Slade, Diana, Scheeres, Hermine, Manidis, Marie, Iedema, Rick, Dunston, Roger, Stein-Parbury, Jane, Matthiessen, Christian, Herke, Maria, McGregor, Jeannette, 2008. Emergency communication: the discursive challenges facing emergency clinicians and patients in hospital emergency departments. Discourse Commun. 2 (3), 271–298.
Spencer-Oatey, Helen, 2000. Culturally Speaking: Rapport Management through Talk across Cultures. Continuum, London.
Sutcliffe, Kathleen M., Lewton, Elizabeth, Rosenthal, Marilynn M., 2004. Communication failures: an insidious contributor to medical mishaps. Acad. Med. 79 (2), 186–194.
US Joint Commission, 2014. America's Hospitals: Improving Quality and Safety – the Joint Commission's Annual Report 2014. Available at: www.jointcommission.org/tjc_annual_report_2014/.
Vine, Bernadette, 2004. Getting Things Done at Work: the Discourse of Power in Workplace Interaction. John Benjamins Publishing, Amsterdam.

**Małgorzata Chałupnik** is Teaching Associate in Linguistics and Professional Communication working in the School of English at the University of Nottingham. She conducts research in the area of professional communication, focusing in particular on leadership and interpersonal aspects of talk at work. Having worked on a number of projects funded by the university and ESRC, Małgorzata has been involved in carrying out research, training and consultancy work with a wide range of public, private and third sector organisations from across the UK.

**Sarah Atkins** is Senior Research Associate at the Aston Institute for Forensic Linguistics, where she works with a team of researchers on the 'Forensic Linguistic Databank' (FoLD), bringing to bear her experience on the ethics and policy considerations for research in a range of institutional settings. She has previously conducted applied linguistic research in a number of professional contexts, with a strong focus on healthcare, including an ESRC 'Future Research Leaders' award at the University of Nottingham (2013–16), from which the data and research underpinning this paper originate.