



Minna-Maria Mattila

## To be seen and heard

Medical students' experiences on interaction skills  
in and through drama-based approaches

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## Abstract

Author(s): Minna-Maria Mattila  
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This qualitative study aims to find out how a small group of medical students experience a workshop with drama-based approaches. The study is focused on analysing medical students' perceptions and experiences on strengthening interaction skills in and through drama-based approaches in a facilitator-led setting. The study is centred around an embodiment standpoint, through which participants' descriptions from experiences are being analysed. The research question is: In what ways can drama-based approaches serve in strengthening medical students' interaction skills?

This is a qualitative study with a phenomenological approach, describing human experiences and perceptions coming up via drama-based exercises in a workshop. The workshop was one-time-workshop (1,5-2 hours) with volunteer medical students. The data was collected using post-workshop questionnaires with open questions and analysed by using thematic analysis.

The analysis show five common themes from the students' answers: 1) Interaction skills are embodied, 2) Increased awareness of the other person and the sense of belonging, 3) Means to promote wellbeing, 4) Sense of embodied cognition, and 5) Drama-based workshop well-accepted. The findings show that the students are experiencing the contacts with the patients in a different way than earlier before the workshop. The participants aim to use explicit ways how to communicate verbally. Also, they aim to pay attention to wellbeing by consciously calming their minds and presence in interaction situations. The findings indicate that drama-based approaches seem to facilitate students' understanding of embodiment and transfer of experiences to patient care.

Drama-based workshop was well-accepted by participant students. The findings suggest educational interventions for developing body awareness and mind-body connection via embodied approaches. The findings encourage applying embodied activities for strengthening medical students' interaction skills.

Keywords: attentiveness, drama-based approaches, embodied cognition, embodiment, interaction skills, medical students

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# 1 Introduction

How can attending physicians be more attentive? In this study, I argue that a healthcare professional's ability to genuinely listen to the patient, not only to observe and examine the medical problem, is an essential element of providing care. In particular it entails engagement with a patient's perspective, lived experience, because a disease is not only a bodily experience, it affects a person's whole existence. (Bart, 2012; Pembroke, 2007; Heinämaa, 2009; Klaver & Bart, 2016.) Through this qualitative study, I aim to analyse medical students' perceptions and experiences when strengthening interaction skills with drama-based approaches in a voluntary workshop.

Leaving a physician's reception feeling unseen, unheard, and unsure is an experience too familiar to too many. Medicine is an embodied practice, referring to that people process, collect, create, and transform information through the body. There is not only a cognitive level but a physical, felt level, through which people come to know themselves, others, the world by using bodily sensations, gestures, movements, and interactions. (Merleau-Ponty, 2012; Shapiro, 2019; Sutela et al., 2021; Loue, 2022.) Naturally, functions of a physical body are central to medicine. When examining a patient, physicians must touch, feel, see, and hear them, to professionally collect information through their senses and body. However, generally medicine treats a patient (their body), more as an object than through an embodied experience or a mutual respectful connection between the patient and the physician. A humanistic practice that recognises the embodied nature of caring is necessary in medicine. There is a shared connection between a caregiver and a patient in which, for example touch can be used to express and communicate listening, presence, and empathy, and to share emotions. (Kelly et al., 2019; Kelly et al., 2020; Loue, 2022.) Healthcare professionals should attentively listen to what the patient is saying and experiencing, focus on being open, and not only focus on results and goals with the disease. Additionally, most healthcare settings require individual professionals to work in teams and attentiveness is also essential in teamwork interaction, which requires team

members to work together, communicate, and cooperate in a safe manner and remain alert in patient situations. (Lyubovnikova et al., 2015; Schmutz et al., 2019.)

As interaction skills are central to the profession, it is recognised that they must be taught, learned, and practiced during studies in faculties of medicine. (Lyubovnikova et al., 2015; Schmutz et al., 2019.) Published in 2020, the Finnish national learning outcomes for graduating physicians (Valmistuvan lääkärin osaamistavoitteet, 2020) list 139 competencies under three headings: professional values and actions, professional skills, and professional knowledge. Graduating medical students are expected to be able to apply their knowledge and skills competently and ethically and are held responsible in complex and uncertain situations. The required learning outcomes entail teamwork and interprofessional cooperation, patient safety and quality, tolerating uncertainty and complex working situations, and wellbeing. Under professional skills, the first dimension is interpersonal skills. These learning outcomes should guide the development of curricula and the content of teaching in the faculties of medicine. (Valmistuvan lääkärin osaamistavoitteet, 2020.)

Unfortunately, several studies about medical students' interaction skills training attitudes show that students' attitudes towards interaction skills training deteriorate as the studies progress (Bombeke et al., 2011; Koponen, 2012; Moral et al. 2019; Ruiz-Moral et al., 2021). The students give value to studying interaction skills and during clinical practice, and see training these skills important, useful, and practical, but their feelings towards and experiences of training interaction skills worsened. In addition to that, there are studies that show decrease of empathy during the medical studies (Hojat et al., 2004; Chen et al., 2007; Newton et al., 2008; Hojat et al., 2009; Neumann et al., 2011; Patel et al. 2019; Triffaux et al., 2019; Dinoff et al., 2023; Howick et al., 2023). Concerning is that both empathy and attitudes towards training interaction skills seem to weaken and decrease alongside with the studies based on these research publications. Such changes seem to stem from the workload of studying and clinical work, stress, and human tragedies that students face when working with

patients. In addition, at times also the unconcerned and disrespectful attitude of the role-models and learning environment can be seen. These factors can be influenced at the faculty level by reviewing and rethinking teaching approaches; in particular, the values and attitudes of the teaching staff at the faculties of medicine play a role in conveying a good example to the students.

Accordingly, medical students worldwide suffer a high level of distress. The results of a systematic review and meta-analysis (Frajerman et al., 2019) from 24 studies with 17 431 students revealed, that burnout among medical students is common. Studies show that competition, the exam load, hospital conditions and workload with the patients, medical uncertainty, responsibility and dealing with patients' suffering and death, are among factors that influence medical students' wellbeing. Also, management and teaching styles of the faculty staff are mentioned. (Nevalainen et al., 2010; Frajerman et al., 2019.) In addition, there can be conflict between values promoted in formal education and values they observe and experience in practice, both in the field and in their studies (Coulehan & Williams, 2003; Howick et al., 2023). Graduating medical students should be able to communicate clearly and effectively, listen and share thoughts, and show empathy and compassion. They should also be able to cope with the challenges of work and workload, uncertainty, and changes. (Valmistuvan lääkärin osaamistavoitteet, 2020.)

A study to newly graduated physicians from the University of Helsinki asked, how undergraduate medical education program helped them to accumulate the competencies required in working life (Vartiainen et al., 2020). The respondents (n=53, response rate 22%) assessed the development of their skills and knowledge in relation to national learning outcomes of graduating physicians. They were satisfied with the feedback received on interaction skills, ability to adopt continuous learning as part of professional values and learning good and safe consultation. Areas of development were poor correspondence with working life, lack of systematic assessment of competences and insufficient feedback from the teachers. The respondents felt they did not learn time management and

ways to cope with workload and uncertainty. They also felt that the actions and the example of the teaching staff did not help to cope. (Vartiainen et al., 2020.)

Overall, pertaining research on medical students' situation and wellbeing show that the students are in need for the resources on how to manage stress and uncertainty. Most of them start studying medicine happy and full of joy and empathy, but with time this may change. Medical students are often expected to act confident while at the same time they might feel inexperienced and are vulnerable to criticism and afraid of making mistakes. All this should be recognised, and preventive measures are needed. Would learning how to calm the mind and the body, and how to be more attentive in and through embodiment-based approaches, help students to cope?

In this study I argue, that to be able to be more attentive requires not only practicing concentration and presence but also a holistic concept of humanity. This means that the focus cannot be just the body and disease, but human being as a whole, referring to their emotionally, mentally, socially lived experiences. Such a view may affect the interaction between the patient and healthcare staff and the perceived empathy. (Baart, 2002; Pembroke, 2007; Rauhala, 2014; Klaver & Baart, 2016; Raatikainen et al., 2017.) The concept of humanity affects what kind of role models professionals are, also as pedagogues.

I work at medical students' skills lab in Faculty of Medicine. I meet and teach all the students during their study years 3–6. I meet our students when they come to hands on and simulation teachings, so I follow the growth and progress of our students throughout their clinical phase of the studies. The studies mentioned previously with worrying data about medical students' distress and change in attitudes requires attention. Distress, declined attitudes towards interaction training, and possible empathy decline are intertwined.

What interests me is creating presence and adding attentiveness by using active drama-based approaches and reflection in action. My curiosity and interest stirred from my observations about myself, what happened while I was performing

poems. It was something more than precepting other people's reactions and movements. I noticed, that when I was bodily present, I was more present with my mind and at the same time attentive with mind and body. In situations when performing in front of the audience, I was vigilant and sensitive, I could react to stimuli coming from the audience and react to what is happening around me." "Flesh talk", made it possible for me to have silent interaction with the audience, created a sense of belonging, and I was able to react during the performance. It was not until later that I became familiar with the concept embodied cognition. Despite of lacking the knowledge and term, this attention I had, led to the idea that could this perception be transferred as learning, to be implemented in practice. I started thinking about the question of whether interaction skills in healthcare can be taught via experience and reflection in different settings, than using simulated patient situations or role-play. Does removing the clinical setting and the need to focus on the patient's disease simultaneously, allow attention to be focused on experiences with the body and interaction, and facilitate embodied learning? Also, when exercises are being done in a group, together, this might remove the tension of being observed by the peers.

## 2 Conceptual framework

The conceptual framework explains the background and the importance of this study and presents the key concepts for analysing the data. Key concepts are also needed for discussing the relation between the concepts and findings of my study. The first subchapter 2.1 focuses on the medical students' attitudes towards interaction skills training, which is a factor, that influences many areas of my thesis. Subchapter 2.2 explains the importance of the teamwork interaction skills and opens its complexity. Subchapter 2.3 brings up the concept of embodied cognition according to which people's bodies are the source and the instrument of information and interaction. The final subchapter 2.4 is a review describing the importance of drama-based approaches and examples of approaches that are applied in medical education.

### 2.1 Challenge of interaction skills

How interaction skills are taught and assessed influence the learning outcome and also the attitude of the student. As stated in the introduction, several studies about medical students' interaction skills training attitudes show that students' attitudes towards interaction skills training deteriorate as the studies progress (Bombeke et al., 2011; Koponen, 2012; Moral et al. 2019; Ruiz-Moral et. al, 2021). The studies revealed that particularly affective attitudes, feelings, and experiences, of the students' receiving interaction training were less positive. This suggests that the change in students' attitudes is at least to some extent a result of the way that interaction skills are being taught. The students give value to the studying of interaction skills in studies and during clinical work and see training these skills as useful and practical, but their feelings and experiences in training interaction skills worsened. The students reported having problems putting theory into practice, and in small group teachings when they need to interview Simulated Patients (SP) they might feel uncomfortable and embarrassed in front of their peers. For example, in those situations, they might be afraid of not having enough

clinical skills to cope, and do not interact with the patient sufficiently or answer the patient's questions. Also, a summative assessment of interaction skills was mentioned as a source of stress and feelings of uncomfortableness. Interestingly, receiving constructive feedback was valued but it did not make the feelings of embarrassment and discomfort disappear. In addition, assessment may cause the representations of empathy rather than true act, as students might act in a way they are expected. (Bombeke et al., 2011; Moral et al., 2019; Laughey et al., 2021; Ruiz-Moral et. al., 2021.) All this may lead to a negative attitude towards interaction skills training.

Some studies show a decrease in empathy during medical studies (Hojat et al., 2004; Chen et al., 2007; Newton et al., 2008; Hojat et al., 2009; Neumann et al., 2011; Patel et al. 2019; Triffaux et al., 2019; Dinoff et al., 2023). This was seen to happen in the clinical phase of the studies and with increasing patient contacts. Most students start their studies happy and full of joy and empathy, but with time and reality, this may unfortunately change. Explanations found were for example heightened feelings of vulnerability, increased responsibility, and distress and pressure with the studies. Also, a lack of role models was mentioned. Studies showing empathy decline have also been seen as controversial, questioning study design and measures (self-reported ready-made scales such as Jefferson Scale of Physician Empathy (JSE-S), interviews, small group discussions rather than observational happening in patient situations), practical significance of measured change, and the impact of culture and context of those studies (Ferreira-Valente et al., 2017; Patel et al. 2019). Very recent review by Howick et al. (2023) synthesised the evidence, that why might medical students' empathy change throughout medical school. They found the same root-causes that the studies mentioned earlier and identified four themes: complexity (complex patients), hidden curriculum (role models, stressful organisational culture, prioritisation of biomedical knowledge, formal teaching style), acquired adaptations (cynicism, professional distancing, desensitisation), and capacity limits (experience, limits on emotional capacity). To enhance medical students' empathy the role of an 'empathic hidden curriculum' should be acknowledged and it should be developed (Howick et al., 2013.)

The same factors regarding possible empathy decline come up in a systematic review and meta-analysis (Frajerman et al., 2019) from 24 studies with 17 431 students revealing that burnout among medical students is common. One student out of two is suffering from burnout, and psychological distress is higher among advanced students. As the factors for this, the studies mentioned competition, the exam load, hospital conditions and workload, medical uncertainty, responsibility, dealing with patients' suffering and death, and management styles (Nevalainen et al., 2010; Frajerman et al., 2019; Kilic et al. 2021). In addition, there can be conflict between values promoted in formal education and values they observe in practice 'hidden curriculum' (such as unemphatic role-models, cynicism, prioritisation of biomedical knowledge, and time pressure), both in the field and in studies (Coulehan & Williams, 2003; Howick et al., 2023). Personal and professional values are related, and personal values influence the professional life; there might be value conflicts and conflict with one's own being and outside pressure.

The respondents of the study to newly graduated physicians from the University of Helsinki felt, that they did not learn time management and ways to cope with workload and uncertainty. They also felt that the actions and the example of the teaching staff did not help to cope. (Vartiainen et al., 2020.) The stress that medical students suffer worldwide can be influenced by making improvements at the faculty level. The students' suffering and emotions should be considered and recognised and ways to help should be created. The studies highlight the importance of carefully designing and implementing interaction to the training methods in the curriculum. And their far-reaching consequences. Would creating a working culture that acknowledges uncertainty in medicine be a start to finding ways how to cope with it (Kim & Lee, 2018)?

The students need to nurture their self-awareness and broaden their vision by reflecting on their attitudes and prejudices. Already nearly twenty years ago an editorial in *Medical Education* (Spencer, 2004) suggested having humanities in the curriculum and that the empathic response should be a part of interaction skills training. Spencer (2004) concludes that teachers must pay attention to their

relationships with their learners; “How can students be expected to behave appropriately if they are not treated with respect and empathic understanding?” (Spencer, 2004.)

In my literature review, the research found several reasons for low empathy levels and reveals, that the most important underlying factors are the large number of healthcare users and lack of time, the professionals’ focus on medical treatment and therapy, lack of training in empathy, and the predominant culture in medical schools (Moudatsou et al., 2020). Overall, as commonly known and much discussed, the healthcare field in Finland is suffering from a lack of staff, and this problem is not easy to solve. The students need resources on how to manage stress and uncertainty. Learning how to be present and attentive in studies and daily clinical practice may serve as a useful way how to cope with uncertainty. (Kim & Lee, 2018.) A working culture that acknowledges uncertainty in medicine and relies on teamwork can be a way how to teach coping with distress.

## 2.2 Importance of teamwork and interaction skills

Most healthcare settings require individuals to work in interprofessional teams. A team is an identifiable social work unit consisting of two or more people with specific roles who interact dynamically toward a common goal and have a limited lifespan (WHO, 2012; Schmutz et al., 2019). Interprofessional team consist of members coming from various professions. Team members have different backgrounds, knowledge, experience, stress, and fatigue level. Therefore, they might have different understandings of how to work together, and they also make different perceptions of the situation and the environment. This is why the ability to use clear communication and good teamwork interaction skills are important. (Schmutz et al., 2019.) Teamwork consists of team members’ abilities to communicate, share information, share observations and expertise, coordinate the performance, and cooperate with each other (Salas et al., 2008; WHO, 2012).

The quality of healthcare teamwork is linked to good and safe patient care. Health care providers share responsibility, and they work together to provide care. In Finland, patient safety, interprofessional collaboration and training are enshrined by law (Health Care Act, 2010). The Finnish Health Care Act states, that health care units shall be managed by multidisciplinary experts to maintain a system of safe high-quality care, cooperation between different professions, and the development of better treatment and operating practices. Healthcare personnel have an obligation to undertake supplementary training, which needs to be ensured by authorities. Also, each healthcare unit should produce a plan for quality management and for ensuring patient safety. (Health Care Act, 2010.)

At international level, the World Health Organization Patient Safety Curriculum Guide for Medical Schools (2009) and the updated version The Multi-professional Edition of the WHO Patient Safety Curriculum Guide (2011) list important topics to be implemented in the curriculum. Topics listed are for example basic knowledge about patient safety, understanding systems and quality improvement of patient care. In addition, the guide lists the practice of interprofessional interaction skills training to be able to act as an effective team player and engaging with patients and carers, managing fatigue and stress and ethical behaviour and practice. The guide clarifies the significance of each topic and serves as a guide on how to create educationally meaningful learning environments using for example problem-based learning and simulation. It also gives suggestions for appropriate assessment methods for intended learning outcomes. (Walton et al., 2010; WHO, 2009; WHO, 2011.) Along the same lines are the Finnish national learning outcomes of graduating physicians (Valmistuvan lääkärin osaamistavoitteet, 2020).

In healthcare settings, the term Non-Technical Skills (NTS) is widely used when referring to cognitive and social skills. The definition of NTS refers to social, cognitive, and personal skills such as communication, teamwork, and leadership skills, and situational awareness competencies (Gordon et al., 2015; Rosen et al., 2018). NTS also includes personal behaviours such as showing compassion,

integrity, and honesty and recognising stress and fatigue in others (Gordon et al., 2015; Rosen et al., 2018).

In studies regarding teamwork in connection to patient outcomes, injuries, and adverse events, teamwork has been shown to play an important role in the generation or prevention of such events (Lyubovnikova et al., 2015). Some problems in teamwork are associated not only with adverse events that could have been prevented, but also with staff fatigue, burnout, and turnover (Rosen et al., 2018). The clinical expertise of individual team members is important, and often the problem is not the lack of medical knowledge but transferring this knowledge into meaningful actions in complex situations and problems in teamwork interaction (Rall & Gaba, 2005; Schmutz et al., 2019). Research focusing on healthcare professionals' perceptions of teamwork showed that both perceptions and attitudes towards safe teamwork are related to quality and safety of care. In addition, perceptions of teamwork and leadership are linked to staff wellbeing that can affect the quality of patient care. (Manser, 2009.)

Research on teamwork interaction skills that are used when performing well in clinical situations emphasises good explicit communication, collaboration, and leadership. Investigating the relationship between teamwork and performance in healthcare teams showed, that teamwork relates to performance regardless of the characteristics of the team or task. (Lyubovnikova et al., 2015; Schmutz et al., 2019.) That is why in healthcare the importance of teamwork should be recognised and sought to improve for the benefit of their patients.

Experiencing different communication strategies and outcomes may facilitate learning. In my bachelor's thesis "Teamwork interaction skills training in healthcare" (Mattila & Laaksonen, 2021), I produced an overview of how team communication skills are currently practiced among healthcare professionals to identify drama-based approaches. The research method used was a descriptive literature review, in which data were collected using Medic, Cinahl, and PubMed databases and a manual search. Fourteen studies between 2015-2020 were selected as the final material. Drama-based approaches were used in three:

mental practice (Lorello et al., 2016), role play (Merckaert et al., 2015) and Forum theatre method (Lundén et al., 2017). Based on the analysis of those studies, drama-based approaches seemed to improve teamwork and collaboration by engaging the participants at a deeper level.

Acai et al. (2017) examined the outcomes of the visual and performing arts in developing healthcare professionals' teamwork interaction skills in a review study. As a result, they found out, that in many of the studies participants felt positively about the experience, had gained an awareness of its importance, and improved their teamwork interaction skills in professional practice. Outcomes included improvements in healthcare professionals' abilities to notice and appreciate multiple perspectives, work effectively with individuals from different backgrounds, listen to and provide empathy and support to others, and understand group processes. This outcome is consistent with their phenomenological study on the use of creative professional development workshops to improve teamwork interaction skills (Acai et al., 2016).

Adamson et al. (2018) suggest empathy as an important ingredient for interprofessional teamwork. They studied health professionals' experiences on empathy and identified four stages of interprofessional empathy for understanding teamwork. First stage is conscious interactions in work relationships and respect for each team member as a human being. Second stage is dialogic communication, interaction is two-way and requires discussion and acknowledgement. Third stage, consolidation of understandings refers to deepening understanding and building bridges between team members. Fourth stage is nurturing the collective spirit. This fosters the wellbeing of the team and increases the sense of inclusion. In developing empathetic relationships in team collaboration, interaction plays a key role. Interaction should be dialogical. Also, there should be room to recognise the role of personality differences and negotiating conflicts. This increases the psychological safety of the team. (Adamson et al. 2018.)

What is worrying, is that research shows that health professionals can have difficulties in their practice to communicate empathetically (Moudatsou et al., 2020). Their review on concept and meaning of empathy in health and social care professionals found several reasons for this. The most important underlying factors are the large number of healthcare users and lack of time, the professionals' focus on medical treatment and therapy, lack of training in empathy, and the predominant culture in medical schools. In their review, Moudatsou et al. (2020) suggest, that developing empathetic skills should not only be in the teaching process of health and social care undergraduate students, but also in the lifelong and continuous education of professionals, preferably in a hands-on way. (Moudatsou et al., 2020.) Healthcare staff should be aware of the importance of empathy and be able to recognise even a short empathy moment while working. This can be done for example when helping in daily activities. There is a difference if a caring person is present or thinking about something else at the same time when interacting with a patient. Cultivating empathy is a tool for the better ability to encounter patients, good care and for wellbeing at work (Montgomery et al., 2017; Raatikainen et al., 2017; Moudatsou et al., 2020).

### 2.3 Embodied cognition in healthcare interaction

Medicine is an embodied practice, and in an ideal situation care is provided through embodied experience and the connection between the patient and the physician. However, too often medicine treats the body, the patient, as an object. The tension between caring and clinical competence can be recognised. However, caring does not exclude clinical competence. When examining the patient there is a difference if the physician is present when they listen, look, feel, and focus using all their senses or explores the patient quickly without concentrating. Through embodiment individuals are able to sense and be holistically aware of others. This opens room for empathy. When there is a shared connection between the caregiver and the patient, for example, touch can be

used to create trust, express listening and presence, empathy and to share emotions. (Kelly et al., 2019; Kelly et al., 2020; Loue, 2022.)

Healing the embodied person or curing the body differ from each other. Using knowledge in cognitive level is not sufficient because people are human beings; therefore, humanistic practice with recognizing embodied nature of caring is needed in medicine. (Klaver & Baart, 2016; Montgomery et al., 2017; Kelly et al., 2019; Loue, 2022.) This means the ability to genuinely listen to the patient, not only observe and examine the medical problem but the patient's perspective because a disease is not only a bodily experience, but it affects a person's whole existence. (Baart, 2002; Pembroke, 2007; Heinämaa, 2009; Rauhala, 2014; Klaver & Baart, 2016.)

What is embodiment then? It is knowledge that people have as given, something that makes us human beings. Being a human being means it is not possible to separate mind from the body. People do not communicate and interact only in cognitive level, but through a body they sense and communicate. People process, collect, create, transform information through their body and perceptions. By being present and making observations, I perceive myself in relation to my environment. By perceiving the other, the other becomes visible and together people are open and connected to their shared experience and being. Embodied cognition recognises both the body and the mind as inseparable and embodied. There is not only a cognitive level but a physical, felt level, people come to know themselves, others, the world by using bodily sensations, gestures, movements, and interactions. Also lived experiences are in the memory of human bodies. People are binding together information arriving with recollected information. This is ongoing, intertwined and often unconscious process. To become and be aware of this is a conscious process that requires practice. (Merleau-Ponty, 2012; Rantala, 2019; Shapiro, 2019; Sutela et al., 2021; Loue, 2022.)

Integration of mind and body and bodily awareness can facilitate ability for bodily listening. (Sutela et al., 2021; Loue, 2022.) For example, touch can be used unconsciously, without paying attention to the possibilities that connection

created. It is not self-evident that the meaning of touch is thought of and discussed as a way to communicate with patients. Although touching the patient is a physician's tool. Via touch or moving together it is possible to create embodied connection, to communicate emotionally showing empathy and presence. This can be used for pedagogical purposes in medical education to deepen understanding of empathy. (Kelly et al., 2020.) Using the example from outside healthcare, when listening to the music or being at the concert people are connected by music, lyrics, rhythm, and moving together. Sharing the same rhythm creates cohesion, people might move and sing together. There might be attendance and feeling of fellowship between individuals and in a group. The lyrics may be very personal and important, going straight into the body and thoughts. All this can cause agitation, joy and in some cases be even life changing. (Salami, 2019.)

Human beings cannot be anything but embodied. People's minds and bodies cannot be separated, human beings are not either or, people sense and connect to the world with their bodies, with the ambiguity of lived experiences. Embodied knowledge, how it manifests in lived experience, exists whether it is reflected or not. Then the question is that how it is possible to perceive it to be able to reflect, how to put embodied experiences and perceptions into words. (Rantala, 2019; Sutela et al., 2021; Loue, 2022.)

To be able to recognise something that is indefinite calls for presence, attentiveness needs to be consciously open. Comprehensive presence and awareness coming from embodiment can facilitate empathy and humanistic approach to patient care and cultivate caring. (Bart, 2002; Pembroke, 2007; Klaver & Bart, 2016; Montgomery et al., 2017; Sutela et al., 2021; Loue, 2022.)

## 2.4 Applying drama education in medical studies

In this study, I propose that healthcare professionals' interaction skills can be strengthened in and through arts and creativity related approaches. Arts can be

defined in terms of activities that provide experiences: performing arts activities, visual arts participation, digital arts activities, literary arts, cultural engagement, and heritage engagement. These definitions include a diverse range, viewing art objects, being a spectator, and participatory, active engagements. (Warran et al. 2022). Arts can have health-promoting elements, for example reduces stress and anxiety, strengthen interaction skills, cohesion, empathy, and self-esteem, and influences empowerment. In particular, it is not only arts and meanings of arts activities itself, but interactions around, social context. Participatory arts, such as interactive theatre, improvisation, and role play can improve communication skills, both verbal and non-verbal, with the team and patients. In addition, having a possibility to observe and experience emotions and experiences might help to raise awareness toward personal values and beliefs, and accordingly, reinforce interaction skills and understanding of the impact of disease on patients. (Salas et al., 2013; Haidet et al., 2016; Fancourt & Finn, 2019.)

In drama education arts-based approaches are applied in teaching. Various phenomena and things are examined through the creation of fiction and roles, in a safe context. Drama education speaks about the concept thinking by doing. People act together, consciously, the action evokes feelings and thoughts that evoke meanings. Then these experiences and meanings are transferred into social reality and vice versa (Heikkinen, 2005; Heikkinen, 2017.) In healthcare education and training, for example when using simulation and role-play, participators operate in an imaginary world and through roles. The participants look at the fictional situation both as themselves and in an imaginary role at the same time. They are learning through experience, and through the ability to reflect on what has been learned through one's own experiences.

Simulated Patients (SP) and role-play are widely used in medical students' interaction training, typically for practicing the appointment situation (Koponen, 2012; Patel et al., 2019). In her doctoral dissertation, Koponen (2012) applied different experiential learning methods in medical education: Simulated Patients (SP), role-play, and Theatre in Education (TIE). Simulated patients are persons who are playing the role of the patient according to a pre-agreed script,

professional actors, or other persons, specially trained for this. When using role-play, the students in a group are playing themselves and the role of the patient. Typically, in the workshops some student interviews an SP, while the rest observe. After each patient case, reflective discussions are creating a link between what happened in the simulated patient situation and reality. The student receives feedback from the teaching staff, SP, and maybe from the peers also. In TIE a short play with a specific theme is combined with workshop exercises, which discuss the themes of the play. Koponen (2012) found that reflective participation was different in different methods. When using the SP and role play, the importance of feedback discussion was emphasised, while in TIE the importance of feedback discussion decreased, and reflection took place during the activity. Interestingly, based on the results of Koponen's research (2012), experiential learning methods can help medical students to be more positive about learning interaction skills and understanding the importance of interaction skills in physician work. Drama education offers tools to learn together as a team, instead of individual performances. When using SP, usually the students need to interview the patient individually, in front of their peers, which might make them feel uncomfortable and embarrassed and hinder performance and learning. Another way to practice could be that medical students need to also play the role of the patient in simulated patient cases. Especially if they have to put on patient clothes and lie in bed, puts them in the role of the patient and gives them insight from the patient's perspective. What kind of experience is it to lie in bed and people around you talk about you, and maybe past you? Students get the opportunity to experience and feel what it is like to be a patient. (Loue, 2022.)

Jones et al. (2017) studied how including arts-based activities in curricula might impact medical students and their professional development. They interviewed students who collaborated in teams to create projects based on themes arising from conversations with patients and their families. Three themes emerged from the analysis: the project enhanced the students' sense of personal growth and development, sense of community and the development of collaboration and teamwork skills, and awareness of humanistic values in medicine. (Jones et al.,

2017.) De la Croix et al. (2011) found similar themes from the analysis of the extensive arts-based project with medical students.

As discussed earlier in this thesis, due to many reasons medical students suffer from distress (Frajerma et al., 2019). Scott et al. (2017) applied a drama-based workshop to help medical students develop interpersonal skills to deal with challenges in teaching and the healthcare setting. The workshops consisted of warm-up exercises and applied theatre methods. Dramatized oppressive interaction situations allow participants to observe, comment on and intervene in scenarios and examine the effect of individual or collective action. This embodied understanding seemed to help students be more confident and authentic as professionals, and more effective with patients. Some participants reported developed sense of how to deal with challenges and mistreatment in the healthcare setting and that they also improved their interpersonal skills. Important note was, that the workshops indicated the limited opportunities for expression and examining of emotions in medical education. (Scott et al., 2017.) Salas et al. (2013) designed a workshop with playback theatre for the first-year medical students. In playback theatre a group of actors interview a member of the audience and play their real-life stories. They concluded through the stories shared by students, that there is a need for the opportunities to communicate the emotions such as anxiety, pride, or anger. Playback theatre helped students to communicate, might foster students' compassion and understanding, and might help medical students' professional development. (Salas et al., 2013.)

Sevrain-Goideau et al. (2020) applied Forum theatre approach to explore difficult encounters with patients and family members with fourth-year medical students (n=488). Forum theatre is a form of applied drama that allows participants to participate and advocate the actions associated with emotions. The aim of this study was to evaluate whether Forum theatre approach would encourage empathy in medical students. After the sessions the students completed the Jefferson Scale of Physician Empathy (JFSE) anonymously. In their study Sevrain-Goideau et al. (2020) found out, that medical students' empathy enhanced by experiencing the roles via being an actor in forum theatre. They

observed that empathy scores increased more in students who participated as actors than in those who were mere observers.

Nash et al. (2021) designed an interprofessional workshop for healthcare students, that used filmed vignettes from a theatre play based on real stories to improve workplace culture. In addition to vignettes, they used technics such as role-play, reflection, pair discussions, group discussion, and moving into positions in the room to spatially show variations in opinions and questions for the facilitators. In their pilot study, the students valued the facilitated discussions and reported an increase in confidence in dealing with mistreatment. The students valued hearing from other professional groups and learning challenging issues together. The authors hypothesize about the positive impact on healthcare culture in the long term, having a mix of professions attending such workshops. (Nash et al., 2021.)

In a literature review, Jeffries et al. (2021) explored in undergraduate and postgraduate nursing education how drama-based approaches can enhance the development of interpersonal skills, such as empathy, emotional intelligence, and communication. This review is made from nursing education, so there are no direct conclusions about medical students' education. However, the findings are very interesting and consistent with those made among medical students, that is why I mention this study as well. Jeffries et. al (2021) identified four themes of interprofessional skills development. Drama-based approaches can provide better understanding of the patient experience through the emotional engagement, development of empathy, and empowerment. Drama can facilitate an increased understanding of one's professional identity through self-reflection, self-awareness, and consolidating identity. Also, drama-based approaches can aid nurses to improve interaction skills and increase their confidence and self-expression, which promotes personalized care. In addition, it also can encourage nursing students to develop reflective skills that support the development of critical thinking (Jeffries et al., 2021). Future research suggestion is to examine the processes of implementing drama techniques into a nursing education programme. They conclude that drama-based educational interventions can

enhance the development of interprofessional skills, which are at the core of nursing (Jeffries et al., 2021).

Beyond the drama education context, in a systematic literature review Alkhaifi et al. (2022) examined visual art-based training in undergraduate medical education. Their findings indicate that visual art-based education can enhance competencies in medical education, such as empathy, tolerating uncertainty, collaboration, wellbeing, and clinical observation skills. To facilitate teaching they recommend multidisciplinary guided art observation, group discussion and reflection exercises. They suggest that these kinds of programmes should be longitudinal and incorporated into the mandatory medical curriculum. Consistent results were found in a narrative review by Mukunda et al. (2019), in which they explored visual art instruction in medical education. Their results highlight the improvement of student reflection. The students felt that there was time for reflection, which facilitated their education and personal growth.

A review conducted by the World Health Organization summarises evidence from more than 900 studies linked to the positive role of the arts in improving health and wellbeing (Fancourt & Finn, 2019). There is significant evidence of the health benefits of the arts for both physical and mental health. For example, music making may foster compassionate contact between healthcare professionals and patients (de Wit, 2021). Music and movement help to reduce stress levels and burn-out, visual arts improve the working environment and participatory arts reinforces healthcare staff's feelings of support. Arts activities can also improve interprofessional skills and emotional awareness. (Fancourt & Finn, 2019; Haidet et al, 2019.) Recently a Danish study (Santini et al., 2023) with 5000 participants showed, that engaging in arts and culture activities are associated with reduced risk of incidents and persistent depression. (Fancourt & Finn, 2019; Santini et al., 2023.) Arts can foster empathetic imagination and can be an option in difficult and complex problems by offering a holistic view to conditions, that are often treated primarily as physical (Fancourt & Finn, 2019). This evidence supports the involvement of arts and cultural activities, as well as creative activities in health strategies.

What these studies have in common is that most of these studies are based on the voluntary nature of the participants, and by that there is a possibility to bias. These studies see combining arts-based approaches with teaching as a valuable opportunity to improve education as part of the curriculum.

### **3 Implementation of the study**

In subchapters 3.1 and 3.2 I explain the background and purpose of this qualitative study, and how this study was designed. Subchapter 3.3 describes how the workshop participants were gathered and how the data was collected. 3.4 shows the data analysis methods and process. Ethicality and reliability of this study is elaborated regarding the entire research process in subchapter 3.5.

#### **3.1 Research task and question**

This qualitative study aims to find out how a small group of medical students experience a workshop with drama-based approaches. The study is focused on analysing medical students' perceptions and experiences on strengthening interaction skills in and through drama-based approaches in a facilitator-led setting. The study is centred around an embodiment standpoint, through which participants' descriptions from experiences are being analysed.

The research question is:

In what ways can drama-based approaches serve in strengthening medical students' interaction skills?

#### **3.2 Methodological starting points**

This empirical research is a qualitative study describing human experiences and perceptions coming up via drama-based exercises. As I am interpreting written reflections, texts, from the experiences and interpreting the meanings, this study takes a phenomenological hermeneutic approach. (Saldaña, 2021.) I designed this study having a theory in my mind, that drama-based approach would serve for learning interaction skills through embodied experiences. I am framing my

research task with the knowledge and perspectives introduced and discussed in conceptual framework: medical students' attitudes towards interaction skills training; medical students suffer from distress; meaning of embodiment in healthcare interaction, and strong evidence about positive effects of arts-related experiences applying drama to medical education.

In a phenomenological approach, human experience, one cannot separate mind and body. Perceptions and experiences are not only thoughts and straight forward processes, but also coming from the physical body, being in a body. The physicality by being in a body and doing exercises provides embodied knowledge, perceptions how experiences are mediated through the body. These are the phenomena I aim to catch and understand with the help of research questions. By using open questions, I wish to enable rich written answers, where the participant students describe with their own words their perceptions and experiences. (Cf. Hirsjärvi et al., 2009; Leavy, 2017; Osman et al., 2018; Saldaña, 2021.) As the aim is to understand experiences of the workshop, a qualitative study approach was a natural choice. For this purpose, I am using questionnaires with open questions. I am collecting and phenomenologically theming and condensing written data and interpreting it, aiming to discover codes that make meaning to understand medical students' experiences and the suitability of drama-based approaches in this context. This interpreting I do through my background and competence in healthcare and drama education, thinking of the meaning of embodied knowledge, and creativity in the field of performing arts (Osman et al., 2018; Saldaña, 2021.)

### 3.3 Data collection

#### *Background*

What inspired me to plan a master's thesis study with a workshop applying drama-based approaches were good experiences working with healthcare professionals using these kinds of exercises. During my drama education studies,

I conducted drama-based workshops for medical students with the purpose of examining the suitability of drama-based approaches in practicing interaction. For the feedback I used combination of Likert-scale questions and open questions. The students reported that the workshop exercises served as an effective way to demonstrate the difficulty of multitasking, to concretize ways how to practice explicit verbal communication and they realized the power of eye contact and touch in interaction. In addition, the workshop offered students different ways to calm the body and mind, and concrete ways how to concentrate in the middle of a rush. However, recruiting students to the workshops was difficult also then. At that time, as reasons for this, they commented, that it is difficult to find time and they see practicing clinical skills as more important than practicing interaction skills. In feedback they commented that the workshop was very good, relaxing, and offered a different kind of learning between all the tricks. In addition, they stated that as a small group teaching it could serve very well as part of basic education. Having this feedback in my mind I started designing this master's thesis study.

My professional background is multidisciplinary. I have degrees in nursing (RN, BSN) and I have not only worked as a nurse but have been involved in healthcare simulation education and training for 20 years. I have worked in and with interprofessional healthcare teams and with medical students. I also have education and experience in the field of performing arts (artist member of the Finnish Society of Poet Reciters) and drama education (drama education basic and advanced studies University of Jyväskylä Open University). For me, humanistic and holistic way of treating patients and encountering each other is natural and important.

#### *Preparation of the workshops and data collection*

The master's thesis research process started in December 2021. The research plan was accepted by the head of the Clinicum, University of Helsinki Faculty of Medicine in April 2022. After receiving approval, I started recruiting medical students to my workshops.

Invitations to the workshops were made via email. I wrote an email with invitation, time and date, description about the workshop and information that I aim to collect data for my master's thesis study. I highlighted the voluntary nature, that the students can participate to the workshop and there is no obligation to participate in the study. I sent the same email to medical student's course email addresses, inviting study years 3-6. I made my first announcements and attempts in the spring 2022. I did not get any participants, so I continued in the fall semester, having two participants at the end of the year. I managed to get five participants during spring semester 2023. I decided seven was a good size for the sample, because of the expected amount of qualitative data. Reading the literature and the writing process was continuous.

The workshop was one-time-workshop (1,5-2 hours) with volunteer medical students. A total of 3 workshops were organized. Workshops were conducted in medical students' training centre in Meilahti campus, University of Helsinki. Workshops were held in Finnish. Volunteer participants were medical students total  $n=7$ , 3rd year students  $n=2$ , 4th year students  $n=1$ , 5th year students  $n=2$ , 6th year (graduating) students  $n=2$ .

All participants participated the study. Participants were informed with Study information for the participants form (including GDPR) and written research permission was asked by using Informed consent form (including GDPR). Both forms are Metropolia University of Applied Sciences' standard forms. (Appendix 2.)

### *Workshops and data collection*

Key elements with examples of the exercises and objectives:

#### 1. Warm up

For example, with introducing themselves to each other and mixing names. Walking around and when meeting, introduce oneself and

change first names. When getting own name back, need to step out of the game.

Objective is to warm up, make first contact with each other, have fun, and create togetherness. Become aware of the importance of concentrating to the situation (repetition, eye-contact) and having courage to ask name again if unclear.

2. Teamwork communication (close-loop communication/ acknowledging the message)

For example, forwarding the baton: the participants stand in a circle and various verbal messages are sent to circulate, in an effort to repeat the circles in the same way.

Objective is to illustrate and to have participants realize difficulties in multitasking and verbal communication. They get to try different ways and find out how to make verbal communication situations clearer, safer, and more effective with their body, their voice, and eye-contact.

3. Concentration, presence, togetherness

Walking in the room, listening, and sensing/contacting the others, someone stops everybody stops, someone starts walking everybody starts. Variable sequence and pace.

Objective is to wake up the awareness of being in a group with other people, create the feeling of togetherness and presence via wordless contacts and by creating a common rhythm with steps. Also illustrates how you can consciously calm down your body.

4. Concentration, presence, nonverbal contact, and attentiveness

For example, in pairs breathing-touch-presence exercise or Mirror.

Objective is to wake up togetherness, awareness, and presence and to consciously notice bodily sensations, breathing, the meaning of touch and non-verbal contact. The embodied experience of touch or mirroring the other.

After every exercise there were reflective discussions about the attentions and feelings rising from these embodied activities and the ideas that came out to link these attentions to work and everyday life. Also, very practical examples, for example calming down the body and mind by breathing consciously or counting to ten while walking to see the patient or while washing hands, how an eye contact and body language affects to interaction and what kind of effects the touch can have, were discussed. Reflective discussions were facilitated by me with the research task in mind.

Data collection consists of postworkshop questionnaires for the participants and instructor observations made during the process. I designed the questionnaires with open questions for this project (Appendix 1). I made a conscious choice not to use existing questionnaires which I found. Nor the one I used with previous workshops, that are combination of Likert-scale questions and open questions. Typically, many of the validated questionnaires use Likert scale-questions at least partially. Ooi et al. (2020) reviewed systematically assessment instruments that are used for self-reflection in healthcare. The analyse showed, that the consistency and validity of the instruments vary between satisfactory to good, and they are potentially generalisable to healthcare professionals' education programmes. (Ooi et al., 2020.) However, though questionnaires with ready-made scales are an efficient and valid method for gathering information, they can be vulnerable to social pressure. The participants might think that they are expected to answer in a certain way, and this can cause bias to the results. (Buck et al., 2015.)

Post-workshop questionnaires for the participants were carried out by using paper questionnaires. Questionnaires have open ended questions about the observations and experiences. The post-workshop questionnaire was completed twice. First immediately after the action at the end of the workshop (the immediate response based on the experiences of the workshop's meaningfulness) and second (experiences of meaningfulness after the workshop, possible transfer effect of learning) as a follow-up two-three weeks after the workshop. Total amount of follow-up questionnaires returned was four (4).

My purpose was to gather information from the medical students as openly as possible. To be able to find answers to my study question in a more reliable way, and to find out openly the students' experiences, I wanted them to write freely with their own words. I made the choice not only to facilitate this qualitative research of mine, and to find out the possible transfer of learning from this experiential workshop, but also to facilitate the students' self-reflection with written feedback. (Osman et al. 2018.) This opportunity was used, students answered some of the questions by writing long answers, reflecting on their observations. Both questionnaires can be found as Appendix 1.

In addition, I have used reflective observations and notes I made during workshops. I wrote down both students' comments and observations they shared between exercises, and my own observations. In my original research plan I planned to have an outside observer to help verifying impacts by using evidence-based model Observation model for creative group activities (Huhtinen-Hildén & Isola, 2021). This had to be omitted for practical reasons, because scheduling workshops was difficult due to difficulties having participants.

### 3.4 Data analysis

Through post-workshop questionnaires with participants, I examine participants' perceptions of the workshop and meanings they give to their experiences. This analyse is done by identifying recurring words, expressions, or themes. I used

inductive thematic analysis to identify key words, phrases, themes, and significant statements through free manual coding. This I did by reading the participants answers from the questionnaires carefully, underlining and making notes. I used tables and a mind map to observe which aspects of the data, participants written descriptions of the experiences, are central and then to think of unifying denominators, phenomenological themes for these. This I did with paper and pen. When the material was arranged according to themes, under each theme I compiled the answers that mention the issue. After that I created electronic tables, translated the answers, and transferred them to the tables. I have used citations to illustrate the examples. (Hirsjärvi et al., 1997; Leavy, 2017; Saldaña, 2021.)

The students filled out a feedback form immediately after the workshop, so I received immediate feedback from each participant, a total of seven (7) feedbacks. Thematic analysis emerged five common themes from the students' answers: 1) Interaction skills are embodied, 2) Increased awareness of the other person and the sense of belonging, 3) Means to promote wellbeing, 4) Sense of embodied cognition, and 5) Drama-based workshop well-accepted.

Total of four (4) out of seven (7) students returned long term feedback between two weeks to three months after the workshop.

Below two examples of how the thematic analysis in this study was conducted (Table 1. and 2.).

Table 1. Example to demonstrate the thematic data analysis process in this study

<p>“The power of touch”</p> <p>“I could also try touch as part of calming down”</p> <p>“That we all gave our time and focused solely on the present moment and our own wellbeing and that of others”</p> <p>“The power of touch in a suitable situation, e.g. when supporting a patient, in terminal care, or when calming down”</p>	<p>power of touch</p> <p>contact to others</p> <p>presence</p> <p>group discussions</p> <p>reflection</p>	<p>awareness of others</p> <p>sense of belonging</p>
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<p>“Reflecting on one's own interaction, what is good communication, hearing other people's thoughts”</p> <p>“touching the patient”</p>		
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Table 2. The second example of the thematic data analysis process

<p>“calming down the body -&gt; calming the mind”</p> <p>“That we all gave our time and focused solely on the present moment and our own wellbeing and that of others”</p> <p>“evoked important thoughts about self-awareness and emotions, senses. Provided tools for both working life and norm life to bring meaningfulness and controlled activities/calmness”</p> <p>“I plan to take short micro-breaks more often, whenever I feel like stress is coming to the surface”</p> <p>“That, how small and easy things can calm you down...”</p> <p>“self-soothing with eyes closed and auditory sensations”</p> <p>“Taking short breaks”</p> <p>“Stopping in the middle of a rush and resetting the brain...”</p>	<p>physical awareness,</p> <p>embodiment</p> <p>calmness</p> <p>balance</p> <p>concentration</p> <p>self-awareness</p> <p>presence</p>	<p>wellbeing</p> <p>self-care</p>
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<p>“Thank you for the good and self-benefiting exercises and relaxation”</p> <p>“Relaxation exercises should be taught more to all medical students”</p>		
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Thematic analysis is a way to systematically investigate qualitative material, and to understand the meanings and phenomena that are repeated. For example, when looking at the sentences in the answers in questionnaires, there are phrases or words which contain the essence of the answer. By continuing to analyse and code these will become more specific and can be identified as themes. (Hirsjärvi et al., 1997; Leavy, 2017; Saldaña, 2021.) Qualitative content analysis aims to create a clear description of the phenomenon being studied by organizing and describing the data. Inductive analysis is data-driven, progressing from a single word, sentence or set of ideas to the general. (Hirsjärvi et al., 1997; Leavy, 2017; Saldaña, 2021.)

### 3.5 Research ethics

I, as a researcher in this thesis study, despite striving to be neutral, interpret the meanings through my own worldview and experiences. And the same applies to medical students who participate this study, they construct their experiences and perceptions in a workshop from their lived experiences, and their worldviews. (Leavy, 2017; Saldaña, 2021.)

I followed the guidelines of the Finnish National Board on Research Integrity, TENK (2023) and The European Code of Conduct for Research Integrity (2017) throughout the process. The Guidelines of the Finnish National Board on Research Integrity on responsible conduct of research and the handling of allegations of misconduct in Finland, promote responsible conduct of research. In the guidelines, research ethics refers to the adherence of ethically responsible and correct practices in research activities (TENK, 2023). The universities of applied sciences are committed to complying with the guidelines of the Finnish Advisory Board on Research Integrity and have published the ethical recommendations for theses of universities of applied sciences by the Rectors' Council of Universities of Applied Sciences Arene Ry (Arene, 2020). At all stages of this study the principles of honesty and accuracy was observed. For the reliability, careful and accurate examination and selection of the studies is important. Attention should be paid to research settings and methods, analysis and interpretation of data and results, and the credibility of argumentation. (Hirsjärvi et al., 2009.)

I respected the work of other researchers by reading the studies carefully and with accurate citations. This thesis was reviewed in the plagiarism detection system when the work was completed. (Arene, 2020.) I am well versed in the subject area to be able to distinguish the relevant literature and do the work reliably. Searching relevant, multidisciplinary, literature I used sources related and found during my master's studies, PubMed and very valuable source was reference lists of articles. I refer to peer-reviewed, relevant articles published in recognised sources such as Medical Education, Medical Teacher, Academic

Medicine, Plos One, and in the publications in the field of healthcare, philosophy, psychology, and theology. Methodology literature I have used is recognised in the field. English is not my native language, so the possibility of mistakes exists in that I have not understood correctly to the full extent. Taking this into account, in selecting, summarizing, and interpreting sources I have been thorough and honest. (Hirsjärvi et al., 2009.)

I am aware of my position as a researcher, having a holistic concept of humanity, in this study. I am active in a field of performing arts and drama education and finalizing my Master of Healthcare Studies in the field of cultural wellbeing and also, I have been using drama-based approaches in education already some years, I am aware that I view the subject through these lenses. Realizing this I have been very careful with the transparency and honesty, when looking for literature and building conceptual framework and reporting the findings of the study. To increase the reliability, I have used direct quotations from the students' feedback, and I reported in results if they stated there was something that was not useful. I also opened the difficulties in recruitment process. By using open questions, I aimed to facilitate students' honest feedback. When using the ready-made scales, the participants might think that they are expected to answer in a certain way, and this can cause bias to the results. (Buck et al., 2015.) My transparency and solid understanding of the subject area increases the trustworthiness of this study.

The authorisation policy for thesis in my organisation is permission to carry out research. The research application must be submitted to an ethics committee in the case of personal data or patient data being collected. This study did not require ethical approval since no such data was collected. Research material, the data collected was anonymous. According to the institute's instructions actual permission to carry out the research is usually given by the target organization, i.e., the unit where the research data is collected, or the research is otherwise carried out in practice. Research plan of this thesis was accepted in writing in April 2022 by the head of the Faculty of Medicine, Clinicum, University of Helsinki.

Consent to participate in research was given by individual subjects. Voluntary participants were informed with Study information for the participants (including GDPR) and written research permission was asked before workshops by using Informed consent form (including GDPR). Both forms are Metropolia University of Applied Sciences' standard forms. (Appendix 2.) Post-workshop questionnaires for the participants were carried out using paper form. Both questionnaires and participant consent forms are stored at researchers' home in safe place with the permission of the participants.

Recruiting students to the workshops was more difficult than I expected. In the beginning of the process, I informed the students in a very neutral way, by inviting them to practice interaction skills with drama-based exercises. I did not give any examples what the expected experiences are to avoid giving them ready-made ideas. I mentioned that exercises will be done together, there are no individual performances. As time passed and having only few participants, I ended giving more information during the recruitment process to attract more participants. This I discussed with my thesis supervisor, and we came to a common agreement on the means. We made a conscious choice to trust, that after the workshop students reflect and report their own experiences and say their honest opinion.

One important code of ethics is confidentiality during the workshops. Ensuring confidentiality enables creating a safe atmosphere during the workshops. This is something that should be discussed and agreed together. (Haidet et al., 2019.) I am strongly guided by my values of good care and ethical behaviour in patient care. Based on these values, I have a need to develop healthcare to be more patient safe and humane for both the patients and the healthcare staff. These are the values I also want to convey when instructing drama workshops. It is necessary for a drama teacher to clarify the ethical goals and direction of ambition that guide their actions. Understanding the impact of past learning experiences is important, to form the foundation for new activities. (Heikkinen, 2017.)

## 4 Findings

The purpose of this study was to study meanings that medical students' give to their perceptions and experiences on strengthening interaction skills in and through drama-based approaches in a workshop setting. I analysed the data collected by using thematic analysis. Thematic analysis emerged five common themes from the students' answers: 1) Interaction skills are embodied, 2) Increased awareness of the other person and the sense of belonging, 3) Means to promote wellbeing, 4) Sense of embodied cognition, and 5) Drama-based workshop well-accepted. These five themes I describe in subchapters. 4.1.-4.5. In subchapter 4.6. I describe long-term feedback received from four students. I have used direct quotes from the students' responses to explicate the results of the study and to bring more content and understanding of the students' experiences. I translated the Finnish quotations into English.

### 4.1 Interaction skills are embodied

The findings suggest that the participant students were able to recognise embodiment's role in interaction. The participants seem to have become aware of effective ways to interact through exercises using body positions and gestures. They stated that, "Communication in a targeted manner and with a focus on getting the message across", and "Creating good contact and closed-loop communication, recognizing one's own body as a tool for interaction." Comments where importance and the concrete ways acknowledging the message was mentioned. These descriptions support a developing ability to use clear and targeted verbal communication and use of good teamwork interaction skills (Cf. Salas et al., 2008; WHO 2012; Schmutz et al., 2019).

The participants described how presence, bodily awareness and sensing the situation were affected as the workshop proceeded. Mind and body as intertwined and bodily awareness facilitated ability for bodily listening. As they stated: "It is

small things that can calm you down and improve communication. Sometimes such things can be vital for the patient.”, another expressed “I could also try touch as part of calming down.”, and another “Communication between body and mind.” These comments show their reflections that interaction skills are not only cognitive but also embodied, and these descriptions suggest, that after the exercises they were able to recognise their bodies as part of interaction. Recognizing the embodied nature of human interaction facilitates a holistic approach to care. (Cf. Sutela et al., 2021; Loue, 2022).

#### 4.2 Increased awareness of the other person and sense of belonging

The findings suggest that the participant students were able to sense increased awareness of the other person and the sense of belonging. The workshop included different kinds of embodied contact and concentration exercises with movements and touch. After each exercise there were reflective discussions about perceptions and applicability. These joint discussions, dialogue, together with exercises done together seemed to bring togetherness. As the participants stated, “Reflecting on one's own interaction...hearing other people's thoughts”, and another,” That we all gave our time and focused solely on the present moment and our own wellbeing and that of others”. The reviews by Mukunda et al. (2019) and Alkhaifi et al. (2022) recommend facilitated teaching with group discussion and reflection exercises. Their results highlight the improvement of student reflection facilitated of personal growth when there is enough time for reflection. By being present and making observations, human beings perceive themselves in relation to their environment and to others, are open and connected to shared experience and being. To become and be aware of this is a conscious process that requires practice (Merleau-Ponty, 2012; Shapiro, 2019; Sutela et al., 2021; Loue, 2022).

The participants highlighted separately touch as a tool in patient care, “The power of touch”, and “Touching the patient”. Another stated about touch that, “I could

also try touch as part of calming down”, and another expressed, “The power of touch in a suitable situation, e.g., when supporting a patient, in terminal care, or when calming down.” Through the exercises they seemed to perceive that presence and awareness coming from embodiment can facilitate empathy and cultivate caring (Cf. Baart, 2002; Klever & Baart, 2016; Montgomery et al., 2017; Kelly et al., 2020; Sutela et al., 2021; Loue, 2022).

### 4.3 Means to promote wellbeing

The findings suggest that the means to promote wellbeing can be how to consciously calm down the body and mind, and how to concentrate and focus on the situation. With the exercises the participants seemed to learn means how to consciously use the body calming down the mind and to concentrate and focus on the situation. Observations from the exercises and ways to apply them were discussed together. As they stated in their feedback: “Calming the body -> calming the mind”, and “That, how small and easy things can calm you down...” About using conscious means, they stated, “I plan to take short micro-breaks more often, whenever I feel like stress is coming to the surface”. Another participants expressed, “self-soothing with eyes closed and auditory sensations”, and other “Stopping in the middle of a rush and resetting the brain...”. As the respondents of the study to newly graduated physicians from the University of Helsinki (Vartiainen et al., 2020), felt, that they did not learn time management and ways to cope with workload and uncertainty (Vartiainen et al., 2020), and there is concern about medical students` distress (Frajerman et al., 2019), this kind of exercises could offer tools to cope. As the participants stated, “Thank you for the good and self-benefiting exercises and relaxation.”, and “Relaxation exercises should be taught more to all medical students!”

According to studies, empathy can be seen as declining with the accompaniment of medical studies (Hojat et al., 2004; Chen et al., 2007; Newton et al., 2008; Hojat et al., 2009; Neumann et al., 2011; Patel et al. 2019; Triffaux et al., 2019;

Dinoff et al., 2023). Some found explanations for this were for example heightened feelings of vulnerability, increased responsibility, and distress and pressure with the studies. Finding ways how to mindfully relax and concentrate through drama-based exercises, might help students to cope and give room to empathy. As they expressed, "it was interesting to discover new thoughts and feelings in myself", and "Evoked important thoughts about self-awareness and emotions, senses. Provided tools for both working life and normal life to bring meaningfulness and controlled activities/calmness".

Drama-based exercises seemed to facilitate means how to consciously calm down the body and mind and to concentrate and focus on the situation. Based on descriptions the participants seemed to perceive these exercises as very meaningful.

#### 4.4 Sense of embodied cognition

The findings suggest that the students were able to recognise the cognition of their bodies in interaction. Via exercises and reflections, the participants seemed to learn how to pay attention to bodily observations, and how to raise bodily awareness about senses and presence. Embodiment is something human beings have as given, but it requires attention and practice to mindfully observe sensations. (Merleau-Ponty, 2012; Shapiro, 2019; Sutela et al., 2021; Loue, 2022.) As they stated, "Recognizing one's own body as a means of interaction", and another "It was a nice experience, it felt good to focus on the body and its sensations, and interesting to reflect on how to use it in interaction.". Another expressed, "it was interesting to discover new thoughts and feelings in myself".

In addition to cognitive level people come to know themselves and others by using bodily sensations, gestures, movements, and interactions. To be able to recognise this embodied nature of being calls for presence, the attentiveness needs to be open. (Bart, 2002; Pembroke, 2007; Klever & Bart, 2016; Montgomery et al., 2017; Sutela et al., 2021; Loue, 2022.) As the participants

described their perceptions,” Thoughts about self-awareness and emotions, senses”, and “...communication between body and mind”, and one participant stated, “...became aware of the presence in the situation”,

In addition to participants written reflections, I noted during the workshop discussions, that active exercises done by physically moving, embodied activities, seemed to facilitate the participants to perceive the embodied nature of interaction.

#### 4.5 Drama-based workshop well-accepted

The findings suggest that drama-based workshop was well-accepted by participant students. The positive perceptions of the students were consistent with those mentioned in the paragraph 2.4, applying drama education in medical studies. During the workshops the atmosphere was positive, relaxing, accepting, and good, the students were actively involved in the exercises. The way of working, how exercises were done together, and some of the exercises eyes closed, seemed to lessen the pressure to perform. We were all in it together, the students did not need to perform at the front of their peers. (Cf. Bombeke et al., 2011; Moral et al., 2019; Ruiz-Moral et. al., 2021.) As the participants expressed, “Really nice experience! Relaxed and accepting atmosphere, the pressure to perform disappeared. In addition, I felt that I was getting many tips for the future”, and another expressed, “I found the workshop very useful and developmental. It was interesting to find new thoughts and feelings about myself”, and another, “The experience was relaxed and calm and safe”, and “Reflections after each exercise good so was able to combine the idea of the exercise with practical work”, and another stated, “Thank you for the good and self-benefiting exercises and relaxation”.

Encounters and interaction are important to the workshop participants, and they pay attention to expressing empathy. In the workshop questionnaire I asked possible significant moments that occurred in the past. “Situations in which you

have been able to communicate caring to the anxious patient and create a sense of security through your own interaction”, and another described, “It always feels meaningful when you notice that the doctor (which I follow) really shows to the patient to be there for the patient and have time just for they.”

I have received good feedback on my interaction directly from the patient a few times. Patients have thanked me for my listening skills and for admitting that I don't know how to yet. For them, listening has been a great thing, and it has been meaningful to me that someone else has appreciated me or what I do.

The students perceive empathetic interaction and lack of it. Does the example of patient giving good feedback from interaction imply that in healthcare listening the patient is not obvious or necessary general. The same may apply to staff and students. As one participant stated, “Constantly as a student, I have gotten used to the fact that I am just air, and no one necessarily says anything to me. A small greeting with a name makes a big difference, because it rarely happens.” Moudatsou et al. (2020) suggested, that developing empathetic skills should not only be in the teaching process of health and social care undergraduate students, but also in the lifelong and continuous education of professionals, preferably in a hands-on way.

In the questionnaire I also asked if something in the workshop was not useful and why. Two students mentioned one exercise that might not be as applicable to working life, one student mentioned that one exercise was maybe a little too lengthy, and one student reflected that exercises with long quiet moments can be challenging.

According to students' feedback drama-based exercises were well-accepted.

## 4.6 Long-term feedback

Total of four (4) out of seven (7) feedbacks was returned, between two weeks to three months after the workshop, which brought out the experiences of meaningfulness after the workshop, and their possible transfer effect on learning.

The five themes from the immediate feedback were visible in the responses, fused together. All answers were connected to embodied cognition, included bodily activities and/or bodily observations. The sense of embodied cognition was present in interaction, increased awareness of the other person and the togetherness and in the means the students have promoted their wellbeing. The students reported that they are actively reflecting their own inner feelings, and applying the interaction means intentionally being more attentive to the patients and themselves. They also said that the workshop was good and has been useful for them. Quotations below are students' long-term reflections after the workshop (translated from Finnish).

The sense of embodied cognition in communication was visible in the replies. The students reported that they were consciously more attentive using their bodies in interaction and attentive concentrating in situations. As they stated, "The positive power of touch", and "Eye contact and touch". Another expressed "I make sure that when I interact with a person, I don't have something else going on at the same time", and "Stopping when in a hurry has improved concentration at work." (Cf. Baart, 2002; Klever & Baart, 2016; Montgomery et al., 2017; Patel et al., 2019.; Kelly et al., 2020; Sutela et al., 2021; Loue, 2022.)

The sense of embodied cognition in increased awareness of the other person and the sense of belonging appeared as follows, "I paid attention to what the patient said by looking into the eyes and for the first time also calmed down with a touch on the shoulder", and other stated, "I may dare better to look people in the eye and, if necessary, touch the patient for comfort when needed", and another, "touching the patient also enhanced my own conscious presence in the situation." One participant described, "A couple of times I have treated a crying,

mentally anxious patient and stopped near touching their shoulder -> this has calmed the patient down, and I have also stopped in the situation in a different way.” (Cf. Patel et al., 2019; Kelly et al. 2020.)

In the immediate feedback the students described about the connection between the mind and the body. In these long-term feedbacks they reported using their bodies to calm down the mind and to be able to concentrate the situation better. This sense of embodied cognition can be seen in the ways the students have consciously promoted their wellbeing at work. They strive to take micro-breaks during the work and calming themselves by breathing and taking time, “From time to time, I have thought about e.g. ways to calm yourself down”, and “I have tried to listen to myself and stop if I am in a hurry.” This has helped them to focus and continue to work. As stated, “I have taken micro-breaks at work, where I have just stopped and breathed in a few times”, and another, “I noticed that in the midst of busy everyday life, it would be good to stop and ground myself from time to time.” (Cf. Patel et al., 2019; Howick et al. 2023.)

These four students reported that they are actively reflecting their own feelings, and applying the interaction means intentionally being more attentive to the patients and themselves. Their awareness has increased, and they consciously pay attention to interaction. The workshop seemed to have contributed to their professional development. As they stated, “I have gained tools to be more present at work and a better communicator.”, and “At work, I have observed how people talk and in which situations communication has been such that it could lead to misunderstandings.” Another participant expressed, “A good reminder of the importance of one's own inner peace and serenity, and that even in the midst of a rush, a break promotes activity!” Another stated, “Maybe I am a degree more ‘grounded’ than before.” Presence and attendance seem to make them physicians, who genuinely encounters the patients, “Listening and looking into the eyes has made it possible, that nothing the patient says has been missed either.” Another participant described, “I also took into account the patient's own needs and waited until they were ready with their speaking turn.” (Cf. Merleau-Ponty, 2012; Shapiro, 2019; Sutela et al., 2021; Loue, 2022.)

As four students out of seven returned long-term feedback, these results do not concern the whole group. In these four feedbacks there were no comments that something had left them wondering negatively, or that the workshop had not been useful. For these students, the workshop was meaningful. As they stated, “Important workshop!”, and another, “Good and useful workshop! I would recommend also to others as part of working life skills!”, and “Very good habits that strengthen and improve ability to work.” (Cf. Patel et al., 2019.)

As medical students’ feedback from their observations shows, physically active drama-based exercises serve well on strengthening interaction skills in and through a workshop setting. Working method where learning happens through embodied inside processes seemed to develop lived experience and facilitated reflection. Participating students were able to observe and reflect their feelings and transfer that knowledge to care. This was also seen from long-term answers. (Cf. Raatikainen et al., 2017; Salami, 2019.) However, more experience and research are needed to make these observations more generalised.

## 5 Conclusions and discussion

In this master's thesis, I was looking for an answer to the following research question: In what ways can drama-based approaches serve in strengthening medical students' interaction skills. As medical students' feedback from their observations showed, drama-based exercises with embodied learning activities served well in strengthening interaction skills in and through a workshop setting. The working method where learning happens through embodied inside processes seemed to develop lived experience and facilitated reflection. Participating students were able to observe and reflect on their feelings and transfer that knowledge to care. This was also seen in long-term answers. (Cf. Raatikainen et al., 2017; Salami, 2019; Nasello & Triffaux, 2020.)

In my study, the participants made observations about using explicit ways how to communicate verbally (good contact, acknowledging the message, using touch), and in long-term feedback they mentioned that they have paid attention to these ways. It was visible in their descriptions, that they recognised that interaction and attentiveness are embodied, and that these skills can be developed. By doing that, they already reported experiencing the contacts with the patients in a different way than earlier. (Cf. Klaver & Baart, 2016; Kelly et al., 2020; Loue, 2022.) It would be interesting to receive even more long-term feedback. Also to hear, that will they inevitably apply these skills also when working in teams; how do they interact, co-operate and how do they experience the attentiveness working in a team. Maybe this kind of longitudinal study will be possible in the future.

The process of recruiting medical students to participate to this workshop supports studies reporting, that students' attitudes towards interaction skills training deteriorate as the studies progress. Recruiting students was more difficult than I expected. During academic year 2022–2023 I announced the workshop a total of 10 times. In the autumn semester I was lucky enough to get two participants in one workshop, and in the spring semester two and three participants on two separate occasions. This difficulty I discussed with some of

the participants, and they stated not only the reasons I mentioned earlier in conceptual framework (lack of time, more value given to practicing clinical skills), but interestingly also uncertainty and possible lack of courage. The comments are consistent with my previous experiences recruiting medical students to this workshop. Practicing clinical skills is clear, the students know what's coming from it and there is no uncertainty. However, going to the personal level brings uncertainty. (Haidet et al. 2016.) I am grateful to the students who participated this study, and I want to thank them. I could not have done this work without their help. As they experienced the workshop positively and saw it to be important, and transfer was seen in long-term answers, I am convinced that they will benefit from this in the future as well as during their studies.

I have been pondering how the selection of participants affects the outcome of my study. Would the result have been different, less positive, if the participation had not been voluntary. On the other hand, recruiting students was difficult, and they are critical of what they participate in. During the workshop the participants also commented on working methods, for example they could ask for clarifications and told me, if some exercise didn't feel natural or relevant. Despite of that they participated in all exercises and reflected on them in joint discussions. So, they were critical despite of the voluntary nature of the participation.

Writing this master's thesis has been a long, and at times also painful and even desperate, process. However, when I think about the whole process I realise; it has been expedient, and I appreciate it. The longer time brought more time to delve deeper and offered an opportunity to explore and include recent interesting articles. My knowledge and understanding have deepened and expanded along the side paths that I took, when reading articles and discussing with students and colleagues. This topic is important and interesting for me, and I trust that it is also so for others interested in the subject. In this thesis I have made my best to write in an accessible way what I currently know about the multifaced, complex, and ambiguous subject of embodiments role in strengthening medical students' interaction skills (Cf. Saldaña et al., 2011.) This thesis shows that for these participants experiencing this workshop was relevant and meaningful. Also, the

outcome encourages the continuation of offering these workshops not only for medical students but also for other groups. Using drama-based approaches made it possible for students to learn through many senses and feelings. This experience facilitated learning about interaction skills and empathy through students' own embodied experience and having a possibility to reflect on those experiences in a safe environment. However, more research is needed to make the result more generalisable. Perhaps these good experiences will get students more interested. Maybe sometime in the future this kind of drama-based workshop will be implemented in the curriculum alongside with simulated patients and role play. Because the role model is of great importance, careful curriculum planning, and pedagogical skills are essential.

There are many ingredients that affect the experience and the outcome of approaches; it is not just arts itself but also interactions around, elements inside contexts, people, and projects. Adequate competence and understanding of the process of learning through arts-based approaches is important. (Osman et al., 2018; Warran et al., 2022.) With this workshop different ingredients that required attention were for example careful selection of drama-based exercises, participant students from different study years, number of students, the atmosphere, time of the day, privacy, equality, inclusion, my role as facilitator. Recent research by Warran et al. (2022) identified 139 potential active ingredients of arts activities. The researchers created a framework that can be used when designing, implementing, and evaluating arts activities matching the needs, objectiveness, and quality. A validated framework at the background helps curriculum planning, justifies the work, and creates credibility. It is hoped that theoretical knowledge of what is it about arts and cultural activities that enables them to affect our health will increase. (Warran et al., 2022.)

Haidet et al. (2016) reviewed and synthesised articles about arts-based education in medical education. Their objective was to find out, why and how arts-based pedagogies promote learning in medical education, and how general concepts can be incorporated into design and evaluation processes. They constructed a conceptual model to help and guide implementing arts-based

teaching in medical education, stating that implementing arts-based approaches should not be depending on the enthusiasm and interest of individual teachers but strategic decisions. (Haidet et al. 2016.) Applying arts draws participants into their own subjective experiences and thoughts and encourages reflection. Examples of the engagements found are embodiment, empathetic imagination, aesthetic knowing and affective experiences. As learning outcomes, they mention for example development of self-awareness, enhanced ability to cope with ambiguity, improved interaction skills, and increased openness to other perspectives. In their suggestions they emphasize the role of the teacher and the role of the group when creating an equal, safe, and trusting learning environment. Also group reflection and discussions enhance learning and the group itself can even undergo transformative change. To facilitate this instructor participation and transparency is critical. There should also be strategies to help students transfer skills and knowledge learned to professional practice. (Haidet et a., 2016.)

As discussed earlier in this thesis, empathy is part of medical professionalism and can lead to improved patient outcomes and patient satisfaction, and improved wellbeing at work. There are studies that show empathy decline along medical studies (Hojat et al., 2004; Chen et al., 2007; Newton et al., 2008; Hojat et al., 2009; Neumann et al., 2011; Patel et al., 2019; Triffaux et al., 2019; Dinoff et al., 2023). This has been seen to happening in the clinical phase of the studies and with increasing patient contacts, being pressed for time. There are also studies that disagree with this, by questioning study design and measures such as self-reported ready-made scales, interviews, and small group discussions rather than observational happening in patient situations (Ferreira-Valente et al., 2017; Patel et al. 2019). However, one can also ponder if self-reflection is more reliable than assessment in group teaching situations or being observed in patient situations. In those situations, empathy can be more representations of empathy rather than true act, as students might act in a way they are expected.

Nasello and Triffaux, (2020) found out in their research that embodied practice affected medical students' empathy in a significant and positive way. Learning conscious processes how to recognise bodily sensations and how to verbalize

them, trying to understand the self and the situation, seemed to facilitate having access to the felt body and embodied knowledge. Their findings confirmed that this was linked to empathy. (Nasello & Triffaux, 2020.)

In a review, Patel et al. (2019) made a synthesis on practicing empathy and compassion in medical education. They aimed to find specific skills and behaviours from curricula that proved to be effective. Key behaviours they identified are sitting during the interview, detecting non-verbal cues of emotion from the patient, recognizing, and responding to opportunities for compassion, non-verbal communication of caring and verbal statements of acknowledgement, support, and validation. They conclude, that practicing these behaviours should be incorporated to the curricula. (Patel et al., 2019.) As can be seen from the list, the emphasis is on recognizing bodily clues, being attentive and listening. Embodied and holistic approach. These means may enhance also diagnostic work (Pembroke, 2007). In a phenomenological study regarding physician touch Kelly et al. (2020) interestingly found out, that for some participants their study was the first time they discussed or thought about touch as a means of communicating with patients. Kelly et al. suggest that reflective practice on touch should be a part on instructing not only interaction skills but also procedural skills. This would emphasise the embodied nature of clinical practice and invite empathy. They conclude that medical curricula should attend that touching is an integral part of being a physician. (Kelly et al. 2020.) To enhance medical students' empathy also the role of an 'empathic hidden curriculum' should be acknowledged and developing it should be prioritized (Howick et al., 2013).

At the time of writing this thesis, I observed bodily reactions in particular when medical students were practicing. Energy, concentration, and rhythm are transmitted unconsciously in groups, which affects the atmosphere in teaching, and this can be sensed. Also, group cohesion is different between groups. In my work I have been able to observe the effect of embodiment both on a group and individual level. Single example of what happened in teaching, in a patient simulation situation I noticed that a student reacted bodily to the patient's pain. The patient, simulator mannikin, complained of pain when the student examined

the abdomen, and the student reacted to the patient's pain both with her body and verbally. These kinds of situations showing empathy would be beneficial to reflect on together to develop students' awareness of bodily reactions and embodiment. It would be important to train them to notice how for example presence, listening, observations, timing, voice, and body positions influence the interaction in a situation.

How to transfer an understanding of embodiment to teaching and learning? Educators' role, skills, and positioning, pedagogical behaviour, is very important, they need to be present and fully committed. Teaching can happen mechanically, like a technical skill, without sensing one's own and others' experiences. I have thought about what would happen to learning if educators listened to their instincts about whether students understood and learned, and are acting empathetically, or are just behaving as they are expected? If the healthcare educators focus on process of learning and reflecting on experiences becomes a habit, what is the transfer effect for students and their future patients? When the students and the teacher are practicing and working together, there is a possibility to be attentive, engage with the environment and others with bodily actions and interactions. They can be able to sense each other's atmosphere, enthusiasm, lack of enthusiasm, and concentration. In an ideal situation they all, both students and teacher, are vigilante, able to feel the connection between themselves and others, and they are aware of the situation. The situation can bring the feeling that we are in this together. If this is not noticed and put into words through joint reflection, it is easy to miss it and miss the opportunity to learn. (Cf. Osman et al., 2018; Sutela et al., 2021.)

MD Anneli Vainio talks about how people encounter, or do not encounter each other, in her book *Kohtaamattomuus* (2023). In her essays she writes about her experiences and observations about the dominant working culture and herself when meeting people and working as a physician, during her long medical career. She speaks, for example, of the language of medicine that excludes the subject and objectifies the patient. And asks why medical language omits both doctor and patient from sentences. Does the language include the assumption that the

doctor is the subject, and the patient is the object? Also, there is no room for the patient's nor the physician's feelings and experiences, the language is words in which subjective experience is not present. This is something that has been normalised and is not questioned. The same issues are brought up by professor Kristiina Patja in her blogs and in media (2022, 2023), who criticises the current culture in the healthcare system. She has criticised systems publicly and talks about finding solutions such as the benefits of long and permanent patient care relationships. Both Vainio and Patja talk about caring; the mutual respect and how important it is to really see the other person and not look past them. Illness does not only mean physical discomfort, but also if the patient can cope, and relationships, work, housework, hobbies, studies, and everything that comes with life. And understanding what is in the background, root-causes. Permanent patient relationships in healthcare could be one solution to improve quality (Patja, 2022, 2023; Vainio, 2023.) What does it say about our culture in healthcare that it needs to be mentioned separately, how important it is to take the patient's experience seriously and respect it? The patient's sense of integrity and control needs to be noted and taken seriously. For example, the patient can seem healthy, but the disease can cause concern and problems with work, leisure, sleep, and relationships with people. Worries about one's own health are also burdensome. It is necessary to understand and acknowledge the social context of the patient in which the health problems present. However this does not apply only to the patients but also to the healthcare staff. Sometimes also they are forgotten as a whole, as a person, often practice serves only performance. For example, in some cases the number of appointments is considered more relevant than the quality. There is no opportunity to focus properly on the patient's situation, which can create ethical stress.

Factors related to interaction play an important role in interprofessional cooperation and wellbeing. Should healthcare professionals' training focus more on attitudes and relations striving for a togetherness and empathy? Digitalisation and the use of artificial intelligent is present and will affect healthcare widely. Utilization of collected data and remote receptions are needed and they offer solutions. They have their place but is it good enough to lead to knowledge in

patient care? How is the use of artificial intelligence combined with values and ethics? Acknowledging embodied nature of human beings is needed for holistic care. If data collection will be more and more externalized, and digitalisation provides information, will there be room to notice embodied knowledge?

Embodied activities' role in strengthening interaction skills and empathy, and its possibilities to ethically develop care in healthcare, is an interesting phenomenon that should be studied, also among healthcare professionals. This could be grounded and framed by going deeper with embodiments' role in interaction, and to the development of empathy. For helping to document the situations and verifying impacts, an outside observer using evidence-based observation model should be added to the study. This improves the quality and reliability of research data. (Huhtinen-Hildén & Isola, 2021.) To carry out this kind of study, a multidisciplinary research team would be ideal (Cf. Osman et al., 2018).

Knowledge cannot be separated from human bodies, from bodily experience. Being so, what is the actual meaning of embodied practice then? There is concept and idea around something, which is naturally given for human beings, inseparable part of being. Why is it not naturally recognised as a self-evident part of being human being? Does the paradox of embodiment stem from the western patriarchal culture? (Salami, 2019.) Perhaps it appears in values; how rational and logical data and knowledge and materialism are valued, or how creativeness and experiences and meanings coming through arts are not self-evidently appreciated as a way of knowing. (Salami, 2019.) Or does it appear in terminology, such as non-technical skills and soft skills when referring to interaction skills. Maybe it appears in how the mind and body are separated, how instead of listening to their bodies people need and follow values and trends measured from their bodies, or how individuality is valued.

Experiences of medical students who participated my thesis study, increased my belief that medical humanities should be part of the curriculum, not implemented only as voluntary courses such as literature. This kind of the workshop where experiences can be reflected together was well accepted and meaningful for the

participants. Cognitive and embodied approach, experiencing and reflecting feelings through active exercises and discussions, open dialogue, in a group, seemed to facilitate becoming aware of means how to strengthen interaction and be attentive and receptive. (Cf. Haidet et al., 2016; Heikkinen, 2017; Loue, 2022.) In a review called “Linking the Heart and the Head”, Montgomery et al. (2017) asked how humanism can be understood in medical education through how it is taught. The connection between the heart and head is nurtured by conscious awareness and critical reflection. Conscious awareness makes it possible to learn from the experience by reflecting on actions personally and collectively. Listening to the heart, not only cognitive domain. This flow is central to the practice of humanism. (Montgomery et al. 2017.) By creating a safe space for the students to share their experiences, their distress may decrease, they can practice recognizing their reactions and feelings in others. They might also feel togetherness and compassion and understanding towards others. Having the possibility to observe and experience their own feelings and experiences might help to raise awareness towards personal values and beliefs. This reflection offers an opportunity to reinforce interaction skills, both with the team and with patients, and understanding of the impact of disease on patients. Perhaps having this kind of workshop again at the end of studies would be beneficial to reinforce students’ personal values and increase resilience to uncertainty.

Drama-based approaches can facilitate learning through playing together, having fun but with serious objectives (Heikkinen, 2015). This working method, embodied activities, was surprising and new for the participated medical students. Nonetheless, in confidential atmosphere they felt safe to take the exercises seriously and reflect and experience together. A positive learning atmosphere increases positive interaction and supports a high level of engagement and emotional attachment. Drama-based approaches seemed to facilitate students’ understanding of embodiment and transfer of experiences to patient care. They also experienced togetherness and reported wellbeing effects.

National learning outcomes of graduating physicians (2020) value ethical behaviour and interaction skills. Educational interventions for developing body

awareness and mind-body connection via embodied approaches for medical students could be one solution to this. These kinds of arts-based approaches could also serve teachers. (Patel et al., 2019; Kelly et al., 2020; Sutela et al., 2021; Loue, 2022.) A humanistic practice that recognises the embodied nature of caring is necessary in medicine. Being seen and heard is our basic need. As one of the participating students of this study experienced:” I felt that I had a special connection with the patient just by making eye contact and letting them vent their situation to me. Indeed, listening is the most important skill of a physician.”

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## Appendices

### Appendix 1. Participant questionnaires translated in English

Post-workshop questionnaire (at the end of the workshop)

1. In what year of study you are?
2. What is your educational/professional background?
3. Can you describe your experience of the workshop?
4. What was meaningful?
5. What elements of the workshop you will take into your studies and work?
6. What was not useful, why?
7. Experience of communication and interaction at studies or at work. Can you describe an interactive situation which stood out for you?
8. Something else you are thinking about?

Post-workshop questionnaire (two-three weeks after the workshop)

1. In what year of study you are?
2. What was your take-away from the workshop? How do you look back on it now?
3. Have you been using some of the communication and interactional approaches from the workshop in your studies and/or at work? If you have, please describe what approaches and how you have used them. If not, what is the reason?
4. Has the workshop given you means to consciously concentrate in interactional situations at studies or at work? If so, how? If not, why may that be?

5. Since the workshop, have you consciously paid attention to the quality of communication and interaction in your studies or at work?
6. In what ways has the workshop fed into your professional development?
7. Something else you are thinking about?

## **Appendix 2. Participant research information sheet/Tutkittavan informointilomake**

### **TIEDOTE TUTKIMUKSESTA**

#### **To be seen and heard - Medical students' experiences on interaction skills in and through drama-based approaches**

##### **Pyyntö osallistua tutkimukseen**

Teitä pyydetään mukaan tutkimukseen, jossa tutkitaan lääketieteen opiskelijoiden käsityksiä ja kokemuksia kommunikaatio- ja vuorovaikutustaitojen parantamisesta työpajaharjoitusten avulla. Tämä tiedote kuvaa tutkimusta ja teidän osuuttanne siinä. Porehdyttyänne tähän tiedotteeseen teille järjestetään mahdollisuus esittää kysymyksiä tutkimuksesta, jonka jälkeen teiltä pyydetään suostumus tutkimukseen osallistumisesta.

##### **Vapaaehtoisuus**

Tutkimukseen osallistuminen on täysin vapaaehtoista. Kieltäytyminen ei vaikuta oikeuksiinne.

Voitte myös keskeyttää tutkimuksen koska tahansa syytä ilmoittamatta. Mikäli keskeytätte tutkimuksen tai peruutatte suostumuksen, teistä keskeyttämiseen ja suostumuksen peruuttamiseen mennessä kerättyjä tietoja voidaan käyttää osana tutkimusaineistoa.

##### **Tutkimuksen tarkoitus**

Tämän tutkimuksen tarkoituksena on selvittää lääketieteen opiskelijoiden käsityksiä ja kokemuksia kommunikaatio- ja vuorovaikutustaitojen parantamisesta draamapohjaisten työpajaharjoitusten avulla. Tutkimuksesta saatavaa informaatiota voidaan tulevaisuudessa hyödyntää työpajojen ja/tai opetuksen suunnittelussa ja toteuttamisessa.

##### **Tutkimuksen toteuttajat**

Tutkimus on Master's Degree Programme in Creativity and Arts in Social and Health Fields, Metropolia ammattikorkeakoululle tehtävä YAMK-opinnäytetyö. Vastuullinen tutkija on opinnäytetyön tekijä Minna-Maria Mattila. Opinnäytetyön ohjaaja on Sanna Kivijärvi.

##### **Tutkimusmenetelmät ja toimenpiteet**

Tutkimukseen osallistuminen vaatii osallistumista yhteen työpajaan (noin 2 h) sekä kahteen palautekyselyyn vastaamista. Ensimmäinen kysely täytetään työpajan yhteydessä ja toinen noin kaksi viikkoa työpajan jälkeen. Työpaja järjestetään Helsingin yliopiston lääketieteellisen tiedekunnan Taitopajan tiloissa.

##### **Tutkimuksen mahdolliset hyödyt**

Työpajassa harjoitellaan kommunikaatiossa ja keskittymissä tarvittavia taitoja ja keskustellaan niiden hyödyntämisestä arjen työssä. Näiden taitojen omaksumisesta voi olla hyötyä tutkittaville.

**Kustannukset ja niiden korvaaminen**

Tutkimukseen osallistuminen ei maksa teille mitään. Osallistumisesta ei myöskään makseta erillistä korvausta.

**Tutkittavien vakuutusturva**

Ei tarvetta erilliselle vakuutukselle.

**Tutkimustuloksista tiedottaminen**

Kysymyksessä on opinnäytetyö, joka julkaistaan avoimesti Theseus-tietokannassa.

**Tutkimuksen päättäminen**

Tämä tutkimus päättyy opinnäytetyön valmistuttua.

Aineistoa voidaan käyttää jatkotutkimuksissa liittäen jatkotutkimusta varten myöhemmin kerättävään lisäaineistoon. Tässä tapauksessa aineisto säilyy edelleen alkuperäisen tutkijan hallussa.

**Lisätiedot**

Pyydämme teitä tarvittaessa esittämään tutkimukseen liittyviä kysymyksiä tutkijalle/tutkimuksesta vastaavalle henkilölle.

**Tutkijoiden yhteystiedot**

Tutkija / opinnäytetyötekijä  
Nimi: Minna-Maria Mattila  
Puh. xx  
Sähköposti: xx

Tutkimuksesta vastaa / opinnäytetyön ohjaaja  
Titteli: PhD, lecturer, Metropolia University of Applied Sciences, Helsinki  
Nimi: Sanna Kivijärvi  
Sähköposti: xx

**Tutkimuksen tietosuojaseloste: Henkilötietojen käsittely tutkimuksessa**

Tässä tutkimuksessa käsitellään teitä koskevia henkilötietoja voimassa olevan tietosuojalainsäädännön (EU:n yleinen tietosuoja-astus, 679/2016, ja voimassa oleva kansallinen lainsäädäntö) mukaisesti. Seuraavassa kuvataan henkilötietojen käsittelyyn liittyvät asiat.

**Tutkimuksen rekisterinpitäjä**

Rekisterinpitäjällä tarkoitetaan tahoa, joka yksin tai yhdessä toisten kanssa määrittelee henkilötietojen käsittelyn tarkoitukset ja keinot. Rekisterinpitäjä voi olla korkeakoulu, toimeksiantaja, muu yhteistyötaho, opinnäytetyöntekijä tai

jotkut edellä mainituista yhdessä (esim. korkeakoulu ja opinnäytetyöntekijä yhdessä).

Tässä tutkimuksessa henkilötietojen rekisterinpitäjä on:

- |                     |                          |                       |
|---------------------|--------------------------|-----------------------|
| Korkeakoulu         | <input type="checkbox"/> |                       |
| Toimeksiantaja      | <input type="checkbox"/> | Toimeksiantajan nimi: |
| Muu yhteistyötaho   | <input type="checkbox"/> | Yhteistyötahon nimi:  |
| Opinnäytetyöntekijä | <input type="checkbox"/> |                       |

#### **Tutkimuksessa teistä kerätään seuraavia henkilötietoja**

Henkilötietojen käsittely on oikeutettua ainoastaan silloin, kun se on tutkimukselle välttämätöntä. Kerättävät henkilötiedot on minimoitava, niitä ei saa kerätä tarpeettomasti tai varmuuden vuoksi.

*Ilmoittautumisessa kysytään työpajan ajankohta, nimi ja sähköpostiosoite.*

*Palautekyselyssä kysytään vuosikurssi ja koulutus.*

*Tutkimuksessa käytetään palautekyselyistä koostettuja palautteita ja osin myös niistä poimittuja suoria lainauksia.*

*Tutkimuksessa käytetään ulkopuolisen havainnoitsijan työpajan aikana tekemiä ja kirjaamia havaintoja.*

*Tutkimuksessa käytetään tutkijan työpajan aikana tekemiä havaintoja.*

*Tutkimuksessa ei käytetä nimiä eikä sähköpostiosoitteita.*

Teillä ei ole sopimukseen tai lakisääteiseen tehtävään perustuvaa velvollisuutta toimittaa henkilötietojanne vaan osallistuminen on täysin vapaaehtoista.

#### **Tutkimuksessa kerätään henkilötietojanne myös seuraavista lähteistä**

Tutkimuksessa ei kerätä henkilötietojanne muista lähteistä.

#### **Henkilötietojenne suojausperiaatteet**

Palautekyselyt ovat paperiset lomakkeet. Ensimmäinen palautetaan työpajan päätteeksi tutkijalle, toinen palautetaan suljetussa kirjekuoressa Taitopajan toimiston oven vieressä olevaan lukolliseen postilaatikkoon tai suoraan tutkijalle.

Osallistumistiedot ja ilmoittautumislinkki lähetetään sähköpostilla kolmannen, neljännen, viidennen ja kuudennen vuoden kurssisähköpostiosoitteisiin.

Ilmoittautuminen tapahtuu yliopiston suljetussa järjestelmässä olevalla sähköisellä lomakkeella, ilmoittautumisessa kysytään ainoastaan työpajan ajankohta, nimi ja sähköpostiosoite.

Palautekyselylomakkeet sekä tutkittavien suostumuslomakkeita säilytetään tutkijan kotona lukitussa kaapissa.

#### **Henkilötietojenne käsittelyn tarkoitus**

Henkilötietojenne käsittelyn tarkoitus on kerätä tietoa tutkimuksessa, jossa tutkitaan lääketieteen opiskelijoiden käsityksiä ja kokemuksia kommunikaatio- ja vuorovaikutustaitojen parantamisesta draamaharjoitusten avulla. Palautekyselyiden avulla kerätty tieto käsityksistä ja kokemuksista analysoidaan ja kootaan tuloksiksi. Tuloksiin analysoidaan myös tutkijan ja havainnoitsijan toimesta kirjatut havainnot. Sekä palautekyselyt että kirjatut havainnot ovat nimettömiä. Suoria lainauksia palautteista voidaan käyttää.

#### **Henkilötietojenne käsittelyperuste**

Henkilötietojen käsittelyperuste on suostumus.

#### **Tutkimuksen kestoaja (henkilötietojenne käsittelyaika)**

Tämä tutkimus päättyy vuonna 2023 opinnäytetyön valmistumiseen.

#### **Mitä henkilötiedoillenne tapahtuu tutkimuksen päätyttyä?**

Ilmoittautumistieto säilyy yliopiston suljetussa järjestelmässä olevalla sähköisellä lomakkeella.

Paperiset palautelomakkeet ja suostumuslomakkeet arkistoidaan tutkijan kotona.

#### **Tietojen luovuttaminen tutkimusrekisteristä**

Tietoja ei luovuteta tutkimusryhmän ulkopuolelle.

#### **Henkilötietojenne mahdollinen siirto EU:n tai ETA-alueen ulkopuolelle**

Tietojanne ei siirretä EU:n tai ETA-alueen ulkopuolelle.

#### **Rekisteröitynä teillä on oikeus**

Koska henkilötietojanne käsitellään tässä tutkimuksessa, niin olette rekisteröity tutkimuksen aikana muodostuvassa henkilörekisterissä. Rekisteröitynä teillä on oikeus:

- saada informaatiota henkilötietojen käsittelystä
- tarkastaa itseänne koskevat tiedot
- oikaista tietojanne
- poistaa tietonne (esim. jos peruutatte antamanne suostumuksen)
- peruuttaa antamanne henkilötietojen käsittelyä koskeva suostumus
- rajoittaa tietojenne käsittelyä
- rekisterinpitäjän ilmoitusvelvollisuus henkilötietojen oikaisusta, poistosta tai käsittelyn rajoittamisesta
- siirtää tietonne järjestelmästä toiseen
- sallia automaattinen päätöksenteko nimenomaisella suostumuksellanne
- tehdä valitus tietosuojavaltuutetun toimistoon, jos katsotte, että henkilötietojanne on käsitelty tietosuojalainsäädännön vastaisesti

Jos henkilötietojen käsittely tutkimuksessa ei edellytä rekisteröidyn tunnistamista ilman lisätietoja eikä rekisterinpitäjä pysty tunnistamaan rekisteröityä, niin oikeutta tietojen tarkastamiseen, oikaisuun, poistoon, käsittelyn rajoittamiseen, ilmoitusvelvollisuuteen ja siirtämiseen ei sovelleta.

Voitte käyttää oikeuksianne ottamalla yhteyttä rekisterinpitäjään.

### **Tutkimuksessa kerättyjä henkilötietoja ei käytetä profilointiin tai automaattiseen päätöksentekoon**

#### **Henkilötietojen käsittely aineistoa analysoitaessa ja tutkimuksen tuloksia raportoitaessa**

Teistä kerättyä tietoa ja tutkimusaineistoa käsitellään luottamuksellisesti lainsäädännön edellyttämällä tavalla.

Ilmoittautumisessa kerätyt nimet ja sähköpostiosoitteet sekä suostumuslomakkeet säilytetään erikseen ja niitä ei yhdistetä palautekyselyiden tietoihin. Palautekyselyistä kerättävä tieto yhdistetään ja analysoidaan erikseen. Suoria lainauksia palautteista voidaan käyttää.

Tutkimusaineistoa säilytetään tutkijan kotona lukitussa kaapissa 10 vuotta, jonka jälkeen ne hävitetään tietosuojajätteenä.

Palautekyselyiden aineistoa voidaan käyttää jatkotutkimuksissa, tai liittää jatkotutkimusta varten myöhemmin kerättävään lisäaineistoon. Tässä tapauksessa aineisto säilyy edelleen alkuperäisen tutkijan hallussa.

### Appendix 3. Participant research consent sheet/ Tutkittavan suostumus

**Tutkimuksen nimi: To be seen and heard - Medical students' experiences on interaction skills in and through drama-based approaches**

**Tutkimuksen toteuttaja: Metropolia Ammattikorkeakoulu, Minna-Maria Mattila.  
YAMK-opinnäytetyön ohjaaja Sanna Kivijärvi.**

Minua \_\_\_\_\_ on pyydetty osallistumaan yllä mainittuun tutkimukseen, jonka tarkoituksena on tutkia lääketieteen opiskelijoiden käsityksiä ja kokemuksia kommunikaatio- ja vuorovaikutustaitojen parantamisesta draamapohjaisten työpajaharjoitusten avulla.

Olen saanut tiedotteen tutkimuksesta ja ymmärtänyt sen. Tiedotteesta olen saanut riittävän selvityksen tutkimuksesta, sen tarkoituksesta ja toteutuksesta, oikeuksistani sekä tutkimuksen mahdollisesti liittyvistä hyödyistä ja riskeistä. Minulla on ollut mahdollisuus esittää kysymyksiä ja olen saanut riittävän vastauksen kaikkiin tutkimusta koskeviin kysymyksiini.

Olen saanut tiedot tutkimukseen mahdollisesti liittyvästä henkilötietojen keräämisestä, käsittelystä ja luovuttamisesta ja minun on ollut mahdollista tutustua tutkimuksen tietosuojaselosteeseen.

Osallistun tutkimukseen vapaaehtoisesti. Minua ei ole painostettu eikä houkuteltu osallistumaan tutkimukseen.

Minulla on ollut riittävästi aikaa harkita osallistumistani tutkimukseen.

Ymmärrän, että osallistumiseni on vapaaehtoista ja että voin peruuttaa tämän suostumukseni koska tahansa syytä ilmoittamatta. Olen tietoinen siitä, että mikäli keskeytän tutkimuksen tai peruutan suostumukseni, minusta keskeyttämiseen ja suostumukseni peruuttamiseen mennessä kerättyjä tietoja ja näytteitä voidaan käyttää osana tutkimusaineistoa.

**Allekirjoituksellani vahvistan osallistumiseni tähän tutkimukseen.**

**Jos tutkimukseen liittyvien henkilötietojen käsittelyperusteena on suostumus, vahvistan allekirjoituksellani suostumukseni myös henkilötietojeni käsittelyyn. Minulla on oikeus peruuttaa suostumukseni tietosuojaselosteessa kuvatulla tavalla.**

Helsinki

\_\_\_\_\_

Allekirjoitus: \_\_\_\_\_

Nimenselvennys: \_\_\_\_\_

Alkuperäinen allekirjoitettu tutkittavan suostumus sekä kopio tutkimustiedotteesta liitteineen jäävät tutkijan arkistoon. Tutkimustiedote liitteineen ja kopio allekirjoitetusta suostumuksesta annetaan tutkittavalle.