Teacher Decision Making: While assessing a student during a simulated patient-student interaction

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Abstract

Prior research shows that communication skills notably impact healthcare quality and the relationship between doctors and patients (Jackson & Calman, 2006; Rider & Keefer, 2006; Silverman, 2009; Stewart, 1995). To teach Technical Medicine students the necessary communication skills, universities worldwide equip students with essential communication skills in medical consultation (Brown, 2012; Lovink et al., 2021; Zayyan, 2011). One of the main contributors to the teaching curricula is simulated patients.

This research aimed to explore the factors influencing the decision-making of communication skills teachers while assessing a student during a simulated patient-student interaction. It used a qualitative research design consisting of a think-aloud study and follow-up interviews with the participants based on a theoretical framework. The participants were nine communication skills teachers at the Technical Medicine faculties of the University of Twente (n=6) and TU/Delft (n=3).

The results and conclusion showed several factors influencing the decision-making of the teachers who participated in this research. Assessor expertise was found as the clearest factor influencing the decision-making process. Several differences between the start of the teaching career and now were highlighted by the teachers who participated in the study. The teachers became more capable of understanding and articulating why a student's performance was sufficient or insufficient. Their focus shifted from focusing on the small details to now evaluating the overall quality of the interaction instead of concentrating on specific details. Aside from assessor expertise, ensuring the validity of the assessment was found as a factor influencing the decision-making of the teachers. Ensuring validity consisted of several smaller factors related to this theme, such as consensus building, personal- and patient norms and values, previous experiences with the same student, and lastly, educational goals set by the university.

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Introduction

Communication skills notably impact healthcare quality and the relationship between doctors and patients (Jackson & Calman, 2006; Rider & Keefer, 2006; Silverman, 2009; Stewart, 1995). Clinical communication, which relies on communication skills, refers to interactions between healthcare professionals and their patients (Laidlaw & Hart, 2011). Research by Halperin (2000) and Taylor et al. (2002) highlights that many patient complaints stem from inadequate healthcare and lack of communication by doctors. Therefore, it is crucial for medical professionals to become proficient in communicating with patients, as it is an important part of providing adequate healthcare (Williams, 1998).

Recognising the significant social impact of effective communication, universities worldwide offer courses in clinical communication to equip students and future healthcare professionals with essential communication skills in medical consultations (Brown, 2012; Lovink et al., 2021; Zayyan, 2011). However, there has been a shift in how these communication skills are taught in recent years. Many educators in the field of medicine acknowledge the significance of offering students increased hands-on experiential learning opportunities (Al Odhayani & Ratnapalan, 2011). Workshops and simulated environments often facilitate these experiential learning opportunities to help develop their communicational abilities. A way of creating an authentic simulated environment is working with simulated patients (SPs). SPs can be defined as “individuals who portray human roles (patient, healthcare professionals, confederates) in education and assessments of health professionals and students” (Pritchard et al., 2020, p. 21).

However, solely training students is insufficient to ensure their clinical communication proficiency. Consequently, as part of the communication course, students must complete an assessment to demonstrate a minimal level of proficiency in clinical communication; these assessments are graded by trained examiners (Khan et al., 2013). Given that examiners exhibit personalised preferences concerning communication styles and the establishment of rapport with

patients (Duran & Hendrix, 2023; Hyde et al., 2022; Malouff & Thorsteinsson, 2016). The grading process is also influenced by the personal decision-making of examiners.

In the literature on decision-making, Berendonk et al. (2013), and Dawes et al. (1989) identified three domains: bias and heuristics, naturalistic decision-making, and social cognition theory. However, we have yet to learn more about examiners' subjective decision-making while assessing a student during a simulated patient-student interaction. Limiting subjectivity in assessments is important, as subjectivity can result in bias and unfairness during assessments (Malouff & Thorsteinsson, 2016). Another factor potentially impacting the outcome of an assessment is examiner leniency, meaning that a group of examiners might be more lenient towards a student's performance than other examiners (Duran & Hendrix, 2023; McManus et al., 2006). This potentially impacts healthcare quality, as students who may not be proficient enough in clinical communication can pass the assessment because of a factor like examiner leniency (Duran & Hendrix, 2023). Subsequently, they enter healthcare without the necessary communication skills.

Examiners' decision-making plays a pivotal role in clinical communication assessments. Despite a significant body of research addressing the variations in assessment outcomes, our understanding of the underlying decision-making process during the current study remains limited (Phung & Michell, 2022). Hence, this research aims to uncover the factors that shape teachers' decision-making within communication skills simulation education at the University of Twente and Tu/Delft.

Setting

This research was carried out within the undergraduate framework of the Technical Medicine (TM) program at the University of Twente (UT) and TU/Delft. The TM program emphasises developing clinical communications skills as an integral component of its curriculum. The aim of teaching is to prepare students to conduct medical consultations from beginning to end in a structured manner.

Even though the teaching curricula at the UT and TU/Delft both utilise simulation education and simulated patients, there are several differences between the curricula. Firstly, the teaching curriculum at the UT consists of three dedicated communication courses titled: “Communication and Professional Conduct”. While TM students at the TU/Delft practice with simulated patients, the programme at the TU/Delft is more limited than at the UT. Secondly, communication teachers at the UT also grade students on their performance during the final assessment. In contrast, the communication teachers at the TU/Delft only provide students with feedback on their communication skills and do not grade them. Because the teachers at the TU/Delft provide feedback on the assessment, the decision-making processes are similar to those of the teachers at the UT. Because we focus on teachers’ thought processes, not grading the assessment does not affect the results of this study. Since the process up to grading is similar. In the paragraph ‘assessment’, the assessment procedure of the UT is described, which differs from the assessment procedure at the TU/Delft. I used the Cheng et al. (2016) framework to report the study setting.

Simulation Event and Environment

For this study, a practice assessment by a second-year undergraduate TM student at the UT was shown to teachers of the UT and TU/Delft during the interviews. This practice assessment occurred within a simulated environment housed within the Technical Medicine Centre at the UT. More specifically, a consultation room. These consultation rooms are meticulously designed to authentically replicate a doctor’s office, providing a realistic setting for training in communication skills. Equipped with video recorders and microphones, these rooms facilitate capturing and analysing interactions during the simulated scenarios.

The simulation has one main learning objective. The student's objective is to complete a medical consultation with an SP. A complete medical consultation contains the following parts: introduction, identifying care requirements, medical history taking, physical examination, policy, and completion. The student is also assessed on this learning objective during the final assessment.

Assessment

To complete the assessment, the student must be able to complete a medical consultation with an SP individually. The teacher is absent during the assessment, but they observe from a separate control room through a live feed.

The assessment is structured into two distinct components: the consult and a reflective paper. During the consult, the student must complete the phases of a medical consultation. The reflective paper, however, focuses on whether the student can critically analyse and assess their performance during the consultation. The assessment is graded using a numerical scoring system. Students can receive a score of 5 (unsuccessful), 7 (competent performance), or 9 (exceptional performance). Teachers at the UT grade the consult using a rubric and an assessment form; both the rubric and the form can be found in Appendix A and B. On the other hand, the grading of the reflective paper is more binary, categorised as either a pass or a failure. To complete the course, students are required to pass both the consultation and the reflective paper.

Research Question

This research aims to explore the decision-making process and the factors influencing the decision-making process of teachers while assessing a student during the interaction between a student and a simulated patient. Therefore, the following research question will be answered:

What factors influence the decision-making of communication skills teachers while assessing a student during a simulated patient-student interaction?

Theoretical framework

This research explores the factors influencing teachers' decision-making while assessing an SP-student interaction. The theoretical framework first focuses on the definition of clinical communication and the contribution of standardised- and simulated patients in education. Then, the focus shifts to performance assessments, assessor expertise and judgements as relevant concepts for

this research. Previous studies on the topic are analysed in the theoretical framework to understand the factors influencing decision-making.

Clinical Communication

Communication holds a central role within healthcare; the relationship between a patient and a doctor relies on clinical communication, which has made the acquisition of clinical communication skills a widespread practice in medical schools. A fundamental component of clinical communication is the concept of patient-centred care, encompassing a comprehensive understanding of patient needs, shared decision-making, and acknowledging the patient's perspective (Cushing, 2015). Patient-centred care is not new, but the implications have grown significantly. The elements of patient-centred care are linked to patient satisfaction and positive medical outcomes, emphasising the importance of students developing proficiency in clinical communication (Cushing, 2015; Deveugele, 2015; Williams, 1998). In addition, clinical communication skills are not merely about acquiring technical knowledge related to the patient's condition. It extends into the dynamic human interaction between healthcare professionals and their patients. Clinical communication's essence lies in understanding what afflicts the patients and delving deeper into what truly matters to them (Cushing, 2015; Makoul & Schofield, 1999).

Now, the critical role of communication in healthcare has been emphasised, particularly within the framework of patient-centred care. It is important to delve deeper into the structured components of a medical consultation, as this is the main learning goal of a student within the setting of this research. Many authors have described and studied the structure of a medical consultation, which consists of the following phases: introduction, medical history taking, conducting a physical examination, diagnosis, treatment plan and lastly, closing remarks (Bagheri et al., 2014; Borhani-Haghighi, 2022; Manalastas et al., 2021).

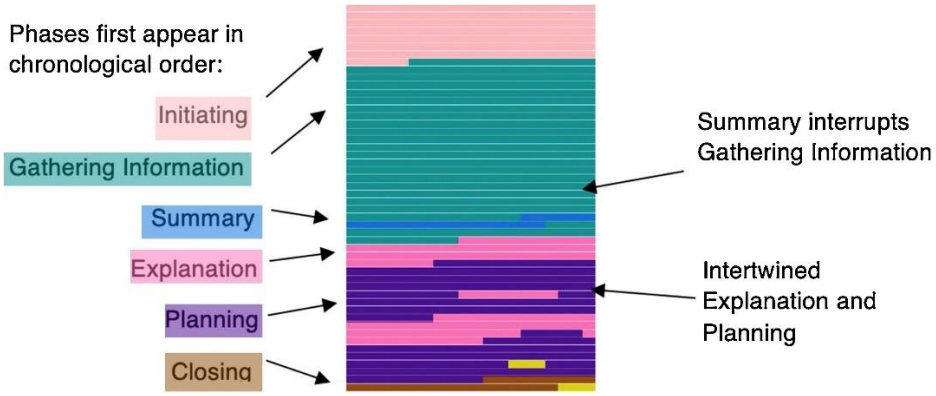
A medical consult generally starts with an informal introduction between the doctor and the patient. The aim of the introduction is to create trust and establish a relationship to further build the

consultation upon (Bagheri et al., 2014). It then moves on to the second phase of the consultation, medical history taking. During this consultation phase, the doctor tries to find out why the patient is visiting the doctor, while the third and fourth phases of the consultation (i.e. physical examination and diagnosis) consist of a physical examination of the patient and finding a diagnosis for the patient's medical issue. The last two stages (i.e. treatment plan and closing) start with a treatment plan and advice based on the patient's medical issues and close the consultation after the patient and doctor agree on a treatment plan (Bagheri et al., 2014).

In addition to the six phases of a medical consultation, explanations during and between phases are needed when a patient has specific questions and uncertainties that a doctor must address. Manalastas et al. (2021) visualised this process during their research, as depicted in **Figure 1** on the next page.

Figure 1

Consultation phases in chronological order, including interrupted and intertwined phases.



Note. This figure was retrieved from Manalastas et al. (2021).

Summarising, effective clinical communication is an essential part of healthcare, influencing the relationship between patients and doctors and contributing to positive healthcare outcomes (Cushing, 2015; Deveugele, 2015; Williams, 1998). A medical consultation often follows several chronological phases, from introduction and history-taking to physical examination, diagnosis, treatment planning, and closing remarks (Bagheri et al., 2014; Borhani-Haghighi, 2022; Manalastas et al., 2021). Moreover, acknowledging the need for explanations during and between phases, especially in response to patient questions and uncertainties, further underscores clinical communication's dynamic and interactive nature in healthcare (Manalastas et al., 2021).

Communication Education

Standardised Patients and Simulated Patients

Through the years, patient concerns about students' involvement in their medical care have fuelled a shift in medical education. The focus has transitioned from merely honing medical skills to ensuring patient safety and healthcare quality over practising medical skills, including clinical communication in real-life scenarios (Okuda et al., 2009). This shift has led medical universities to adopt simulation-based education to train clinical communication skills. Two frequently used methods for teaching communication skills are role-playing with peers or teachers and standardised-

or simulated patients. Role-playing with peers is a low-cost, time-efficient means of equipping students with essential communication strategies. However, role-playing with peers does not closely resemble a real-life medical consult, as peers are not trained to play the role of a patient (Lane & Rollnick, 2007). A method closely resembling a real-life consultation is working with standardised- or simulated patients (Bank et al., 2021; Lovink et al., 2021). However, it is important to note that this method involves a substantial investment of time and resources in recruiting and training individuals to portray standardised- and simulated patients (Al Odhayani & Ratnapalan, 2011).

Notably, in the Netherlands, standardised- and simulated patients have emerged as key components of the teaching curriculum (Bank et al., 2021; Cleland et al., 2009; Lovink et al., 2021). The emergence of patient-centred healthcare underscores the importance of standardised and simulated patients in medical teaching curricula.

A standardised patient is a person who is trained to consistently portray a specific role without deviation, thereby ensuring uniformity and consistency in simulations (Cleland et al., 2009). The primary emphasis in this approach lies in maintaining a controlled and standardised environment, which limits variability from student to student during the simulations (Barrows, 1993). On the other hand, simulated patients are used when a higher degree of authenticity is required (Bank et al., 2021). A simulated patient, guided by a predefined role description, follows specific guidelines to achieve the learning objectives of the simulation. The simulated patient may adhere to a script or improvise aspects of the role, adapting to the evolving situation in the consult, thereby adding a layer of real-world complexity to the training process (Churchouse & McCafferty, 2012).

During assessments, universities generally favour working with standardised patients because there is less variability from student to student (Rethans et al., 2012). However, simulated patients can be incorporated into assessments using the individual simulated patient encounter format, even though this introduces more variability in how the role is played. The interpretation of the role may vary, which presents an element of subjectivity in the assessment (Rethans et al., 2012).

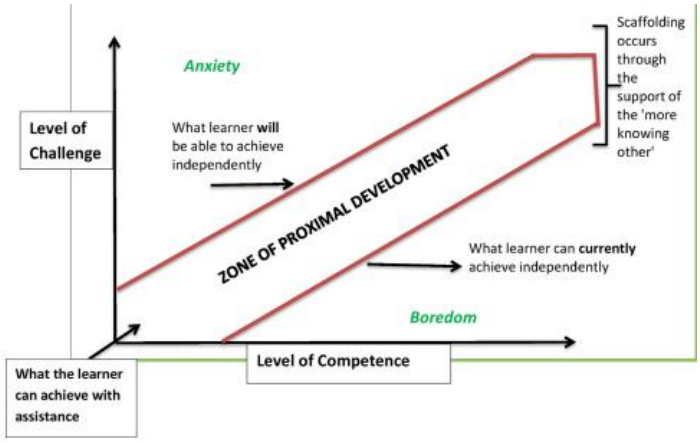
In the undergraduate curricula of medical schools in the Netherlands and Belgium, a combination of standardised- and simulated patients is commonly employed, albeit with variations in their contributions (Rethans et al., 2012). Several distinct formats for working with standardised- and simulated patients have been identified (Bank et al., 2021; Rethans et al., 2012). The most notable format for the contribution of simulated patients used in practice is the individual simulated patient encounter. Standardised simulated patients are most often used during assessments. Individual simulated patient encounters allow students to engage in one-on-one scenarios with similar feedback mechanisms. This includes input from the teacher, the simulated patient, and one observing peer, creating an environment where students target their weaknesses and receive specific feedback (Rethans et al., 2012). The format often used during assessments is called the standardised simulated patient, where the symptoms of the patient are consistently portrayed across different students and encounters. These interactions between the standardised simulated patient and the student are often assessed by psychologists and physicians (Bank et al., 2021; Rethans et al., 2012).

Role of the Teacher

Another facet of clinical communication education is the role of the teacher. Cushing (2015) conducted a study to examine the learning journey of students as they acquire clinical communication skills and the impact of the teacher on the learning curve. This learning curve has been conceptualised by Vygotsky and Cole (1978), as depicted in **Figure 2** on the next page. The Zone of Proximal Development (ZPD) represents the range where additional learning occurs. ZPD delineates what a student can achieve independently and where a teacher's guidance can enhance learning.

Figure 2

Zone of proximal development (ZPD).



Note. This figure was retrieved from Cushing (2015).

Summarising, the evolution of patient-centred healthcare has prompted a shift in teaching clinical communication skills (Okuda et al., 2009). Medical universities have increasingly turned to simulation-based education, recognising the importance of effective communication in modern healthcare (Okuda et al., 2009). While role-playing with peers offers cost-effective education, its limitations in replacing real-life scenarios have led to the widespread adaptation of standardised- and simulated patients. These methods, though resource-intensive, offer varying degrees of authenticity, catering to the diverse needs of students (Bank et al., 2021; Cleland et al., 2009; Lovink et al., 2021). Combining both approaches, as seen in medical schools in the Netherlands and Belgium, allows for a comprehensive educational experience. There are several simulated patient formats, such as individual encounters, which offer tailored learning opportunities complemented by feedback from peers, teachers, and simulated patients. And for assessments the standardised simulated patient (Bank et al., 2021; Rethans et al., 2012). Moreover, the role of teachers emerges as crucial in guiding students through their learning journey (Cushing, 2015). Understanding the Zone of Proximal Development by Vygotsky and Cole (1987) underscores the significance of teacher intervention in enhancing communication skills acquisition (Cushing, 2015). As medical education continues to

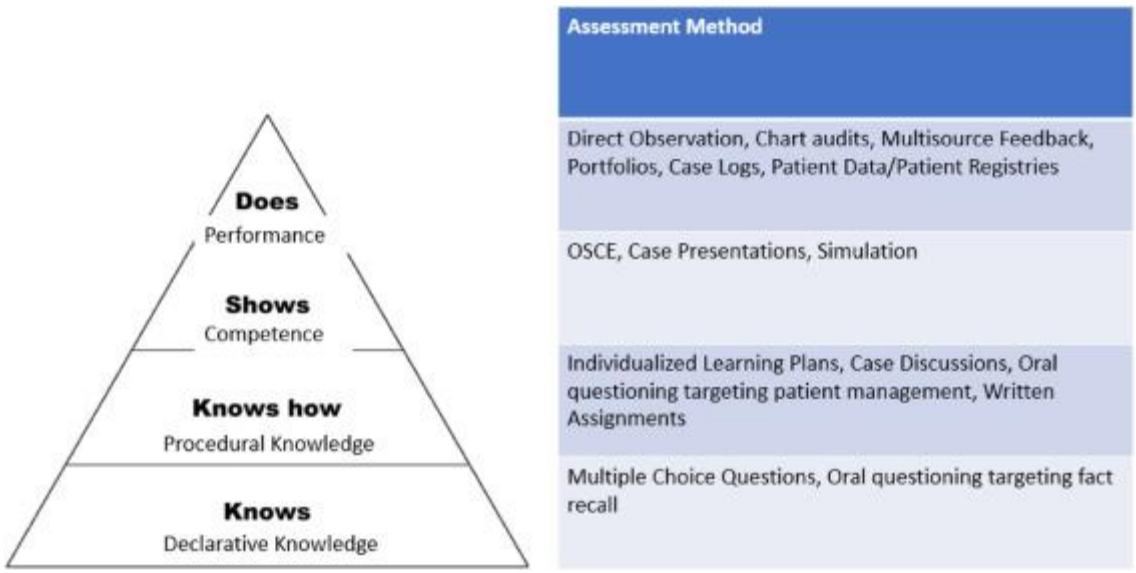
evolve, embracing innovative teaching methodologies and recognising the impact of effective communication in healthcare remains important.

Performance Assessments

The assessment of clinical skills underwent a notable transformation, characterised by a shift towards patient-centeredness and student involvement (Howley, 2004). Traditionally, clinical assessments primarily relied on faculty observations, oral exams, and multiple-choice tests. However, factors such as increased workload, dissatisfaction with traditional methods, and advancements in psychology and education have prompted the emergence of new approaches, particularly performance assessments in competency-based education (Howley, 2004). Competency-based education relies on a student developing certain competencies or skills, which are described as learning outcomes in the learning curriculum (Howley, 2004; Lee & Chiu, 2022). **Figure 3** below gives an overview of multiple assessment methods.

Figure 3

Assessment methods in clinical examination.



Note. This figure was retrieved from Lee and Chiu (2022).

Performance assessments are a prominent method for assessing clinical skills (competencies) in medical education. Two significant variations of these assessments, namely Objective Structured Clinical Examinations (OSCEs) and Work Based Assessments (WBA), play an important role in assessing the clinical communication competencies of students and healthcare professionals (Chahine et al., 2016; Khan et al., 2013; Lim et al., 2023; Newble, 2004). WBAs are challenging to provide regularly throughout a student's undergraduate curriculum since internships and hospital visits are limited. Hence why OSCEs are more commonly integrated into undergraduate curricula due to their practicality (Chahine et al., 2016; Khan et al., 2013; Patrício et al., 2013).

OSCEs were first introduced to address the inconsistencies observed in clinical assessments (Khan et al., 2013). Harden et al. (1975) first wrote about the weaknesses of traditional clinical examinations, which were WBAs at clinical wards in the hospital and being observed and assessed by two examiners while treating several patients. Harden et al. (1975) stated that there are multiple luck factors involved in this type of testing, and it becomes a factual test instead of testing the actual clinical competencies of students. OSCEs closely resemble WBA scenarios, but due to the examination environment, the students often feel pressure stemming from time constraints and adherence to exam guidelines, despite OSCEs aiming to replicate the realism of WBAs (Lim et al., 2023). Nonetheless, students can apply both their clinical skills and clinical communication skills in simulated scenarios while being allowed to make mistakes without consequences, which, in taking into consideration patient-centred healthcare, makes OSCEs the preferred method of examination for undergraduate students as it serves as a good preparation for WBAs later in their student career (Khan et al., 2013; Lim et al., 2023).

In addition, a variation of OSCEs where written feedback plays an important role is also used. Effective feedback is important to aid students in their professional development once the assessment has been completed. The result of the assessment shows a student's strengths and weaknesses related to a certain skill tested during the assessment. Feedback focuses more on the

student's performance during the assessment than judging the student as a person (Lee & Chiu, 2022).

OSCEs often encompass a range of areas, including communication, professionalism, patient history, physical examination, and clinical reasoning skills. These assessments usually involve using simulated patients to recreate real-life medical encounters, with an assessor present to evaluate and grade the student's performance (Gormley, 2011). Ideally, the outcome of assessments should be solely influenced by the student's performance. However, several human elements can affect the outcome of OSCEs (Epstein, 2007; Gormley, 2011). The simulated patient's performance and the student's perception of the assessment also affect its effectiveness. Additionally, assessor subjectivity and biases also naturally factor into the grading and outcome of the assessment (Epstein, 2007; Gormley, 2011).

Assessor Subjectivity and Expertise

Assessments in competency-based education are not purely objective processes. They are often influenced by assessors' subjective judgements, which raises questions about what influences assessors' decision-making processes.

Assessor Subjectivity and Bias

Assessor subjectivity refers to the assessors' perspectives and opinions, while assessor bias involves concealed assumptions about the students. In an ideal scenario, an assessment would be entirely objective, free from subjective judgements and assessors' biases; however, this is not the case in practice (Virk et al., 2020). Given the nature of simulation-based education, subjective judgements are inherent to OSCEs and assessments (ten Cate & Regehr, 2019). However, subjective judgements, when conducted correctly by expert assessors, can be valuable for providing feedback and making informed evaluations (ten Cate & Regehr, 2019; Virk et al., 2020).

It is important to acknowledge that bias and subjectivity can adversely affect the validity of assessment grading. assessor bias can be categorised into two primary internal factors: the halo

effect and leniency (Chong et al., 2017). The halo effect, a form of personal bias, occurs when an assessor forms judgements based on their first impression of the student; this bias subsequently influences the student's overall assessment grading (Chong et al., 2017). In performance assessments, there are also variations among assessors regarding leniency and stringency (Chong et al., 2017). Some assessors tend to have higher standards for students, while others exhibit greater leniency in their grading, leading to disparities in assessment grading and potential perceived unfairness from students.

Assessor Expertise

Another factor that influences assessors' decision-making process is assessor expertise (Berendonk et al., 2013; Govaerts et al., 2011). An expert has unique qualities, abilities, and information that set experts apart from beginners (Berendonk et al., 2013; Ericsson, 2006; Govaerts et al., 2011). As an assessor gains more experience, they tend to become more effective at capturing a comprehensive view of a student's performance during the assessment while delivering a more detailed and insightful description of the performance (Berendonk et al., 2013; Ericsson, 2006). According to Berendonk et al. (2013), assessor expertise can be divided into three key categories: assessor characteristics, the assessment context, and assessors' perceptions of the assessment task.

Assessor characteristics refer to the assessors' view of their knowledge and self-efficacy; both components influence their decision-making (Berendonk et al., 2013). Assessors' uncertainty about their knowledge level can be critical for the assessment outcomes, especially if they have insufficient knowledge about student performance, which is more common with novice than experienced assessors (Berendonk et al., 2013).

The second dimension related to assessor expertise, described by Berendonk et al. (2013), delves deeper into the environmental factors that shape the assessment process. An example of an external factor in the assessment context is factors such as a student appealing their grade. This makes the assessment context impact decision-making significantly, as it may influence the

assessors' considerations and judgments. Berendonk et al. (2013) found that a common way to deal with the assessment context and its challenges is to lower the standards or ask a peer assessor for a second opinion. This suggests that similar student performances might receive different evaluations in non-identical environments (Berendonk et al., 2013).

The perception of tasks represents the third category related to assessor expertise, encompassing what assessors are instructed to assess, why they are doing it, and how they interpret and apply the guidelines provided (Berendonk et al., 2013). This element is profoundly subjective, as it also hinges on the individual interpretations of the assessor. It is not only about ticking boxes; it is about how assessors can read between the lines, seeking to understand aspects of the student's performance during the assessment (Berendonk et al., 2013). What stands out predominantly in the theme of assessors' perceptions is the strain between beliefs about the assessment and the examination regulations imposed by educational institutes such as universities. Often, assessors see an assessment as a means to facilitate learning, while universities prioritise grading. This reveals a distinction between the teacher and assessor roles; both roles are often performed by the same person, which can add variability and subjectivity to assessors' judgements (Berendonk et al., 2013).

Subjectivity is also enhanced by assessors' interpretations of the definition of competency; interpretations of competency can often be linked to the reliance on automatic decision-making, which changes with the amount of expertise an assessor has (Govaerts et al., 2011; Oudkerk Pool et al., 2018). The decision-making processes of inexperienced and experienced assessors significantly differ. Inexperienced assessors focus more on providing solutions and have a more ad-hoc decision-making process. In contrast, experienced assessors rely more on automated decision-making while gathering and analysing observed information before reaching a decision (Govaerts et al., 2011; Oudkerk Pool et al., 2018). Experienced raters also rely more on mental models developed from previous assessments. Inexperienced raters lack such models, rendering them more susceptible to literal descriptions of observed behaviour, which is not necessarily wrong or right, and this can lead

to missing links between different phases of the observed behaviour, such as missing contextual- and situational details influencing the performance of the student (Govaerts et al., 2011). These differences between assessors can contribute to the subjectivity in teachers' decision-making processes (Govaerts et al., 2011).

The role of assessor expertise in assessment grading cannot be understated (Berendonk et al., 2013; Govaerts et al., 2011; Oudkerk Pool et al., 2018). The subjectivity introduced by the assessors' characteristics, perceptions, and the context in which they operate can influence the grading of the assessments (Berendonk et al., 2013). The interpretations of competence, reliance on automatic decision-making, and the expertise of assessors add further layers of complexity and subjectivity to the grading process (Govaerts et al., 2011; Oudkerk Pool et al., 2018).

Conclusion

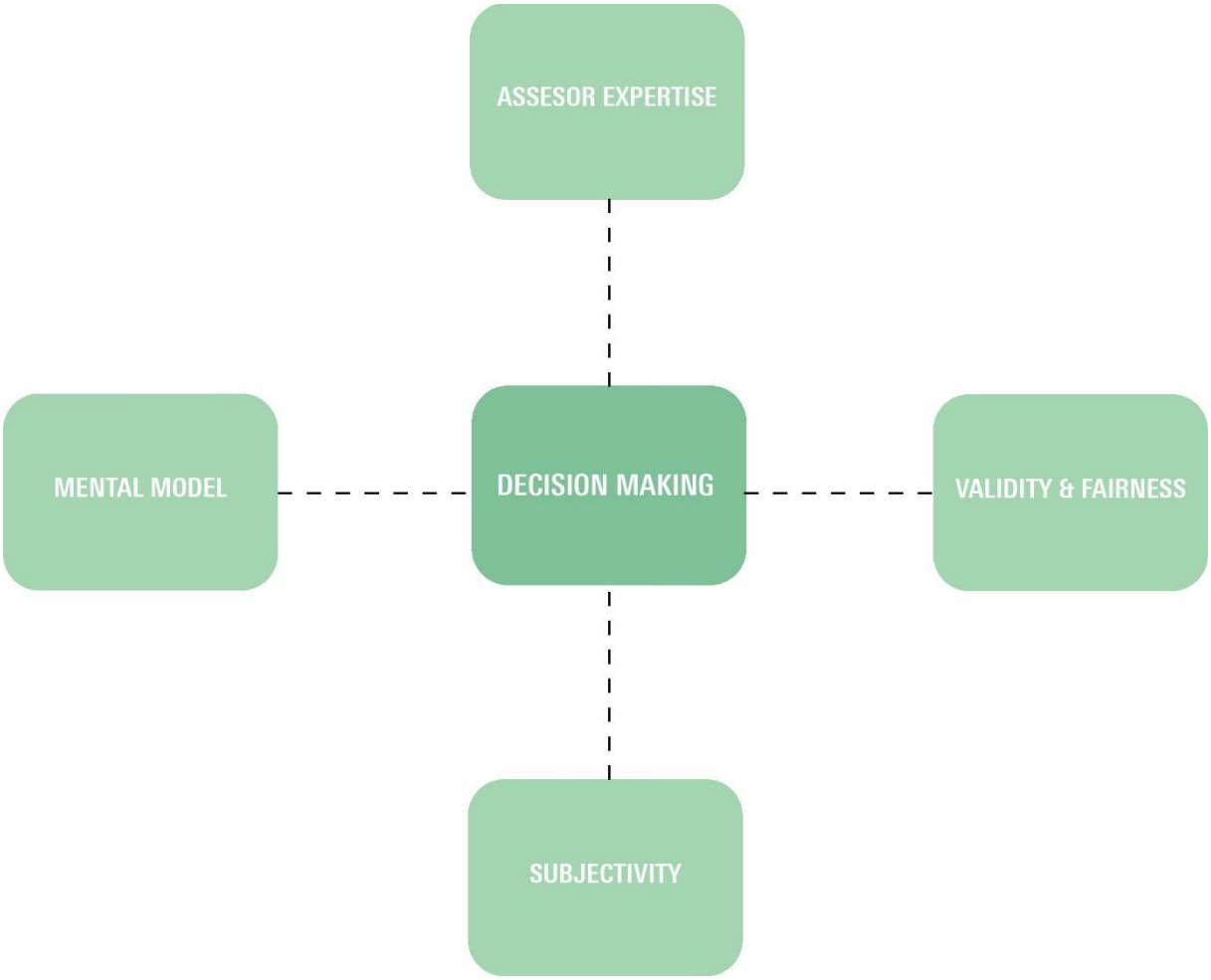
Figure 4 on the next page depicts several factors in the theoretical framework that can influence teachers' decision-making. The concepts shown in **Figure 4** form the basis of the deductive coding during the analysis phase of this research to answer the following research question:

What factors influence the decision-making of communication skills teachers while assessing a student during a simulated patient-student interaction?

This study investigated how the identified factors manifested in the participants' behaviour and responses. Think-aloud and supplementary interviews were employed to evaluate the factors in the theoretical framework. This approach allowed us to observe and assess which theoretical constructs were evident in the participants' actions and verbalisations.

Figure 4

Concepts related to the decision-making of teachers.



Research Method

Participants

Twelve teachers were invited to participate in the study, which consisted of seven teachers of the TM faculty at the UT and five teachers from the communication programme at the Clinical Technology faculty of the TU/Delft. The teachers were contacted through email invitations by voluntary sampling, with invitations dispatched approximately one month before the scheduled interviews. In total, nine teachers participated in the study (N=9). Six participants were employed at the UT, while three participants were employed at the TU/Delft. All participants had a background in psychology.

Design

A qualitative research design was used to answer the research question. During the study, participants participated in stimulated think-aloud sessions. During the stimulated think-aloud sessions, participants were asked to watch an SP-student interaction and voice their thoughts when they wanted to say about their cognitive process (see Appendix C for the specific instructions). The goal of think-aloud is to capture the participant's thought process during an activity (Lyle, 2003; Wolcott & Lobczowski, 2021). A thematic analysis was then used to analyse the data. A thematic analysis is a qualitative data-analysis method specifically used during this study to analyse a participant's thoughts and behaviours across the data set. Employing a deductive approach, the thematic analysis involved the categorisation of the data based on the preconceived thematic frameworks identified through a review of existing literature preceding the interview phase (Kiger & Varpio, 2020).

Pilot

Before the start of the data collection, a pilot was conducted with one volunteer. The pilot had several goals: first, to identify whether capturing teachers' thoughts in a stimulated think-aloud

study was possible and if the protocol was sufficient; second, to determine whether the schedule was correct and for the researcher to practise conducting stimulated think-aloud interviews.

Based on the pilot, the protocol was revised with fewer interrupting questions. The interrupting questions were transformed into a semi-structured interview after completing the think-aloud part of data collection.

Procedure

Data Collection

To ensure ethical compliance, participants were required to provide informed consent in written form and through verbal affirmation before their involvement in the study. The ethical committee already approved the use of the video recording as part of a study by Annelies Lovink. Official approval from the ethics committee at the UT was secured before data collection (case number 230052).

The interviews with the UT and Tu/Delft participants spanned from March until April 2023. The think-aloud interviews lasted approximately 60 minutes. The interview protocol entailed observing a recorded SP-student interaction, allowing the teacher to interject their thoughts by pausing the recording at their commando (see Appendix C). An audio device captured the interviews, resulting in voice recordings. The voice recordings were deleted after transcription.

Interviews

The interviews with the participants consisted of two parts: the stimulated think-aloud and a semi-structured interview after completing the think-aloud. All participants were presented with the same recording of an SP-student interaction. A procedure protocol was developed to guide the interviews systematically. The procedure contained information facilitating the participants' articulation of their thoughts during their decision-making process. Given the individualistic nature of each session, the procedural framework ensured reliability, validity, and coherence across the interviews.

Upon completion of the think-aloud interview, structured, open-ended questions were asked to delve deeper into the factors influencing teachers' decision-making processes. The procedure, protocol, and open-ended interview questions can be found in Appendix C. This research's think-aloud and interview phase were conducted by a sole researcher (BK).

It is important to note that not every participant was asked the same interrupting questions. Only when the researcher felt extra elaboration was needed or there was more information behind the statement were they asked within the interview flow.

Data Analysis

A deductive coding approach was used for the thematic analysis of the data. A deductive approach means several predetermined themes have been established based on the theoretical framework, which was expected to be reflected in the data (Braun & Clarke, 2006; Byrne, 2022). As portrayed in **Figure 4**, these themes are mental models, assessor expertise, validity and fairness principle, and subjectivity. The initial focus was on a semantic level of coding, which implies the search for expressed opinions of the participants (Byrne, 2022). The six steps of a thematic analysis by Braun and Clarke (2006) were followed: data familiarisation, initial coding, setting themes, theme evaluation, renaming and defining themes, and writing a report. ATLAS.TI was used as a tool to code the data.

Data Familiarisation and Initial Coding

Before commencing the coding process, a preparatory step was undertaken, specifically familiarisation with the data. This involved transcribing the interviews using Amber Script software and manually adjusting the transcripts while listening to the audio recordings. Subsequently, the transcripts underwent another thorough reading, during which notes were taken in preparation for the initial coding phase.

Then, the initial coding of the data started. The data from the first interview underwent separate coding by the researcher and supervisor, denoted BK and AL. The researcher and supervisor

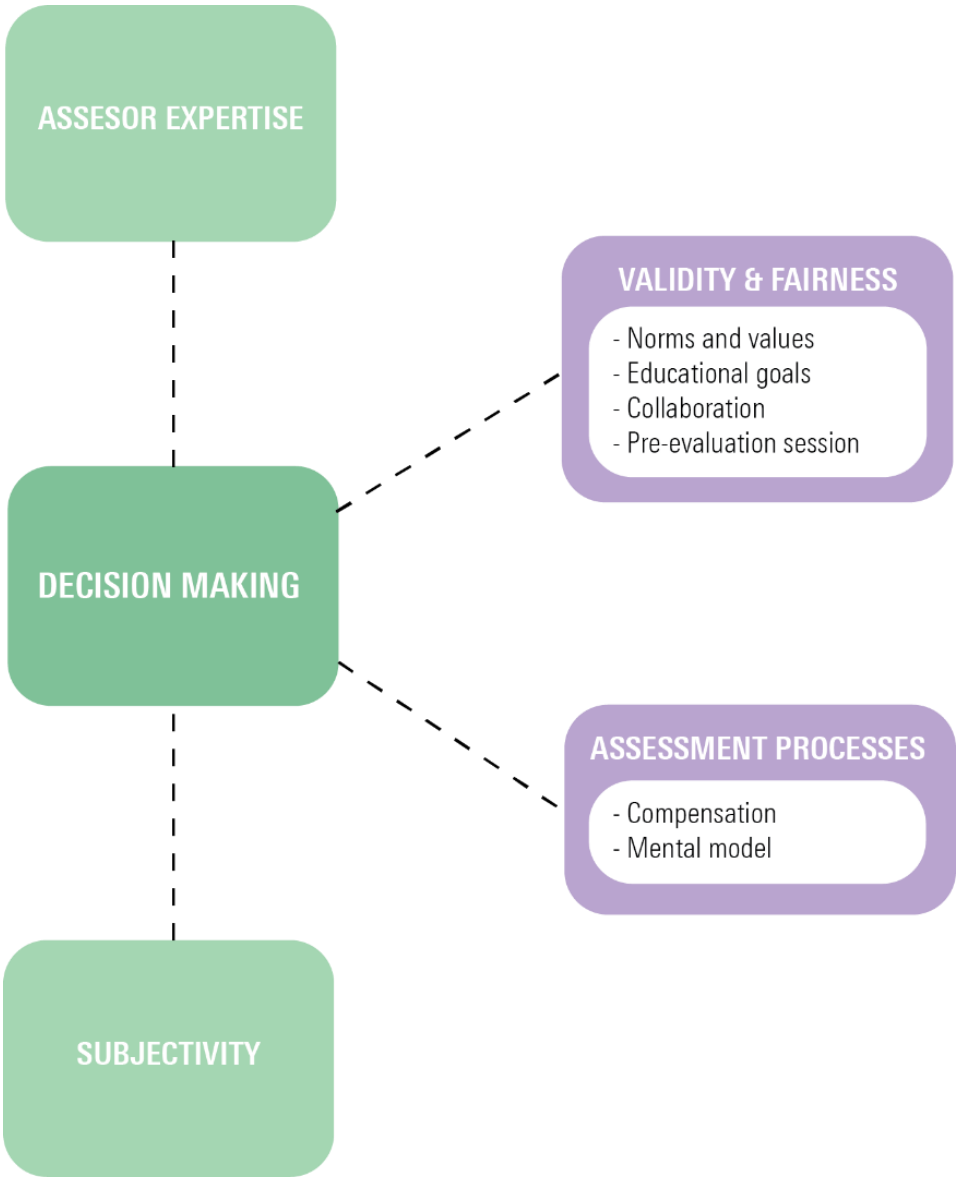
used the pre-defined themes and what stood out during the familiarisation phase. The data was coded at a sentence level, not on a paragraph level, meaning all sentences were initially coded separately. The researcher and supervisor looked at everything that stood out from what the teachers had said in the interviews. This included going outside the existing themes because there was valuable information outside these themes. As a result, the focus was changed from a deductive approach to a mixed method of deductive- and inductive coding. Following the independent coding of the first interviews, a discussion was convened between the researcher and the supervisors. During this meeting, the codes were deliberated upon and refined. A similar procedure was followed for the subsequent eight interviews, wherein BK performed the initial coding, and AL and MG undertook the review process of four out of nine interviews. The goal of the review process was to ensure validity and consistency throughout the coding of the interviews.

Setting Themes and Evaluation

The researcher continued setting themes after the interview data were coded and discussed. During this step of thematic analysis, the different codes were analysed and revised (Braun & Clarke, 2006; Byrne, 2022). It was examined whether the individual codes could be merged under a theme with several sub-themes. During this process, several themes with corresponding sub-themes were drawn up in a thematic map and reviewed on theme quality. This resulted in the following themes and sub-themes, shown in **Figure 5** on the next page**.** The deductively coded themes are portrayed in green, and the themes added or changed during the coding are depicted in purple. It is important to note that in the coding scheme, the sub-themes collaboration and pre-evaluation exist, but in the results, these sub-themes have been rephrased to consensus building.

Figure 5

Final thematic map.



Renaming Themes and Writing the Report

The next step of the thematic analysis is renaming and defining themes (Braun & Clarke, 2006; Byrne, 2022). The final themes used in this study are presented in **Figure 5.** After the theme names were established, the themes were analysed. During this phase of the study, several quotes were extracted that best captured the definition of the themes or when something stood out that a teacher spoke out during the interviews or stimulated recall session related to the research question. The data was extracted from ATLAS.TI and then displayed in written-out texts instead of in illustrations. While analysing and writing out the results, no meaning was yet given to the quotes; this was done during the next and final step of the thematic analysis, which is writing out the report. The written report of the results was added to the discussion.

Reflexivity

Reflexivity was essential in the meetings about coding. After these sessions, BK engaged in critical self-reflection, thereby contributing to the enhancement of consistency in the coding process. It is noteworthy that AL is an experienced lecturer in SP education and a PhD candidate. MG is a senior lecturer and researcher at the TM faculty of the UT. Their role as project supervisors encompassed reading and analysing the themes and codes, ensuring the reliability and validity of the standards upheld throughout the study.

Results

During this research, the researcher sought to investigate the factors influencing the decision-making process of communication skills teachers at the Technical Medicine faculties of the University of Twente and Tu/Delft. In the upcoming paragraphs, several themes are presented, including quotations associated with the themes.

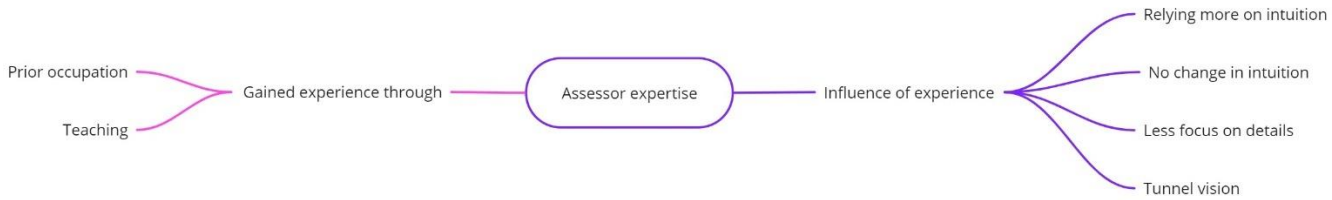
Assessor Expertise

Assessor expertise was identified as a theme that can influence teachers' decision-making. All nine participants indicated that their experiences contributed to their decision-making processes.

However, the way experience was acquired varied among the participants. **Figure 6** below displays an overview of assessor expertise and its influence on decision-making mentioned by the participants.

Figure 6

Assessor expertise and its identified sub-themes.



When asked about assessor expertise during the follow-up interviews: one participant gained experience through **prior occupations** (n=1) before teaching, while others (n=8) acquired experience through their **teaching roles.** When asked if gained experience influenced the decision-making process during assessments, one participant stated that their **prior experiences** contributed to their job as an assessor. The participant argued: *"Yes, I think so. It can hardly be otherwise. I observed a lot during my previous work and take that experience here. In terms of content, it is about how the consultation should progress from the different phases, such as medical history taking to the policy. Over time, you better understand how this process should be and ideally done. Making it easier for you to assess what you observe and form opinions about it. So, I am more focused on the consultation content now." T-1.*

The other eight participants agreed that they gained experience **through working as a teacher and or examiner**; there is a difference in how their experiences influenced their decision-making processes. When asked about this theme during the follow-up interview. Two participants argued that they moved from grading on intuition to a more argued approach to grading; they (n=2) stated the following: *"[…] Initially, it was more based on intuition, noticing and hearing reactions,*

from the simulated patient and the student. It either goes well, or it does not, and the longer I work, the more I can justify why I find something good or not. So, I have more and more factors that I can weigh in my head. I can also articulate them more and more. So, in the beginning, I would notice more like 'oh, this is a bit difficult or unpleasant', but over time, more reasons and factors emerge so I can justify it." T-2. The second participant mentioned a change in intuition: *"Yes, I now have a much better understanding of what is expected in a medical consultation, and I have seen so many medical consultations that I also have some insight. I can, for example, envision how this will be structured and what information should be included. I also have a better understanding of what goes into the medical history taking, So I am more informed in content and know very well what to expect from first, second, and third-year consultations. Back then, I did not know what I was looking for. Because then you rely more on intuition or something. You feel it is a good consultation but cannot justify why. And now I can." T-3.*

Others (n=2), in contrast, did **not mention a change in intuition**; they argued that they developed more of a helicopter view and did not sit on the small details compared to their early years of teaching while also becoming more flexible. One participant argued the following when asked about this theme during the follow-up interview: *"Yes, I think in my earlier years, I was more focused on details, like do they ask open-ended or closed-ended questions. Sometimes, when a colleague observes or discusses the consultation, I might think, 'Oh, I did not notice that at all.'. Because now I focus more on how the interaction unfolds. […] However, I think that in my early years, I was more focused on such details. Furthermore, now I look at the overall picture and the interaction. I focus more on what happens in the consultation rather than the details, and I would say I have become more flexible." T-5.* The other participant mentioned the following change after being asked about this during the follow-up interview: "*Yes, I now have a certain arrogance that after a few minutes, I already know that they will not finish the consultation in time or that they will get a less cooperative answer because they are leaving things unresolved. So, I think maybe I was stricter at the start of my career. I was paying more attention to the rules. Moreover, I zoom out and think about if*

they mean it well. What I always do now is think about if they can touch my grandmother or take care of my grandmother. Can I trust you with that? I find that aspect of professionalism quite appealing. However, I do have to justify this very well and provide concrete examples of why it is not good." T-7.

In contrast, one participant mentioned **focusing less on the details** during a consultation. When asked about this topic during the follow-up interview, the participant mentioned having developed more of a tunnel vision: *"Well, in all honesty, I do think there is some degree of tunnel vision, which is maybe not the right word, but that you are more alert to certain points that occur more frequently, such as using filler words, making eye contact, or having the student provide explanations or instructions, which I know will happen. Most students make those kinds of mistakes, or they excel on a certain point. So, I seek confirmation or a contradiction of that. That is it. I look open enough, but I sort of pre-filter the points. I focus on the important ones." T-8.*

Internal Assessment Processes

During the stimulated think-aloud sessions, participants often mentioned specific themes related to their internal assessment processes. Two relevant themes were identified within the internal assessment process of a teacher: the student compensating for their mistakes and the developed mental models on which participants relied while assessing the student during a student-SP interaction. It is important to note that the participants mentioned these models during the think-aloud study, and then the researcher asked the participants a follow-up question to clarify their thoughts further if needed. Each sub-theme will be described in a separate paragraph supported by defining quotes, and **Figure 7** below displays the themes and sub-themes related to internal assessment processes.

Figure 7

Internal assessment processes and its sub-themes.

Student Compensating

Within the theme of internal assessment processes, students compensating for their mistakes was identified as a related theme throughout the stimulated think-aloud sessions. Students compensating for their mistakes represent that a student can make a mistake early in the consultation but compensate for it by doing something right later on and vice versa.

Multiple (n=5) participants mentioned during the think-aloud session that students can **compensate** for their mistakes during a consultation. When asked to elaborate upon this theme, one participant (n=1) stated that a student must make grave mistakes not to pass the assessment. The participant elaborated: *"Yes, because I think eventually, when she comes to the policy, she does have to start talking about why they are there. If she can explain it well, because the patient is following it, that does compensate for me that it is missing in the beginning […]. That would not be a decisive factor for me whether to give someone a failing grade on that basis alone." T-2.*

A different participant (n=1) out of five participants who mentioned compensating concisely answered a follow-up question about compensating during their think-aloud session by stating the following: *"When someone does a part very well. What do you do then? Do you average out and say it is just okay? Alternatively, do you say yes, but that part is just below par, so that is impossible […]. What do you find insufficient? I think that is an important question. Then there is a bit of, I can see him doing it. How bad is it in the clinic? If you would do this in the clinic, no matter if you did everything else so well, it is insufficient". T-5.*

In addition, two participants (n=2) mentioned that their decision-making is a process of **pluses and minuses** and finding the right balance to assess a student. The first participant stated the following during the think-aloud session without being asked a question: *"I think this is a missed opportunity […]. Also, zooming out, okay, this went wrong on that piece, but the student did well elsewhere. Putting this alongside the objectives, what is more important? Then I look at the assessment form; it is just a puzzle". T-1.* In addition to this statement, the second participant mentions the following during the think-aloud session without being asked a question when the student missed a second opportunity: *"[…]. This is where the student could have compensated […]. If she had used this moment to correct that, I would have thought, okay, you missed something initially, but you are picking it up now […]. She could have made something up in that. However, now, at least so far, I notice that she misses an opportunity not once but twice". T-6.*

Lastly, the reflection paper was also mentioned by one participant during their think-aloud study. The participant captured their thoughts after a follow-up question about how the **reflection paper** plays a role when a student might not pass the assessment: *"That could be decisive now, or whether she has insight in what was left out in the policy because it is a student that I do think, I do have confidence that the student can, but has not shown it". T-3.*

Mental Models

During the think-aloud sessions, multiple participants (n=5) out of nine mentioned that they relied on mental models when assessing student-simulated patient interactions. It became apparent from multiple quotes that the rubric had become a mental model for two participants in that they used it sparingly while assessing.

Two participants mentioned **rubrics** turning into mental models when asked a follow-up question during the think-aloud session: *"Not for me […]. The rubric is more in your head at a certain point. It becomes more self-evident, so you should not look at it. Furthermore, for every fool, there are also exceptions; there is no consultation on what exactly fits in there. Yes, assessing is just a difficult*

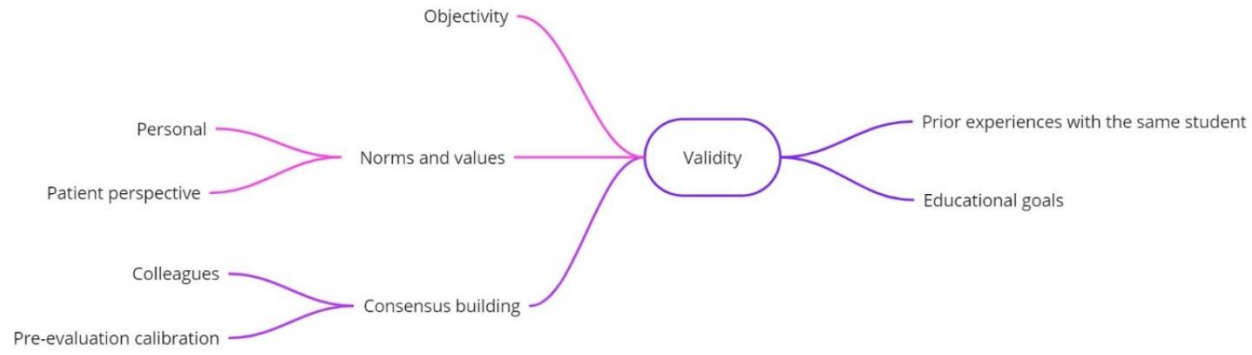
process". T-2. Additionally, the other participant stated the following when asked a follow-up question: *"I think I have internalised the rubric. I know what is expected of them in their first, second, and third years so well that I do not use it anymore. It helps me focus on writing something down, such as patient contact […]. It makes me more aware of writing something down". T-3.*

Validity

Validity was one of the themes identified throughout the coding process. The participants frequently referred to terms related to validity during the think-aloud sessions and when asked about this theme during the follow-up interview. The theme validity was subsequently divided into sub-themes, as depicted in **Figure 8** below: educational goals, consensus building, prior experiences with the same student, and objectivity. Each of these sub-themes will be described in individual paragraphs.

Figure 8

Validity and its sub-themes.



Norms and Values

Within the theme, validity, **norms, and values** were identified as related themes throughout the think-aloud sessions and follow-up interviews. Norms and values represent the personal norms and values of the participant, which can be divided into **personal- and patient perspectives.**

All (n=7) but two participants (n=2) indicated that **norms and values** played a role while assessing a student during an SP interaction; they (n=2) argued that the norms and values discussed by the teachers were more important than their own. Before the assessments start, the teachers at the UT discuss their criteria. UT participants linked this to their personal norms and values during the think-aloud and interviews.

One participant answered the following to a question asked by the researcher during the interview phase about their norms and values playing a role in their decision-making: *"Looking at my **own norms and values**. Well, I see what happens in that consultation. So, how does this patient react, and what bit of the norms and values have we agreed upon with each other? So, I do not think it plays a role. I find it important that they listen well and inquire about what the patients are saying. More generally, I think. So, not necessarily my own norms and values." T-3.* The second participant argued when asked a question during the interview phase about their norms and values: *"Good question; I am not sure if it has to do much with norms and values, but rather what I believe constitutes good care or something like that. In that regard, patients should not just be complaints; they should not be seen as numbers, and I would say a student turns out like a robot. I am using that word again. The human touch is important for me" T-4.*

Seven participants (n=7) stated that their norms and values affect their decision-making process. When asked about this during the interview phase, one participant said: *"I think so. It would be very naïve to say that it does not play a role. […] I think it is less of a factor now because you have more of an idea of what they should be able to do, and it does not have to be done my way. When I just started, it was quite challenging to distinguish that. However, someone can also establish contact differently. I am quite formal, but not all students are like that, which often leads me to have an opinion about it if they are too casual. However, the contact can still be perfectly fine that way. So, you must frame it a bit." T-6.* A second participant argued that they are sensitive about the energy of a student. When the teacher was asked about this during the interview phase, they mentioned the

following: *Yes, because I am sensitive, for example, to the entrance, that there is some more energy being put into that, so I am extra alert to the extent to which this influences me. Who is sitting across from the patient, and what does the* ***patient need****? It cannot be otherwise than this playing a role, so that is why I am consciously engaged with it. I incorporate it because I question myself more about what it says about me versus the educational goals, the assessment criteria, the assessment itself, and the relationship with the patient. I try to put my* ***norms and values*** *alongside those considerations." T-1.*

Educational Goals

One of the sub-themes identified was **educational goals**. Educational goals represent specific skills students must demonstrate to complete a medical consultation. These goals vary among first-year, second-year, and third-year students at UT; the TU/Delft does not have this distinction. Analysing the quotations from the codes, eight out of nine participants mentioned education goals during the think-aloud phase. In contrast, one participant of the UT did not mention them. It is important to note that there is a difference between the participants of the UT (n=8) and TU/Delft (n=3) due to variations in the education curriculum of both universities. Participants of the UT often refer to the educational goals as the difference between the three stages of the course. In contrast, participants of the TU/Delft refer to educational goals as specific aspects students must be able to demonstrate during a medical consultation.

During the think-aloud sessions, multiple participants (n=5) of the UT mentioned **educational goals** while watching the recorded consultation. One participant of the UT described the following about educational goals while pausing the recording: *"I do not expect that from this student yet. I appreciate that he/she is paying attention and trying to establish a connection in that way. There is still room for improvement by being more open. So, it would be nice if she had done that, but I also find it okay that she is trying." T-1.* A different participant of the UT is not satisfied with the performance of the student at a certain point during the think-aloud session but does mention, after pausing the recording, that it is good enough for now: *"Here, she briefly makes that connection again*

between the physical complaint, the severe pain, and now, what do you do? So, it is nice that she is trying that for a second year. Well, there is still more to be gained from it, but I would agree for a second-year student. I think she understands what she needs to do, that these questions do not seem entirely isolated, and that she is trying to establish that link between the complaint and life. Moreover, subsequently, she marks what she wants to do next." T-5.

Previous Experiences with the Same Student

Participants were also asked how previous experiences with the same student could influence their decision-making. Four (n=4) participants stated it influences their decision-making during the interview phase. Two participants captured the following about **previous experiences with the same student** and how it plays a role: *"I try not to do that, but I do not know if I can separate it because I even know her from the simulation room. Moreover, you, at some point, know where someone may excel and where they may have weaknesses. You try to keep it within the context of the consultation, but I can also imagine that it unconsciously plays a role. For example, with this student, I know he/she is less focused on the patient's contact and emotions. So, I sometimes wonder, am I seeing that because it is like that? Or am I already aware of this aspect? Moreover, do I pay extra attention to it? So, I think you can never completely detach them from each other, especially when you also teach undergraduates like I do. Yes, I think it does have an influence" T-2.* The second participant argued that **personal experiences** with a student can play a role in the following way: "*Yes, also, sometimes students that, well, you may have a bit of a soft spot for. However, there are also students that you think may have gone against my norms and values in some way during sessions. I think you should be aware of that and honest about it. Maybe I am looking more critically than I should. Then, I feel like I should place them on the consultation list as I often do. [...]. If you know that It can play a role, you should put it on the consultation list to be sure (*BK as described by the participants of the UT: the consultation list is used if the student's performance during the assessment is doubtful. A colleague will also assess the student's performance as a second opinion)*". T-6.*

Consensus Building

This theme is separated from the participants of the TU/Delft since they do not grade students on their performance, but they only personally provide them with feedback. At the UT, when there is doubt about the student's performance, they ask a **colleague for a second opinion**. Out of six participants (n=6), four (n=4) mentioned they would use a **second opinion from a colleague**. Two participants (n=2) captured the essence of the second opinion. The first participant was asked about this during the interview phase as an additional question since it was mentioned prior during the think-aloud phase and more information was needed: *"[…] If people fail, or if there is doubt, then it is just a second teacher who also watches the consultation if there is still doubt, then there will be a third teacher watching along. This limits the subjectivity of the evaluation". T-4.* The second participant was asked about this with a follow-up question during the think-aloud phase and stated: *"[…] You sometimes have consultations that you watch and think that it is a complete consultation, but something is happening there that I cannot put my finger on. Moreover, that can be that the SP is delighted, and I am not, or vice versa. However, I will always put the student on the consultation list." T-6.*

Another facet of consensus building at the UT is a **pre-evaluation calibration session** before the start of the final assignment. This ensures the teachers are all on the same page regarding the guidelines. However, out of the participants of the UT (n=6), only a limited (n=2) number of participants mentioned this session during the think-aloud phase. One participant was asked a follow-up question after pausing the recording regarding grading a student if they found certain parts of the consultation more important than others; the participant mentioned the following: *"No, not to that extent, and that is also because we and I have to say, we started this year to have a good calibration session beforehand. We agree on the consultation's goals and how much weight each aspect carries. To align with the different assessors. […] So, there is a weighing there. However, it is* ***not my personal one; we discussed it in advance with the teachers****." T-4.* The second participant was asked how they weighed their final decision towards the end of the think-aloud phase with a follow-

up question. Then, the teacher mentioned the calibration session and how it helps: *"That partly has to do with the calibration session we do beforehand. So, now with VCPG2, it helped me that we had said, what do we find important? What do we want to see? So, what is the most important thing? In VCPG2, that was conducting a complete consultation. So, that helps." T-6.*

Discussion and Conclusion

This research explored the factors influencing the decision-making of communication teachers at the Technical Medicine faculties of the University of Twente and TU/Delft while assessing the same student during a simulated patient-student interaction. The literature review described several possible factors influencing teachers' decision-making. The main themes identified in the theoretical framework were assessor expertise, mental models, subjectivity, validity, and fairness. Several other factors were then explored and added during the analysis of the results, as depicted in **Figure 5**. The factors in the literature review are shown in green, while the additional factors are in purple.

Assessor Expertise and Mental Models

Berendonk et al. (2013) described assessor expertise as one of the factors influencing teachers' decision-making. The teachers who participated in this research described the assessor's expertise during the think-aloud phases and interviews of the study and how it influenced their decision-making process. The teachers highlighted differences between the start of their teaching careers and now. The teachers noted that they can now understand the reasons behind a student's performance, whether the performance is sufficient or insufficient. Initially, they could sense when certain aspects were insufficient or sufficient but could not articulate the reasons behind their judgements comprehensively. Furthermore, the teachers indicated that at the start of their careers, they focused on the small details while assessing a student during a medical consultation. In contrast, their focus now lies in evaluating the interaction's overall quality instead of concentrating narrowly on specific details, such as whether a student asked open-ended questions. In addition, a student can

compensate for their mistakes during the assessment or negate minuses with pluses and vice versa. Evaluating the consultation is an internal balancing act for the teachers who participated in the study. They ultimately arrive at a final judgement regarding the student's performance during the assessment by weighing the positives and negatives. These findings are in line with the research of Berendonk et al. (2013) and Ericsson (2006), who suggest that as assessors gain experience, they develop an enhanced ability to capture a comprehensive view of a student's performance and become more adept at providing detailed and insightful descriptions of a student's performance.

In the literature on assessor expertise, mental models were described as being developed by experienced assessors. (Govaerts et al., 2011). However, no evidence was found during the current study about the development of mental models by the teachers who participated. The teachers only indicated that the rubrics prescribed by the university have now been internalised and are no longer strictly followed. However, this finding cannot be described as a mental model.

Validity

Teachers who participated in this study said they keep validity in mind during their decision-making. Firstly, the sub-themes of validity, personal norms and values and those of the patients were mentioned as factors influencing their decision-making process. Most teachers who participated in this study acknowledged that norms and values play a role in and influence their decision-making process. However, they are also aware of this influence. Consequently, they strive to lessen this factor by aligning it with the educational goals and recognising that they view the consultation through their personal lens rather than an assessor's lens.

This factor is also related to previous experiences with the same student, where a negative or a positive view of the student possibly influences their assessment of the student. However, the teachers of these students are aware that when they assess them, these students will quickly be placed on the consultation list, thereby sharing the responsibility of forming a judgement with other teachers. This is in line with the research of Chahine et al. (2016), and Chong et al. (2017), more

specifically, the halo effect, where teachers base their judgement on a student's performance on their first impressions and previous experiences with the student.

Consensus Building

Teachers indicate that consensus building is a factor that influences their decision-making. Whenever there is doubt about a student, a second opinion is sought from a colleague. This mechanism is built into the program curriculum to ensure students receive a fair assessment. Another emerging aspect regarding consensus building is the pre-evaluation calibration session before the final assignment. Although this aspect was only briefly mentioned by the teachers in this study, evidence was found that it influences participating teachers' decision-making process. Specifically, it emphasises that the educational goals are more important than their norms and values. This theme is closely related to the factor validity, as consensus building adds to a fair assessment of the student's performance.

Conclusion

In conclusion, when looking back at the research question: *What factors influence the decision-making of communication skills teachers while assessing a student during a simulated patient-student interaction?* Foremost among the identified factors is assessor expertise, which emerged as the most influential factor affecting teachers' decision-making as it became clear that there is a stark difference between assessing at the start of their careers and now.

Moreover, the study highlights the factors of personal and patient norms and values, previous experiences with the same student, and consensus building as influences on teachers' decision-making. These factors are integral to the theme of validity and the validity of the assessments, as validity contributes to the overall decision-making dynamic. Notably, the conscientious consideration of validity introduces an element of uncertainty for teachers, prompting them to seek additional input through consultations with colleagues, thus emphasising the collaborative nature of assessment practices.

Strengths and Limitations

While this study's findings provide insights into teachers' decision-making while assessing student-SP interactions, it is essential to acknowledge that the study also has limitations.

Even though the sample size was representative of the population, the sample size of participants involved was relatively small. In total, nine teachers participated in the study, but to give the study more depth, future studies might benefit from a larger and more diverse sample size. In addition, there was a difference between the curricula of the TU/Delft and the University of Twente. Teachers at the TU/Delft do not engage in the grading of students; they only provide the students with feedback on their communication competencies. Future research could address this limitation by including teachers from institutions where grading is a routine aspect of their roles.

It is important to note that there were instances where the protocol was not consistently followed across all participants or interviews, potentially introducing inconsistency in the findings. It is crucial for future studies to address these deviations to ensure the validity of the research. Enhanced measures to monitor the use of the protocol could be beneficial in this regard.

Recommendations

This study is a preliminary step in the research on factors influencing the decision-making of communication teachers while assessing student-simulated patient interactions. Several factors were observed that possibly influenced the decision-making. Future research should focus on not only observing the factors but also studying how these factors moderate each other. For example, subjectivity and biases could be influenced by the educational goals set by the medical institution, which have not been measured in this research. To give more meaning to these factors, it is essential to delve deeper into the interplay between them and how they influence decision-making.

References

Al Odhayani, A., & Ratnapalan, S. (2011). Teaching communication skills. *Canadian Family Physician Medecin de Famille Canadien*, *57*(10), 1216–1218.

Bagheri, H., Ibrahim, N. A., & Habil, H. (2014). The Structure of Clinical Consultation: A Case of Non-Native Speakers of English as Participants. *Global Journal of Health Science*, *7*(1). https://doi.org/10.5539/gjhs.v7n1p249

Bank, I., Rasenberg, E. M. C., Makkenze-Mangold, S. H., Nelissen, S., van Wijngaarden, J., Lovink, A. G., & Rethans, J.-J. (2021). Fifteen simulated patient working formats to use in communication skills training: Report of a survey. *Medical Teacher*, *43*(12), 1391–1397. https://doi.org/10.1080/0142159X.2021.1948522

Barrows, H. S. (1993). An overview of the uses of standardized patients for teaching and evaluating clinical skills. AAMC. *Academic Medicine*, *68*(6), 443–451. https://doi.org/10.1097/00001888-199306000-00002

Berendonk, C., Stalmeijer, R. E., & Schuwirth, L. W. T. (2013). Expertise in performance assessment: assessors' perspectives. *Advances in Health Sciences Education*, *18*(4), 559–571. https://doi.org/10.1007/s10459-012-9392-x

Borhani-Haghighi, A. (2022). How Can Clinical Communication Skills Improve Patient-Physician Relationship Building? *Galen Medical Journal*, *11*. https://doi.org/10.31661/gmj.v11i.2480

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Brown, J. (2012). Perspective: clinical communication education in the United Kingdom: some fresh insights. *Academic Medicine*, *87*(8), 1101–1104. https://doi.org/10.1097/ACM.0b013e31825ccbb4

Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity*, *56*(3), 1391–1412. https://doi.org/10.1007/s11135-021-01182-y

Chahine, S., Holmes, B., & Kowalewski, Z. (2016). In the minds of OSCE examiners: uncovering hidden assumptions. *Advances in Health Sciences Education*, *21*(3), 609–625. https://doi.org/10.1007/s10459-015-9655-4

Cheng, A., Kessler, D., Mackinnon, R., Chang, T. P., Nadkarni, V. M., Hunt, E. A., Duval-Arnould, J., Lin, Y., Cook, D. A., Pusic, M., Hui, J., Moher, D., Egger, M., & Auerbach, M. (2016). Reporting guidelines for health care simulation research: extensions to the CONSORT and STROBE statements. *Advances in Simulation*, *1*(1), 25. https://doi.org/10.1186/s41077-016-0025-y

Chong, L., Taylor, S., Haywood, M., Adelstein, B.-A., & Shulruf, B. (2017). The sights and insights of examiners in objective structured clinical examinations. *Journal of Educational Evaluation for Health Professions*, *14*, 34. https://doi.org/10.3352/jeehp.2017.14.34

Churchouse, C., & McCafferty, C. (2012). Standardized Patients Versus Simulated Patients: Is There a Difference? *Clinical Simulation in Nursing*, *8*(8), e363–e365. https://doi.org/10.1016/j.ecns.2011.04.008

Cleland, J. A., Abe, K., & Rethans, J.-J. (2009). The use of simulated patients in medical education: AMEE Guide No 42. *Medical Teacher*, *31*(6), 477–486. https://doi.org/10.1080/01421590903002821

Cushing, A. M. (2015). Learning patient-centred communication: The journey and the territory. *Patient Education and Counseling*, *98*(10), 1236–1242. https://doi.org/10.1016/j.pec.2015.07.024

Dawes, R. M., Faust, D., & Meehl, P. E. (1989). Clinical Versus Actuarial Judgment. *Science*, *243*(4899), 1668–1674. https://doi.org/10.1126/science.2648573

Deveugele, M. (2015). Communication training: Skills and beyond. *Patient Education and Counseling*, *98*(10), 1287–1291. https://doi.org/10.1016/j.pec.2015.08.011

Duran, M., & Hendrix, J. M. (2023). The Role of Videotaped Clinical Skills Aggregated Peer Evaluations in the Enhancement of Evaluation Skills of Individual Medical School Faculty Members. *Cureus*. https://doi.org/10.7759/cureus.37871

Epstein, R. M. (2007). Assessment in Medical Education. *New England Journal of Medicine*, *356*(4), 387–396. https://doi.org/10.1056/NEJMra054784

Ericsson, K. A. (2006). An Introduction to *The Cambridge Handbook of Expertise and Expert Performance* : Its Development, Organization, and Content. In *The Cambridge Handbook of Expertise and Expert Performance* (pp. 3–20). Cambridge University Press. https://doi.org/10.1017/CBO9780511816796.001

Gormley, G. (2011). Summative OSCEs in undergraduate medical education. *The Ulster Medical Journal*, *80*(3), 127–132.

Govaerts, M. J. B., Schuwirth, L. W. T., Van der Vleuten, C. P. M., & Muijtjens, A. M. M. (2011). Workplace-based assessment: effects of rater expertise. *Advances in Health Sciences Education*, *16*(2), 151–165. https://doi.org/10.1007/s10459-010-9250-7

Halperin, E. C. (2000). Grievances against physicians: 11 years' experience of a medical society grievance committee. *Western Journal of Medicine*, *173*(4), 235–238. https://doi.org/10.1136/ewjm.173.4.235

Harden, R. M., Stevenson, M., Downie, W. W., & Wilson, G. M. (1975). Assessment of clinical competence using objective structured examination. *BMJ*, *1*(5955), 447–451. https://doi.org/10.1136/bmj.1.5955.447

Howley, L. D. (2004). Performance Assessment in Medical Education. *Evaluation & the Health Professions*, *27*(3), 285–303. https://doi.org/10.1177/0163278704267044

Hyde, S., Fessey, C., Boursicot, K., MacKenzie, R., & McGrath, D. (2022). OSCE rater cognition – an international multi-centre qualitative study. *BMC Medical Education*, *22*(1), 6. https://doi.org/10.1186/s12909-021-03077-w

Jackson, M., & Calman, K. (2006). Medical Education past, present and future. *Medical Education*, *40*(3), 190–192. https://doi.org/10.1111/j.1365-2929.2006.02396.x

Khan, K. Z., Ramachandran, S., Gaunt, K., & Pushkar, P. (2013). The Objective Structured Clinical Examination (OSCE): AMEE Guide No. 81. Part I: An historical and theoretical perspective. *Medical Teacher*, *35*(9), e1437–e1446. https://doi.org/10.3109/0142159X.2013.818634

Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, *42*(8), 846–854. https://doi.org/10.1080/0142159X.2020.1755030

Laidlaw, A., & Hart, J. (2011). Communication skills: An essential component of medical curricula. Part I: Assessment of clinical communication: AMEE Guide No. 51. *Medical Teacher*, *33*(1), 6–8. https://doi.org/10.3109/0142159X.2011.531170

Lane, C., & Rollnick, S. (2007). The use of simulated patients and role-play in communication skills training: A review of the literature to August 2005. *Patient Education and Counseling*, *67*(1–2), 13–20. https://doi.org/10.1016/j.pec.2007.02.011

Lee, G. B., & Chiu, A. M. (2022). Assessment and feedback methods in competency-based medical education. *Annals of Allergy, Asthma & Immunology*, *128*(3), 256–262. https://doi.org/10.1016/j.anai.2021.12.010

Lim, A., Krishnan, S., Singh, H., Furletti, S., Sarkar, M., Stewart, D., & Malone, D. (2023). Linking assessment to real life practice – comparing work based assessments and objective structured clinical examinations using mystery shopping. *Advances in Health Sciences Education*. https://doi.org/10.1007/s10459-023-10284-1

Lovink, A., Groenier, M., Van der Niet, A., Miedema, H., & Rethans, J.-J. (2021). The contribution of simulated patients to meaningful student learning. *Perspectives on Medical Education*, *10*(6), 341–346. https://doi.org/10.1007/S40037-021-00684-7

Lyle, J. (2003). Stimulated recall: a report on its use in naturalistic research. *British Educational Research Journal*, *29*(6), 861–878. https://doi.org/10.1080/0141192032000137349

Makoul, G., & Schofield, T. (1999). Communication teaching and assessment in medical education: an international consensus statement. *Patient Education and Counseling*, *37*(2), 191–195. https://doi.org/10.1016/S0738-3991(99)00023-3

Malouff, J. M., & Thorsteinsson, E. B. (2016). Bias in grading: A meta-analysis of experimental research findings. *Australian Journal of Education*, *60*(3), 245–256. https://doi.org/10.1177/0004944116664618

Manalastas, G., Noble, L. M., Viney, R., & Griffin, A. E. (2021). What does the structure of a medical consultation look like? A new method for visualising doctor-patient communication. *Patient Education and Counseling*, *104*(6), 1387–1397. https://doi.org/10.1016/j.pec.2020.11.026

McManus, I., Thompson, M., & Mollon, J. (2006). Assessment of examiner leniency and stringency ('hawk-dove effect') in the MRCP(UK) clinical examination (PACES) using multi-facet Rasch modelling. *BMC Medical Education*, *6*(1), 42. https://doi.org/10.1186/1472-6920-6-42

Newble, D. (2004). Techniques for measuring clinical competence: objective structured clinical examinations. *Medical Education*, *38*(2), 199–203. https://doi.org/10.1111/j.1365-2923.2004.01755.x

Okuda, Y., Bryson, E. O., DeMaria, S., Jacobson, L., Quinones, J., Shen, B., & Levine, A. I. (2009). The Utility of Simulation in Medical Education: What Is the Evidence? *Mount Sinai Journal of Medicine: A Journal of Translational and Personalized Medicine*, *76*(4), 330–343. https://doi.org/10.1002/msj.20127

Oudkerk Pool, A., Govaerts, M. J. B., Jaarsma, D. A. D. C., & Driessen, E. W. (2018). From aggregation to interpretation: how assessors judge complex data in a competency-based portfolio. *Advances in Health Sciences Education*, *23*(2), 275–287. https://doi.org/10.1007/s10459-017-9793-y

Patrício, M. F., Julião, M., Fareleira, F., & Carneiro, A. V. (2013). Is the OSCE a feasible tool to assess competencies in undergraduate medical education? *Medical Teacher*, *35*(6), 503–514. https://doi.org/10.3109/0142159X.2013.774330

Phung, D. Van, & Michell, M. (2022). Inside Teacher Assessment Decision-Making: From Judgement Gestalts to Assessment Pathways. *Frontiers in Education*, *7*. https://doi.org/10.3389/feduc.2022.830311

Pritchard, S. A., Denning, T., Keating, J. L., Blackstock, F. C., & Nestel, D. (2020). "It's Not an Acting Job … Don't Underestimate What a Simulated Patient Does": A Qualitative Study Exploring the Perspectives of Simulated Patients in Health Professions Education. *Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare*, *15*(1), 21–29. https://doi.org/10.1097/SIH.0000000000000400

Rethans, J.-J., Grosfeld, F. J. M., Aper, L., Reniers, J., Westen, J. H., van Wijngaarden, J. J., & van Weel-Baumgarten, E. M. (2012). Six formats in simulated and standardized patients use, based on experiences of 13 undergraduate medical curricula in Belgium and the Netherlands. *Medical Teacher*, *34*(9), 710–716. https://doi.org/10.3109/0142159X.2012.708466

Rider, E. A., & Keefer, C. H. (2006). Communication skills competencies: definitions and a teaching toolbox. *Medical Education*, *40*(7), 624–629. https://doi.org/10.1111/j.1365-2929.2006.02500.x

Silverman, J. (2009). Teaching clinical communication: A mainstream activity or just a minority sport? *Patient Education and Counseling*, *76*(3), 361–367. https://doi.org/10.1016/j.pec.2009.06.011

Stewart, M. A. (1995). Effective physician-patient communication and health outcomes: a review. *CMAJ : Canadian Medical Association Journal = Journal de l'Association Medicale Canadienne*, *152*(9), 1423–1433.

Taylor, D. M., Wolfe, R., & Cameron, P. A. (2002). Complaints from emergency department patients largely result from treatment and communication problems. *Emergency Medicine Australasia*, *14*(1), 43–49. https://doi.org/10.1046/j.1442-2026.2002.00284.x

ten Cate, O., & Regehr, G. (2019). The Power of Subjectivity in the Assessment of Medical Trainees. *Academic Medicine*, *94*(3), 333–337. https://doi.org/10.1097/ACM.0000000000002495

Virk, A., Joshi, A., Mahajan, R., & Singh, T. (2020). The power of subjectivity in competency-based assessment. *Journal of Postgraduate Medicine*, *66*(4), 200. https://doi.org/10.4103/jpgm.JPGM_591_20

Williams, S. (1998). Doctor-patient communication and patient satisfaction: a review. *Family Practice*, *15*(5), 480–492. https://doi.org/10.1093/fampra/15.5.480

Wolcott, M. D., & Lobczowski, N. G. (2021). Using cognitive interviews and think-aloud protocols to understand thought processes. *Currents in Pharmacy Teaching and Learning*, *13*(2), 181–188. https://doi.org/10.1016/j.cptl.2020.09.005

Zayyan, M. (2011). Objective Structured Clinical Examination: The Assessment of Choice. *Oman Medical Journal*, 219–222. https://doi.org/10.5001/omj.2011.55

Appendix

Appendix A: Rubric

	Rubric Consultvaardigheden - Technische Geneeskunde (© docenten VCPG)					
	Levels / **Onderdeel**	**1** Onvoldoende	**2** Voldoende 1e jaar	**3** Voldoende 2e jaar Goed 1e jaar	**4** Voldoende 3e jaar Goed 2e jaar	**5** Goed 3e jaar
Psychologisch construct	**RELATIE**	Maakt niet actief contact met de patiënt, toont onvoldoende interesse in de patiënt en zijn beleving, heeft een passieve houding, weet gevoelens/beleving van de patiënt en zichzelf niet te hanteren.	Hanteert gepaste omgangsvormen, toont respect, maakt actief contact, heeft een actieve houding, kijkt de patiënt aan, is geinteresseerd in de beleving van de patiënt; vraagt hier naar.	Reageert op non-verbale signalen van de patiënt, geeft aandacht aan beleving/gevoelens van de patiënt, toont professionaliteit, is hulpvaardig en begripvol	Herkent en accepteert denkbeelden van de patiënt, hanteert emoties bij de patiënt en bij zichzelf, past gevoelsreflecties doelmatig toe in complexe situaties,	Kan de relatie onderwerp van gesprek maken, stelt grenzen en kan deze verantwoorden, kan signalen van de patiënt herkennen en kan hier op inspelen, hanteert de complexiteit van de situatie, achterhaalt onderliggende emoties.
Psychologisch construct	**STRUCTUUR EN REGIE**	Geeft regie uit handen, laat zich leiden door de patiënt, biedt geen duidelijkheid, is te sturend en directief	Geeft doel van het gesprek weer, betrekt de patiënt bij de gang van zaken, past samenvattingen toe.	Neemt en behoudt de regie, geeft plan van aanpak voor het consult, past samenvattingen doelmatig toe, markeert fasen in het consult	Neemt en behoudt de regie en weet hier flexibel mee om te gaan, biedt daarmee ruimte aan de patiënt en weet leiding te houden over het gesprek.	Kan flexibel omgaan met plan van aanpak voor het consult en biedt kaders waarbinnen alle fasen van het consult aan de orde komen, speelt in op de patiënt en de situatie.
Psychologisch construct	**PRINCIPES VAN (PATIENT)COMMUNICATIE**	Stelt veelal gesloten vragen, vraagt niet door, luistert niet naar wat er vertelt wordt en geeft geen samenvattingen	Kan op basisniveau: luisteren, doorvragen, open vragen stellen en samenvatten. Heeft een juiste balans tussen open en gesloten vragen.	Kan op basisniveau: stiltes hanteren, concretiseren en sluit met open vragen aan op het verhaal van de patiënt.	Luistert aandachtig, vraagt doortastend door, geeft heldere samenvattingen en concretiseert. 2e jaar: kan dit toepassen in onverwachte situaties 3e jaar: kan dit toepassen in complexe situaties.	Komt tot de essentie in het consult, stelt prioriteiten en stelt zich flexibel op. Kan dit toepassen in complexe situaties.

	Rubric Consultvaardigheden - Technische Geneeskunde (© docenten VCPG)					
	Levels / **Onderdeel**	**1** Onvoldoende	**2** Voldoende 1e jaar	**3** Voldoende 2e jaar Goed 1e jaar	**4** Voldoende 3e jaar Goed 2e jaar	**5** Goed 3e jaar
Medisch deel	**1e DEEL VAN HET CONSULT: KENNISMAKING & VRAAGVERHELDERING**	Stelt zichzelf onvoldoende voor, geeft geen plan van aanpak voor het consult, stelt veelal gesloten vragen, exploreert hulpvraag onvoldoende, vraagt het verhaal van de patiënt te minimaal uit en plaatst dit niet in een breder perspectief.	Begroet de patiënt, stelt zichzelf voor, stelt uitnodigende openingsvraag, exploreert hulpvraag van de patiënt, vraagt het verhaal van de patiënt uit in breder perspectief (SCEGS)	Stelt zichzelf volledig voor, geeft uitleg over rol en functie, geeft plan van aanpak voor het consult, concretiseert hulpvraag en vraagt hierop door.	Gebruikt gepast de voorkennis uit het dossier, reageert adequaat op wat de patiënt vertelt, komt op een efficiënte manier tot de essentie.	Kan voorgaande flexibel toepassen in een complexe situatie.
Medisch deel	**2e DEEL VAN HET CONSULT: ANAMNESE & LICHAMELIJK ONDERZOEK**	1e jaar: n.v.t. Vraagt de speciele en algemene anamnese onvolledig uit. Geeft geen uitleg voorafgaand aan en tijdens het LO. Heeft geen contact tijdens LO met de patiënt.	N.v.t.	1e jaar: n.v.t. Vraagt aan de hand van voorinformatie uit het dossier de speciele en algemene anamnese uit. Geeft uitleg over LO en voert dit uit, behoudt contact met de patiënt.	Zorgt voor een soepel verloop, heeft op een natuurlijke manier contact met de patiënt, straalt zelfvertrouwen en deskundigheid uit. Kan omgaan met onverwachte situaties tijdens deze fase.	Kan flexibel omgaan met complexe situaties tijdens deze fase.
Medisch deel	**3e DEEL VAN HET CONSULT: BEVINDINGEN, BELEID EN AFRONDING**	Geeft geen afsluitende samenvatting, geeft geen ruimte voor vragen, neemt niet/teveel de leiding in het afronden van het consult, laat de patiënt in onduidelijkheid. 1e jaar n.v.t.: onvoldoende beleid: Geen afstemming met de patiënt qua inhoud, niveau en hoeveelheid van informatie, geeft onjuiste informatie.	Afronding: geeft een afsluitende samenvatting, checkt of de patiënt vragen heeft, beëindigt actief het consult, begeleidt patiënt naar de deur. N.v.t.: bevindingen en beleid	1e jaar: n.v.t. Geeft bevindingen weer, geeft heldere en correcte uitleg over behandeling/diagnostiek, stemt beleid af met de patiënt, komt met de patiënt tot een plan van aanpak, vraagt (schriftelijk) informed consent en informeert de patiënt hiervoor voldoende.	Ondersteunt uitleg met beelden, grijpt terug op verhaal van de patiënt in eerste gedeelte van het consult. Kan omgaan met onverwachte situaties en kan afwijken van eigen plan van aanpak en ruimte geven aan de patiënt.	Kan flexibel omgaan met complexe situaties tijdens deze fase.

Appendix B: Assessment Form

Beoordelingslijst VC & PG 2

Naam student:	***Beoordelaar:***
	Datum:

Deel 1 Fase 1: KENNISMAKING, CONTACT LEGGEN EN AANLEIDING
Openen, begroeting, contact leggen, condities scheppen (o.a. *accommoderen, aandacht geven, aansluiten, concretiseren, vragen stellen*), opbouw gesprek bespreken

Fase 2: VRAAGVERHELDERING, HET VERHAAL VAN DE PATIËNT
Exploratie, hulpvraag en klacht, zorgen (*o.a. open vragen, kleine aanmoedigingen, gevoelsreflecties, parafraseren, samenvatten*)

zeer matig _____ | _____ ***heel goed***

Deel 2 Fase 3-4: ANAMNESE EN LICHAMELIJK ONDERZOEK
Anamnestische informatie vanuit dossier zonodig checken bij patiënt, ontbrekende anamnestische gegevens uitvragen
+ Uitleg en uitvoering lichamelijk onderzoek

zeer matig _____ | _____ ***heel goed***

Deel 3 Fase 5-6: BEVINDINGEN EN BELEID
Uitleg bevindingen + perspectief, voorstel + uitleg over mogelijkheden vervolg, bespreekt beleid sámen met de pt., afspraken over vervolg

Fase 7: AFRONDING
Afsluitende samenvatting, check of patiënt instemt, of de patiënt nog vragen heeft
actief beëindigen van het consult, de patiënt naar de deur begeleiden

zeer matig _____ | _____ ***heel goed***

Geheel: BEJEGENING / RELATIE Maakt actief contact (aankijken, reageren op signalen), laat merken geïnteresseerd te zijn in de beleving. Erkent/accepteert denkbeelden/gevoelens van de pt., heeft aandacht voor emotionele gevoelsuitingen van de pt., toont zich hulpvaardig en begripvol, betrekt patiënt bij de gang van zaken (*o.a. aandacht geven, gevoel reflecteren, stiltes hanteren, actief luisteren, parafraseren*)

STRUCTUUR/REGIE Leiding over het gesprek met behoud van pt.contact en bep. mate van flexibiliteit (*o.a. parafraseren, samenvatten, markeren*)

zeer matig _____ | _____ ***heel goed***

EINDOORDEEL TOTAAL ***zeer matig*** _____ | _____ ***heel goed***

Toelichting:

Appendix C: Interview Protocol

Protocol interviews

Inleiding voorafgaand aan het de sessie

Ik wil je ten eerste hartelijk danken dat je wil deelnemen aan de pilot voor mijn onderzoek. Ik neem in eerste instantie de informatie uit de informatiebrief met je door.

Doel van het interview/onderzoek:

Onderwijs met simulatiepatiënten maakt een belangrijk deel uit van het communicatieonderwijs van de verschillende opleidingen, zo ook bij Technische Geneeskunde aan de UT. Om meer zicht te krijgen op hoe deze vorm van onderwijs bijdraagt aan het leren van studenten is er een onderzoek gestart. Het algemene onderzoek van Annelies Lovink richt zich op het leren van studenten tijdens deze consulten en hoe simulatiepatiënten hieraan bijdragen. Als aanvulling op dit onderzoek, doe ik een onderzoek naar het beoordelen van student-SP interacties en wat jouw gedachtegang is en welke factoren een invloed hebben op het beoordelingsproces. In het kort: hoe kijk jij naar dit consult, wat is het proces wat zich in je hoofd afspeelt? Welke ideeën komen in je op en hoe speelt dit mee in je beoordeling?

Wat gaat er in je om? Waarom is dit wel/niet goed? En hoe kom je hiertoe?

Invulling van het interview:

Voor het interview ga je samen met mij kijken naar een opname van een student-SP consult uit het einde van het 2de jaar. Zodra er gedachten in je op komen mag je de video stopzetten om deze te verwoorden. Het stopzetten van de video doe je wanneer je iets ziet wat mee gaat spelen in de beoordeling.

Er zijn uiteraard geen foute antwoorden/opmerkingen. Alle gedachten die in je opkomen kunnen waardevol zijn voor mijn onderzoek. Ik vind het dan ook prettig als je zo open mogelijk je gedachten met mij wil delen. Het is allemaal anoniem, dit betekent dat je ook ongefilterde antwoorden kan geven.

Onderzoek versus onderwijs:

Het onderzoek staat volledig los van je werk als docent bij het vak VCPG/de opleiding Klinische Technologie en heeft daarom ook geen invloed op je functie. Ik zit hier vanuit mijn rol als onderzoeker en niet vanuit mijn studentenrol.

Privacy:

Het interview zal worden opgenomen met een voice recorder en zal vervolgens worden uitgeschreven. De gegevens zullen vertrouwelijk en anoniem worden verwerkt en alleen gebruikt worden voor onderzoeksdoeleinden. De gegevens worden maximaal 10 jaar bewaard. Deelname aan het onderzoek is geheel vrijwillig. Je kan je ten alle tijden terugtrekken uit de studie, zonder dat je aangeeft waarom.

Ben je voldoende geïnformeerd? Heb je nog vragen?

Zou je het toestemmingsformulier willen ondertekenen?

Algemene vragen:

Deelnemersnummer:

Leeftijd:

Jaren ervaring:

Achtergrond (opleiding):

Datum:

Bedankt voor alle informatie! Dan gaan we nu beginnen met het onderzoek.

1. **Warming-up**

Lees de casusinformatie eens door. Wat zijn aspecten waarop je gaat letten tijdens het beoordelen van het consult?

Probeer je gedachten hardop uit te spreken. Er is geen goed of fout.

Na de warming-up: *Dit is iets wat wij tijdens deze sessie gaan doen. Ben je klaar om het consult te bekijken? Heb je nog vragen? Dan gaan we nu starten*

Start het interview en START DE OPNAME VAN HET CONSULT

2. **Video consult**

Instructie: *Dan gaan we nu samen naar het consult kijken uit het einde van het 2de jaar. Ik ga na de sessie nog een aantal verdiepende vragen stellen. Als je je gedachten wil verwoorden dan kan je je handopsteken of mij op een andere manier een seintje geven, dan stop ik de video. Nogmaals, probeer zo open mogelijk te vertellen welke gedachten er in je omgaan tijdens het beoordelen van het consult. Ben je er klaar voor? Dan gaan we nu beginnen!*

Vragen ter verdieping bij een pauze moment (nadat de docent zijn/haar gedachten heeft verwoord):

1. *Waar let je hier op en hoe kijk je hier naar?*
2. *Welke factoren spelen daarbij een rol?*
3. *Je zei nat dat je even wil afwachten. Hoe hangt dit samen met andere momenten in het consult?*
4. *Je zei net dat je even wil afwachten. Wat maakt dit moment belangrijker/minder belangrijk dan de vorige?*
5. *Wat zijn je gedachtes hier? Doet de student dit goed/minder goed en waarom?*

Dit herhalen voor alle momenten die worden aangegeven door de docent. Noteer elke keer de tijd in LS

vragen voor na het bekijken van het interview

Cognities & decision making:

- Hoe heeft je ervaring en training invloed op je beoordelingsproces? En hoe?
- Hoe kom je uiteindelijk tot je eindoordeel?
    - Hoe zorg je ervoor dat je de aandacht erbij houdt?
- Wat speelt been rol bij het beoordelen? En hoe spelen je eigen normen en waarden (bijvoorbeeld als patiënt mee)?

- Tijdens het beoordelen van consulten. Hoe spelen de eerder gevoerde consulten van een student mee? Stel het assessment gaat niet goed en je twijfelt of het een voldoende is, maar tijdens de oefensessies ging het telkens goed.
- Speelt een goede/slechte relatie met de student een rol? Zo ja, op wat voor een manier?
    - Zo nee, hoe weet je dit gescheiden te houden?
- Zijn voor jou de richtlijnen voor het beoordelen helpend of niet?
- Hoe zorg je ervoor dat je eerlijk en constant beoordeeld?
- Kan je omschrijven wat je belangrijk vindt bij het beoordelen van een consult?

Assessor expertise:

- Wat is je ervaring als het komt tot beoordelen van consulten?
    - Doorvragen op het antwoord.
- Hoe blijf je up-to-date met de nieuwste trends van het vak VCPG en de veranderingen die hierbij komen kijken?
- Hoe zorg je ervoor dat het beoordelingsproces eerlijk en unbiased is voor ieder interactie?