

**Finnish Preclinical and Clinical Medical Students as Strategic L2  
English Learners: Language Learning Strategies and  
Communicating with Patients**

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This thesis focused on medical students' language learning strategies for patient encounters. The research questions concerned the types of learning strategies that medical students use and the differences between the preclinical students and the clinical students, two groups who have had varying amounts of experience with patients. Additionally, strategy use was examined through activity systems to gain information on the context of language learning strategy use in order to learn language for patient encounters.

In total, 130 first-year medical students (preclinical) and 39 fifth-year medical students (clinical) participated in the study by filling in a questionnaire on language learning strategies. In addition, two students were interviewed in order to create activity systems for the medical students at different stages of their studies. The study utilised both quantitative and qualitative research methods; the analysis of the results relies on Oxford's Strategic Self-Regulation Model in the quantitative part and on activity theory in the qualitative part. The theoretical sections of the study introduced earlier research and theories regarding English for specific purposes, language learning strategies and activity theory.

The results indicated that the medical students use affective, sociocultural-interactive and metasociocultural-interactive strategies often and avoid using negative strategies, which hinder language learning or cease communication altogether. Slight differences between the preclinical and clinical students were found, as clinical students appear to use affective and metasociocultural-interactive strategies more frequently compared to the preclinical students. The activity systems of the two students interviewed were rather similar. The students were at different stages of their studies, but their opinions were very similar. Both reported the object of learning to be mutual understanding between the patient and the doctor, which in part explains the preference for strategies that support communication and interaction. The results indicate that the nature of patient encounters affects the strategy use of the medical students at least to some extent.

Key words: activity theory, English as a second language, English for specific purposes, language learning strategies, medical students

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### **List of abbreviations**

ESL	English as a Second Language
ESP	English for Specific Purposes
L2	Second Language
OCSI	Oral Communication Strategy Inventory
SI	Sociocultural-Interactive
SILL	Strategy Inventory for Language Learning
SLA	Second Language Acquisition

# 1 Introduction

The global status of the English language has undoubtedly affected the language use in the Finnish working environments, as well as the society in general. The languages that the majority of the population speak as their native languages are not the only languages needed in many professional contexts, and often second language (L2) skills are required. English, due to its global status, is very likely to be the language of communication when the speakers do not share a native language. This thesis focuses on second language acquisition (SLA) and on the professional L2 use in medical contexts, more specifically the English learning of medical students. L2 is a multidimensional term, and to avoid any confusion in the terminology, throughout the thesis I use L2 to mean any languages that have been acquired after learning one's native language (Ortega 2009: 5).

The present study aims to explore Finnish medical students and the language learning strategies they use to succeed in patient encounters in English. I will examine the types of learning strategies the medical students use in order to learn English for patient encounters, and also compare the strategy use between preclinical students, who have little or no experience with patients, and clinical students, who have at least some experience with patients. I will also examine the larger context of language learning for patient encounters through activity systems; I aim to discover what kinds of activity systems are found among the medical students and how they differ between the preclinical and clinical students. The hypothesis is that there are at least some differences between the preclinical and the clinical students in their strategy use, possibly because of the varying amounts of experience with patients.

In the present study, the strategy use of the medical students is examined through a language learning strategy questionnaire and interviews which complement the questionnaire results. The analysis of the results relies on *Strategic Self-Regulation Model* and *activity theory*. Strategic Self-Regulation Model by Oxford (2011) is thoroughly introduced in section 3.3 and it is used throughout the thesis as a basis for



categorising language learning strategies. Activity theory is used in the analysis of the qualitative results in order to examine the medical students' overall views on English learning and language learning strategies. To the best of my knowledge, the English learning of Finnish medical students has not been widely studied, and neither have their language learning strategies regarding patient communication. L2 learning strategies in general have been the focus of research for a long time, and in the present study the activity theoretical perspective adds a new angle to examining learning strategies.

The topic of this thesis was inspired by the nature of language studies within medical education. Future medical professionals receive very little formal instruction in English, though English is one of the languages most likely to be used in Finland in addition to Finnish or Swedish. This has led me to think about the abilities of Finnish medical students in patient encounters that need to be conducted in English. Much of the English learning of Finnish medical students depends on autonomous and active learning without formal instruction, and thus language learning strategies were seen as a suitable focus for the present study.

The following three sections focus on the theoretical framework of the study. Section 2 introduces English for specific purposes and language use in professional circumstances, as well as more specific information on medical discourse between doctors and patients. In addition, language teaching in the context of Finnish medical education is given some attention in section 2. Section 3 focuses on language learning strategies. Language learning strategies are discussed thoroughly, as the previous research has been very extensive and complex. Section 4 introduces activity theory, which will be used in the analysis of the qualitative results. Sections 5 and 6 concentrate on the present study, its data and methodology. The results of the study are presented and analysed in section 7, and the results are further discussed in section 8. Section 9 concludes the thesis, and some limitations to the study and suggestions for further research are presented.

## 2 English for specific purposes

In this section, I will discuss *English for specific purposes* (ESP) and research conducted in the field. The first subsection presents the definition of English for specific purposes and introduces some relevant previous research. In subsection 2.2, the focus is on medical discourse and using a language for communication between doctors and patients. Subsections 2.2.1 and 2.2.2 concentrate on the conventions of medical discourse in Finland and the status of communication and language studies in medical education in Finland, and more specifically in the University of Turku.

### 2.1 Definitions and previous research

English for specific purposes is a field of study focusing on the specific communication needs of certain professional or occupational groups (Hyland 2007: 391). ESP research is an interdisciplinary field which is most often connected to applied linguistics and discourse analysis, though other disciplines and fields are commonly linked to it as well (Hyland 2007: 392). ESP research presupposes that different practices and understandings within institutions affect language use and communication, and these practices should be identified to be able to create useful tasks and materials for students of a specific field (Hyland 2007: 397). ESP research is also strongly based on the idea of language users being members of a social group, which turns the focus on communication (Hyland 2007: 401). Much of ESP research is heavily based on the wide usage of English as a lingua franca in specific domains, such as in the business world (Nickerson 2012: 445).

The globalisation of the world has brought new requirements for the work place, including the usage of multiple languages, often English among them, and encounters with multicultural contexts. Both linguistic competence and intercultural awareness are needed in educational institutions and the professional world alike (Taillefer 2007: 136). Taillefer (*ibid.*) mapped the professional language needs of French economics students as well as the students' perceptions on what the language training at the university should include. Oral skills appeared to be more difficult to learn compared to written language; nonetheless they were both perceived as important skills for a

graduate (Taillefer 2007: 147). The graduated students reported that they were not satisfied with their language skills, especially oral skills, and they did not feel sufficiently prepared for the requirements of professional language use (*ibid.*). As Taillefer (2007) examines the language skills of economics students in France, the results are not entirely transferable to the Finnish context or the medical field, which consists of altogether different professions than the economical field. It is still noteworthy that Taillefer (2007) emphasises the link, or lack thereof, between higher education and the professional world that follows.

Though Taillefer's (2007) study provides information on professional language needs in general, a view of the language needs in the medical field is nevertheless useful in the context of the present study. Boshier and Smalkoski (2002) conducted a needs analysis for immigrant English as second language (ESL) nursing students' professional English language needs in the United States of America. Through interviews and observations, the faculty members indicated that immigrant ESL nursing students of various backgrounds seemed to have great communication problems with their patients, and patients had problems understanding the students as well (Boshier & Smalkoski 2002: 61). The added stress of using a second language during procedures made the nursing students nervous in communication situations (Boshier & Smalkoski 2002: 63). A course was designed to improve both verbal and non-verbal communication skills of the students; the objectives of the course included guidance both in appropriate communication in health care and in the importance of the role of culture in health care (Boshier & Smalkoski 2002: 69). In general, the students found the course useful, and according to students' own evaluation, the course had a positive effect on their communication skills (Boshier & Smalkoski 2002: 74). The linguistic context in the US is very different from the Finnish context, but the problems ESL nursing students in Boshier and Smalkoski's (2002) study faced during their studies and during patient encounters may be generalised to a Finnish context, where a professional uses a second or a foreign language to communicate.

Lepetit and Cichocki (2002), then, explored the perceptions that future health care professionals in the US have of their needs for foreign language learning. Contrary to Boshier and Smalkoski's (2002) study, Lepetit and Cichocki (2002) examined native

English speakers' needs for foreign languages. Therefore, the results may be more linked to the present study as the learnt language is not that of the majority of the population. The students participating in the study found oral skills more important than written skills in relation to their future professions (Lepetit & Cichocki 2002: 390). The study draws from the growing Spanish-speaking population in the US and addresses the changes and demands the Spanish-speaking population possibly places on the medical field (Lepetit & Cichocki 2002: 392). In the Finnish context, the situation is to some extent similar; the number of people who speak neither Finnish nor Swedish as their native language has significantly increased in Finland over the last 20 years (Statistics Finland 2014), and the recent increase in the number of asylum seekers and refugees in Finland and in Europe inevitably affects the work of health care professionals to some extent. The global status of English indicates that English is one of the languages most likely to be used when the speakers do not have a common native language.

## **2.2 Medical discourse**

Doctors, as many professionals, encounter situations where certain types of language use are typical or even mandatory. In the medical field, communication and its effectiveness are considered to have a significant importance in clinical outcomes (Ferguson 2012: 243). This subsection concentrates on the discourse of medical encounters. Firstly, I will present the typical patterns of Finnish doctor-patient communication, and then, communication studies in medical education are briefly discussed. Secondly, I will provide a general view of language and communication studies in the context of this study, in the University of Turku in Finland. All of the obligatory languages studies are discussed, though most emphasis is given to English.

### **2.2.1 Medical discourse in Finland**

Certain structures are typical and common during patient encounters, including chains of questions and answers, where questions can be both open or closed questions, and the patient's answer affects the formulation of the next question (Pyörälä 2001: 187). Each doctor and each patient has his or her own style of communication, resulting in

doctor-patient encounters that are never identical (Peräkylä, Eskola & Sorjonen 2001: 9). However, both doctors and patients have certain traditional impressions on how to talk, which topics are appropriate, what is the structure of the encounter, how long it lasts and what kind of roles the doctor and the patient have (Peräkylä, Eskola & Sorjonen 2001: 9–10). From the point of view of communication, each encounter is still potentially different regardless of the rather fixed structures. Different communication styles and assumptions of the structures might lead to difficult situations, and hence acknowledging these potential differences is especially important when considering doctor-patient encounters in which either one of the participants or both of them use a second language, or there are cultural differences.

Among communication skills, Pyörälä (2001: 190) emphasises doctor's active listening as an important part in doctor-patient encounters. Expressions of listening, such as short answers and eye contact, assist the patient in continuing speaking (*ibid.*). The importance of doctors observing and noticing the expressions that patients are listening are also emphasised (Pyörälä 2001: 191–192). Pyörälä's (2001) description of doctors' communication is situated in the Finnish context, but signs of active listening could be seen as rather universal. Cultural differences inevitably exist and an awareness of possible differences is to some extent important for doctors, and though the conventions and structures presented above are based on the Finnish context alone, they offer a valuable view of the communication between doctors and patients in general.

Interaction skills for patient encounters are taught during medical education in Finland. Pyörälä (2001: 183) argues that doctors' communication skills were assumed to develop along clinical skills by observing experienced doctors and their communication with patients, until in the 1990s communication studies were included in medical education both in Finland and abroad. According to Pyörälä (2001: 194), the aim of communication studies in medical education is to guide the students to listen to the patient, to integrate their speech to that of the patient, to take advantage of the elements the patient brings to the discussion and to apply communicational structures flexibly. Developing communication skills in one's native language can differ greatly from learning and developing communication skills in one's second language,

especially when the second language is used in a professional context. Hence, language and communication studies in medical education will be the topic discussed next.

### **2.2.2 Language studies at the Faculty of Medicine in the University of Turku**

Medical students in the University of Turku have obligatory courses in Finnish, Swedish and English, each of the courses preparing the students for their future profession and for either academic language and communication needs or for studying their field (Hynönen, Laivo-Laakso & Lampinen 2015: 49). The Finnish studies include instruction on both medical writing skills and professional communication with patients and the media (*ibid.*). The course on patient communication in Finnish is placed at the end of the preclinical studies (Hynönen, Laivo-Laakso & Lampinen 2015: 49), as is the Swedish course (Sahlstein 2015: 86). The aims of the Swedish course are to achieve both written and oral skills that are needed in the profession of a doctor, especially when encountering patients, and to help students with concrete situations (*ibid.*). The English course is placed at the first semester of medical studies; however, a description of the Medical English I course is not available in the curriculum (University of Turku 2015). The English course consists primarily of learning medical vocabulary in order for the students to be able to read medical texts in English (Kelly Raita, personal communication, September 2015).

Sahlstein (2015) studied the status of Swedish among medical students in the University of Turku. Medical students at the clinical stage of their studies have indicated a positive attitude towards the Swedish language and they feel it is important, but some of the students are reluctant to use the language due to insecurity (Sahlstein 2015: 89). Many students reported that they found it difficult to use Swedish when it had been a while since they took the Swedish course and they had not had any practice (Sahlstein 2015: 92). Not using the language often enough resulted in insecurities and therefore using the language during patient encounters might be nearly impossible (*ibid.*). Sahlstein's (2015) results are especially interesting in regard to the present study considering that the students do not receive formal instruction on communicating with patients in English, and unlike the language studies

in Finnish and Swedish, English teaching does not include any instruction on how to communicate in the language. It could be argued that communication skills are transferable to another language. However, the Finnish and Swedish courses are primarily based on the Finnish context, so intercultural patient encounters are possibly not covered during these courses.

In a needs analysis conducted by the Language Centre of the University of Turku, Nelson (2015: 71–72) aimed to discover the skills that both students themselves and faculty members regard as the most important for studies and for the future in the professional world. The results of the needs analysis suggest that university students consider general speaking skills as the most important skill in foreign language learning, while the faculty staff members emphasise academic skills (Nelson 2015: 75). The skills the students consider most important in their future workplace included for example courage to speak, cultural knowledge, social skills, and generally English in all forms (Nelson 2015: 79). Along with the needs analysis, the general efficacy of the Language Centre was assessed through examining the students' achieved learning goals (Nelson 2015: 80). For the present study, it is noteworthy that the medical students had the lowest score in recognising their learning strategies, both among all the learning goals examined (including, for instance, increasing confidence in communication situations) and among all the faculties examined for the study (Nelson 2015: 81).

Considering the results of both Sahlstein (2015) and Nelson (2015) and that the English course concentrates mostly on vocabulary, the language and communication skills of medical students especially in English are arguably an important topic. Though medical students possibly use English more often than Swedish in their daily lives, the lack of instruction in professional communication skills in English might result in difficulties in patient encounters where English is needed. As oral skills and communication skills are highly appreciated by university students according to Nelson's (2015) study, medical students' patient encounters in English become an interesting topic for research. Much of learning English for professional purposes is dependent on the students' own active interest in learning and on students regulating their language learning. Hence, the

following section concerns one way of regulating language learning, using language learning strategies.



### **3 Language learning strategies**

In this section, I will concentrate on *language learning strategies* and previous research on the topic. The first subsection introduces the definitions of language learning strategies that are used in the present study, as well as presents some of the problems of defining learning strategies. Subsection 3.2 reviews some of the earlier research conducted in the field of language learning strategies and self-regulation, including criticisms towards the research. The following subsection presents Oxford's (2011) Strategic Self-Regulation Model, an extensive model of language learning strategies, which will be one of the fundamental theoretical frameworks of this study. In subsection 3.4, I will briefly discuss language learning strategies in connection to English for specific purposes.

#### **3.1 Defining language learning strategies**

Language learning strategies, and learning strategies in general, have been widely studied for decades (see subsection 3.2), but the definition of a learning strategy is still being discussed. Researchers still dispute over a clear, comprehensive definition of a learning strategy (Dörnyei & Ryan 2015: 143), and various definitions have been suggested and discussed (Macaro 2006: 324). This subsection presents the definitions chosen for this study and prefaces further examination of language learning strategies.

Among the numerous definitions of language learning strategies, this study bases the view on language learning strategies on the definitions by Griffiths (2008) and Oxford (2011). Griffiths (2008: 87) defines learning strategies as “activities consciously chosen by learners for the purpose of regulating their own language learning”. Griffiths (2008: 85–87) developed the definition based on a careful examination of previous research and on features upon which learning strategy researchers have agreed. After combining the key aspects of the previous language learning strategy research, the above definition was suggested (*ibid.*). Griffiths (2013: 7–15) completes her earlier definition by reviewing research and introducing six key features of language learning strategies. These key features are activity, consciousness, choice, goal orientation, regulation, and learning focus (*ibid.*). Griffiths (2013: 9) also suggests that consciously

used strategies can be automatic or deliberate and all strategy use is placed on a continuum between automatic and deliberate. Griffiths' (2008) definition was chosen because it is based on extensive examination of previous research, and Griffiths (2013) has returned to her definition to complete it with other important features of the term.

Oxford (2011: 12), then, uses the more specific term *self-regulated L2 learning strategy*. The definition of a self-regulated L2 learning strategy is given along with the introduction of the Strategic Self-Regulation Model, and the following definition is suggested: "*self-regulated L2 learning strategies* are defined as deliberate, goal-directed attempts to manage and control efforts to learn the L2" (Oxford 2011: 12, emphasis as in the original) and self-regulated L2 learning strategies are described as "broad, teachable actions that learners choose from among alternatives and employ for L2 learning purposes" (*ibid.*). Griffiths' (2008) and Oxford's (2011) definitions are fairly similar, both emphasising learners choosing certain activities or actions in order to be able to control or regulate their learning. Oxford's (2011) definition adds the learners' goals to the definition, as well as learners being able to choose from a range of strategy options. Oxford's (2011) Strategic Self-Regulation Model being a theoretical background for the analysis of the present study, Oxford's definition is seen as an important foundation for defining the central concept of a language learning strategy.

The learner's active part is emphasised in both above-mentioned definitions. Also Dörnyei and Ryan (2015: 140) emphasise the active learner, and according to their definition, learning strategies explain "*how proactively and in what way* L2 learners engage in the learning process" (emphasis as in the original). Dörnyei and Ryan (2015: 164) further argue that the usefulness of a learning strategy depends on the learner, and the exact type of a learning strategy is not as important as the fact that the learner has chosen to use learning strategies. Hence, there are individual differences in the usefulness of specific strategies, and learners do not necessarily benefit from similar learning strategies.

As the focus of this thesis is on oral communication skills, the relationship between communication strategies and learning strategies needs to be acknowledged as well.

Communication strategies are traditionally defined as ways to solve linguistic problems when non-native speakers interact (Kasper & Kellerman 1997: 1). Grenfell and Macaro (2007: 14) conclude that communication strategies can be viewed as a part of learning strategies, social interaction being a possibility for strategic behaviour. Additionally, Oxford (2011: 90) views communication strategies as facilitating both communication and learning by communicating. Opposing views exist, and for example Griffiths (2013: 15) distinguishes communication strategies from learning strategies by noting that communication strategies are used to facilitate interaction, whereas learning strategies regulate language learning. However, the view of communication strategies as a part of learning strategies is adopted in this study, particularly because the participants of the study do not receive instruction on the communication situations studied, and autonomous strategic behaviour, including communication strategies, might be essential for learning to communicate successfully.

Language learning strategies are often divided into two conflicting perspectives: psychological and sociocultural (Oxford & Schramm 2007: 47). Oxford and Schramm (2007: 47–48) offer the definition of learning strategies for each perspective; the psychological perspective views learning strategies as particular plans or actions that are used by individual learners, whereas the sociocultural perspective focuses on societies, and learning strategies are defined as socially mediated plans in order to achieve a goal. The psychological perspective often prefers quantitative research methods, while the sociocultural perspective is often associated with qualitative methods (Oxford & Schramm 2007: 49). Oxford and Schramm (2007: 47) encourage researchers to combine these two perspectives instead of continuing the conflict of the two views. The present study aims to consider both psychological and sociocultural views on language learning strategies.

Learning strategies are rather closely related to metacognition and to learner autonomy, and thus these two concepts are briefly discussed. Metacognition is defined as the ability to think about and reflect on thinking and learning, and it helps learners to make conscious choices and decisions in managing learning, for example through choosing particular strategies (Anderson 2008: 99). Anderson (2008: 101) argues that the effective use of appropriate strategies is one of the important aspects

of a learner's metacognitive behaviour, and simultaneously awareness of using learning strategies helps learners in using the strategies effectively. Cotterall (2008: 110) summarises learner autonomy as the learner's capability to take responsibility for learning and make decisions while learning. The concepts of learner autonomy and metacognition are meaningful to this study, considering the independent nature of the medical students' learning of English language communication skills.

## **3.2 An overview of language learning strategy research and self-regulation**

This subsection presents some of the most notable research in the field of language learning strategy research and some of the criticism towards the research. As has been mentioned earlier, learning strategies have been of interest for decades and the amount of research on language learning strategies alone is substantial. This short review will only cover a part of language learning strategy research and the aim of this subsection is to give background for the choice of Oxford's (2011) Strategic Self-Regulation Model as the theoretical basis for the present study.

### **3.2.1 Notable research in the field**

Language learning strategy research started in the 1970s, and Joan Rubin's article in 1975 is considered to be the beginning of language learning strategy research (Grenfell & Macaro 2007: 11). Early research in language learning strategies focused on the traits of a 'good language learner' (Dörnyei & Ryan 2015: 144), and since then the research has focused more on using and managing the strategies appropriately (Dörnyei & Ryan 2015: 147). In the 1970s, the possibility of learning strategies resulting in successful language learning was examined, and later, the research continued to suggest that the use of learning strategies is related to effective language learning (Griffiths 2013: 1–2). The research conducted in the 1970s and the early 1980s produced numerous findings and was exploratory in nature (Skehan 1989: 79). The emergence of language learning strategy research also created a variety of terms to describe similar phenomena (Griffiths 2008: 83).

Language learning strategy research has experienced two major shifts of perspective; firstly, the focus shifted from the general characteristics of a 'good language learner' to differences in individuals' strategy use in specific contexts; secondly, the quality of strategy use became more prominent than the quantity of strategies (Grenfell & Macaro 2007: 23). Along with these changes of perspective, metacognition began to receive more interest as the mechanism managing effective strategy use (*ibid.*). To avoid problems of, for example, defining fuzzy concepts in learning strategy research, Tseng, Dörnyei and Schmitt (2006) have suggested including *self-regulation* in the research of strategies. Most of the learning strategy research since the late 1980s has concentrated on practical matters, such as examining ways of directing learners towards effective studying (Tseng, Dörnyei & Schmitt 2006: 78). Therefore, Tseng, Dörnyei and Schmitt argue that the self-regulatory approach "highlights the importance of the learners' innate self-regulatory capacity that fuels their efforts to search for and then apply personalized strategic learning mechanisms" (Tseng, Dörnyei & Schmitt 2006: 79). However, they (2006: 81) admit that self-regulation and self-regulatory mechanisms have many of the same definitional problems as learning strategies.

Many language learning strategy researchers have resisted adopting solely the term self-regulation to discuss learning strategies. Gao (2007), Ranalli (2012) and Rose (2012) have all suggested that instead of abandoning learning strategy research, self-regulation and learning strategies could be seen as complementary elements. Furthermore, Rose (2012: 95) argues that self-regulation and strategy use are different phases of a process; self-regulation, being a trait of a learner, is the "driving force" and strategy use is the outcome of self-regulation. Gao (2007: 619) recommends continuing the research of learning strategies as a part of a wider approach including self-regulation. Oxford's (2011) Strategic Self-Regulation Model (see subsection 3.3) acknowledges both learning strategies and self-regulation, as the name of the model suggests, and thus learning strategies and self-regulation are seen as complementary in the present study.

Both Skehan (1989) and Macaro (2006) have compiled sets of generalisations based on earlier research. Based on comparison of some of the early language learning strategy

studies, Skehan (1989: 83) proposes four generalisations: 1) social strategies are seen as the most important in informal language learning situations; 2) the amount of time spent on learning is relevant to many strategies; 3) research is not based on a single learning theory, different versions are used by different researchers; 4) reflective abilities are seen as important. A few decades later Macaro (2006: 20) has summarised the central research in language learning strategies and the results the studies have yielded into four claims: 1) a correlation between strategy use and success in language learning has been found, 2) strategies vary among groups and individuals, 3) the methodologies in language learning strategies research are imperfect, but they do not lack validity or reliability, 4) instructing learning strategy use seems to be useful for learners. These sets of generalisations show the development of the field from the very early stages of the field to a more recent stage. Compared to Macaro's (2006) list, Skehan's (1989) generalisations are still rather simple and show that the research on which he based the generalisations had not yet been very extensive. Macaro (2006), then again, has been able to make clear generalisation about the correlation of strategy use and success as well as the usefulness of strategy instruction.

After the initial steps of language learning strategy research, O'Malley and Chamot (1990) and Oxford (1990) published their contributions to the field, and their works are regarded to be among the most significant in the field (Grenfell & Macaro 2007: 18). Therefore, O'Malley and Chamot's (1990) and Oxford's (1990) contributions to the field are presented here in more detail. Oxford's work in 1990 is also a precedent to her later work with the Strategic Self-Regulation Model. Thus, Oxford's (1990) work is discussed in detail to provide an extensive background for the model used in the present study. Though O'Malley and Chamot (1990) and Oxford (1990) have encountered some criticism, their influence on the field has nevertheless been considerable.

O'Malley and Chamot (1990: 1) base their work on cognitive information processing, of which learning strategies are a part. Cognitive theory and second language learning are discussed in detail, and learning strategies are described as cognitive processes (O'Malley & Chamot 1990: 42). O'Malley and Chamot (1990: 16) argue that "cognitive theory can extend to describe learning strategies as complex cognitive skills". Though

O'Malley and Chamot (1990: 44) acknowledge affective strategies, they have chosen to focus on strategies that are clearly cognitive, as they base their work on cognitive theory. O'Malley and Chamot (1990) conducted four studies on language learning strategies in different contexts and with different methods, and they summarise the results in their book. Their studies aimed to examine various issues, including organisation of learning strategies, relationship of specific tasks and the proficiency level (O'Malley & Chamot 1990: 115), the differences between foreign language learners and English as second language learners (O'Malley & Chamot 1990: 123), phases of listening comprehension and the differences between the strategy use of ineffective and effective listeners (O'Malley & Chamot 1990: 130), and the learner's ability to identify strategies on different proficiency levels (O'Malley & Chamot 1990: 133). Based on the studies conducted, O'Malley and Chamot (1990: 143) conclude that mental processes can be categorised as metacognitive, cognitive and social/affective strategies.

Oxford's (1990) contribution to the language learning strategy research provided the field primarily a very practical view on the matter. Oxford (1990) directly addresses educators and has included a significant number of exercises and practical ways to include learning strategies in teaching; therefore, the goal of the book seems to have been to introduce the field to teachers. Oxford (1990) created a taxonomy of language learning strategies and lists key features of language learning strategies, which will be shortly introduced. The greatest contribution of Oxford's (1990) work for language learning strategy research has possibly been the Strategy Inventory for Language Learning (SILL), which has been used widely in studying language learning strategies. Oxford's (1990) ideas that are most central to the present study are briefly presented and discussed as a background for Oxford's subsequent work.

Oxford (1990: 11) lists nine features of language learning strategies. Strategies are problem-oriented tools helping learners to solve a problem or achieve a goal (*ibid.*). Strategy use is based on actions or behaviours which are meant to enhance learning (*ibid.*). Learning strategies include affective and social strategies in addition to cognitive and metacognitive aspects (*ibid.*). Oxford (1990: 11–12) also mentions supporting learning both directly and indirectly; direct strategies use the L2 and

indirect strategies do not necessarily involve using the L2, but still contribute to language learning (e.g. affective strategies). The degree of observability is low, as many learning strategies cannot be observed by another person (Oxford 1990: 12). Unlike in her recent work in 2011, in 1990 Oxford argued that learning strategies can be instinctive and become automatic, i.e. they are not always used consciously (Oxford 1990: 12). Strategy use can be taught to students and strategy training in general is recommended (*ibid.*). Language learning strategy use is flexible; learners choose and combine learning strategies in their own individual ways and they are not always predictable (Oxford 1990: 13). However, many factors can affect the choices of learning strategies, for example personal preferences or traits, the environment or the general context of learning (*ibid.*).

Oxford (1990: 14–15) created a model of language learning strategies which divides strategies into direct and indirect strategies, and further includes six strategy categories within the two strategy classes. Indirect strategy categories include metacognitive, affective and social strategies, whereas direct strategies include memory, cognitive and compensation strategies (*ibid.*). Direct language learning strategies include direct use or processing of the target language; for example, compensating lack of knowledge by guessing is a form of direct strategy use (Oxford 1990: 37). Indirect language learning strategies have a supporting role and are not necessarily directly in contact with the target language; for example, encouraging oneself to learn is an indirect strategy (Oxford 1990: 135–136). Direct and indirect strategies do not, however, work separately, but are supposed to support each other and interact (Oxford 1990: 14). Oxford (1990: 8) lists metacognitive, affective, social, cognitive, memory and compensation strategies as helpful strategies to achieve communicative competence, which is seen as a broad goal of language learning in general.

Though Oxford (1990) introduced a new system of categorising and classifying learning strategies and introduced the widely used strategy use inventory, the theoretical support for the introduced system is rather vague, as there are few references to other researchers and the claims are not always explicitly justified. Oxford is aware of the theoretical shortcomings of the field (1990: 17), but regardless she established a firm



belief on the effectiveness of learning strategies in language learning (Oxford 1990: 22). Oxford's work in 1990 can be viewed as a predecessor of the Strategic Self-Regulation Model introduced later.

### **3.2.2 Criticism towards learning strategy research**

As many fields of study, also learning strategy research has received a fair share of criticism. Many aspects have been criticised, but mostly the methods of gathering data and the problems of defining strategies. The problems of the field have been discussed widely (e.g. Macaro 2006) and researchers in the field acknowledge the problems in various ways. In this subsection, these issues are briefly discussed.

Language learning strategy research has been criticised from very early on. Skehan (1989: 94) remarks that, at the time, language learning strategy research was "in its infancy" and mentions the lack of satisfactory methodologies. In his evaluation of the research conducted so far, Skehan (1989: 98) concludes that the language learning strategy research is a case of a "research-then-theory" perspective. According to Grenfell and Macaro (2007: 20), language learning strategy research was criticised during its early stages in the 1980s, for instance, for the lack of a common definition for a strategy, uncertainty of the relation between learner behaviour and cognitive processes, and the problems of classification.

The most significant criticism towards learning strategy research has been the problem of defining a 'strategy' (Macaro 2006: 322). Tseng, Dörnyei and Schmitt (2006: 80) also note that the idea of strategy use being both behavioural and cognitive is problematic. Additionally, strategic learning can be very difficult to separate from motivated learning (Tseng, Dörnyei & Schmitt 2006: 80). As mentioned earlier in subsection 3.2.1, self-regulation has been suggested as a replacing term for learning strategies (e.g. Tseng, Dörnyei & Schmitt 2006), but many researchers view self-regulation and learning strategies as complementary terms. Regarding the definitional problems, Grenfell and Macaro argue (2007: 9) that though the definition and the terminology of language learning strategy research have been problematic, the problems are not

limited to the research of learning strategies, but have been issues in second language acquisition research in general.

Research methodologies in language learning strategy research are another problematic issue, which has been criticised considerably. The issues of both qualitative and quantitative research methodologies have been mentioned in critical reviews of the language learning strategy research (Macaro 2006: 321–322). Tseng, Dörnyei and Schmitt (2006: 83) also note that questionnaires problematically only measure the quantity of strategy use; previous research has proved the quality of strategy use to be more important than the quantity, because learners might use a number of language learning strategies unsuitable to them or to the particular learning situation. Many of the questionnaires developed for studying learning strategies, such as Rebecca Oxford's (1990) SILL, do not consider the quality of strategy use in any way (Tseng, Dörnyei & Schmitt 2006: 83).

Cohen and Macaro (2007: 283) state that reaching a consensus over the definition of a strategy is unlikely and as long as the field lacks a consensual, definitive model of a strategy, it is important to clearly state the theoretical framework on which the research is based. Based on Cohen and Macaro's (2007) advice, I aim to acknowledge the criticism presented here regarding the definitional and methodological issues in the present study to a sufficient degree, and additionally state explicitly the theoretical basis of the study. The model introduced in the following subsection, the Strategic Self-Regulation Model, is the most significant model of language learning strategies for the present study.

### **3.3 The Strategic Self-Regulation Model**

For the present study, Oxford's Strategic Self-Regulation Model is the most important learning strategy related framework. The Strategic Self-Regulation Model will be used in the analysis of the results, and Oxford's (2011) ideas on language learning strategies are significant in the understanding of language learning strategies in this study. The Strategic Self-Regulation Model was created by Oxford as an attempt to provide a theoretical model of language learning strategies, which balances psychological, social-

cognitive and sociocultural aspects of language learning (Oxford 2011: 40). The focus of the model is on active and constructive learners controlling their language learning by using learning strategies (Oxford 2011: 7). The learners' active management of their learning by choosing effective learning strategies for particular situations or learning goal, and evaluating their use of strategies and successfulness of the strategy use are emphasised (Oxford 2011: 14). The definition of self-regulated L2 learning strategies was introduced above in subsection 3.1 and features of learning strategies are further examined later in this section. Though Oxford's (2011) Strategic Self-Regulation Model has been criticised to be too broad to solve any of the problems in language learning strategy research (Dörnyei & Ryan 2015: 150), the Strategic Self-Regulation Model is nevertheless seen as a useful framework for the present study.

Oxford (2011: 14) lists six features of self-regulated L2 learning strategies. The strategies are used consciously, and their purpose is to affect learning by making it easier, quicker, pleasant and more effective (*ibid.*). Strategies are transferable to other relevant situations, and particular tactics are used to apply the strategies in different contexts (*ibid.*). The Strategic Self-Regulation Model defines tactics as the application of certain strategies or metastrategies, i.e. the practical ways a strategy can be used (Oxford 2011: 31). Strategies reflect the multidimensionality of learners, and strategies are often used as chains of strategies (Oxford 2011: 14). These features complement the definition Oxford (2011) has given for self-regulated L2 learning strategies. Compared to earlier features of language learning strategies Oxford presented in 1990, the key features of self-regulated L2 learning strategies consist of clearly characteristic features of strategies, instead of categorisations or functions.

Oxford (2011: 14) divides language learning strategies into three dimensions: cognitive strategies, affective strategies and sociocultural-interactive (SI) strategies. Each dimension helps the learner in different ways and they are introduced more thoroughly below. The three dimensions also have meta levels, describing the processes of managing the use of strategies: metacognitive strategies, meta-affective strategies and metasociocultural-interactive (meta-SI) strategies (Oxford 2011: 15). Unlike earlier taxonomies, Oxford's taxonomy (2011: 16–17) has included meta-affective and metasociocultural-interactive strategies in order to avoid the confusion

of using only the term metacognitive strategies, when affective and sociocultural-interactive metastrategies are described in addition to cognitive strategies.

Cognitive strategies include strategies contributing to L2 knowledge, its construction, transformation and application (Oxford 2011: 14), whereas metacognitive strategies guide and manage the use of cognitive strategies, which in turn help learners to construct their L2 knowledge (Oxford 2011: 44). According to the Strategic Self-Regulation Model, cognitive and metacognitive strategies are valuable for successful learners at all stages of L2 learning (Oxford 2011: 43). Table 1 below introduces both metacognitive and cognitive strategies included in the Strategic Self-Regulation Model and an example of a tactic a learner might use within the strategy type. As the model lists definite strategy types, the inclusion of the term tactics allows an infinite number of ways to use the strategies, in any way an individual learner chooses.

<b>Metacognitive strategies</b>	
<i>Strategy</i>	<i>Example of a tactic</i>
Paying Attention to Cognition	<i>Deciding to pay close attention in class</i>
Planning for Cognition	<i>Prioritising and scheduling tasks</i>
Obtaining and Using Resources for Cognition	<i>Finding online dictionaries in L2</i>
Organizing for Cognition	<i>Organising materials for easy access</i>
Implementing Plans for Cognition	<i>Taking notes while reading</i>
Orchestrating Cognitive Strategy Use	<i>Choosing strategies for specific purposes</i>
Monitoring Cognition	<i>Considering the difficulty of a task</i>
Evaluating Cognition	<i>Evaluating progress between tasks</i>
<b>Cognitive strategies</b>	
<i>Strategy</i>	<i>Example of a tactic</i>
Using the Senses to Understand and Remember	<i>Placing sticky notes with vocabulary in the apartment</i>
Activating Knowledge	<i>Brainstorming existing knowledge in a group</i>
Reasoning	<i>Learning a rule and applying it immediately</i>
Conceptualizing with Details	<i>Analysing sentence structure to understand</i>
Conceptualizing Broadly	<i>Skimming a text</i>
Going Beyond the Immediate Data	<i>Inferring and predicting based on the context</i>

**Table 1.** Metacognitive and cognitive strategies (Oxford 2011: 102–113)

Affective strategies aim to influence the attitudes and emotions of the learner (Oxford 2011: 14) and function as the force creating positive attitudes and beliefs to maintain and increase motivation (Oxford 2011: 63). Meta-affective strategies monitor and evaluate the success of the affective strategies (*ibid.*). The affective dimension of L2 learning, with emotions, beliefs and attitudes, is a complicated and challenging side of learning that requires attention (Oxford 2011: 65). Meta-affective and affective strategies are an effective way to address issues resulting from affective aspects (Oxford 2011: 65–66), such as problems with motivation.

Affective and meta-affective strategies are useful for learners at all levels, but they can be especially important for learners at lower proficiency levels (Oxford 2011: 83). Oxford (2011: 67) notes that many of the previous models of language learning strategies have disregarded the affective aspect of language learning, or have considered them as a secondary component. Oxford (*ibid.*) strongly disagrees with the belief of emotions having a small part in learning, and thus the Strategic Self-Regulation Model emphasises the importance of emotions, attitudes and beliefs as influential components of language learning (Oxford 2011: 67). Table 2 below introduces meta-affective and affective strategies within Oxford's (2011) model, and similarly to Table 1, provides some examples of possible tactics.

Meta-affective strategies	
<i>Strategy</i>	<i>Example of a tactic</i>
Paying Attention to Affect	<i>Considering motivations for learning</i>
Planning for Affect	<i>Setting a goal to feel less anxious</i>
Obtaining and Using Resources for Affect	<i>Listening to music in L2 for motivation</i>
Organizing for Affect	<i>Minimising disruptions in study environment</i>
Implementing Plans for Affect	<i>Calming down before a test</i>
Orchestrating Affective Strategy Use	<i>Combining positive and “threat” strategies</i>
Monitoring Affect	<i>Monitoring motivation during a task</i>
Evaluating Affect	<i>Considering the success of affective strategies</i>
Affective strategies	
<i>Strategy</i>	<i>Example of a tactic</i>
Activating Supportive Emotions, Beliefs and Attitudes	<i>Relaxing prior to a task in L2</i>
Generating and Maintaining Motivation	<i>Creating positive thoughts about a task</i>

**Table 2.** Meta-affective and affective strategies (Oxford 2011: 114–124)

Sociocultural-interactive (SI) strategies combine the communicative and sociocultural situations (Oxford 2011: 14), and their purpose is to facilitate communication in L2 in possibly problematic communication situations (Oxford 2011: 87). Sociocultural context is viewed as the cultural context, including three layers of culture (social, historical and imaginative) where communication occurs (Oxford 2011: 86). Metasociocultural-interactive strategies facilitate learning by managing contexts, communication and culture (Oxford 2011: 87). The Strategic Self-Regulation Model emphasises that learners should continue communicating in spite of lack in L2 knowledge (e.g. grammatical, semantic), as different communication strategies often facilitate both communication and learning by communicating (Oxford 2011: 90). Table 3 below presents the meta-SI and SI strategies in Strategic Self-Regulation Model, and provides examples to clarify the contents of the strategies.

<b>Meta-SI strategies</b>	
<i>Strategy</i>	<i>Example of a tactic</i>
Paying Attention to Contexts, Communication, and Culture	<i>Considering the interactive requirements of a task</i>
Planning Contexts, Communication, and Culture	<i>Planning for strategies based on emphasis on either fluency or accuracy, or both</i>
Obtaining and Using Resources for Contexts, Communication, and Culture	<i>Seeking opportunities to interact with native speakers</i>
Organizing for Contexts, Communication, and Culture	<i>Scheduling time to communicate in L2</i>
Implementing Plans for Contexts, Communication, and Culture	<i>Planning to use certain speech acts and using them when possible</i>
Orchestrating Strategy Use for Contexts, Communication, and Culture	<i>Using communication strategies to overcome linguistic problems</i>
Monitoring for Contexts, Communication, and Culture	<i>Monitoring cultural understanding during conversations</i>
Evaluating for Contexts, Communication, and Culture	<i>Evaluating cultural knowledge and needs for improvement</i>
<b>SI strategies</b>	
<i>Strategy</i>	<i>Example of a tactic</i>
Interacting to Learn and Communicate	<i>Asking for help or clarification from a teacher</i>
Overcoming Knowledge Gaps in Communicating	<i>Using gestures to explain an unknown word</i>
Dealing with Sociocultural Contexts and Identities	<i>Imitating cultural behaviours of others</i>

**Table 3.** Meta-SI and SI strategies (Oxford 2011: 125–136)

The Strategic Self-Regulation Model introduces task-phases that learners employ when engaging in a task (Oxford 2011: 25). The task-phases are the following: strategic forethought, strategic performance, and strategic reflection and evaluation (*ibid.*). Strategic forethought is defined as the activities and processes preceding the task, such as considering the requirements of the task and setting goals (*ibid.*). Strategic performance refers to implementing the actions planned in the first task-phase, and monitoring the success of the plan as well as assessing whether to proceed with the plan or modify it (*ibid.*). Strategic reflection and evaluation refer to assessing the outcomes and the effectiveness of the used strategies (*ibid.*). Oxford (2011: 26) notes that task-phases do not necessarily occur in this order and any strategy can occur in multiple phases, though the model suggests the phases where each strategy is most likely to be useful.

The Strategic Self-Regulation Model considers learners to be part of communities of practice (Oxford 2011: 28). The model defines a community of practice as “an authentic, meaningful group centred on specific practices, goals, beliefs, and areas of learning within an environment, which can be local or electronically networked” (Oxford 2011: 29). Communities of practice are discussed in sociocultural psychology, and though the concept is not identical to the concept of community in activity theory, the terms are connected. Discussion on communities of practice within the Strategic Self-Regulation Model supports the use of the Strategic Self-Regulation Model and activity theory concurrently. A professional group or a group of students in the same discipline can be regarded as a community of practice; hence medical students are a suitable group for examination.

### **3.4 Learning strategies and English for specific purposes**

In this section, I intend to examine the research on learning strategies and learners of English for specific purposes. Learning language for professional reasons and for professional environments might differ drastically from everyday language use, and therefore language learning strategies might also be different. The relationship between language learning strategies and ESP is discussed through an examination of earlier research and results.

Peacock and Ho (2003) studied interdisciplinary differences in strategy use. According to previous studies, strategy use differs among disciplines of study and information on interdisciplinary differences offers important knowledge for developing the language teaching in different disciplines (Peacock & Ho 2003: 183). The disciplines examined in the study were the following: English, primary education, business, maths, science, engineering, building and construction, and computer studies (*ibid.*). The results indicate that English students use strategies most often and computing students use them least often (Peacock & Ho 2003: 185). Peacock and Ho (2003) prove, in part, that strategy use differs sometimes greatly between disciplines, though it also differs within the disciplines; each discipline had both high-use and low-use students. Several reasons for not using certain strategies were presented during the interviews; among other reasons, learners reported a lack of interest in learning English and feelings of



English not being useful for them (Peacock & Ho 2003: 193). Though Peacock and Ho (2003) did not have medicine as one of the studied disciplines, their results are still of interest to this study. Relying on the results of Peacock and Ho (2003), it could be assumed that medical students, too, have their own set of strategies that are typical of them as a group, though individual differences are of course characteristic of any group.

Al Qahtani (1999) focused on the English learning of medical students whose language of instruction is English. The background of Al Qahtani's (1999) study is rather different to the present study, as the participants in Al Qahtani's study are instructed in English and cultural differences both in general and in medical education are present (Al Qahtani views the Gulf countries as developing countries, 1999: 5). The study still offers noteworthy conclusions for a different environment and setting, and is an interesting point of comparison. Similarly to the present study, one of Al Qahtani's (1999: 5) aims for her study was to explore the strategies medical students use to learn English, as well as the relationship between study approaches and learning strategies. Al Qahtani's (1999: 415) results indicate that providing training in learning strategies and offering optional English courses can affect students' achievements in English learning positively. Though Al Qahtani (1999) recommends this solely for medical schools in the Gulf region, where the subjects of the study live, these recommendations could easily be extended to other contexts as well.

Based on a study of two advanced English learners, Kawai (2008: 226–227) found that the learners used three levels of strategies in order to develop their oral communication skills. The first level included strategies concerning general skills in speaking, such as intonation and turn taking (Kawai 2008: 226). The second level consisted of strategies that aim for more fluent communication, such as learning vocabulary related to a certain topic or learning typical expressions for different types of conversations (Kawai 2008: 227). The third level, which Kawai emphasises to be the one that should receive the most attention, covers strategies used to help the speaker complete specific speaking situations, including strategies such as rehearsing for different communication situations (*ibid.*). Kawai (2008: 218) notes that "[o]ral communication involves an interactive social aspect which sets it apart from other

language skills and creates a whole extra dimension with which the learner must come to terms". Kawai's study was conducted with only two participants, both of whom were proficient in English and worked with the language (2008: 223), and thus the findings cannot be widely generalised. However, the third level of strategies in Kawai's (2008) study concern greatly the topic of the present study. Medical students in the University of Turku do not rehearse communication with patients in English in their obligatory courses. This leads to the students not using strategies that would help them communicate in a very specific communication situation, a patient encounter, during their studies, unless the students are active and interested in improving their language skills autonomously.

## **4 Activity Theory**

This section focuses on activity theory and its relation to the present study; activity theory and more specifically the activity systems of activity theory are utilised in the qualitative analysis of the results. First, the background and the basic terms of the theory are introduced in subsection 4.1, followed by a presentation of Engeström's model of activity theory in subsection 4.2. Subsection 4.3 presents some of the most relevant features of the theory for the present study as well as discusses previous activity theoretical research in second language learning relevant for the present study. Subsection 4.3 considers the overall relevance of activity theory for the present study and further justifies its suitability for studying university students' language learning. Activity theory has been mentioned in relation to language learning strategies, for example, by Oxford (2011: 53–54) and Griffiths (2013: 40). Oxford (2011: 53–54) discusses activity theory in relation to the Strategic Self-Regulation Model, as the concepts of the model are similar. Thus, the Strategic Self-Regulation Model and activity theory can easily be considered simultaneously.

Activity theory is a very complicated and broad theory and activity theoretical studies are scattered among numerous fields of research. Due to the complexity of the theory and the scope of the present study, activity theory is only introduced in a limited manner and only the most relevant parts of the theory are discussed. The present study is not aiming to be a strictly activity theoretical study, but a study using activity theory as a perspective on language learning strategies.

### **4.1 The background and central concepts of activity theory**

The history of activity theory is very long, and though it provides background for the theory and its development, an extensive examination of the history of the theory is not of relevance for the present study. Vygotsky, Leont'ev and Luria, whose works were published in the early 20<sup>th</sup> century, are regarded as the initiators of activity theory (Engeström & Miettinen 1999: 1). Before the 1990s, activity theory was relatively unknown in Western and Anglo-Saxon academic literature, though the theory was occasionally mentioned earlier, too (Roth 2004: 1–2). Though activity

theory is often associated with psychology, Sannino, Daniels and Gutiérrez (2009: 1) state it is multidisciplinary and not tied to one discipline or field. Activity theoretical research has been divided into three generations with different focuses. Vygotsky's work is considered as the first-generation activity theory, and Luria's and Leont'ev's following works are considered as the second-generation activity theory (Roth & Lee 2007: 189). The third-generation activity theory includes the idea of activity systems being a part of networks of activity systems which form the society (Roth & Lee 2007: 200). The present study relies mostly on literature on the third-generation activity theory, though the scope of the study does not allow including networks of activity systems in the analysis.

Activity theory has been applied to various fields of research, among them learning, language acquisition and, more recently, learning and developing at work (Engeström & Miettinen 1999: 2). Yang, Baba and Cumming (2004: 14) summarise the basic idea of activity theory as follows: "[e]ssentially, activity theory holds that human beings construct their knowledge through their interactions with others and the world". According to Sannino, Daniels and Gutiérrez (2009: 1), the aim of activity theory is to examine the changes of social activities. Activities purposefully construct and change societal norms and this way form new features of reality (Davydov 1999: 39). By performing activities, the skills, the personality, and the consciousness of a person develop in addition to changes outside a person: transformations of social conditions and creating new cultural artifacts, among others (*ibid.*).

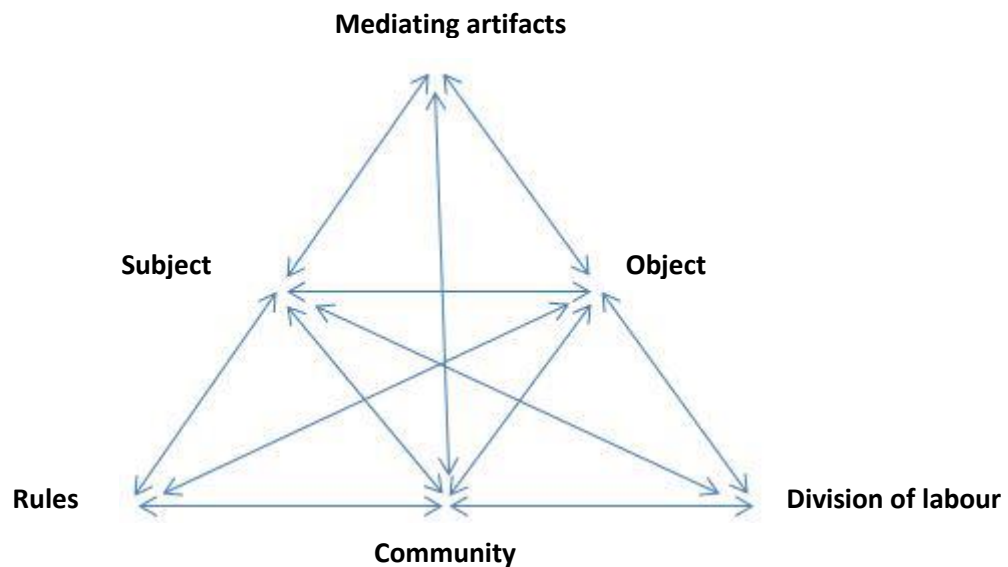
The basis for activity theory and activity theoretical perspective is object-oriented activities (Sannino, Daniels & Gutiérrez 2009: 3), for example, learning a new language. Activity theory encompasses the historical dimension and explores activities beyond given situations (*ibid.*). Activities are considered as developing complex structures, where human agency is both mediated and collective (Roth & Lee 2007: 198). The concept of activity should not be confused with momentary events that have exact points of beginning and end (Roth & Lee 2007: 198), nor with the meaning 'activity' often receives in educational settings, tasks in which learners engage (Roth & Lee 2007: 201). Though activity as a word is often used in a very broad sense in everyday contexts and it can mean for example tasks during a lesson, within activity theory the

term has a narrower meaning, and thus all action is not necessarily an activity in the activity theoretical sense.

As the earlier paragraphs have stated, activities happen in a social setting and interaction is essential to them. According to the ideas of sociocognitive tradition, in which activity theory is included, cognitive development is largely based on interaction between members of a community, where the learner learns by observing and interacting with a more advanced individual and hence develops his or her own skills to be able to perform tasks autonomously (Pekarek Doehler 2002: 23). When Pekarek Doehler's (2002) idea is applied to second language learning, it indicates that learners learn by communicating with other speakers. Activity theory in second language learning implies a holistic perspective in language learning; learning a second language is not only learning forms, but includes "developing, or failing to develop, new ways of mediating ourselves and our relationships to others and to ourselves" (Lantolf & Pavlenko 2001: 145). Lantolf and Pavlenko (*ibid.*) argue for a perspective where learners are agents who actively affect their own learning, its terms and its conditions. These general ideas and views of activity theory and its past provide a background for examination of the unit of analysis in activity theory, the activity system.

## **4.2 Activity systems**

The unit of analysis in the third-generation activity theory is "*object-oriented, collective, and culturally mediated human activity, or activity system*" (Engeström & Miettinen 1999: 9, emphasis as in the original), which will be henceforth referred to as an activity system. Engeström (1999: 30–31) presents two models to visualise activities and the activity system. The simple model only has three components: subject, object, and mediating artifacts (Engeström 1999: 30). This simple model does not include the societal and collaborative nature of activities (*ibid.*), and therefore the complex model of activity systems (Figure 1) is needed. The complex model has been expanded to include the societal and collaborative aspects in addition to the basic components (Engeström 1999: 31). The added components are rules, community, and division of labour (*ibid.*).



**Figure 1.** Activity system. Adaptation of Engeström (1999: 31)

The subject in the activity system refers to the person or the group performing the activity (Engeström 1999: 30–31). The object is the goal or objective the subject aims to achieve, and the mediated artifacts are the tools used in order to achieve the object (*ibid.*). The activity theory accounts for the common cultural resources of a society as historically formed mediating artifacts that are used in any local activities (Engeström & Miettinen 1999: 8). An artifact can become a part of an activity system when activity systems interact as networks (*ibid.*). The shifts within networks cause the artifacts to be modified in various ways, and thus, previous generations provide general cultural means of solving problems (*ibid.*). Community, as presented in the activity system, includes other individuals with the same object (Fujioka 2014: 42) and the community where the activity is situated and for which the activity is performed (Roth & Lee 2007: 199). The division of labour means the roles of the community members, for example, the responsibilities and statuses of the members (Fujioka 2014: 42). Finally, rules define the appropriate conventions of interaction within the activity system (*ibid.*). The components introduced above are visualised in Figure 1.

Roth (2004: 4) emphasises the dynamic nature of the structure of activity, which is represented in Engeström’s triangle by arrows; the structure experiences constant changes in the components of the activity. Roth and Lee (2007: 196) also emphasise the dialectical nature of the activity theory; components of a unit cannot be

understood separately, without the other parts of the unit or without seeing the component in a larger system. By this Roth and Lee (2007) mean that for example the activity system is a unit which consists of several components that cannot be understood as separate entities, and in turn, the activity system cannot be understood without the components of which it is composed.

### **4.3 Activity theory and the present study**

Activity theory is particularly suitable for the present study, considering the learning environment of medical students. Medical students learn many skills by observing experienced doctors working and by working based on the guidance of experienced doctors, and though interaction and communication skills are taught formally, arguably students learn interaction with patients in other contexts as well. Medical students learn within a clear community of students and medical professionals, in a context where communication and interaction is rather different compared to other professional contexts. This subsection aims to further discuss the relation of activity theory to the present study.

Patient encounters are without doubt social situations with certain rules and roles. Interaction might become more challenging still, when using a second language is integrated to a specific situation such as a patient encounter, with its roles and rules. Pekarek Doehler (2002: 22) argues that social situations should not be treated only as contexts in which activities are performed, but as situations which are integral in learning the activity in a particular social situation. This can be applied to social situations in both one's native language and in one's second language, as specific social situations often have certain patterns and structures. Pekarek Doehler (2002: 24) also notes that social interaction and interactional competencies themselves are simultaneously a mediating artifact and an object of learning. Succeeding in interactional problem-solving presupposes that the participants understand and act according to the sociocultural norms of the situation (*ibid.*).

Fujioka (2014) studied the interaction between students and professors on academic writing assignments and examined the networks of activity systems between students

and teachers as well as the changes in the activity systems. Fujioka's (2014) longitudinal perspective allowed the researcher to create connections in the behaviours of the participants, and to explore the networks of activity systems. In the present study, networks of activity systems are not included due to the scope of the study. However, it is evident that also medical students act within a network of different activity systems; their teachers and patients have their own activity systems that affect the activity systems of the medical students. Transformations in the activity systems are also excluded in the strict meaning, as examining the transformation of activity systems would require longitudinal research methods. Nevertheless, the present study includes the perspectives of students at different stages of their studies, and thus certain cautious assumptions on the development of the students' learning strategies and activity systems can be made.

This section and the previous sections have introduced the theoretical framework on which the present study relies. The following sections focus on the empirical part of the study, presenting the data and the methodology of the present study, analysing the results and further discussing the implications of the results. The information in the theoretical sections is crucial to understand the results, and I will refer back to the appropriate sections as needed.



## **5 Data**

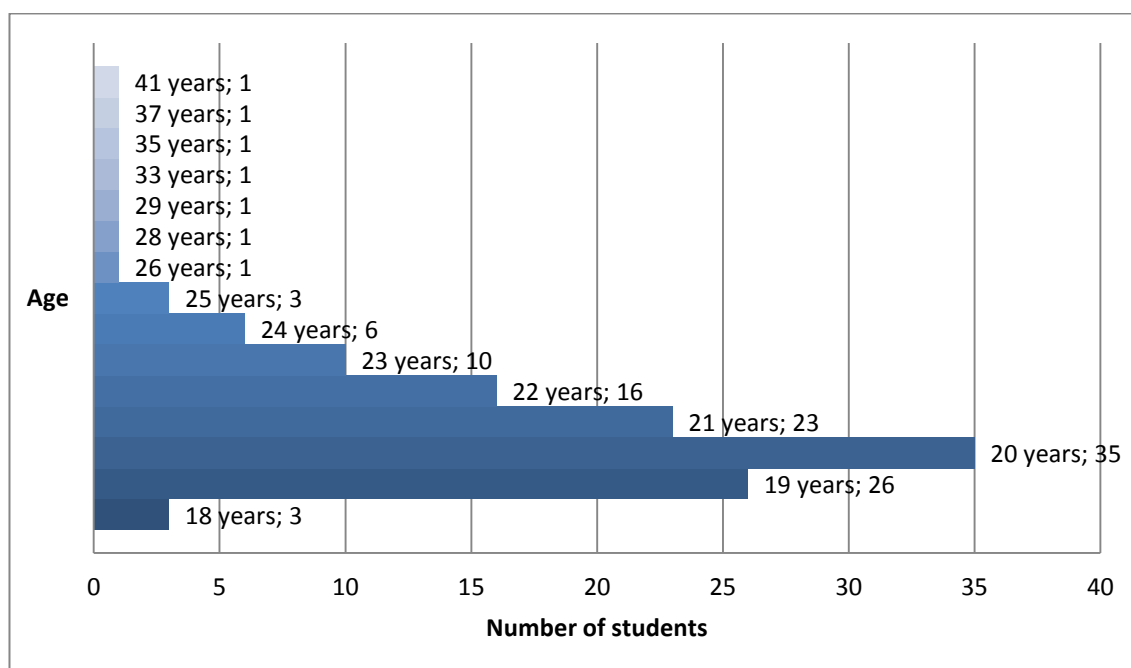
In this section, I present the data and the participants of the present study. The data of the present study consist of questionnaire answers and information gathered in interviews. The data on the medical students and their learning strategies have been gathered in two phases; firstly, a questionnaire was distributed among first-year (preclinical) and fifth-year (clinical) students of medicine in the University of Turku in September 2015, and secondly, semi-structured interviews with voluntary students were conducted in February 2016. The methods of data gathering are presented in more detail in section 6.

Overall, the data consist of 167 questionnaires, of which 76.9% are from preclinical students and 23.1% are from clinical students, and two interviews. 5 preclinical and 5 clinical students were invited for interviews, but only two students replied to the invitation and participated in the interviews. Fortunately, one of the interviewees was a preclinical student and one was a clinical student, and thus the data gathered from the interviews can be easily compared to each other and the quantitative questionnaire data. Including two groups of students in different stages of their studies allows for comparison between the groups, and comparing preclinical and clinical students is particularly interesting considering that the students have had varying amounts of experience with patients. Al Qahtani (1999: 418) has recommended studying students at different stages of their studies, in clinical and preclinical stages, and this approach was adopted in the present study. The participants of the study are introduced in more detail in the following subsections.

### **5.1 Preclinical students**

The preclinical students in the present study are first-year medical students who have started medical studies in September 2015. The first-year students answered the questionnaire during a lesson of their English course, Medical English I. In total, 138 students filled in the questionnaire form. Of these 138 forms, eight were excluded due

to imperfect or ambiguous answers. None of the information on the excluded questionnaire forms is included in the examination of the participants or in the analysis of the results. Among the questionnaires that had been correctly filled in, 15 students left their contact information so they could be invited for an interview, though only 14 emails were valid. 69 students (53.5%) were female and 60 students (46.5%) were male. The students' ages are distributed between 18 years and 41 years, though 92.2% of the students are under 25 years old. Though the age of the students is not further discussed in the analysis of the results, the differences between the age structures of the two student groups are still important to acknowledge. Age can arguably affect the language learning of a person to some extent (Ortega 2009: 29), and thus influence the strategy use of students within one group. For example, among the preclinical students, the three 18-year-olds possibly have very different ideas on language learning and language learning strategies compared to the 41-year-old student. The age distribution of the preclinical students is presented in Figure 2 below.



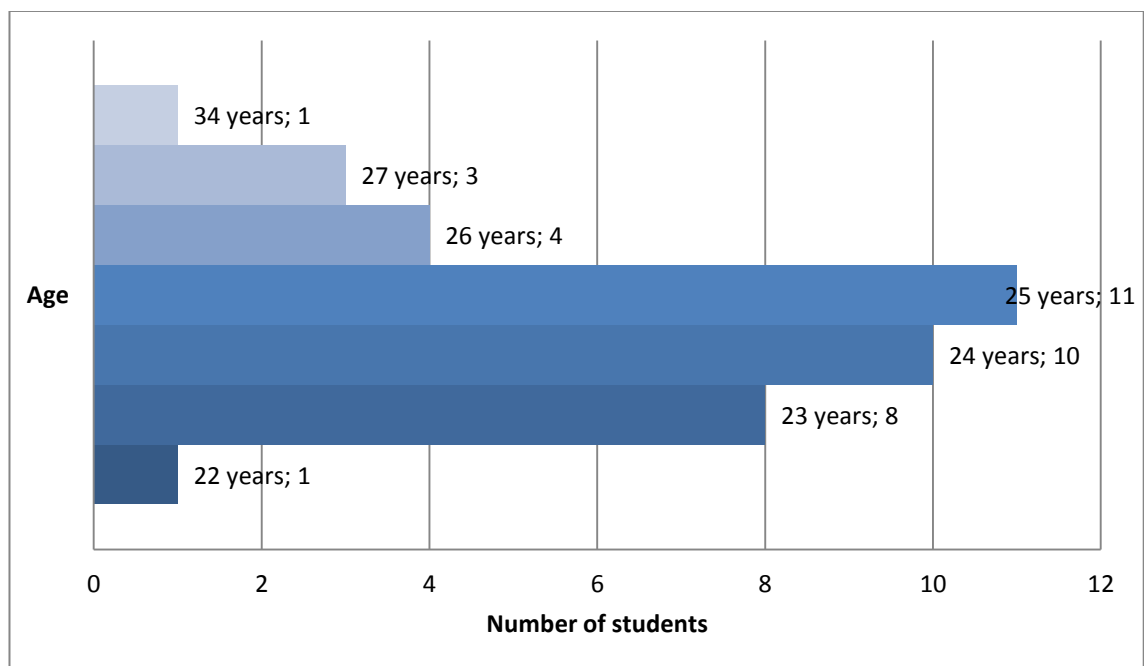
**Figure 2.** The age distribution of the preclinical students

The questionnaire was distributed among the students in the beginning of their English lesson. Thus, the students were not rushed to fill in the questionnaire and the questionnaire being related to English learning, it was relevant to the lesson. The students were divided into two groups for the English course, and the questionnaire

was administered for each group during the same day. The English course is a compulsory course which in part explains the high number of participants, along with the unhurried situation.

## 5.2 Clinical students

The clinical students in the study are fifth-year students. The questionnaire was distributed to the clinical students on two occasions, as the students are divided into two groups who study different courses. In total, 41 questionnaire forms were returned, but three forms were excluded due to missing or ambiguous answers. Five students left their contact information for the interview, but one of the participants had not answered all of the items and was hence excluded altogether. 17 students (44.7%) were female and 21 students (55.3%) were male. Figure 3 presents the age distribution of the clinical students. Compared to the preclinical students, the clinical students' ages are slightly more evenly distributed, as 76.3% of the students are 23–25 years old.



**Figure 3.** The age distribution of the clinical students

The questionnaire was distributed among the clinical students after their lectures, and the students stayed voluntarily to fill it in. The students were informed of the

questionnaire in advance, but some students were not able to stay after the lecture. As the students had been divided into two groups, the questionnaires were administered on different days. The first group had a compulsory lecture before I distributed the questionnaire, but unfortunately I was not able to schedule a time after a compulsory lecture for the second group. Therefore the number of students was lower during the second session of data gathering. Some students in both groups were not able to stay due to other responsibilities, especially as both of the lectures ran a few minutes late.

## **6 Methodology**

This section introduces the methods of the present study. One of the aims of the present study was to examine the types of learning strategies the medical students use, and discover whether the preclinical and the clinical students differ in their strategy use. Measuring learning strategy use and self-regulatory learning is often conducted through self-report questionnaires (Dörnyei & Ryan 2015: 155, White, Schramm & Chamot 2007: 94) and this was the approach chosen for this study as well, as regards the quantitative part. In addition to quantitative data from the questionnaires, interviews were conducted to gather qualitative data; the purpose of gathering qualitative data was to examine the wider context of learning strategy use and to examine possible reasons for strategy use in the learning environment. Oxford's Strategic Self-Regulation Model was used in the analysis of the questionnaires, whereas the interviews were examined largely by using activity theory. This section presents the methods used to analyse the data, subsection 6.1 presenting the questionnaire and subsection 6.2 introducing the interviews.

### **6.1 Questionnaire**

Quantitative data on the learning strategy use of the medical students were gathered with a two-page questionnaire; Nakatani's (2006) Oral Communication Strategy Inventory (OCSI) was translated into Finnish for the purposes of the present study. The focus on oral communication of the questionnaire was found suitable for the present study, as the students were asked to think of a specific situation, a patient encounter in English, while filling in the questionnaire. Additionally, OCSI was developed based on real strategies Japanese university students use (Nakatani 2006: 153), and as the development of the inventory involved university students, it was viewed as a suitable questionnaire to be used in the present study as well. OCSI was created to provide a survey to examine the strategies ESL students use for communication (Nakatani 2006: 152). Furthermore, Nakatani (2006) has paid great attention to the validity of the questionnaire; pilot studies were conducted (Nakatani 2006: 153) and reliable items were chosen for the questionnaire through statistical factor analysis (Nakatani 2006:

153). The internal consistency of the inventory was found to be highly acceptable (Nakatani 2006: 157). The survey is divided into two parts, the first concentrating on strategic behaviour in speaking and the second concentrating on strategies used while listening (Nakatani 2006: 153). The original OCSI form was translated into Finnish to ensure that the participants understood the questions. The original OCSI by Nakatani is found in the Appendices (Appendix 1), along with the translated version used in this study (Appendix 2).

The subjects of the study filled in a paper questionnaire during or after lectures. Each group of students received the same instructions and background information on the study before the questionnaire was distributed; the topic of the study was briefly explained to the participants, the structure of the questionnaire was presented and the students were instructed to think about patient encounters when choosing their answer. The students had five options to choose from: never or almost never, generally not, to some extent, generally, and always or almost always. At the initial stages of analysing the data from the questionnaires, one of the questionnaire items was found slightly problematic because the statement could be understood in two different ways. Due to this fault in translation, item 8 in the listening section was excluded from the analysis in order to ensure that the results were not misleading.

Nakatani (2006: 165–166) has divided the questionnaire items in the speaking section into eight categories, or factors: social affective strategies, fluency-oriented strategies, negotiation for meaning while speaking, accuracy-oriented strategies, message reduction and alteration strategies, nonverbal strategies while speaking, message abandonment strategies, and attempt to think in English strategies. The items in the listening section were divided into seven categories: negotiation for meaning while listening, fluency-maintaining strategies, scanning strategies, getting the gist strategies, nonverbal strategies while listening, less active listener strategies, and word-oriented strategies (Nakatani 2006: 166–168). Though Nakatani's categorisation is surely functional and Nakatani has justified the categorisation thoroughly by statistical analysis, the categories are not particularly suitable for the present study. Instead of using the categorisation in the original OCSI, the items were categorised based on Oxford's Strategic Self-Regulation Model. Strategic Self-Regulation Model is a

broad framework and thus it is viewed as a suitable model for examining language learning strategies and, as Nakatani (2006) has already compared the items in OCSI to Oxford's (1990) earlier categorisation in SILL, the categorisations of Strategic Self-Regulation Model are seen as applicable. The categories of Nakatani (2006) and Oxford (2011) do not differ extensively, though Oxford's categories are broader in general. Strategic Self-Regulation Model is viewed as a more suitable way of categorising the learning strategies of medical students in the present study, mainly because the model is consistent with previous research in the field and it takes into account the earlier findings of the field more thoroughly.

Griffiths (2013: 44–45) has suggested categorising strategies based on specific contexts and objectives, and if pre-existing classifications are used, they should be modified with the learner group in mind and considering the goals and the learning environment of the learners. Keeping in mind the context and the learning environment of the medical students participating in this study, the items were categorised anew relying on the examples Oxford (2011) provides. Each questionnaire item was compared to the strategy categories and examples of tactics, and a corresponding strategy category within Strategic Self-Regulation Model was selected for each item. In addition to Oxford's six categories, a new category of negative strategies was added; OCSI includes several strategies in categories 'message abandonment strategies' and 'less active listener strategies' which cease communication altogether or do not contribute to successful communication. Placing the strategies that potentially have a negative effect on communication among the positive strategies might be problematic and misleading when the results are analysed; hence the negative strategies are distinguished into their own category. The categorisation for the present study is presented in Table 4. Affective and meta-affective strategies are very few in OCSI, but understandably sociocultural-interactive and metasociocultural-interactive strategies are numerous.

Strategy classification	Questionnaire items	
	Speaking	Listening
Metacognitive strategies	7, 8, 11, 13, 14, 17, 18	4, 5, 13, 16, 26
Cognitive strategies	1, 2, 3	1, 2, 3, 7, 9, 12, 25
Meta-affective strategies	29	-
Affective strategies	25, 27, 28	-
Metasociocultural-interactive strategies	10, 19, 20, 22, 30	14, 17, 18, 19, 20
Sociocultural-interactive strategies	4, 9, 12, 15, 16, 21, 23, 26, 31	6, 10, 15, 21, 22, 23
Negative strategies	5, 6, 24, 32	11, 24

**Table 4.** Strategy classification in the present study

Self-report questionnaires are not without problems, and it is important to acknowledge the possible issues. Common problems in language learning strategy questionnaires include participants misunderstanding or misinterpreting the strategy descriptions, answers not portraying the participant's actual strategy use, and participants forgetting which strategies they have previously used (White, Schramm & Chamot 2007: 95). Another issue with self-reports is the possibility of social desirability response, i.e. the learner answering based on what he or she believes the researcher wants as an answer (Oxford 2011: 142). For the present study, however, self-report questionnaires were found the most suitable and appropriate way to gather quantitative data, as other-report and observation of the medical students using English with a patient would have been extremely difficult to organise, considering, for example, the nature of the doctor-patient relationship.

## 6.2 Interviews

The qualitative data of the present study were gathered through semi-structured interviews in Finnish. Interviews were chosen as a method of gathering further data on the learning strategies of medical students to elicit qualitative data and more specific information on the matter. As the language learning strategy research has received plenty of criticism regarding the methods (see section 3), a qualitative perspective on



the topic was perceived to be necessary to complement the results. Interviews provide flexibility and allow the participant to clarify and specify his or her earlier answers (White, Schramm & Chamot 2007: 94), which then complements the quantitative data.

The aim of the interviews was to compose models of activity systems (see section 4.2) of the medical students, and the interview questions were created based on the descriptions of the components of the activity system. Descriptions of the components were carefully examined in order to be able to create questions that would elicit answers easily applicable to an activity system. In formulating the questions, I aimed for questions that did not include any difficult or scientific words as well as short and concise questions. To avoid leading the participant to certain answers, the questions were formulated to be as open-ended as possible. Each component of the activity system was covered separately. The questionnaire answers of the students were also discussed during the interviews; I had analysed the results of the individual students, and during the interview I confirmed whether the interviewee agreed with my analysis of his or her questionnaire results.

Altogether 10 students were invited for the interviews, and eventually the data consist of two interviews, one of the interviewees being a first-year student and one of them a fifth-year student. The number of students invited for the interviews was based on the number of fifth-year students who left their contact information along with the questionnaire; among the fifth-year students five students left their e-mail address. Five students from the first-year students were selected randomly. The interviews were arranged in a group work room in a library to ensure a neutral environment where noises and other distractions could be kept to the minimum. Both interviews were recorded to ease the analysis of the results and to avoid consuming time writing down the answers. The situation was meant to be relaxed and natural, and both interviewees appeared rather relaxed despite the recording equipment, which could cause nervousness. The interviewees were reminded of the anonymity of the interviews, the nature of the study, and they were encouraged to ask for clarifications if needed. As warm-up questions, the interviewees were asked about their relationship to English in general and to learning English and whether they had encountered English-speaking patients. The actual questions concerned the different components of

the activity system and each component was separately discussed. In the end, the interviewees had a chance to add something or ask questions regarding the study or the interview. In addition, the interviewees were asked further questions if their answers were somehow vague or they discussed a particularly interesting topic. The interview questions are found in the Appendices (Appendix 3).

## **7 Results**

In this section, the results of the study are presented and discussed. The aim of the quantitative results was to discover the types of learning strategies the medical students use and to explore what kind of differences there possibly are between the two student groups. The quantitative results are based on the questionnaire answers and they are presented in subsection 7.1. The qualitative results examine the broader context of language learning strategy use using activity systems elicited in interviews, and the aim is to create activity systems and find possible reasons for typical strategy use. Differences between the activity systems of the preclinical student and the clinical student are also discussed. Subsection 7.2 concentrates on the qualitative results.

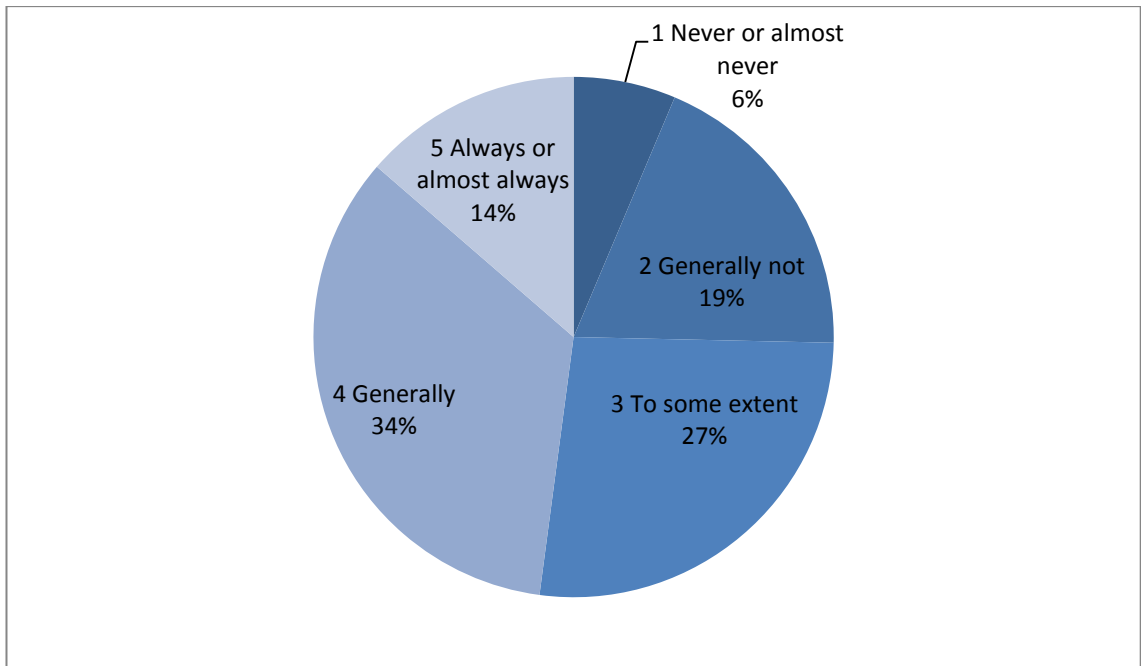
### **7.1 Quantitative results**

The questionnaire data provides information on the types of strategies medical students use in order to learn communicating in English during patient encounters. In this subsection, I will present the quantitative results of this study and answer the research questions concerning the language learning strategy use of medical students and the differences in strategy use between the two groups that were examined. Each strategy category is covered separately, starting with the cognitive and metacognitive strategies, continuing with affective and meta-affective strategies, SI and meta-SI strategies and finally, closing with the negative strategies. The questionnaire used in the present study distinguished the strategies used in speaking and in listening. However, in the representation of the results of the study, the strategies in speaking and in listening have been combined to provide a practical and efficient view of the strategy use of medical students. Within each strategy category, both student groups are first discussed separately and then compared.

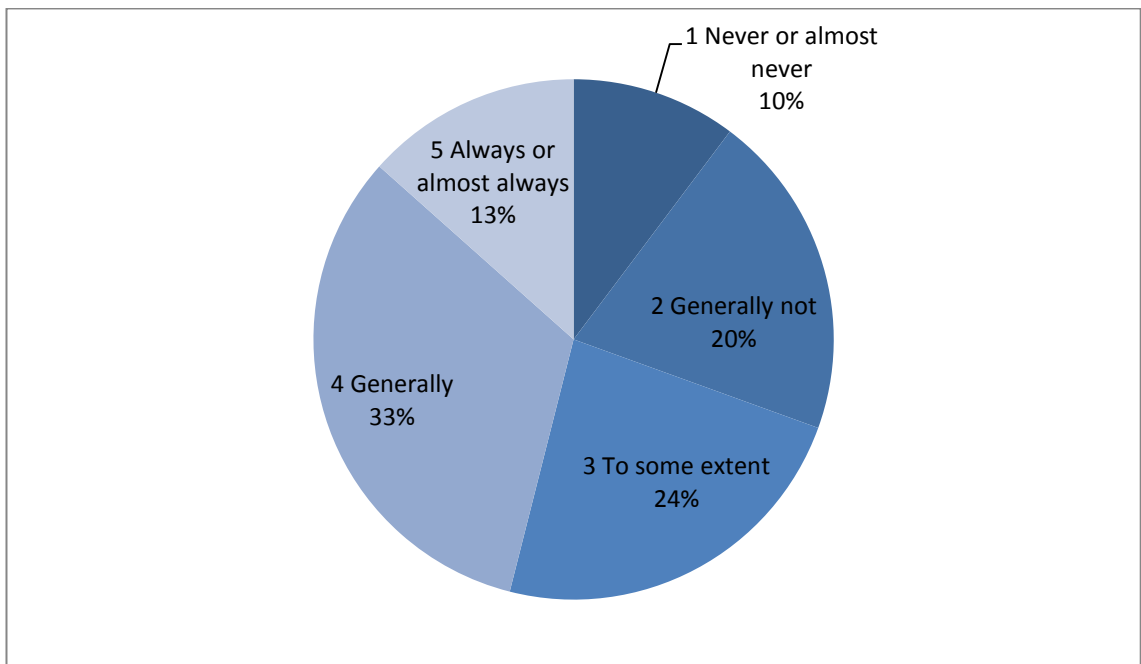
In the questionnaire, the students had five options for each statement among which they were to choose the option that is equivalent to their own behaviour. The options were presented on a Likert scale, as numbers from 1 to 5. The distance of the options is not fixed; for example, the distance from the option 'generally not' to the option 'never or almost never' is not exact and individuals can perceive them differently.

Thus, the data were processed as ordinal data, and for example the means were not calculated, but instead the mode of each category is given and the frequencies of using a particular strategy type are presented in figures. Next, the results regarding each strategy category are presented. The results of the preclinical and the clinical students are presented separately as figures, along with the description of the results and a comparison between the two groups.

**Cognitive strategies** concentrate on helping the students constructing knowledge on the L2 (Oxford 2011: 14). Cognitive strategies in the questionnaire of the present study included for instance “I think first of a sentence I already know in English and then try to change it to fit the situation” in speaking (item 2) and “I guess the speaker’s intention by picking up familiar words” in listening (item 3). Among the preclinical students, the mode, the most commonly chosen answer, was ‘generally’ which was chosen by 34% of the students (Figure 4, below). 27% of the students reported using cognitive strategies to some extent; thus the majority of the preclinical students used cognitive strategies generally or to some extent. The results from the clinical students are quite similar (Figure 5, below). 33% of the clinical students reported using cognitive strategies generally and 24% reported using them to some extent, ‘generally’ being the most common answer.



**Figure 4.** The use of cognitive strategies in speaking and listening by the preclinical students

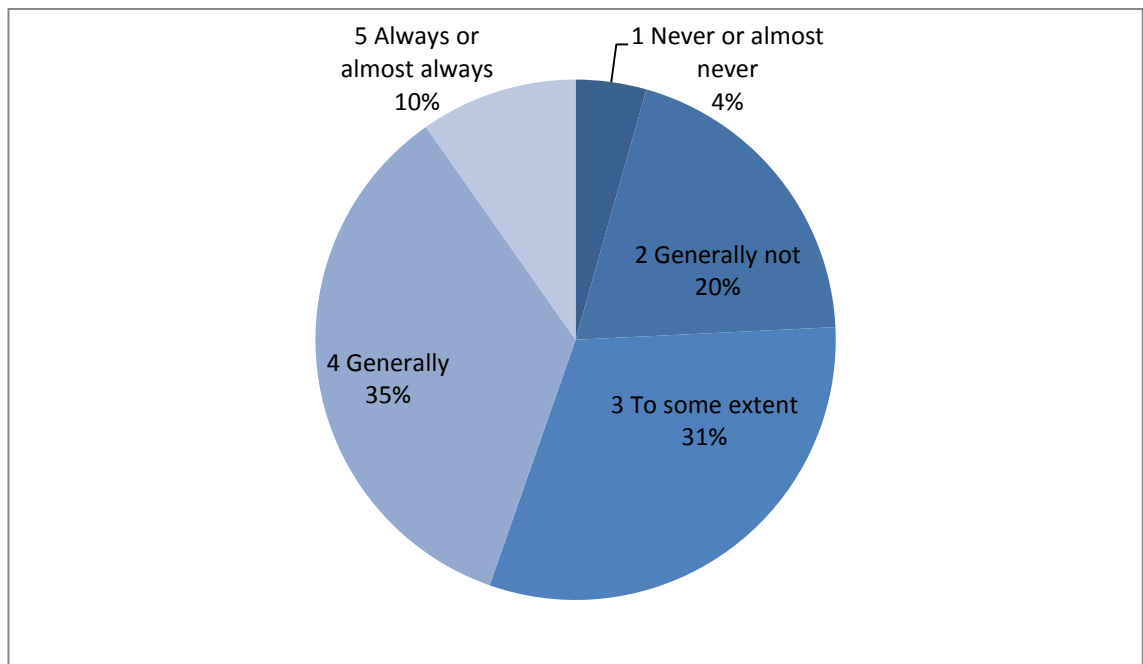


**Figure 5.** The use of cognitive strategies in speaking and listening by the clinical students

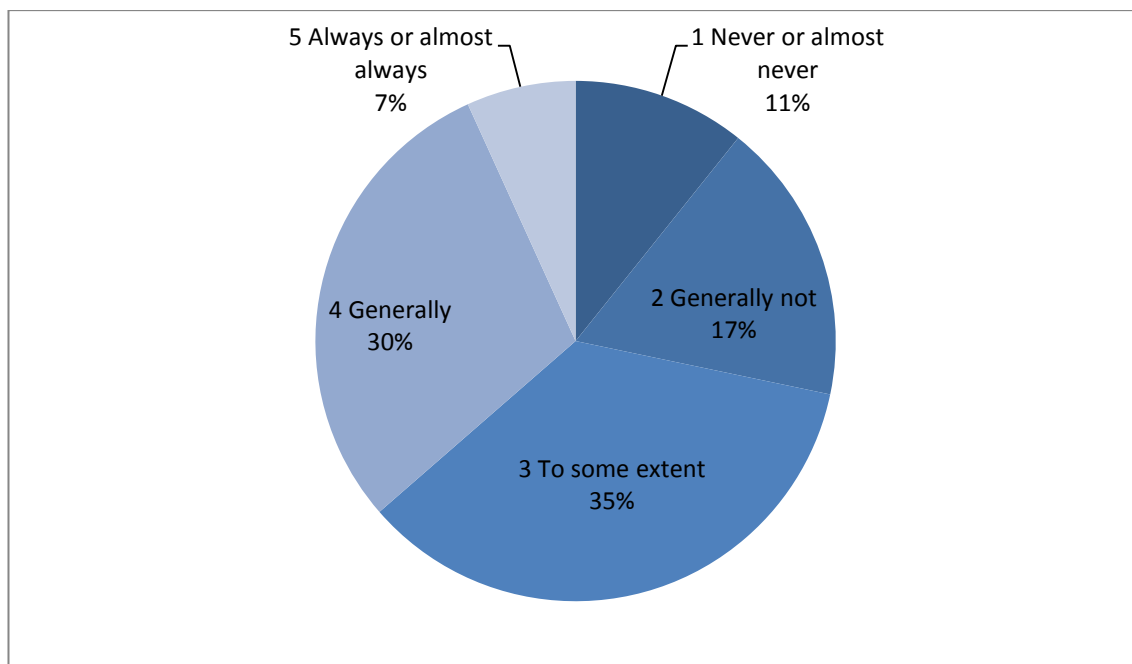
The differences between the two groups are not great; in both students groups, the most common answers were 'generally' and 'to some extent'. The clinical students reported never or almost never using cognitive strategies more often than the preclinical students. The greatest differences between the groups can be seen in the

answers 'never or almost never', where the difference is four percentage points, and 'to some extent', where the difference is three percentage points. Otherwise the difference between the results of the two groups is only one or two percentage points.

**Metacognitive strategies** control and guide the use of cognitive strategies (Oxford 2011: 44), and the questionnaire included such metacognitive items as "I pay attention to grammar and word order during conversation" in speaking (item 7) and "I pay attention to the speaker's rhythm and intonation" in listening (item 13). Figure 6 below shows the distribution of answers regarding metacognitive strategy use among the preclinical students. The mode, the most common answer in metacognitive strategy use, was 'generally'; 35% of the preclinical students generally use metacognitive strategies while speaking and listening. 31% of the students use metacognitive strategies to some extent. Among the preclinical students, 20% do not generally use metacognitive strategies and 4% use them never or almost never. The most common answer among the clinical students was 'to some extent', which was chosen by 35% of the students (Figure 7, below). Metacognitive strategies were used generally while speaking and listening by 30% of the clinical students. 11% of the clinical students reported using metacognitive strategies never or almost never.



**Figure 6.** The use of metacognitive strategies in speaking and listening by the preclinical students

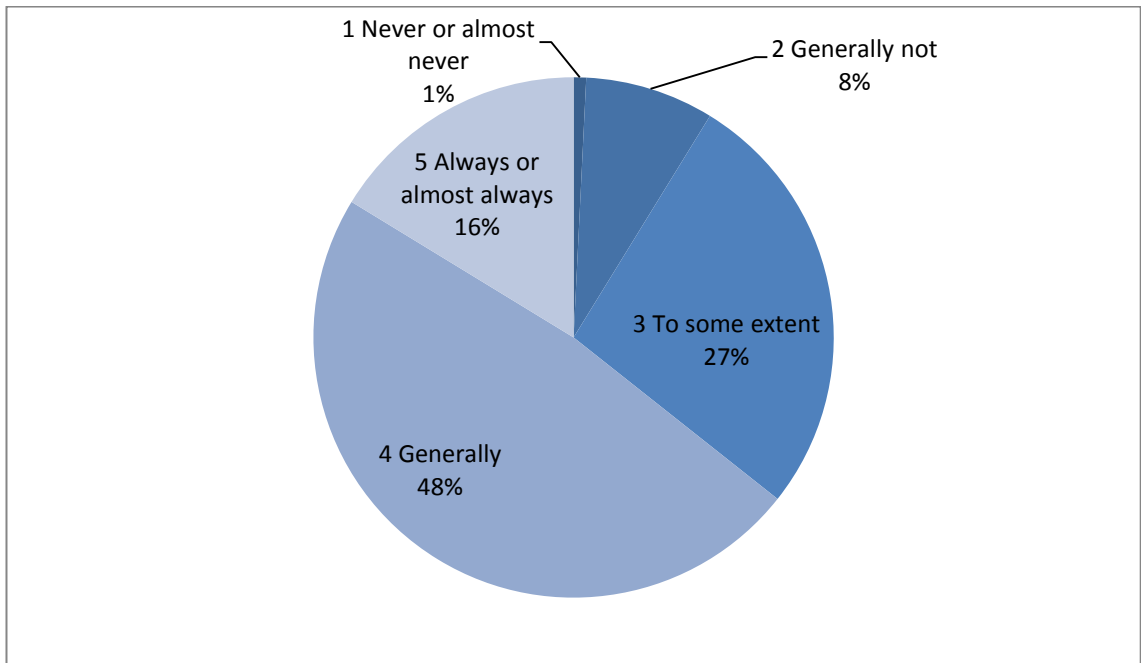


**Figure 7.** The use of metacognitive strategies in speaking and listening by the clinical students.

As with the cognitive strategies, the differences between the two groups are rather small. The majority of students in both groups use metacognitive strategies generally or to some extent. Similarly to cognitive strategies, a larger percentage (11%) of the clinical students reported never or almost never using metacognitive strategies compared to the preclinical students, among whom 4% reported never or almost never using metacognitive strategies. Metacognitive strategies are used by students in both groups quite evenly across the options, each extreme receiving fewer answers than the options in the middle. Overall, the medical students in the present study use metacognitive and cognitive strategies at various frequencies, and clear preferences or avoidances are not visible in the quantitative results.

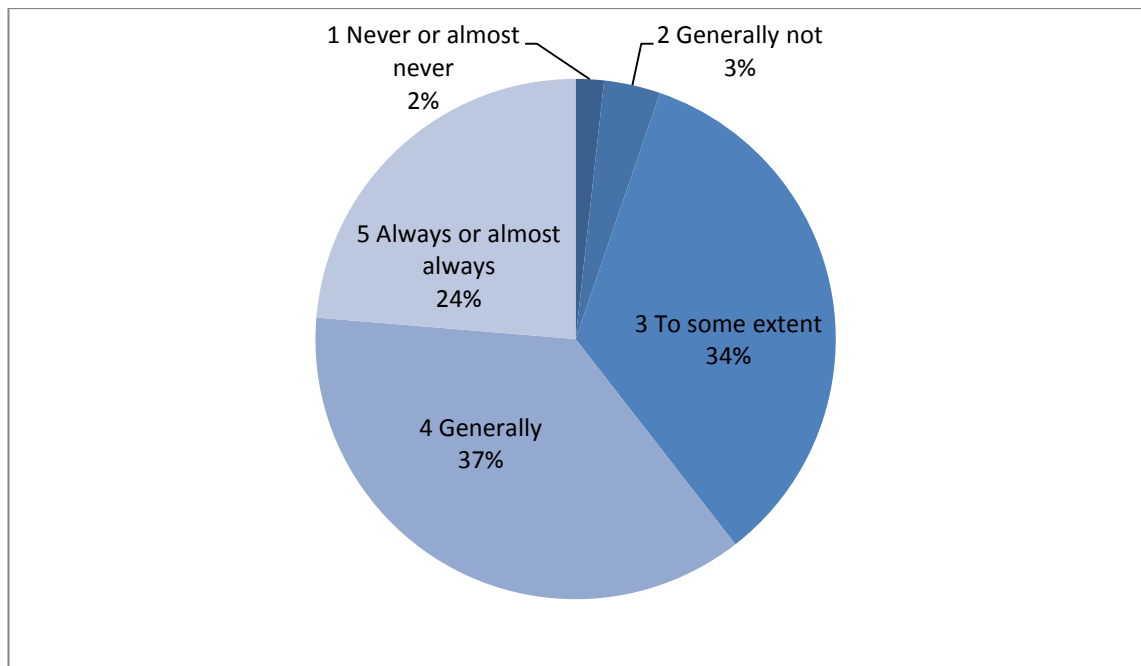
**Affective strategies** in language learning manage the feelings and attitudes towards language learning (Oxford 2011: 14, 63). In the questionnaire, affective strategies included items such as “I try to relax when I feel anxious” in speaking (item 28); the part on listening did not include any affective strategies. 48% of the preclinical students reported using affective strategies generally, and 27% of the preclinical students use affective strategies to some extent (Figure 8, below). Only 1% of the preclinical students reported never or almost never using affective strategies, whereas

16% use them always or almost always. A clear majority of the preclinical students use affective strategies in learning English either to some extent, generally, or always or almost always. The most common answer among the clinical students was 'generally', which was chosen by 37% of the clinical students (Figure 9, below). 'To some extent' was chosen by 34% of the clinical students and 24% of the clinical students reported using affective strategies always or almost always.



**Figure 8.** The use of affective strategies in speaking by the preclinical students



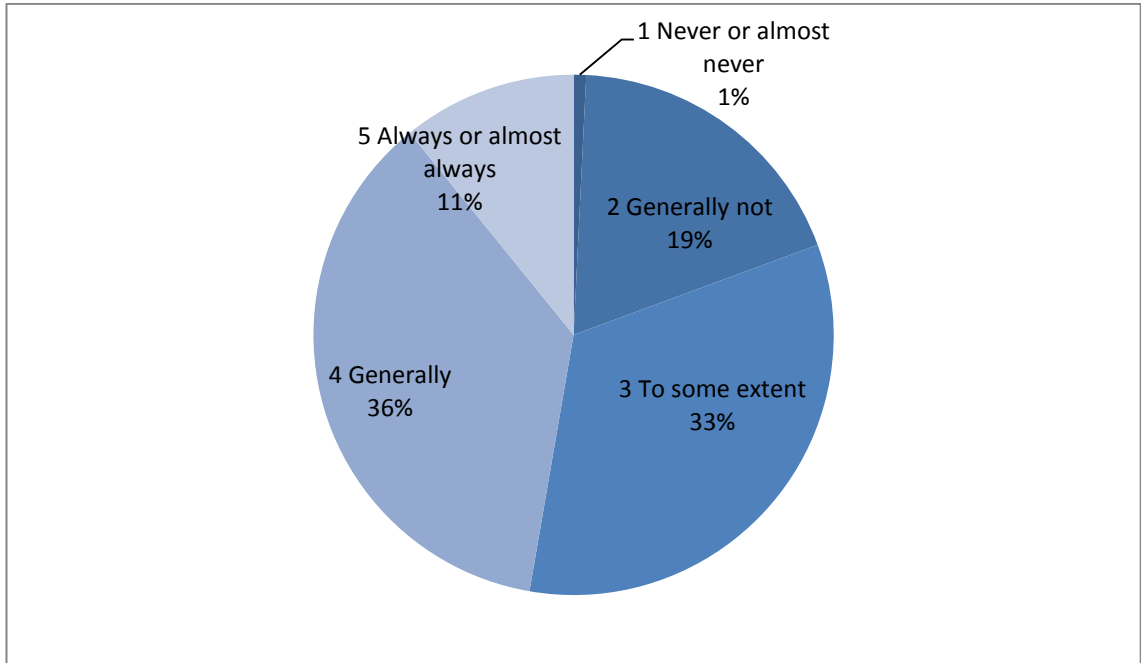


**Figure 9.** The use of affective strategies in speaking by the clinical students

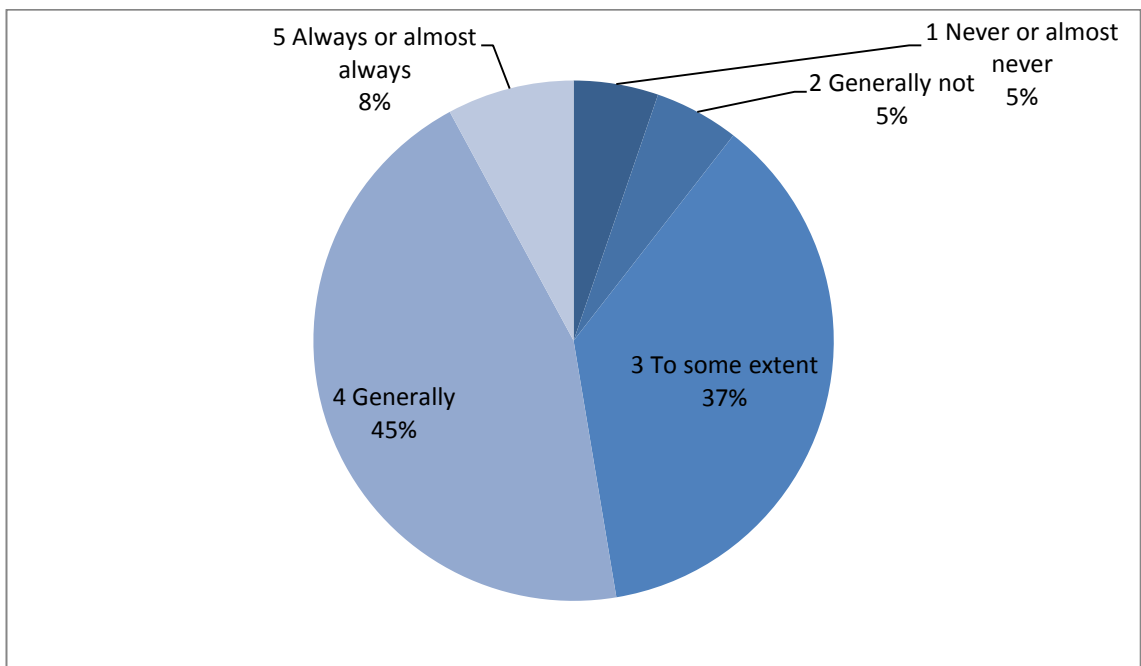
Compared to the strategy types discussed earlier in this section, the use of affective strategies between the two student groups differs slightly more. Though in both groups a very small percentage reports using affective strategies never or almost never, the percentages of students answering ‘generally not’ already differ from each other. The clinical students in general use affective strategies more often, as 24% of the clinical students reported using affective strategies always or almost always, whereas only 16% of the preclinical students chose this option. Overall, the medical students appear to use affective strategies often in order to learn English and control their own feelings about learning and using English. Over 50% of the students in both groups use affective strategies generally or always or almost always, which indicates that affective strategies are an important strategy type for medical students and their professional language learning.

**Meta-affective strategies** help the learner control the use of affective strategies (Oxford 2011: 63). The questionnaire used in the present study only included one item in the speaking section regarding meta-affective strategy use: “I actively encourage myself to express what I want to say” (item 29). As there was only one item on which the results are based, the results do not necessarily depict the actual meta-affective strategy use of the medical students. The most common answer among the preclinical

students (Figure 10, below) was 'generally' (36%). 33% of the preclinical students reported using the meta-affective strategy to some extent and 19% chose the option 'generally not'. Among the clinical students (Figure 11, below), the most common answer was also 'generally' (45%). 37% of the clinical students use the meta-affective strategy to some extent and 8% use it always or almost always.



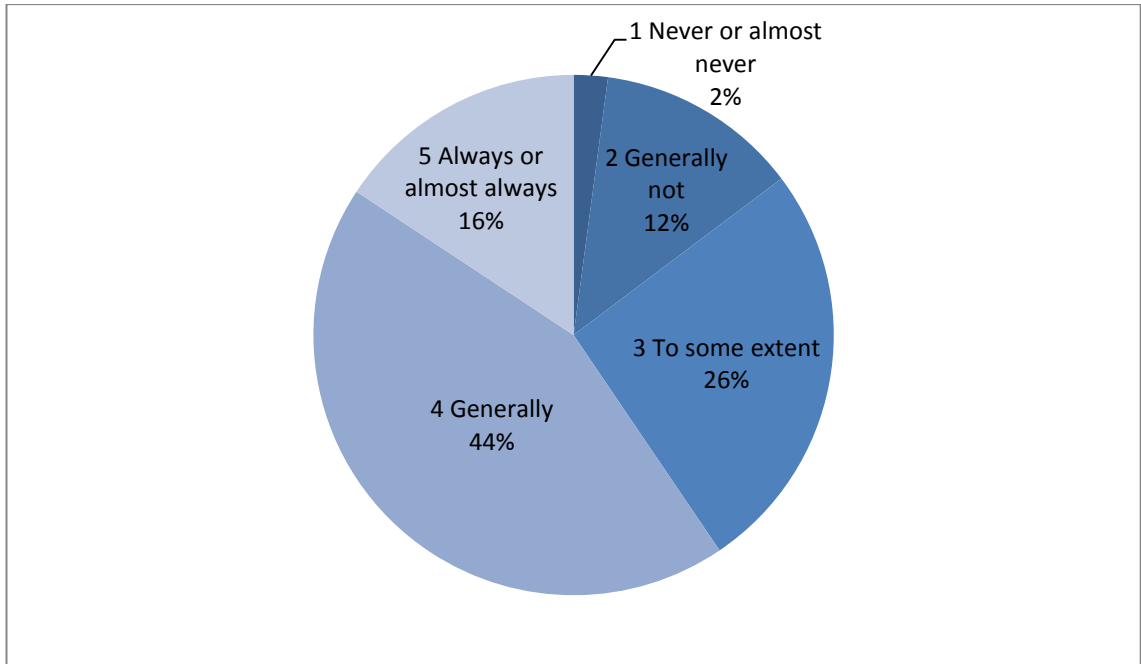
**Figure 10.** The use of meta-affective strategies in speaking by the preclinical students



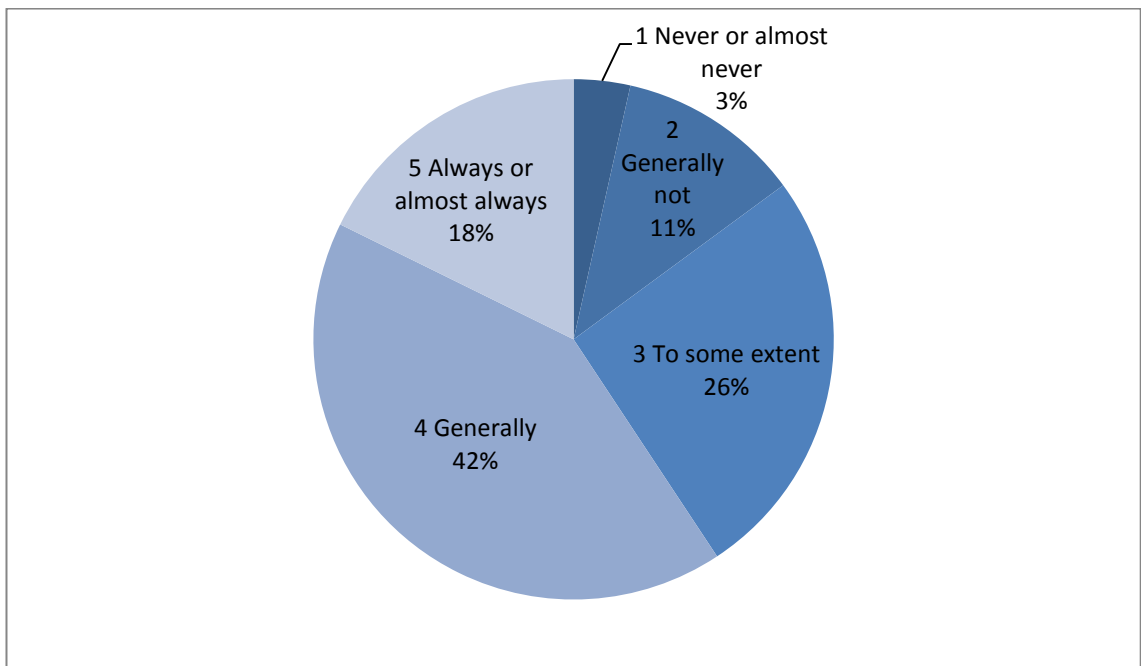
**Figure 11.** The use of meta-affective strategies in speaking by the clinical students

The meta-affective strategy use differs slightly between the preclinical and clinical students. A higher percentage of preclinical students, in total 20%, answered generally not using or never or almost never using the meta-affective strategy, whereas 10% of the clinical students answered either 'never or almost never' or 'generally not'. Furthermore, a higher percentage of the clinical students used the meta-affective strategy generally. A slight difference can also be found in the answer 'always or almost always'; 11% of the preclinical students reported using the strategy always or almost always, whereas the corresponding percentage for the clinical students is 8%. A higher percentage of the clinical students appear to use meta-affective strategies in order to learn English, though the difference between the groups is not very large (6 percentage points). Examination of the affective and meta-affective strategy use of the preclinical and the clinical students shows that both types of strategies are often used; the majority of the medical students in the present study use meta-affective and affective strategies at least to some extent.

**Sociocultural-interactive strategies** help learners to communicate effectively (Oxford 2011: 87). Items of the SI strategy category in the questionnaire included strategies such as "I change my way of saying things according to the context" in speaking (item 9) and "I try to respond to the speaker even when I don't understand him/her perfectly" in listening (item 6). As with many of the previous strategy types, the most common answer among the preclinical students was 'generally', which was chosen by 44% of the students (Figure 12, below). 26% of the preclinical students reported using SI strategies to some extent and 16% use them always or almost always. SI strategies are used never or almost never by 2% of the preclinical students. Among the clinical students, the most common answer was also 'generally', being the choice of 42% of the clinical students (Figure 13, below). 26% of the clinical students chose 'to some extent' and 18% chose 'always or almost always'.



**Figure 12.** The use of SI strategies in speaking and listening by the preclinical students

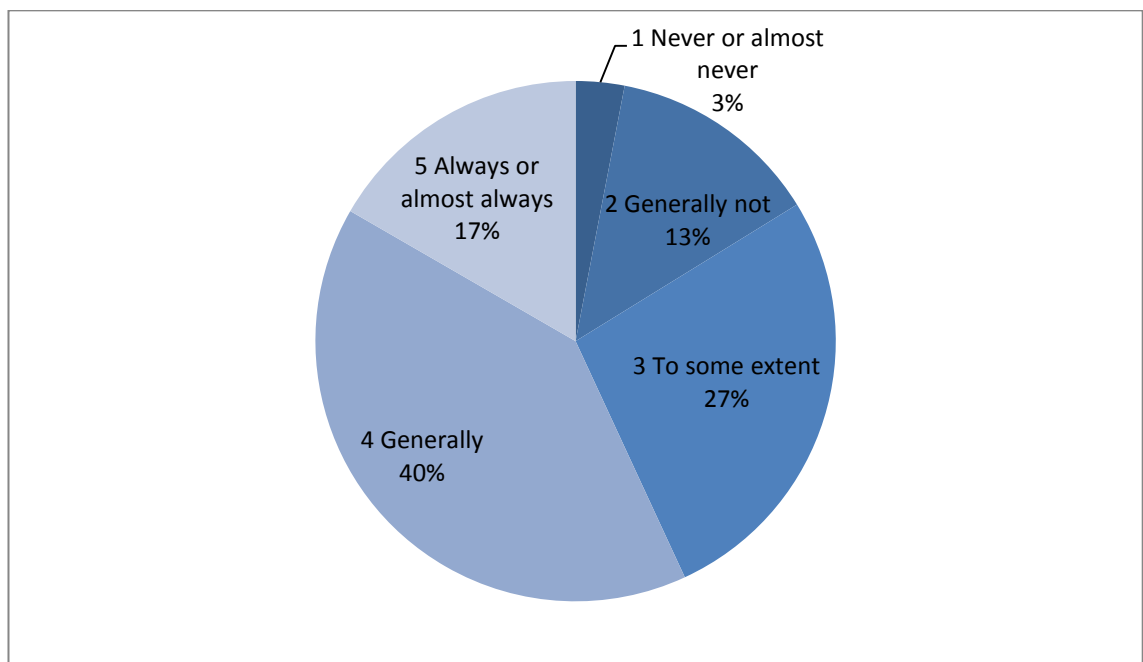


**Figure 13.** The use of SI strategies in speaking and listening by the clinical students

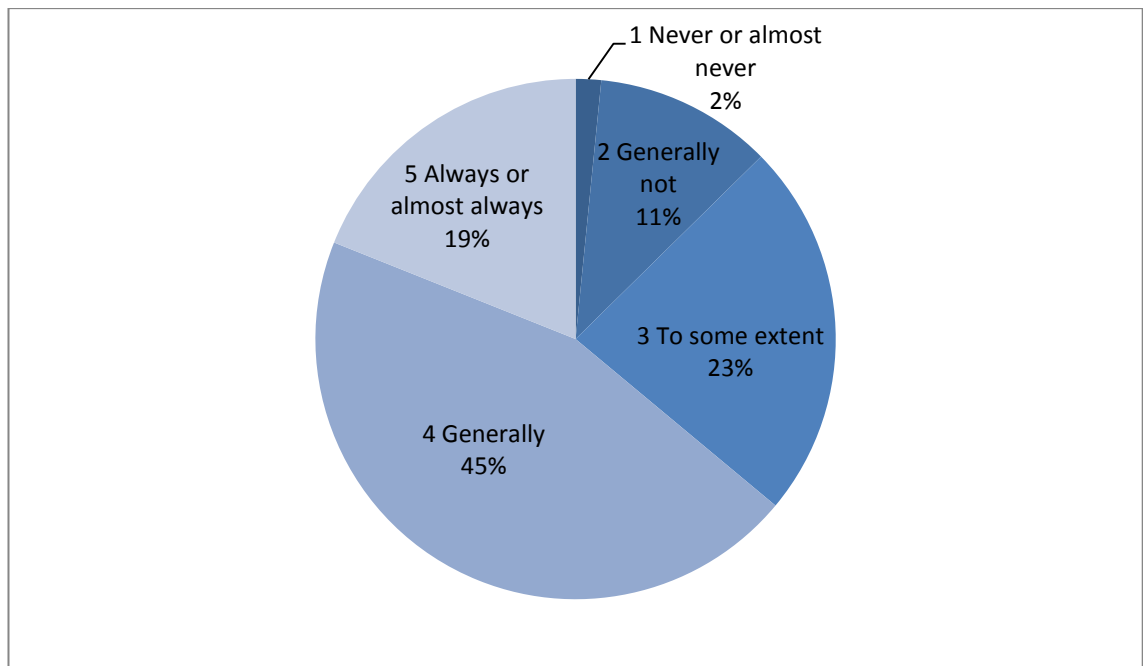
The use of SI strategies is very similar in both student groups studied. The differences in the percentages are only one or two percentage points. In both groups, most of the students use SI strategies very often; 60% of both the preclinical and the clinical students use SI strategies generally or always or almost always. If the students who use SI strategies to some extent are added, the percentage rises to 86 % in both groups.

This percentage is not as high as the same percentage in affective strategies, but nevertheless higher than the equivalent in cognitive strategies, which shows that in general the medical students use affective strategies and SI strategies more than cognitive strategies.

**Metasociocultural-interactive strategies** help learners to control and manage communication and sociocultural situations (Oxford 2011: 87). Both sections of the questionnaire included meta-SI strategies, for instance, “While speaking, I pay attention to the listener’s reaction to my speech” in speaking (item 19) and “I send continuation signals to show my understanding in order to avoid communication gaps” in listening (item 14). The most common answer among the preclinical students was ‘generally’ and it was chosen by 40% of the students (Figure 14, below). ‘To some extent’ was chosen by 27% of the preclinical students and ‘always or almost always’ by 17% of the preclinical students. The most common answer among the clinical students was as well ‘generally’, which was chosen by 45% of the clinical students (Figure 15, below). 23% of the clinical students reported using meta-SI strategies to some extent and 19% always or almost always.



**Figure 14.** The use of meta-SI strategies in speaking and listening by the preclinical students

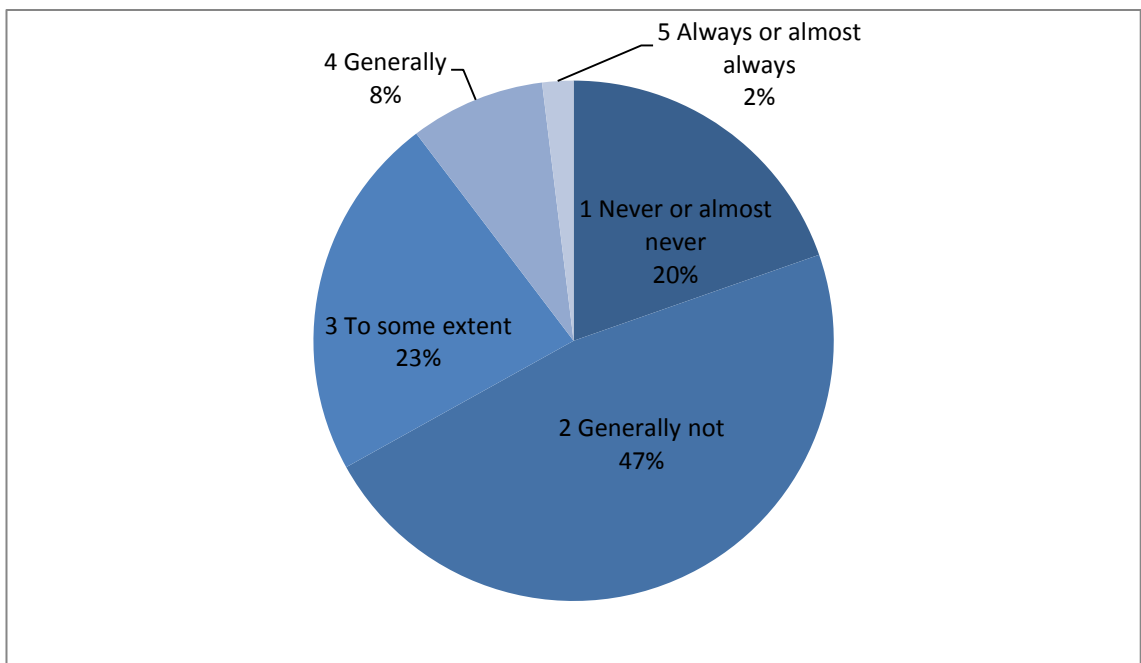


**Figure 15.** The use of meta-SI strategies in speaking and listening by the clinical students

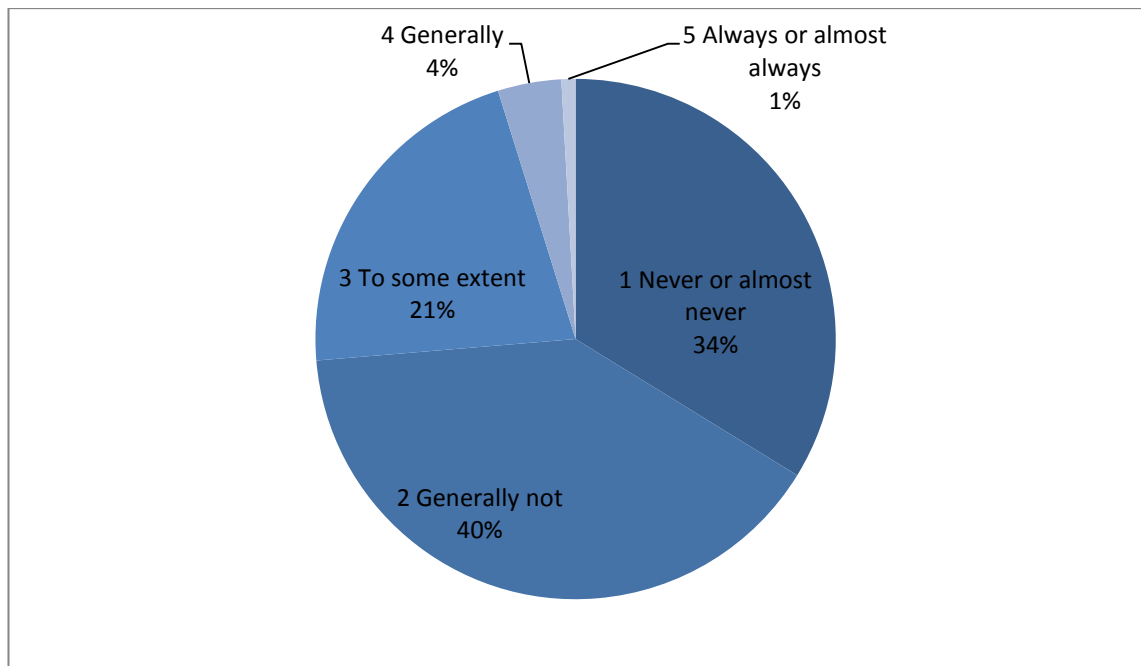
Overall, over 50% of both the preclinical and the clinical students use meta-SI strategies generally or always or almost always. The differences between the preclinical and the clinical students are rather small in the options that depict low-frequency use of meta-SI strategies and slight differences start to show in the middle of the scale. The difference between the two groups in the answer ‘to some extent’ was 4 percentage points, the preclinical students being the group that chose this option more often. A higher percentage of the clinical students chose the option ‘generally’, with a difference of 5 percentage points to the preclinical students. Also the option ‘always or almost always’ was chosen by a higher percentage of the clinical students than the preclinical students, the difference being 2 percentage points. Based on the results regarding the meta-SI strategies, the clinical students appear to use meta-SI strategies more often than the preclinical students, though the differences are not overall very extreme. On the whole, the medical students appear to use both meta-SI and SI strategies often.

In addition to the strategy types Oxford (2011) introduced, a category of **negative strategies** was created specifically for this study to include strategies which do not facilitate learning or communication, but are more likely to hinder learning or lead to

unsuccessful communication. Negative strategies in the questionnaire included items such as “I give up when I can’t make myself understood” in speaking (item 32) and “I try to translate into native language little by little to understand what the speaker has said” in listening (item 11). Below, Figure 16 presents the results of the preclinical students; the most common answer was ‘generally not’, which was chosen by 47% of the preclinical students. 23% of the preclinical students reported using negative strategies to some extent and 20% use them never or almost never. The most common answer among the clinical students was ‘generally not’, which was chosen by 40% of the students (Figure 17, below). 34% of the clinical students chose ‘never or almost never’ as their answer and ‘to some extent’ was chosen by 21% of the students.



**Figure 16.** The use of negative strategies in speaking and listening by the preclinical students



**Figure 17.** The use of negative strategies in speaking and listening by the clinical students

Some differences between the preclinical and the clinical students were visible in the use of negative strategies. In both groups, 'generally not' was the most common answer, though there is a difference of 7 percentage points, the percentage being higher among the preclinical students. A higher percentage of the clinical students reported using negative strategies never or almost never, with the difference of 14 percentage points to the preclinical students. Negative strategies are used generally or always or almost always more by the preclinical students than the clinical students. For example, 8% of the preclinical students use negative strategies generally, whereas the same percentage is 4% for the clinical students. Overall, most of the medical students do not appear to rely on negative strategies in their communication.

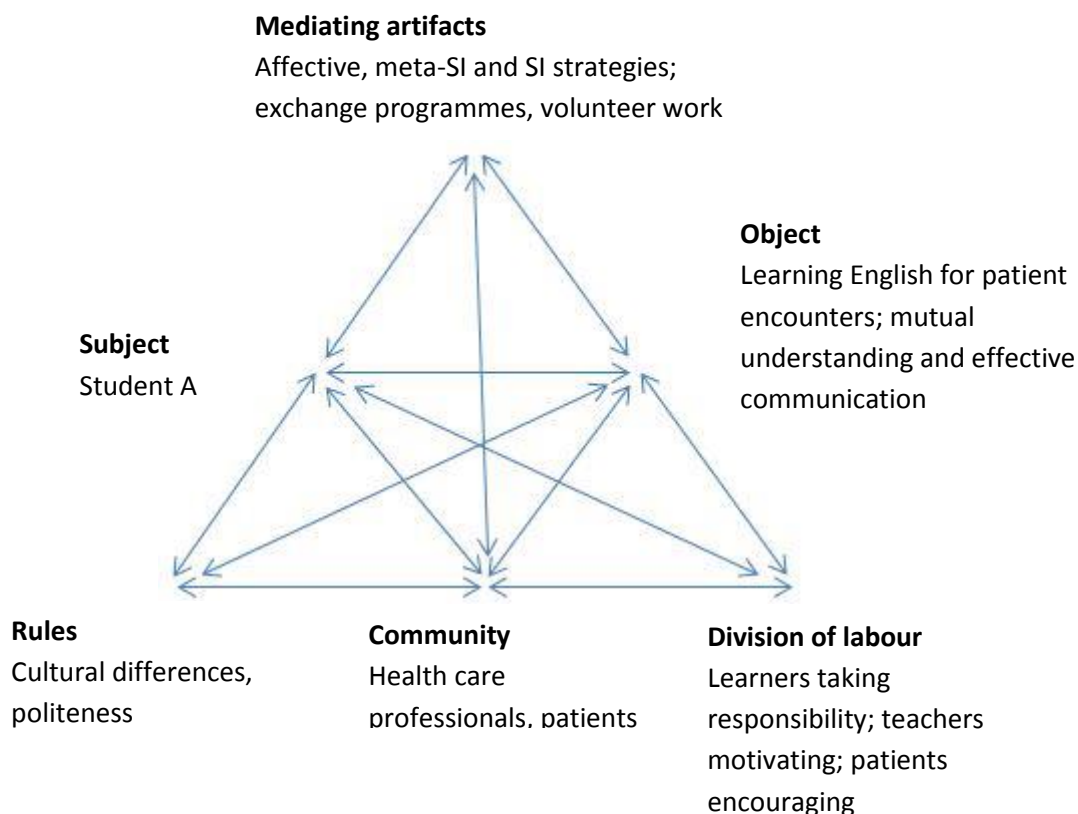
This subsection has concentrated on the results elicited by the strategy questionnaire, that is, the quantitative results. The results are further discussed in section 8, where the results of the present study are viewed in a broader perspective and mirrored to the results of other studies as well as the qualitative results of the present study. The following subsection focuses on the qualitative results.



## 7.2 Qualitative results

The interviews conducted for the present study aimed to discover the activity systems of the interviewees. The results of the interviews are qualitative in nature and the two interviewees and their opinions on language learning will be first discussed separately and then compared. The results are presented as activity system triangles in addition to describing the students' answers regarding the information on the triangles. As the number of interviewees was lower than expected, the results only depict the activity systems of two individuals and the results may not be generalisable to all medical students. The interviewees are referred to as Student A and Student B, Student A being the preclinical student and Student B being the clinical student. Firstly, some background information about the interviewee is presented, and secondly, the activity systems are presented in the form of triangles.

Student A, the first-year student, is a 23-year-old male. As background information, the interviewees were asked about their general relationship to the English language and language learning, as well as their potential patient encounters with English-speaking patients during their studies. Student A reported being a motivated English learner, whose relationship with English and English learning has always been good and who uses English often, almost daily. He has not encountered any English-speaking patients, which was expected to be the case with the first-year students. Patient encounters being very unlikely at this stage of studies, Student A was also asked about any other medical encounters in English; he had not used spoken English in medical contexts. Many of the questions were discussed in a hypothetical manner, as Student A is at an early stage in his studies and he has not yet encountered patients in English. The activity system of Student A can be seen in Figure 18.



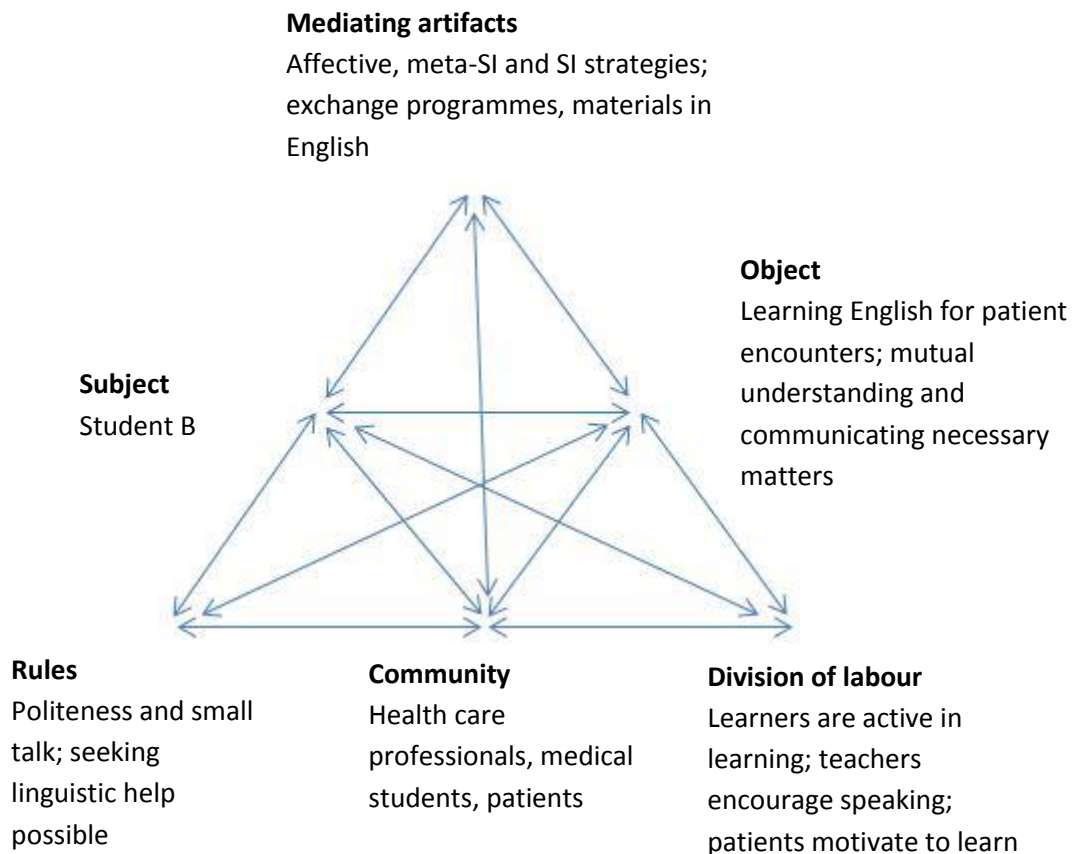
**Figure 18.** The activity system of Student A

The object reported by Student A was mutual understanding between the patient and the doctor and learning English in order to be able to communicate with patients effectively. Mediating artifacts were discussed generally and then with a focus on language learning strategies. As general mediating artifacts Student A discussed travelling as a way of gaining confidence in speaking English and exchange programmes and volunteer work as ways of learning medical English and preparing for patient encounters. Based on Student A's questionnaire answers, he uses affective, meta-SI and SI strategies often and negative strategies very rarely if at all. The results from the questionnaire were confirmed, as Student A emphasised speaking without worrying about possible grammatical errors, finding possibilities to practise speaking English in order to avoid long breaks during which English is not used at all, and aiming for producing language that is understood by the listener.

As a community who have the same goals for language learning and to which Student A considers himself to belong Student A reported health care professionals, including for instance doctors, nurses and psychologists. Patients are included in the community

as people who benefit from doctors reaching their goals in language learning. The roles and statuses of people involved in language learning during medical school were a slightly challenging topic for Student A. According to him, the role of medical students is to motivate themselves to learn English and take responsibility for learning independently. Especially the English teacher has a motivational role, while the importance of other teachers in language learning is much less important. Patients can encourage learners to succeed in language learning and patient encounters can also act as language learning opportunities. The statuses differ in different contexts, but generally Student A sees teachers and doctors as experts of their field and not necessarily as authority figures. Rules of patient encounters in English were similarly a challenging topic, especially because Student A has not yet had experience with English-speaking patients. Cultural differences were mentioned as a possible factor affecting the rules in an English-speaking patient encounter, and the difference between rules of politeness in Finnish and English were shortly discussed as well. Seeing a patient encounter as an opportunity to learn language lowers the pressure of producing perfect language and thus rules can be modified, when the language is other than the doctor's native language.

Student B, the fifth-year student, is a 23-year-old female. Her relationship with English is very good and she uses English confidently. She has attended a language-oriented school and has spent time abroad as an exchange student, though not in an English-speaking country. As a clinical student, Student B has already had experience with patients, also English-speaking patients. The experiences with English-speaking patients have been positive, though sometimes when the patient has not been a native English speaker, he or she has had problems understanding Student B's fluent language. She has not noticed any significant cultural differences during these patient encounters. The activity system of Student B can be seen in Figure 19.



**Figure 19.** The activity system of Student B

Student B's object for learning language for patient encounters was mutual understanding and being able to communicate the necessary matters to the patient. As general mediating artifacts regarding language learning, Student B mentions maintaining language skills alongside other professional skills by reading medical books or watching videos that are related to medicine. Exchange programmes are also mentioned, as Student B has first-hand experience of the benefits of studying abroad. Based on Student B's questionnaire answers, she uses affective, meta-SI and SI strategies often, and negative strategies are used only very rarely. During the interview Student B emphasised learning by using the language and concentrating on understanding and communication instead of grammaticality, which belong to meta-SI and SI strategies, and she also confirmed using affective strategies. The interview thus confirms the results of the questionnaire.

The community Student B identifies with consists of health care professionals and medical students. Especially patients benefit from doctors' language skills and hence are a part of the community as well. According to Student B, students' role in English

learning is to be active and find ways to motivate themselves. Teachers should encourage students to speak in English, whatever their level of language skills is. The patient's role is to be a sort of incentive for speaking English, and also to motivate students to learn more. Student B discusses the statuses by contrasting medical students and teachers and doctors and patients. At the clinical stage, students and teachers have a more casual relationship and they are beginning to become colleagues. Doctors are experts who have the knowledge and education to evaluate medical information, whereas patients have the right to act according to their own will. According to Student B, the rules of a patient encounter are very similar in Finnish-speaking encounters and English-speaking encounters. Politeness and small talk were mentioned as culturally dependent aspects that differ slightly in Finnish and in English. Student B reported earlier, when discussing cultural differences in general, that she has noticed that "gaining consent with the patient" (a direct quotation from Student B) is important in many Youtube videos she has watched. Seeing a patient encounter as a language learning opportunity also allows the doctors to seek linguistic help from a native speaker.

During the interviews, a few themes outside the exact questions were raised. Student A, being a first-year student and not yet fully aware of the courses in the future, seemed surprised that medical students do not have English courses that concentrate on oral communication and patient encounters. According to Student A, English is likely the other language besides Swedish to be used along with Finnish. During the interview, Student B often emphasised language as a tool in patient encounters; language acts as a tool in patient encounters enabling communication. A similar perspective was not mentioned during the interview with Student A, and possibly the idea of language as a tool is related to the clinical experience of Student B, or it is a personal opinion or view of Student B.

Overall, the activity systems of Student A and Student B are rather similar. Both the preclinical and the clinical student reported mutual understanding as a very important objective of learning English for patient encounters. The mediating artifacts were also similar, both using affective, meta-SI and SI strategies the most. Some differences were found in the perceived division of labour; Student B perceived teachers' role to be to

encourage the medical students to speak and patients' role to be to motivate the medical students to learn more, whereas Student A saw the teachers motivating and patients encouraging. The medical students also have slightly different roles according to the interviewees, as Student A emphasised students taking responsibility and Student B emphasised active learning. The students interviewed perceived some differences in the rules of patient encounters in English. Student A admitted cultural differences to have an effect in the patient encounter, whereas Student B did not see cultural differences as an issue that could change the structure of the patient encounter. Both students, however, mentioned politeness as a rule that changes when the language of the patient encounter is English. Though the differences between the two activity systems are not great, the preclinical and the clinical students still showed differences of opinion in their interviews. The importance of the activity systems and the information they provide are further discussed in the following section.

## **8 Discussion**

The previous sections have introduced the data and the results of the present study. The aim of this section is to discuss the results, compare the results to some previous research on the field and ponder on the implications of the present study, as well as evaluate the validity and the reliability of the study. Subsection 8.1 concentrates on the quantitative results of the study and the differences in quantitative strategy use between the two student groups. The following subsection 8.2 discusses the qualitative results in more detail and a broader view of the English learning of the medical students is presented. Finally, the qualitative and quantitative results are linked together in subsection 8.3 and in subsection 8.4, I will evaluate the validity and the reliability of the study.

### **8.1 Quantitative language learning strategy use of the medical students**

This subsection aims to answer the research questions regarding the types of language learning strategies the medical students use, and the differences between the preclinical students and the clinical students. I will firstly discuss the typical strategy use of the medical students in general and then continue by discussing the differences of the two groups and possible reasons for the differences. Some limitations and problems in the quantitative part of the study are also discussed in relation to the results.

The questionnaire data provide information for creating a typical profile of a medical student as a language learning strategy user. Peacock and Ho (2003) concluded that students of different fields use learning strategies differently, and in addition to individual differences, there are also differences between different disciplines. Based on Peacock and Ho's results, also medical students are likely to have a typical set of learning strategies they use in language learning, and the results of the present study suggest that certain strategy types are more often used among the medical students in general. Individual differences of course exist, which is visible in the variation in the questionnaire answers; each option for each strategy type has been chosen by at least a small percentage of the students. However, some tendencies can be seen in the

results. Overall, the most commonly used strategy types among the medical students were affective, meta-affective, sociocultural-interactive and metasociocultural-interactive strategies. Cognitive and metacognitive strategies were also used by medical students, but the answers were distributed more evenly between all of the options compared to the other strategy types. Negative strategies were used very rarely among the whole group.

The results indicate that the medical students find interactive skills and ways to learn by interacting as well as ways to keep motivated important in language learning. Linguistic knowledge, such as grammatical features, is perhaps not seen as important when considering the L2 use in patient encounters. The emphasis of the questionnaire was on spoken language, which could partly explain why cognitive strategies were not as popular as the other strategy types. Both of the students interviewed highlighted that communication can be successful without being strictly correct grammatically; this could reflect the general opinions on spoken language learning and explain the preference of more communicational strategies over cognitive ones.

As the students were instructed to think about patient encounters when filling in the strategy questionnaire, the types of strategies might have been very different if they had been instructed to think about English learning in general or speaking in more informal situations, such as while travelling. Of course, the questionnaire was designed to examine the strategies used in oral communication situations, and possibly the strategies of the medical students would apply to other situation as well. However, the interactive nature of a patient encounter is clearly visible in the quantitative results, as was already stated. Affective and meta-affective strategies possibly help the medical students to maintain motivation to learn English and keep speaking during patient encounters. SI and meta-SI strategies, then, might help the medical students in succeeding in conveying the message in an L2. It is also noteworthy that negative strategies are very rarely used among the medical students, which indicates that successful communication is, indeed, something they strive for.

Though there are rather clear tendencies in strategy use among the whole group of medical students, there are still differences between the preclinical students and the



clinical students. The differences were visible mostly in affective, meta-SI and negative strategies. Though slight differences were found in all of the strategy categories, affective and meta-SI strategy types show most variation in the high frequency use and negative strategies in the low frequency use. Especially affective strategies and meta-SI strategies were more often used among the clinical students than the preclinical students. The clinical students also used negative strategies less often than the preclinical students. One possible explanation for these differences is the varying amount of experience the students have; the clinical students already have experience with patients and have had time to develop their own style of communicating with patients, whereas the preclinical students are only beginning to gain experience with medicine. The age distributions of the students were presented in section 5 (Figures 2 and 3), and considering the similarly wide range of different ages of both groups, it is perhaps more likely that differences in strategy use are explained by experience with patients instead of general life experience.

Various factors might have affected the quantitative results. The number of participants differed greatly, as the number of preclinical students was significantly higher. Almost all of the first-year students of medicine in the University of Turku participated in the study, which then gives a very representative sample of the group. Though the total number of fifth-year students studying medicine is lower, due to, for example, the increased intake of students, the sample of clinical students is not as representative as the preclinical students; the testing situations differed and the clinical students participated in a more informal context. These issues might have affected the results of the study, and if a more representative sample of clinical students could have been obtained, the results could have differed to some extent. Another problem was encountered with the preclinical students, who have not had much experience with patients. They had to think about patient encounters hypothetically and it is possible that some of the students thought about English learning in general, instead of limiting their thinking to patient encounters in English. Some of these issues will be further discussed in subsection 8.4, when the validity and the reliability of the study are evaluated.

## **8.2 A qualitative view of English language learning for patient encounters**

This subsection focuses on the qualitative part of the study, and on discussing the results provided by the interviews. The interviews were conducted in order to create activity systems and through them, discover a wider context of language learning for patient encounters. Examining the goals of language learning, the communities in which learning occurs, and other components of the activity system provides information on the possible reasons behind the choices of strategy use as well. Though the two activity systems elicited in the interviews were already compared to some extent in section 7.2, the differences in the activity systems are further discussed and reflected on here. The results are also examined in relation to other activity theoretical studies in the SLA field. Some issues in conducting the interviews are also discussed at the end of this subsection.

As noted in section 7.2, the differences in the activity systems of the preclinical and the clinical students are not very great. Some differences were, however, found. As the differences were already presented along with the results, here I focus on discussing the possible reasons behind the differences. The role of teachers was seen differently, the preclinical student, Student A, seeing teachers motivating to learn and the clinical student, Student B, seeing them encouraging to learn. Patients' role was also different, as Student A considers patients encouraging learning and Student B considers them motivating. Student B's opinion on patients having a motivational role might be due to her experience with patients; Student A has not yet worked with patients and had to think of patient encounters hypothetically instead of comparing it to his prior experiences. Surprisingly, unlike Student A, Student B did not see cultural differences as possible rules or structures that might affect a patient encounter in English. This difference could, again, be explained by the clinical student mirroring the question to her actual experiences. Based on the interview, Student B has not encountered patients in situations where cultural differences, such as, for example, the relationship of a patient and a doctor, have affected the situation in any major way.

The activity theoretical research presented in this thesis has not concerned the learning of spoken language, which makes comparing other activity theoretical studies very difficult. The methods of the present study and some of the SLA related activity theoretical studies are, however, similar. Fujioka (2014) conducted a longitudinal study, where the development of the activity systems was examined. The scope of the present study did not allow a longitudinal examination, but it is possible to cautiously explore the possibility of development happening between the preclinical stage and the clinical stage of the studies. Though the differences in the activity systems were not extreme, some transformations were visible, as has been discussed in the previous paragraphs.

The interviews demonstrated the importance of spoken language skills in patient encounters. The language learning and teaching of higher education students were discussed in section 2, and several researchers have concluded that university students appreciate especially oral skills (e.g. Taillefer 2007, Lepetit & Cichocki 2002, Nelson 2015). Considering the interactive nature of the doctor-patient relationships, it is understandable that the medical students interviewed emphasised speaking skills. Another noteworthy issue regarding the oral English skills of Finnish medical students is the possible added stress of using an L2. Boshier and Smalkoski (2002: 63) discuss the nervousness caused by the stress of using an L2 in a medical communication situation. The interviewees of the present study were both confident speakers, but this cannot be generalised to the whole group. Lack of instruction in spoken English and English-speaking interaction might result in nervousness, and as Ferguson (2012: 243) states, interaction and communication are the key to successful medical care. Though Sahlstein (2015) discussed Swedish learning in medical education, her results indicated that students who had not had practice in speaking Swedish were insecure and unwilling to use the language. For students who are not as confident as the interviewees, lack of practice in using professional English might also cause insecurity in an actual patient encounter.

Both of the students interviewed were very motivated and confident language learners. This affects the results, as different kinds of learners as interviewees might have resulted in very different activity systems. The students' motivation was visible in

their willingness to participate in the interviews as well. Though 19 students in total left their contact information, only the two interviewees participated in the end. There are several possible reasons for the low number of interviewees. Any studies in higher education take time and effort, and it is possible that at the particular time of the interview invitations the students were busy with their studies. Additionally, the questionnaire was conducted in September, and the interviews were conducted in February of the following year; many of the students might have forgotten the questionnaire and that they left their e-mail address for the interview, and thus ignored the invitation. Other reasons are, of course, possible as well, and the reasons presented above are merely assumptions. This, however, shows the high motivation and interest of the two students who wanted to participate in the interviews.

### **8.3 Linking the quantitative and qualitative results**

The previous subsections concentrated on discussing the quantitative and qualitative results separately, and the aim of this subsection is to link the two types of results. I will examine the correspondence of the quantitative and qualitative results, discuss the additional information given by the activity systems and how it complements the quantitative data, and reflect on some implications of the results in general.

Viewing the results as a whole provides interesting information on the language learning strategy use of medical students. Based on the strategy questionnaires, the medical students in general use meta-affective, affective, meta-SI and SI strategies in learning English for patient encounters. Both interviewees stated these strategies to be the most important strategies for themselves, and their personal results on the questionnaires indicated similar preferences. Thus, the quantitative and qualitative results appear to correspond rather well. The interactive nature of patient encounters could arguably affect the strategy preferences of the medical students. Meta-SI and SI strategies include many features that are typical of doctor-patient encounters, such as maintaining eye contact and encouraging the patient to continue speaking (see section 2.2.1), which can partly explain the medical students preferring these strategy types.

The additional information in the activity systems can also explain the preferred language learning strategies. Both of the students interviewed reported mutual understanding between the patient and the doctor as the most important goal of their language learning. Considering the object of learning, the most common strategies among the medical students seem very logical. As stated in the previous paragraph, meta-SI and SI strategies are very likely to be helpful in patient encounters. The students interviewed regard themselves to be a part of a community consisting of other health care professionals and other medical students, as well as their patients. Within the community, other health care professionals have the same learning goals and patients benefit from their language learning; the idea of patients being the ones benefitting from language learning supports the thought of successful communication as the object of learning. Each of the components in the activity system somehow affects the other components, and thus, the activity system provides a broader view of the learning context. Of course, as only two students were interviewed, the results cannot be generalised to all medical students. The following subsection addresses this issue and other issues with the validity and the reliability of the study.

The medical students appear to be autonomous strategy users, considering the nature of their English teaching. Oxford's (2011) Strategic Self-Regulation Model expects learners to be active and take responsibility in their learning (see section 3.3), and based on both the quantitative and qualitative results, many of the medical students use language learning strategies that are possibly useful in the context of learning for patient encounters. Of course, the quantitative results cannot tell whether the students use strategies effectively, but according to the qualitative results, the students interviewed have found the strategies that they find appropriate for this particular context, learning English for patient encounters.

#### **8.4 Validity and reliability of the present study**

The aim of this subsection is to evaluate the validity and the reliability of the study. Evaluating the validity and the reliability of the study is of utmost importance in establishing the quality of the study, and naturally, the aim has been to pursue a study that is as valid and reliable as possible. The generalisability of the study has been

considered earlier already, but the issue is further discussed here. I will also discuss objectivity, the sampling of the participants and the possible effects of the testing situations differing as well as some issues regarding the questionnaire.

As has been noted earlier in the previous subsection and in section 7, the qualitative results cannot be generalised to a larger population. Only two students participated, and, furthermore, they were very similar in their opinions and ideas about language learning. Interviewees being motivated and skilled learners, the results are not necessarily representative of the whole group. However, as both of the students confirmed using strategies that are commonly used among the medical students in both groups, the qualitative results can be generalised to some extent, though with caution. The quantitative results are slightly more generalisable, as the sample of participants was significantly higher than in the qualitative part. The sample of the preclinical students is rather representative, because almost all of the first-year students participated. Nonetheless, the first-year students do not represent all preclinical students, as the preclinical stage of the medical studies continues for the first three years of the studies. The sample of the clinical students is not as representative due to reasons that I could not control, such as the lectures running late and some students having to leave for other commitments (see section 5.2 for more details).

Researcher objectivity is an important issue in any research. Especially the qualitative part of the study threatens the objectivity of the researcher; during the interviews, I had to concentrate on not leading the interviewees in their answers and on trying to keep the interview questions as similar as possible for each interviewee. The interviews were semi-structured, so subjectivity was difficult to avoid and though objectivity was the aim, it would have been impossible to fully reach objectivity. Another threat to objectivity in the present study was the categorisation of learning strategies. I categorised the strategies in Nakatani's questionnaires based on the examples of strategies in Strategic Self-Regulation Model, and another researcher could have categorised the strategies slightly differently. However, the questionnaire results are adequately repeatable, at least in the case of the preclinical students, if the same categorisations are used. Yet, the structure of the questionnaire caused some

issues as well. The number of items for each strategy type was not even, and for example meta-affective strategies were very poorly represented in the questionnaire. Due to this, the results regarding the meta-affective strategy use might not represent the actual meta-affective strategy use of the medical students. Furthermore, the translation process of the original OCSI caused one of the items to be excluded from analysis; the translation of the items might have slightly modified the tone or emphasis of other items as well, and thus the results of a questionnaire conducted in Finnish and in English might differ.

After an extensive examination of the results of the present study and discussion on them, I will continue by concluding the thesis in the following section. The results of the present study have produced new information on the strategy use of the medical students, and though the study has its problems and limitations, there are still various implications which will be briefly discussed in the concluding section of this thesis.

## 9 Conclusion

The aims of this study included discovering the types of language learning strategies that the medical students use, creating activity systems in order to elicit information on the wider context of learning strategy use and examining the differences between the preclinical and the clinical students. The results show that the medical students tend to use affective, sociocultural-interactive and metasociocultural-interactive strategies often when learning English for communicating with patients. The object of language learning was discovered to be mutual understanding, which could partly explain the preferred strategies of the medical students. Slight differences were found between the two student groups, though the differences were not very drastic; the clinical students preferred affective and meta-SI strategies slightly more than the preclinical students, and the clinical students used negative strategies less frequently. The activity systems of the two students interviewed were similar, and thus definite conclusions of the possible effects of experience with patients were not achieved based on the activity systems.

As every study, the present study has its limitations as well. Problems and issues have already been discussed, especially in section 8. However, the most important limitations need to be acknowledged here, alongside some suggestions for future research. The generalisability of the study is limited by the number of participants in both the quantitative part and the qualitative part, and additionally by the selection of participants not being random. The number of the clinical students who filled in the questionnaire was considerably lower than the number of the preclinical students, which might have affected the results. Furthermore, though ten students in total were invited for an interview, only two students were interviewed in the end. Thus, the interviewees were not particularly representative of the whole group of medical students. The preclinical students in general were somewhat problematic as subjects, as they did not yet have experience with patients and thus had to think about the situations hypothetically. The questionnaire used to elicit quantitative data had some problems; the number of the items in each strategy type was quite unbalanced, resulting in the meta-affective strategies being represented by only one item. Due to



this, specifically the results concerning meta-affective strategy use are not particularly trustworthy.

The present study has only scratched the surface of the English learning of Finnish medical students and their language learning strategies. To discover more of the professional language skills of future doctors, further research is required. Due to the scope of the present study, the language skills of the medical students were not tested at all, and neither was the successfulness of their strategy use. The actual strategy use was not tested, and only the questionnaire results of the students interviewed were confirmed during the interviews. Thus, further research on the successfulness of strategy use would be beneficial to discover whether the strategies are appropriate for learning English for patient encounters. The present study could also be expanded to include working doctors, who have had extensive experience with patients. The comparison of language learning strategies between doctors and medical students would further enlighten the relationship of language learning strategies and experience with patients. The activity theoretical perspective was found to be useful in the examination of language learning strategies, and thus activity theory could be utilised in future as well. Further studies ought to acknowledge the problems and limitations of the present study and strive for a more generalisable sample. However, the present study has provided a good starting point for further research on the matters of English learning for patient encounters.

## References

- Al Qahtani Mona Faisal Mohammed 1999. *Approaches to Study and Learning Environment in Medical Schools with Special Reference to the Gulf Countries*. Doctoral thesis, University of Dundee.
- Anderson Neil J. 2008. Metacognition and good language learners. In Griffiths (ed.): 99–109.
- Bosher Susan & Smalkoski Kari 2002. From needs analysis to curriculum development: designing a course in health-care communication for immigrant students in the USA. *English for Specific Purposes* 21 (1): 59–79.
- Breen Michael P. (ed.) 2001. *Learner Contributions to Language Learning: New Directions in Research*. Harlow: Longman.
- Cohen Andrew D. & Macaro Ernesto (eds) 2007. *Language Learner Strategies: Thirty Years of Research and Practice*. Oxford & New York: Oxford University Press.
- Cohen Andrew D. & Macaro Ernesto 2007. Conclusions. LLS and the future: Resolving the issues. In Cohen & Macaro (eds): 275–284.
- Cotterall Sara 2008. Autonomy and good language learners. In Griffiths (ed.): 110–120.
- Cummins Jim & Davison Chris (eds) 2007. *International Handbook of English Language Teaching*. Boston: Springer.
- Davydov Vassily V. 1999. The content and unsolved problems of activity theory. In Engeström, Miettinen & Punamäki (eds): 39–52.
- Dörnyei Zoltán & Ryan Stephen 2015. *The Psychology of the Language Learner Revisited*. New York & London: Routledge.
- Engeström Yrjö 1999. Activity theory and individual and social transformation. In Engeström, Miettinen & Punamäki (eds): 19–38.
- Engeström Yrjö & Miettinen Reijo 1999. Introduction. In Engeström, Miettinen & Punamäki (eds): 1–16.
- Engeström Yrjö, Miettinen Reijo & Punamäki Raija-Leena (eds) 1999. *Perspectives on Activity Theory*. Cambridge: Cambridge University Press.
- Ferguson Gibson 2012. English for medical purposes. In Starfield & Paltridge (eds): 243–261.

- Fujioka Mayumi 2014. L2 student–U.S. professor interactions through disciplinary writing assignments: An activity theory perspective. *Journal of Second Language Writing* 25: 40–58.
- Gao Xuesong 2007. Has language learning strategy research come to an end? A response to Tseng *et al.* (2006). *Applied Linguistics* 28 (4): 615–620.
- Grenfell Mike & Macaro Ernesto 2007. Claims and critiques. In Cohen & Macaro (eds): 9–28.
- Griffiths Carol (ed.) 2008. *Lessons from Good Language Learners*. Cambridge: Cambridge University Press.
- Griffiths Carol 2008. Strategies and good language learners. In Griffiths (ed.): 83–98.
- Griffiths Carol 2013. *The Strategy Factor in Successful Language Learning*. Bristol: Multilingual Matters.
- Hyland Ken 2007. English for specific purposes: Some influences and impacts. In Cummins & Davison (eds): 391–402.
- Hynönen Emmi, Laivo-Laakso Katja & Lampinen Arja 2015. Valmiuksia potilasviestintään ja asiantuntijuuteen mediassa (Preparing for patient communication and for expert status in media). *Kielikeskus tutkii (The language centre studies)* 2: 49–57.
- Kasper Gabriele & Kellerman Eric (eds) 1997. *Communication Strategies: Psycholinguistic and Sociolinguistic Perspectives*. New York: Routledge.
- Kasper Gabriele & Kellerman Eric 1997. Introduction: approaches to communication strategies. In Kasper & Kellerman (eds): 1–13.
- Kawai Yasushi 2008. Speaking and good language learners. In Griffiths (ed.): 218–230.
- Lantolf James P. & Pavlenko Aneta 2001. (S)econd (L)anguage (A)ctivity theory: Understanding second language learners as people. In Breen (ed.): 141–158.
- Lepetit Daniel & Cichocki Wladyslaw 2002. Teaching languages to future health professionals: A needs assessment study. *Modern Language Journal* 86 (3): 384–396.
- Macaro Ernesto 2006. Strategies for language learning and for language use: Revising the theoretical framework. *The Modern Language Journal* 90 (3): 320–337.

- Nakatani Yasuo 2006. Developing an oral communication strategy inventory. *The Modern Language Journal* 90 (2): 151–168.
- Nelson Mike 2015. Analysing the language-related needs of University of Turku students and faculties: a report. *Kielikeskus tutkii* (The language centre studies) 2: 70–83.
- Nickerson Catherine 2012. English for specific purposes and English as a lingua franca. In Starfield & Paltridge (eds): 445–460.
- O'Malley Michael J. & Chamot Anna Uhl 1990. *Learning Strategies in Second Language Acquisition*. Cambridge: Cambridge University Press.
- Ortega Lourdes 2009. *Understanding Second Language Acquisition*. London & New York: Routledge.
- Oxford Rebecca L. 1990. *Language Learning Strategies: What Every Teacher Should Know*. New York: Newbury House Publishers.
- Oxford Rebecca L. 2011. *Teaching and Researching Language Learning Strategies*. Harlow: Pearson.
- Oxford Rebecca L. & Schramm Karen 2007. Bridging the gap between psychological and sociocultural perspectives on L2 learner strategies. In Cohen & Macaro (eds): 47–68.
- Peacock Matthew & Ho Belinda 2003. Student language learning strategies across eight disciplines. *International Journal of Applied Linguistics* 13 (2): 179–200.
- Pekarek Doehler Simona 2002. Mediation revisited: the interactive organization of mediation in learning environments. *Mind, Culture, and Activity* 9 (1): 22–42.
- Peräkylä Anssi, Eskola Kari & Sorjonen Marja-Leena 2001. Lääkäriin ja potilaan vuorovaikutus tarkastelun kohteena (Examining the interaction between a doctor and a patient). In Sorjonen, Peräkylä & Eskola (eds): 7–26.
- Pyörälä Eeva 2001. Keskusteluanalyttisen vuorovaikutustutkimuksen soveltaminen lääkärikoulutuksessa (Applying conversational analytic interaction research in medical education). In Sorjonen, Peräkylä & Eskola (eds): 183–195.
- Ranalli Jim 2012. Alternative models of self-regulation and implications for L2 strategy research. *Studies in Self-Access Learning Journal* 3 (4): 357–376.

- Rose Heath 2012. Reconceptualizing strategic learning in the face of self-regulation: Throwing language learning strategies out with the bathwater. *Applied Linguistics* 33: 92–98.
- Roth Wolff-Michael 2004. Introduction: “Activity theory and education: An introduction”. *Mind, Culture and Activity* 11 (1): 1–8.
- Roth Wolff-Michael & Lee Yew-Jin 2007. “Vygotsky’s neglected legacy”: Cultural-historical activity theory. *Review of Educational Research* 77 (2): 186–232.
- Sahlstein Annmari 2015. “Ruotsia saisi olla enemmänkin” – lääketieteellisen tiedekunnan ruotsin opetuksen nykynäkymiä (“There could be more Swedish” – current perspectives in the teaching of Swedish at the medical faculty). *Kielikeskus tutkii* (The language centre studies) 2: 84–96.
- Sannino Annalisa, Daniels Harry & Gutiérrez Kris D. (eds) 2009. *Learning and Expanding with Activity Theory*. Cambridge University Press: Cambridge.
- Sannino Annalisa, Daniels Harry & Gutiérrez Kris D. 2009. Activity theory between historical engagement and future-making practice. In Sannino, Daniels & Gutiérrez (eds): 1–15.
- Skehan Peter 1989. *Individual Differences in Second-language Learning*. London: Edward Arnold.
- Sorjonen Marja-Leena, Peräkylä Anssi & Eskola Kari (eds) 2001. *Keskustelu lääkärin vastaanotolla* (Conversation during a doctor’s appointment). Tampere: Vastapaino.
- Starfield Sue & Paltridge Brian (eds) 2012. *The Handbook of English for Specific Purposes*. Malden, MA: Wiley-Blackwell.
- Statistics Finland 2014. Vuoden 2013 väkiluvun kasvusta vieraskielisten osuus 90 prosenttia (90 percent of the increase in population in 2013 consists of foreign-language speakers). [online]. Available: [www.tilastokeskus.fi/til/vaerak/2013/vaerak\\_2013\\_2014-03-21\\_tie\\_001\\_fi.html](http://www.tilastokeskus.fi/til/vaerak/2013/vaerak_2013_2014-03-21_tie_001_fi.html) (18 November 2015).
- Taillefer Gail F. 2007. The professional language needs of economics graduates: Assessment and perspectives in the French context. *English for Specific Purposes* 26: 135–155.

- Tseng Wen-Ta, Dörnyei Zoltàn & Schmitt Norbert 2006. A new approach to assessing strategic learning: The case of self-regulation in vocabulary acquisition. *Applied Linguistics* 27 (1): 78–102.
- University of Turku 2015. KIEN1411 Englannin kieli: Medical English I 1 op – Kielikeskus [online]. Available: [www.nettiopsu.utu.fi/opas/opintojakso.htm?rid=19970&idx=4&uiLang=fi&lang=fi&lvv=2015](http://www.nettiopsu.utu.fi/opas/opintojakso.htm?rid=19970&idx=4&uiLang=fi&lang=fi&lvv=2015) (17 January 2016).
- White Cynthia, Schramm Karen & Chamot Anna Uhl 2007. Research methods in strategy research: Re-examining the toolbox. In Cohen & Macaro (eds): 93–116.
- Yang Luxin, Baba Kyoko & Cumming Alister 2004. Activity systems for ESL writing improvement: Case studies of three Chinese and three Japanese adult learners of English. *Angles on the English Speaking World* 4: 13–34.

## Appendices

### Appendix 1. Oral Communication Strategy Inventory by Nakatani (2006: 163–164)

Please read the following items, choose a response, and write it in the space after each item.

1. Never or almost never true of me
2. Generally not true of me
3. Somewhat true of me
4. Generally true of me
5. Always or almost always true of me

### Strategies for Coping With Speaking Problems

1. I think first of what I want to say in my native language and then construct the English sentence.
2. I think first of a sentence I already know in English and then try to change it to fit the situation.
3. I use words which are familiar to me.
4. I reduce the message and use simple expressions.
5. I replace the original message with another message because of feeling incapable of executing my original intent.
6. I abandon the execution of a verbal plan and just say some words when I don't know what to say.
7. I pay attention to grammar and word order during conversation.
8. I try to emphasize the subject and verb of the sentence.
9. I change my way of saying things according to the context.
10. I take my time to express what I want to say.
11. I pay attention to my pronunciation.
12. I try to speak clearly and loudly to make myself heard.
13. I pay attention to my rhythm and intonation.
14. I pay attention to the conversation flow.
15. I try to make eye-contact when I am talking.
16. I use gestures and facial expressions if I can't communicate how to express myself.

17. I correct myself when I notice that I have made a mistake.
18. I notice myself using an expression which fits a rule that I have learned.
19. While speaking, I pay attention to the listener's reaction to my speech.
20. I give examples if the listener doesn't understand what I am saying.
21. I repeat what I want to say until the listener understands.
22. I make comprehension checks to ensure the listener understands what I want to say.
23. I try to use fillers when I cannot think of what to say.
24. I leave a message unfinished because of some language difficulty.
25. I try to give a good impression to the listener.
26. I don't mind taking risks even though I might make mistakes.
27. I try to enjoy the conversation.
28. I try to relax when I feel anxious.
29. I actively encourage myself to express what I want to say.
30. I try to talk like a native speaker.
31. I ask other people to help when I can't communicate well.
32. I give up when I can't make myself understood.

#### Strategies for Coping With Listening Problems

1. I pay attention to the first word to judge whether it is an interrogative sentence or not.
2. I try to catch every word that the speaker uses.
3. I guess the speaker's intention by picking up familiar words.
4. I pay attention to the words which the speaker slows down or emphasizes.
5. I pay attention to the first part of the sentence and guess the speaker's intention.
6. I try to respond to the speaker even when I don't understand him/her perfectly.
7. I guess the speaker's intention based on what he/she has said so far.
8. I don't mind if I can't understand every single detail.
9. I anticipate what the speaker is going to say based on the context.



10. I ask the speaker to give an example when I am not sure what he/she said.
11. I try to translate into native language little by little to understand what the speaker has said.
12. I try to catch the speaker's main point.
13. I pay attention to the speaker's rhythm and intonation.
14. I send continuation signals to show my understanding in order to avoid communication gaps.
15. I use circumlocution to react the speaker's utterance when I don't understand his/her intention well.
16. I pay attention to the speaker's pronunciation.
17. I use gestures when I have difficulties in understanding.
18. I pay attention to the speaker's eye contact, facial expression and gestures.
19. I ask the speaker to slow down when I can't understand what the speaker has said.
20. I ask the speaker to use easy words when I have difficulties in comprehension.
21. I make a clarification request when I am not sure what the speaker has said.
22. I ask for repetition when I can't understand what the speaker has said.
23. I make clear to the speaker what I haven't been able to understand.
24. I only focus on familiar expressions.
25. I especially pay attention to the interrogative when I listen to WH-questions.
26. I pay attention to the subject and verb of the sentence when I listen.

## Appendix 2. Translated OCSI questionnaire.

### Taustatiedot:

Vuosikurssi: \_\_\_\_\_

Ikä: \_\_\_\_\_

Sukupuoli: \_\_\_\_\_

**1 = En koskaan/lähes koskaan 2 = Yleensä en 3= Jossain määrin 4= Yleensä 5= Aina/lähes aina**

### Kun kohtaan ongelmia puhuessani...

1. Ajattelen ensin mitä haluan sanoa äidinkielelläni ja sen jälkeen muodostan lauseen englanniksi.	1	2	3	4	5
2. Ajattelen ensin lausetta, jonka jo osaan englanniksi ja yritän muuttaa sitä tilanteeseen sopivaksi.	1	2	3	4	5
3. Käytän sanoja, jotka ovat tuttuja minulle.	1	2	3	4	5
4. Pelkistan viestiä ja käytän yksinkertaisia ilmauksia.	1	2	3	4	5
5. Korvaan alkuperäisen viestin toisella, koska koen, että en kykene toteuttamaan alkuperäistä tarkoitustani.	1	2	3	4	5
6. Hylkään verbaalisen suunnitelman toteutuksen ja sanon vain joitain sanoja, kun en tiedä mitä sanoa.	1	2	3	4	5
7. Kiinnitän huomiota kielioppiin ja sanajärjestykseen keskustelun aikana.	1	2	3	4	5
8. Yritän korostaa lauseen subjektia (tekijää) ja verbiä.	1	2	3	4	5
9. Muutan tapaani sanoa asioita eri tilanteissa.	1	2	3	4	5
10. Ilmaisen asiani rauhassa ja ajan kanssa.	1	2	3	4	5
11. Kiinnitän huomiota ääntämiseeni.	1	2	3	4	5
12. Pyrin puhumaan selkeästi ja kovaa, jotta minut kuullaan.	1	2	3	4	5
13. Kiinnitän huomiota puheeni rytmiin ja intonaatioon.	1	2	3	4	5
14. Kiinnitän huomiota keskustelun sujuvuuteen.	1	2	3	4	5
15. Yritän saada katsekontaktin puhuessani.	1	2	3	4	5
16. Käytän eleitä ja ilmeitä, jos en osaa ilmaista itseäni.	1	2	3	4	5
17. Korjaan itseäni, kun huomaan tehneeni virheen.	1	2	3	4	5
18. Huomaan, kun käytän ilmaisua joka noudattaa oppimaani sääntöä.	1	2	3	4	5
19. Kun puhun, kiinnitän huomiota siihen kuinka kuuntelija reagoi puheeseeni.	1	2	3	4	5
20. Annan esimerkkejä, jos kuuntelija ei ymmärrä mitä sanon.	1	2	3	4	5
21. Toistan sanomani kunnes kuuntelija ymmärtää.	1	2	3	4	5
22. Tarkistan, että kuuntelija ymmärtää mitä haluan sanoa.	1	2	3	4	5
23. Yritän käyttää täytesanoja, kun en keksi sanottavaa.	1	2	3	4	5
24. Keskeytän lauseita kielivaikeuksien vuoksi.	1	2	3	4	5
25. Yritän antaa hyvän vaikutelman kuuntelijalle.	1	2	3	4	5
26. Voin ottaa riskejä, vaikka sen vuoksi tekisinkin virheitä.	1	2	3	4	5
27. Yritän nauttia keskustelusta.	1	2	3	4	5
28. Yritän rentoutua, kun tunnen oloni jännittyneeksi.	1	2	3	4	5

29. Rohkaisen itseäni aktiivisesti ilmaisemaan mitä haluan sanoa.	1	2	3	4	5
30. Yritän puhua äidinkielen puhujan tavalla.	1	2	3	4	5
31. Pyydän toisilta apua, kun en osaa kommunikoida hyvin.	1	2	3	4	5
32. Luovutan, kun minua ei ymmärretä.	1	2	3	4	5

### Kun kohtaan ongelmia kuunnellessani...

1. Kiinnitän huomiota lauseen ensimmäiseen sanaan arvioidakseni onko kyseessä kysymyslause.	1	2	3	4	5
2. Yritän ymmärtää jokaisen sanan, jonka puhuja sanoo.	1	2	3	4	5
3. Yritän arvata puhujan aikomuksen poimimalla tuttuja sanoja.	1	2	3	4	5
4. Kiinnitän huomiota sanoihin, jotka puhuja sanoo hitaammin tai joita puhuja korostaa.	1	2	3	4	5
5. Kiinnitän huomiota lauseen ensimmäiseen osaan ja arvaan puhujan tarkoituksen.	1	2	3	4	5
6. Yritän vastata puhujalle vaikka en ymmärrä häntä täydellisesti.	1	2	3	4	5
7. Arvaan puhujan tarkoituksen pohjautuen siihen, mitä hän on sanonut siihen asti.	1	2	3	4	5
8. Minua ei haittaa vaikka en ymmärtäisi jokaista yksityiskohtaa.	1	2	3	4	5
9. Ennakoin mitä puhuja aikoo sanoa tilanteen pohjalta.	1	2	3	4	5
10. Pyydän puhujaa antamaan esimerkin, kun en ole varma mitä hän sanoi.	1	2	3	4	5
11. Yritän kääntää äidinkielelleni pala palalta ymmärtääkseni mitä puhuja on sanonut.	1	2	3	4	5
12. Yritän ymmärtää asian ytimen.	1	2	3	4	5
13. Kiinnitän huomiota puhujan rytmiin ja intonaatioon.	1	2	3	4	5
14. Välitän puhujalle merkkejä jatkaa puhumista, näyttääkseni ymmärtämiseni ja välttääkseni aukkoja kommunikaatiossa.	1	2	3	4	5
15. Käytän kiertoilmaisuja reaktiona puhujan ilmauksiin, kun en ymmärrä hänen tarkoitustaan hyvin.	1	2	3	4	5
16. Kiinnitän huomiota puhujan ääntämiseen.	1	2	3	4	5
17. Käytän eleitä, kun minulla on vaikeuksia ymmärtää.	1	2	3	4	5
18. Kiinnitän huomiota puhujan katsekontaktiin, ilmeisiin ja eleisiin.	1	2	3	4	5
19. Pyydän puhujaa hidastamaan, kun en ymmärrä mitä hän on sanonut.	1	2	3	4	5
20. Pyydän puhujaa käyttämään helppoja sanoja, kun minulla on vaikeuksia ymmärtää.	1	2	3	4	5
21. Pyydän selvennystä, kun en ole varma mitä puhuja on sanonut.	1	2	3	4	5
22. Pyydän puhujaa toistamaan, kun en ymmärrä mitä puhuja sanoi.	1	2	3	4	5
23. Kerron puhujalle mitä en ole ymmärtänyt.	1	2	3	4	5
24. Keskityn ainoastaan tuttuihin ilmaisuihin.	1	2	3	4	5
25. Kiinnitän erityistä huomiota kysymyssanaan, kun kuuntelen kysymyslauseita, jotka alkavat wh-sanalla (esim. what, where).	1	2	3	4	5
26. Kiinnitän huomiota lauseen subjektiin ja verbiin kuunnellessani.	1	2	3	4	5

Jos olisit valmis osallistumaan tutkimukseen liittyvään lyhyeen haastatteluun, ole hyvä ja jätä sähköpostiosoitteesi: \_\_\_\_\_

Kaikki vastaukset käsitellään täysin anonyymeinä. Vastauksia käytetään ainoastaan tutkimustarkoituksiin ja niitä ei luovuteta ulkopuolisille.

### **Appendix 3.** The interview questions.

#### **Ennen varsinaista haastattelun aloitusta**

\* Millaisesta tutkimuksesta on kyse

\* Yleisiä kysymyksiä: Millainen suhde sinulla on englantiin yleisesti? Oletko kohdannut englanninkielisiä potilaita? Millaisia kokemuksia näistä kohtaamisista jäi?

#### **Haastattelukysymykset**

Ohjeistus: Kaikki kysymykset liittyvät englannin kielen oppimiseen potilaskohtauksia varten.

Kysyn tarkentavia kysymyksiä tarvittaessa. Jos jokin kysymys on vaikeasti muotoiltu vai vaikeasti ymmärrettävä, kysy tarkennusta.

Subjekti on haastateltava, kliininen tai prekliininen opiskelija.

**Object:** Millaisia tavoitteita tai päämääriä sinulla on englanninkieliselle potilaskohtaukselle?

Minkä onnistumista pidät tärkeänä englanninkielisessä potilaskohtauksessa?

**Mediating artifacts / tools:** Millä tavoin pyrit konkreettisesti saavuttamaan tavoitteesi? Mitä

olet tehnyt valmistautuaksesi englanninkieliseen potilaskohtaukseen? Mitkä vapaa-ajan tai

opintojen osa-alueet ovat valmistaneet sinua potilaskohtauksiin englanniksi? Millaisia

oppimisstrategioita pidät tärkeitä potilaskohtaukseen valmistautuessa ja sen aikana?

(oppimisstrategia = tietoinen strategia tai toimi oppimisen edistämiseksi, esim.

muistiinpanojen tekeminen luennolla)

Viimeisen kysymyksen yhteydessä esille voi ottaa haastateltavan kyselyvastaukset ja

keskustella niistä.

**Community:** Kenellä mielestäsi on samat tavoitteet oppimisessa? Millaiseen yhteisöön koet

kuuluvasi, kun ajattelet englannin oppimistasi työelämää varten? Ketkä hyötyvät

oppimisestasi?

**Division of labour:** Kun ajattelet omaa englannin oppimistasi potilaskohtauksia varten, mikä

on a) opiskelijan rooli? b) opettajien (englannin, viestinnän, kliinisten) rooli? c) potilaiden rooli?

d) tuleeko mieleen muita, joilla on jonkinlainen rooli englannin oppimisessasi? Millä tavoin

näiden henkilöiden statukset eroavat toisistaan?

**Rules:** Millaisia sääntöjä, tapoja ja rakenteita liittyy potilaskohtaukseen vieraalla kielellä

(englanniksi)? Eroaako vuorovaikutus potilaan kanssa, kun kieli on englanti eikä suomi/ruotsi?

Muuttuvatko säännöt, jos potilaskohtauksen näkee samalla myös kielenoppimistilaisuutena?

**Lopuksi:** Onko vielä lisättävää tai kysyttävää haastatteluun tai tutkimukseen liittyen?

## Suomenkielinen tiivistelmä

### Johdanto

Englannin kielen asema globaalina kielenä on asettanut uusia haasteita niin suomalaisille työympäristöille kuin yhteiskunnalle yleisestikin. Suomen ja ruotsin lisäksi työpaikoilla tarvitaan nykyisin usein myös muiden kielten tuntemusta, ja englantia toimii usein yhtenä kommunikaatiokielenä, kun puhujilla ei ole yhteistä äidinkieltä. Tämän pro gradu -tutkielman keskiössä ovat lääketieteen opiskelijoiden englannin oppiminen ja erityisesti kielenoppimisstrategiat, joita opiskelijat käyttävät oppiakseen englantia potilaskohtaamisia varten. Tutkielman tavoitteina oli selvittää, millälaisia kielenoppimisstrategioita lääketieteen opiskelijat tyypillisesti käyttävät sekä tutkia, millaisia eroja prekliinisten ja kliinisten opiskelijoiden strategioiden käytössä on. Oppimistrategioiden käyttöä tutkittiin laajemmassa kontekstissa myös toimintajärjestelmien (*activity system*) avulla; pyrin saamaan selville, millaisia toimintajärjestelmiä lääketieteen opiskelijoilla on ja millaisia eroja toimintajärjestelmissä on prekliinisten ja kliinisten opiskelijoiden välillä. Tutkielman teoreettinen tausta perustuu pääasiassa Oxfordin (2011) oppimisstrategiamalliin sekä toiminnanteoriaan (*activity theory*).

### Tutkimuksen teoreettinen tausta

Tutkimuksen teoreettisessa osuudessa keskityttiin tutkimuksen keskeisiin käsitteisiin: englantia erikoiskielenä (*English for specific purposes*), kielenoppimisstrategiat sekä toiminnanteoria. Erikoiskielillä tarkoitetaan kielen muotoja, joita ammatilliset ryhmät käyttävät oman alansa tarpeisiin ja alan vaatimaan kommunikaatioon (Hyland 2007: 391). Erikoiskieliin liittyvä tutkimus, etenkin englantiiin liittyvä tutkimus, pohjautuu vahvasti englannin lingua franca -asemaan useilla yksittäisillä aloilla (Nickerson 2012: 445). Aiemmissa englantia erikoiskielenä tutkineissa tutkimuksissa on selvitetty muun muassa kauppatieteiden opiskelijoiden kielitaitotarpeita yliopisto-opinnoissa sekä tulevassa työelämässä (Taillefer 2007), kun taas lääketieteellisessä kontekstissa on tutkittu muun muassa Yhdysvaltoihin muualta muuttaneiden sairaanhoitajaopiskelijoiden ammatillista kielenoppimista (Bosher & Smalkoski 2002) sekä yhdysvaltalaisten terveydenhoitoalan ammattilaisten tarvetta vieraiden kielten

osaamiseen (Lepetit & Cichocki 2002). Kaikissa edellä mainituissa tutkimuksissa suullisen kielitaidon tärkeys korostui.

Kuten monilla muillakin aloilla, myös lääketieteen alalle on tyypillistä tietynlainen kommunikaatio. Lääkärin ja potilaan kohtaaminen vaatii usein kontekstin tuntemista niin potilaalta kuin lääkäriltäkin. Potilaskohtaisille tyypillisiä rakenteita ovat muun muassa kysymysten ja vastausten ketjut; lääkärin kysymykset voivat antaa vaihtoehtoja tai olla avoimia kysymyksiä, ja potilaan vastaus vaikuttaa seuraavan kysymyksen muotoiluun (Pyörälä 2001: 187). Jokaisen lääkärin ja potilaan tapa kommunikoida eroaa muista, joten yksikään potilaskohtaaminen ei ole täysin samanlainen, vaikka sekä lääkäreillä että potilailla on käsitykset siitä, minkälainen potilaskohtaamisen perinteisesti tulisi olla (Peräkylä, Eskola & Sorjonen 2001: 9–10). Lääketieteelliseen koulutukseen sisältyy viestintätaitojen opetusta, jonka tarkoituksena on ohjata opiskelijoita joustavaan ja toimivaan kommunikaatioon potilaan kanssa (Pyörälä 2001: 194). Turun yliopiston lääketieteellisessä tiedekunnassa kieli- ja viestintäopintoihin sisältyy pakollisia suomen, ruotsin ja englannin kursseja (Hynönen, Laivo-Laakso & Lampinen 2015: 49). Suomen kielen opinnot keskittyvät sekä kirjoitustaitoihin että ammatilliseen kommunikaatioon potilaiden ja median kanssa (Hynönen, Laivo-Laakso & Lampinen 2015: 49), ruotsin opinnoissa keskitytään kirjallisiin ja suullisiin taitoihin, joita lääkäri tarvitsee konkreettisissa potilaskohtaisissa (Sahlstein 2015: 86), kun taas englannin opinnot keskittyvät pääasiassa lääketieteelliseen sanastoon (Kelly Raita, henkilökohtainen keskustelu, syyskuu 2015).

Oppimisstrategioita on tutkittu jo vuosikymmenien ajan, mutta oppimisstrategian määritelmästä kiistellään edelleen. Tässä tutkimuksessa oppimisstrategian määritelmä pohjautui kahden oppimisstrategiatutkijan määritelmiin, Griffithsin (2008) ja Oxfordin (2011). Griffithsin (2008: 87) määritelmän mukaan oppimisstrategiat ovat ”oppijoiden tietoisesti valitsemia toimintoja oman kielenoppimisensa ohjaamiseksi”. Oxfordin määritelmä on hyvin samankaltainen; Oxford (2011: 12) määrittelee oppimisstrategioiden olevan lisäksi tavoitteellisia. Kumpikin määritelmä korostaa oppijan omaa aktiivisuutta ja oman oppimisen ohjailua oppimisstrategioiden avulla. Erityisesti oppimisstrategian määritelmien moninaisuus ja monimutkaisuus on

herättänyt tutkijoissa myös kriittisyyttä oppimisstrategiatutkimusta kohtaan (Macaro 2006: 322). Koska selkeä ja yhtenäinen määritelmä oppimisstrategialle on edelleen vasta tavoite, Cohen ja Macaro (2007: 283) ovat kehottaneet tuomaan selkeästi esille määritelmät, joihin kukin tutkimus nojautuu.

Tämän tutkielman toisena tärkeänä teoreettisena viitekehyksenä, toiminnanteorian lisäksi, on käytetty Rebecca Oxfordin (2011) *Strategic Self-Regulation Model* -mallia, jota käytetään myös tulosten analysointiin. Oxfordin oppimisstrategiamalli korostaa oppijoiden aktiivista oppimisen ohjaamista oppimisstrategioiden avulla (Oxford 2011: 14). Oxford (2011: 14) jakaa kielenoppimisstrategiat kolmeen osaan: kognitiivisiin strategioihin (*cognitive*), affektiivisiin strategioihin (*affective*) sekä sosiokulttuurillis-interaktiivisiin strategioihin (*sociocultural-interactive*). Kuhunkin näistä strategiatyypeistä kuuluu myös metatason strategioita, joiden avulla strategioiden käyttöä säännellään (Oxford 2011: 15). Kognitiiviset strategiat ovat oppimisstrategioita, joiden avulla oppija rakentaa, muuttaa ja soveltaa tietoa oppimastaan kielestä (Oxford 2011: 14). Metakognitiiviset strategiat puolestaan ohjaavat kognitiivisten strategioiden käyttöä (Oxford 2011: 44). Affektiiviset strategiat vaikuttavat oppijan asenteisiin ja tunteisiin (Oxford 2011: 14) ja saavat oppijan asennoitumaan ja ajattelemaan positiivisesti motivaation ylläpitämiseksi ja kasvattamiseksi (Oxford 2011: 63). Meta-affektiivisten strategioiden tarkoitus on tarkkailla ja arvioida affektiivisten strategioiden onnistumista (*ibid.*). Sosiokulttuurillis-interaktiiviset strategiat yhdistävät kommunikatiiviset ja sosiokulttuuriset tilanteet (Oxford 2011: 14), ja niiden tarkoituksena on helpottaa kommunikaatiota ongelmatilanteissa (Oxford 2011: 87). Metasosiokulttuurillis-interaktiiviset strategiat helpottavat oppimista vaikuttamalla konteksteihin, kommunikaatioon ja kulttuuriin liittyviin asioihin (*ibid.*).

Toiminnanteoriaa (*activity theory*) hyödynnettiin tässä tutkimuksessa pääasiassa kvalitatiivisten tulosten analyysissä. Muun muassa Oxford (2011: 53–54) ja Griffiths (2013: 40) ovat maininneet toiminnanteorian oppimisstrategiatutkimuksen yhteydessä, ja lisäksi Oxfordin (2011) oppimisstrategiamallin käsitteet ovat samankaltaista kuin toiminnanteoriassa, joten näitä kahta mallia on helppo käyttää rinnakkain. Toiminnanteoria on erittäin laaja, hajanainen ja monialainen tieteenala,



joten tutkielman rajoitetun laajuuden vuoksi toiminnanteoria on esitetty vain suppeasti. Toiminnanteorian perusajatus on, että tieto rakentuu ihmisten keskinäisessä vuorovaikutuksessa (Yang, Baba & Cumming 2004: 14), ja toiminnanteorian päämääränä on tutkia yhteiskunnallisten toimintojen muutoksia (Sannino, Daniels & Gutiérrez 2009: 1). Toiminnanteorian peruskäsitteisiin kuuluu tavoitteellinen toiminta (*object-oriented activity*) (Sannino, Daniels & Gutiérrez 2009: 3), esimerkiksi kielenoppiminen.

Toiminnanteoriassa analysoidaan toimintajärjestelmiä, jotka ovat kollektiivisia, kulttuurillisesti välittyviä ja päämäärään tähtäviä (Engeström & Miettinen 1999: 9). Toimintajärjestelmään kuuluu kuusi osaa: tekijä (*subject*), kohde (*object*), välineet (*mediating artifacts*), säännöt (*rules*), yhteisö (*community*) sekä työnjako (*division of labour*) (Engeström 1999: 30). Toimintajärjestelmässä tekijä viittaa henkilöön tai ryhmään, joka suorittaa toimintaa, kohteella tarkoitetaan päämäärää, johon tekijä tähtää, ja välineillä tarkoitetaan niitä välineitä tai tapoja, joita käytetään päämäärän saavuttamiseksi (Engeström 1999: 30–31). Yhteisö sisältää henkilöitä, joilla on samanlaiset päämäärät (Fujioka 2014: 42) sekä koko yhteisön, jonka sisällä toiminta tapahtuu ja jota toiminta hyödyttää (Roth & Lee 2007: 199). Työnjako viittaa yhteisön jäsenten rooleihin ja heidän vastuihinsa ja asemiinsa (Fujioka 2014: 42). Säännöt määrittelevät toimintajärjestelmässä tapahtuvan vuorovaikutuksen käytännöt (*ibid.*).

### **Tutkimuksen toteutus**

Tutkielman aineisto koostui 167 kyselylomakkeesta sekä kahdesta haastattelusta. Tutkimukseen osallistui ensimmäisen vuoden lääketieteen prekliinisiä opiskelijoita sekä viidennen vuoden lääketieteen kliinisiä opiskelijoita. Kyselytutkimukseen osallistui yhteensä 138 prekliinistä opiskelijaa, joista kahdeksan opiskelijan vastaukset hylättiin epäselvien tai puutteellisten vastausten vuoksi. Yksi prekliininen opiskelija osallistui yksilöhaastatteluun. Kliinisiä opiskelijoita osallistui yhteensä 41 opiskelijaa, joista kolmen lomake hylättiin puutteellisten vastausten vuoksi. Yksi kliininen opiskelija osallistui yksilöhaastatteluun.

Tutkielmassa käytettiin sekä määrällisiä että laadullisia tutkimusmenetelmiä. Määrällinen aineisto koostui kyselylomakevastauksista ja laadullinen aineisto

yksilöhaastatteluista. Kyselyssä selvitettiin lääketieteen opiskelijoiden kielenoppimisstrategioiden käyttöä suullisissa tilanteissa, erityisesti potilaskohtaamisten aikana, ja kyselynä käytettiin Nakatanin (2006) *Oral Communication Strategy Inventory* -kyselyä, josta käytetään lyhennettä OCSI. Kysely (Liite 2) käännettiin suomeksi, jotta mahdollisuus väärinkäsityksiin saatiin minimoitua. Osallistujat vastasivat kyselyyn joko luennon aikana tai sen jälkeen; prekliiniset opiskelijat täyttivät kyselyn pakollisten englannin oppituntien aikana, ja kliiniset opiskelijat vastasivat kyselyyn luentojen jälkeen. Osallistujia ohjeistettiin vastaamaan kyselyyn ajatellen englanninkielisiä potilaskohtaamisia. Tässä tutkielmassa on käytetty Oxfordin (2011) oppimisstrategiamalliin pohjautuvaa kategorisaatiota Nakatanin (2006) esittelemän sijasta. Nämä kategoriat ovat kognitiiviset, metakognitiiviset, affektiiviset, meta-affektiiviset, sosiokulttuurillis-interaktiiviset ja metasosiokulttuurillis-interaktiiviset strategiat. Näiden lisäksi kategorisaatioon lisättiin uusi kategoria, negatiiviset strategiat, koska Oxfordin (2011) taksonomia ei sisällä ollenkaan erillistä kategoriaa strategioille, jotka mahdollisesti hidastavat tai haittaavat oppimista, mutta Nakatanin (2006) kyselyyn niitä on sisällytetty.

Haastattelut toteutettiin suomenkielisinä puolistrukturoituina yksilöhaastatteluina. Haastatteluiden avulla pyrittiin saamaan tarkempaa tietoa lääketieteen opiskelijoiden käyttämistä oppimisstrategioista ja englannin oppimisen laajemmasta kontekstista. Tämän tavoitteen täyttämiseksi haastatteluissa hyödynnettiin toiminnanteoriaa, ja tarkoituksena oli koostaa haastatteluiden pohjalta toimintajärjestelmä kullekin haastateltavalle. Haastattelukysymykset laadittiin toimintajärjestelmän osien mukaan niin, että jokaiseen osaan liittyi kysymyksiä. Haastattelut nauhoitettiin analyysin helpottamiseksi, mutta nauhoituksia ei litteroitu. Varsinaisten haastattelukysymysten (Liite 3) lisäksi haastateltavilta tiedusteltiin heidän suhdettaan englannin kieleen ja sen opiskeluun sekä olivatko he kohdanneet englanninkielisiä potilaita opintojensa aikana.

## **Tulokset**

Tutkielman tulokset sisältävät sekä kvantitatiivisia että kvalitatiivisia tuloksia, jotka esitellään erikseen. Kvantitatiivisten tulosten tavoitteena oli selvittää, millaisia oppimisstrategioita lääketieteen opiskelijat käyttävät ryhmänä ja millaisia eroja

prekliinisten ja kliinisten opiskelijoiden strategioiden käytössä on. Tulokset osoittivat, että prekliinisistä opiskelijoista 34 % käyttää kognitiivisia strategioita yleensä. Vastausvaihtoehdoista 'yleensä' oli suosituin prekliinisten opiskelijoiden parissa. Kliinisten opiskelijoiden tulokset olivat hyvin samankaltaiset; 33 % kliinisistä opiskelijoista valitsi vastausvaihtoehdon 'yleensä', joka oli myös yleisin vastaus. Erot kognitiivisten strategioiden käytössä olivat hyvin pieniä prekliinisten ja kliinisten opiskelijoiden välillä. Metakognitiivisia strategioita käyttää yleensä 35 % prekliinisistä opiskelijoista, ja 'yleensä' olikin yleisin vastaus. Kliinisten opiskelijoiden yleisin vastaus oli 'jossain määrin', jonka valitsi 35 % opiskelijoista. Myöskään metakognitiivisten strategioiden kohdalla erot kahden ryhmän välillä eivät olleet erityisen suuria, vaikka yleisin vastaus olikin eri kummassakin ryhmässä.

Verrattuna kognitiivisiin ja metakognitiivisiin strategioihin lääketieteen opiskelijat käyttävät affektiivisia strategioita useammin. 48 % prekliinisistä opiskelijoista raportoi käyttävänsä affektiivisia strategioita yleensä, kun taas kliinisistä opiskelijoista 37 % valitsi vastausvaihtoehdon 'yleensä'. Myös vastausvaihtoehto 'aina tai lähes aina' oli melko suosittu kummassakin ryhmässä (prekliiniset 16 %; kliiniset 24 %). Kliiniset opiskelijat käyttävät affektiivisia strategioita jonkin verran useammin kuin prekliiniset opiskelijat, vaikkakin kummassakin ryhmässä yli 50 % opiskelijoista käyttää affektiivisia strategioita yleensä tai aina tai lähes aina. Kyselyssä oli ainoastaan yksi meta-affektiivinen strategia, joten tulokset meta-affektiivisten strategioiden käytöstä eivät välttämättä kuvaa lääketieteen opiskelijoiden todellista meta-affektiivisten strategioiden käyttöä. Kummassakin tutkitussa ryhmässä 'yleensä' oli yleisin vastaus (prekliiniset 36 %; kliiniset 45 %). Kliinisistä opiskelijoista jonkin verran pienempi määrä vastasi 'yleensä en' tai 'en koskaan tai lähes koskaan' verrattuna prekliinisiin opiskelijoihin; ero ryhmien välillä oli 10 prosenttiyksikköä.

Kuten affektiiviset strategiat myös sosiokulttuurillis-interaktiiviset strategiat ovat yleisempiä kuin kognitiiviset strategiat. Kuten useissa aiemmissakin strategiatyypeissä myös sosiokulttuurillis-interaktiivisten strategioiden kohdalla 'yleensä' oli prekliinisten opiskelijoiden yleisin vastaus (44 %). 'Yleensä' oli yleisin vastaus myös kliinisillä opiskelijoilla, joista 42 % kertoi käyttävänsä sosiokulttuurillis-interaktiivisia strategioita yleensä. Erot kahden ryhmän välillä ovat jälleen melko pieniä. Kun tarkastellaan koko

ryhmää, lääketieteen opiskelijat vaikuttavat käyttävän sosiokulttuurillis-interaktiivisia strategioita usein. Myös metasosiokulttuurillis-interaktiivisten strategioiden kohdalla 'yleensä' oli prekliinisten (40 %) ja kliinisten (45 %) opiskelijoiden yleisin vastaus. Kliiniset opiskelijat vaikuttavat käyttävän metasosiokulttuurillis-interaktiivisia strategioita hieman useammin verrattuna prekliinisiin opiskelijoihin.

Lääketieteen opiskelijat käyttävät negatiivisia strategioita hyvin vähän. Negatiivisten strategioiden kohdalla prekliinisten opiskelijoiden yleisin vastaus oli 'yleensä en', jonka valitsi 47 prosenttia, ja toiseksi yleisin vastaus oli 'jossain määrin' (23 %). Kliinisistä opiskelijoista 40 % vastasi 'yleensä en' ja 34 % vastasi 'en koskaan tai lähes koskaan'. Negatiivisten strategioiden käytössä näkyi ero erityisesti vastauksessa 'en koskaan tai lähes koskaan', sillä kliinisten opiskelijoiden ja prekliinisten opiskelijoiden välinen ero oli 14 prosenttiyksikköä. Kaiken kaikkiaan kvantitatiivisten tulosten mukaan lääketieteen opiskelijat eivät näytä käyttävän negatiivisia strategioita, vaan suosivat affektiivisia, sosiokulttuurillis-interaktiivisia ja metasosiokulttuurillis-interaktiivisia strategioita.

Tutkielman kvalitatiivisten tulosten kautta pyrittiin kokoamaan toimintajärjestelmät kummankin haastateltavan vastausten perusteella. Koska haastateltavien määrä oli odotettua pienempi, tuloksia ei voida yleistää koko prekliinisten tai kliinisten opiskelijoiden ryhmään. Tulosten esittelyssä käytetään prekliinisestä opiskelijasta nimitystä Opiskelija A ja kliinisestä opiskelijasta nimitystä Opiskelija B. Kumpikin haastatelluista opiskelijoista kertoi käyttävänsä englantia mielellään ja olevansa motivoitunut oppimaan englantia. Opiskelija A ei ollut kohdannut englanninkielisiä potilaita opintojensa aikana, mikä oli odotettavissa prekliinisessä vaiheessa, kun taas Opiskelija B kertoi jo kohdanneensa potilaita, joiden kanssa potilaskohtaaminen on tapahtunut englanniksi.

Opiskelija A piti englannin oppimisensa objektina lääkärin ja potilaan molemminpuolista ymmärtämistä. Oppimisen välineinä hän mainitsi yleisellä tasolla matkustelun tapana kerätä rohkeutta kielenkäyttöön sekä vaihto-ohjelmat ja vapaaehtoistyön tapana oppia lääketieteellistä kieltä. Oppimisstrategiakyselyn mukaan Opiskelija A käyttää affektiivisia, metasosiokulttuurillis-interaktiivisia sekä

sosiokulttuurillis-interaktiivisia strategioita usein ja negatiivisia strategioita erittäin harvoin, ja Opiskelija A vahvisti kyselyn tulokset haastattelussa. Opiskelija A pitää terveydenhoitoalan ammattilaisia yhteisönä, jolla on samat oppimistavoitteet kuin hänellä itsellään ja näkee potilaat yhteisön sinä osana, joka hyötyy oppimistavoitteiden saavuttamisesta. Työnjako opiskelijoiden, opettajien ja potilaiden kesken toimii Opiskelija A:n mukaan niin, että lääketieteen opiskelijoilla on vastuu itsenäiseen englannin opiskeluun, opettajilla on motivoiva rooli ja potilailla rohkaiseva rooli kielenoppimisessa. Sääntöihin Opiskelija A sisällyttää mahdolliset kulttuurierojen aiheuttamat muutokset potilaskohtamisessa sekä kohteliaisuuserot suomen ja englannin kielten välillä.

Opiskelija B:n tavoite kielenoppimisessa oli myöskin potilaan ja lääkärin molemminpuolinen ymmärtäminen, mutta myös tarpeellisten asioiden välittäminen potilaalle. Oppimisen välineinä yleisellä tasolla Opiskelija B mainitsi vaihto-ohjelmat sekä kielitaidon ylläpitämisen muun muassa lukemalla lääketieteellisiä kirjoja. Oppimisstrategiakyselyn mukaan Opiskelija B käyttää affektiivisia, metasosiokulttuurillis-interaktiivisia sekä sosiokulttuurillis-interaktiivisia strategioita usein ja negatiivisia strategioita vain harvoin. Haastattelun aikana Opiskelija B painotti oppimista kieltä käyttämällä sekä keskittymistä vuorovaikutukseen kielioppiasioden sijasta ja hän myös vahvisti kyselyn tulokset haastattelun aikana. Yhteisönä Opiskelija B piti sekä muita terveydenhoitoalan ammattilaisia että lääketieteen opiskelijoita, joiden lisäksi potilaat kuuluvat yhteisöön kielitaidosta hyötyvinä osapuolina. Työnjako on Opiskelija B:n mukaan hyvin samankaltainen kuin Opiskelija A:n kuvailema; opiskelijoiden rooli on oma-aloitteinen opiskelu ja itsensä motivointi, opettajat rohkaisevat oppimaan ja käyttämään englantia, ja potilaat toimivat kannustimena oppimiselle. Säännöt englanninkielisessä potilaskohtamisessa ovat Opiskelija B:n mukaan hyvin samankaltaiset kuin suomenkielisessäkin, tosin myös Opiskelija B mainitsi erot kohteliaisuussäännöissä suomen ja englannin välillä. Kaikkiaan Opiskelija A:n ja Opiskelija B:n haastatteluiden perusteella muodostetut toimintajärjestelmät ovat hyvin samankaltaiset, ja erot ovat hyvin vähäisiä.

## Johtopäätökset

Tutkielmassa esitettyjen tulosten perusteella voidaan tehdä joitakin johtopäätöksiä. Tarkasteltaessa koko ryhmän tuloksia huomattiin että lääketieteen opiskelijoille tyypillisiä oppimisstrategioita ovat erityisesti affektiiviset, meta-affektiiviset, sosiokulttuurillis-interaktiiviset ja metasosiokulttuurillis-interaktiiviset strategiat. Myös kognitiivisia ja metakognitiivisia strategioita käytettiin, mutta näiden strategioiden kohdalla vastaukset jakoutuivat muita strategiatyyppejä tasaisemmin kaikille vastausvaihtoehdoille. Lääketieteen opiskelijat käyttävät negatiivisia strategioita hyvin harvoin. Vaikka koko ryhmälle tyypilliset strategiat ovat melko selkeitä, on eroja prekliinisten ja kliinisten opiskelijoiden välillä kuitenkin nähtävissä. Kaikissa strategiatyypeissä oli vähäisiä eroavaisuuksia kahden tutkitun ryhmän välillä, mutta selkeimpinä erot näkyivät affektiivisissa, metasosiokulttuurillis-interaktiivisissa ja negatiivisissa strategioissa. Kliiniset opiskelijat raportoivat käyttävänsä affektiivisia ja metasosiokulttuurillis-interaktiivisia strategioita useammin kuin prekliiniset opiskelijat, ja he käyttävät negatiivisia strategioita harvemmin kuin prekliiniset opiskelijat. Yksi mahdollinen selitys kahden ryhmän eroille on kliinisten opiskelijoiden pidempi kokemus potilastyöstä. Kvantitatiivisiin tuloksiin on saattanut vaikuttaa myös se, että prekliinisten opiskelijoiden on täytynyt ajatella potilaskohtaamisia hypoteettisella tasolla, kun taas kliiniset opiskelijat ovat voineet heijastaa vastauksiaan omiin kokemuksiinsa.

Haastatteluissa kootuissa toimintajärjestelmissä oli kahden haastatellun opiskelijan välillä vain pieniä eroja. Erot keskittyivät toimintajärjestelmän työnjakoon ja sääntöihin. Esimerkiksi oppimisen objekti oli kummallakin opiskelijalla hyvin samankaltainen kuten myös oppimisen välineinä käytetyt oppimisstrategiat. Haastatellut opiskelijat painottivat suullisen kielitaidon tärkeyttä, mikä on ymmärrettävää potilaskohtaamisen interaktiivisen luonteen vuoksi. Haastateltavat opiskelijat olivat itsevarmoja ja kokeneita englannin käyttäjiä, joten heidän vastaustensa ei voida olettaa vastaavan muiden lääketieteen opiskelijoiden mielipiteitä. Tutkielman tuloksia on yleistettävä erityisen varoen, muun muassa koska koehenkilöiden määrä on melko pieni sekä kvantitatiivisessa että erityisesti kvalitatiivisessa osassa. Kvantitatiiviset ja kvalitatiiviset tulokset vaikuttavat kuitenkin

vastaavan toisiaan melko hyvin, sillä kumpikin haastateltava kertoi käyttävänsä eniten juuri niitä strategioita, joita kvantitatiivisten tulosten mukaan lääketieteen opiskelijat käyttävät eniten.

Tutkimukseen liittyvät rajoitteet ja puutteet on myös tärkeää huomioida. Kuten aiemmin on jo mainittu, tutkimuksen yleistettävyyden on rajallinen; kyselyyn vastasi huomattavasti pienempi määrä kliinisiä opiskelijoita kuin prekliinisiä opiskelijoita, minkä lisäksi haastatteluihin osallistui ainoastaan yksi opiskelija kummastakin ryhmästä. Lisäksi prekliinisten opiskelijoiden oli ajateltava oppimisstrategioidensa käyttöä hypoteettisella tasolla, koska heillä ei vielä ole ollut opintoihin liittyvää potilastyötä. Lisäksi tuloksia meta-affektiivisten strategioiden käytöstä tulee tarkastella harkiten, koska kysely sisälsi ainoastaan yhden meta-affektiivisen strategian.

Lääketieteen opiskelijoiden englannin oppimisstrategioita ei ole aiemmin laajasti tutkittu, ja sen vuoksi tämä tutkielma luokittelee pohjaa tulevalle aiheen tutkimukselle. Lääketieteen opiskelijoiden kielitaitoa tai heidän todellista oppimisstrategioiden käyttöään ei tässä tutkimuksessa testattu, joten laajemmat tutkimukset aiheesta ovat tarpeen. Työelämässä olevien lääkäreiden sisällyttäminen tutkimusasetelmaan saattaisi myös tuoda uudenlaista tietoa englanninkielisten potilaiden kohtaamisesta ja kielenoppimisesta englanninkielisiä potilaskohtaamisia varten.