

Needs Analysis for Medical English Education: Doctors' Literacy Related with Cognition and Identity

Emiko Matsumoto,

Faculty of International Liberal Arts, Juntendo University, Tokyo, Japan

Abstract

The primary objective of this research is to establish the groundwork for conducting a needs analysis in medical English education for the development of future curriculum programs in my dissertation. The dissertation delves into the cognitive processes of healthcare professionals, scrutinizes the literacy evolving from this cognition over time and space, and explores the identity of medical doctors. Throughout the dissertation, the terms "literacy," "identity," and "cognition in time and space" will be elucidated. The methodology employed involves utilizing conversation analysis to dissect data collected through the observation of presentation videos from the ENDO2022 International Conference. This approach aims to unveil the literacy and identity of doctors. Data collection includes interviews with 11 doctors, observation of doctors' presentations, and a questionnaire administered to 81 university students. The study also aims to identify gaps between the current situation and desired outcomes, applying actual student experiences as a basis. This identification of gaps serves as a key objective, ultimately informing the development of future curricula. In this paper for the LLLD in Iran, I will introduce a portion of the data from my dissertation as a midterm report, providing insights into the ongoing research.

Keywords: Needs Analysis, English for Medical Purposes, Conversation Analysis

1. Introduction

The current research is a baseline study to conduct a needs analysis for medical English education that will be a part of my dissertation. The series of studies aimed at developing curricula for future medical English education programs. It will investigate the cognition of healthcare professionals, examines the literacy that emerges from this cognition in time and space and explore identity of medical doctors. In the process of doing research, the terms; literacy, identity and cognition in time and space will be clarified. In this paper, only one of the findings will be discussed as a preliminary study for my future research. In utilizing the Conversation Analysis in the future, the effectiveness of the methodology will be discussed

In the era of globalization, medical professionals are increasingly required to navigate international contexts. Consequently, English proficiency, as assessed by exams like TOEFL and TOEIC, has become a crucial indicator for medical students and healthcare professionals, especially in universities with medical programs. This has led to English instructors being tasked with preparing students for these examinations.

This study, conducted at Juntendo University, one of Japan's premier medical schools, delves into the impact of English qualification tests on medical education. With over a decade of experience specializing in the preparation of such tests since completing the TESOL M.A. course in 2008, the researcher questions the alignment of TOEFL with the future objectives of medical students and healthcare professionals. Observations suggest that while students diligently strive to meet university expectations by excelling in standardized

English tests, there is a growing need to evaluate whether these requirements truly contribute to the development of effective communication skills essential for future medical professionals.

Communication in medical settings is a critical factor that can determine life or death outcomes. While doctors can assess conditions through symptoms and automated medical equipment, patient communication remains essential for understanding responses to tests, medications, and addressing concerns that impact overall treatment. Ineffectual communication, particularly when a shared language is not well-mastered by one or both parties, can complicate medical interactions significantly (Small, 2019).

This study emphasizes the necessity for Japanese medical trainees to consider the discourse components in English, especially when interacting with other people. Medical practitioners must be confident in their English proficiency to ensure effective communication and achieve shared goals in medical discourse with patients lacking proficiency in the Japanese language (Small, 2019).

Beyond doctor-patient communication, this research also explores the communication dynamics among doctors in their daily activities and academic conferences. Effective communication among colleagues is vital for collaborative efforts and the advancement of medical knowledge and practices.

With above considerations in mind, the literacy to become a medical doctors will be examined. Therefore, the following research questions could be considered as the theme of this paper.

Research Questions:

1. How does literacy affect doctor's conversation?
2. How does doctors construct their professional identity through discourse?

2. Literature Review

2.1. The New Literacy Studies

For individuals outside the realm of research, the term "literacy" often carries a limited meaning, primarily associated with the acquisition of reading, writing, mathematical, and computer skills. A common understanding might equate an "illiterate person" with someone lacking proficiency in reading and writing. In developing countries, both national and international agencies focus on improving the "literacy rate" through enhancements to education, including curriculum and assessments. Contrastingly, the field of new literacy studies encompasses a vast array of topics and concepts, aiming to introduce novel perspectives and ideas applicable in diverse contexts (Street and Hornberger, 2010). Researchers within this field explore various literacy types, such as media literacy in junior high school students (Yoshimura, 2022), ICT literacy in medical schools (Tomotaki, 2022), and legal literacy in universities (Sakai, 2022). As the field of study has flourished, the term "literacy" has expanded its range, encompassing a broader spectrum of skills and knowledge.

This research seeks to trace the development of literacy studies and explore how discourse analysis can be applied to English education. Emphasizing the evolving nature of the term, the study aims to elucidate the concept and definition of literacy relevant to its specific context and application in this research.

2.2. Identity

The current research focuses on English education for medical students and examines the identities of practicing physicians. Defining "identity" is crucial, given its extensive and complex nature across disciplines such as linguistics, psychology, philosophy, communication, and cultural studies. A renowned psychotherapist and psychiatrist, Erikson (1968), in the late 90s, highlighted the diversity and evolving framework of the term, suggesting a need for a clearer description. However, the inherent fluidity of identity, as Erikson noted in 1968, makes a definitive definition susceptible to evolving historical connotations. To establish the position of doctors' identity, the study briefly reviews Erikson's concept, acknowledging the depth of his research as a foundational recapitulation.

2.2.1. Identity in Socio-psychology and Psychotherapy

The term "identity," defined in the Longman Advanced American Dictionary (2000), encompasses "who someone is or the name of someone" and includes "the qualities and attitudes a person or group possesses that set them apart from others." Drawing from Erikson's influence, the concept of "identity crisis" and "a sense of identity" becomes central to understanding identity, which Erikson considers highly polysemous and dynamic (Erikson, 1950, 1968, 1959). Erikson's introduction of a "subjective sense of an invigorating sameness and continuity" aligns with William James' idea that one's character is discernible in moments of intense activity. Erikson further explores the psychological perspective on identity, introducing terms like "Group identity," revealing the inclusion of both psychological and sociological elements in his concept. However, his work suggests that not everyone possesses a healthy sense of identity, as seen in instances of "identity crisis" and "identity diffusion."

The section then shifts to Tosi's exploration of personal identity in psychotherapy, emphasizing the meaningful events that prompt individuals to question who they are. While Erikson and Tosi share a psychotherapeutic perspective on identity as inherent to the individual, the study acknowledges the need to broaden the perspective, considering physicians' identities as not inherently present at birth.

2.2.2. Identity as both personal and social

Though fully explaining identity is challenging, clarifying its notion in this research is essential. The researcher, prior to this study, considered identity a natural acquisition during growth but recognizes the prevalent debate on its personal or social aspects. This research asserts that identity is inherently both personal and social, offering insights into the potential theory of the person-society relation, as suggested by Vignoles (2017), who distinguishes personal and social identity.

2.3. Cognition in time and space

In the past, approaches to Lingua Franca English were predominantly influenced by structuralism, emphasizing verbal resources in face-to-face contexts. However, with the evolution of globalization, mobility, and digital communication, a more nuanced perspective is needed. Canagarajah (2018) advocates for researchers to broaden their scope to include semiotic, material, and multimodal resources beyond words as integral components of the data. Canagarajah identifies three key aspects in his approach. Firstly, he critiques the limitations of dominant approaches, noting their exclusive focus on verbal resources. While some studies acknowledge elements like laughter and silence, they are often treated as paraverbal cues. Physical features such as gaze, gesture, posture, proximity, and positioning in interactions have been overlooked. Secondly, emerging theoretical approaches challenge the historical subordination of social, geographical, historical, and material considerations to grammar. Canagarajah emphasizes a spatial orientation to multilingual interactions, asserting that language is situated within material life, emphasizing the practical purposes of communication over grammatical proficiency. Thirdly, he underscores the need to incorporate diverse semiotic resources and expand the unit of analysis. Methodologically, Canagarajah suggests researchers consider local interactions within the context of globalization as embedded in layered trans-local time and space scales experienced in everyday life (Canagarajah, 2018).

In the context of discourse community, discourses are intertwined with social institutions, influencing individuals' identities and behaviors. Occupations and societal positions shape various aspects of individuals, including clothing, thought processes, behavior, communication styles, values, thoughts, beliefs, symbols, and tools used in conversations. Recognizing the social and political dimensions becomes essential. Gee (1999) highlights that discourses preexist individuals and persist long after their departure. Building on these concepts, the current research will explore how medical doctors construct and position themselves within their discourses, recognizing how these discourses evolve across time and space.

3. Methodology

3.1. Overview

For this study, data has been obtained from several sources to make the data collection method more reliable. According to Long (2005), triangulation involves the researchers comparing different sets and sources of data with one another to increase the credibility of their data so as to increase the credibility of the interpretations of those data. Thus, in the current research, the data comes from in-depth interviews with 11 medical professionals working at hospitals and research institutions, participant observation with 13 medical doctors followed by questions and interactions by e-mails, and questionnaire for the 81 students in Health and Science department in Juntendo University. Due to the limitation of space, these methods are illustrated in Table 1.

Methods	Data Collection Methods	Participants
1 Interview	written and electric forms of question sheets	Doctors
	face to face interview recording	Dentist
	zoom video recording	Veterinarian
		Student Researchers
2 Participants Observation	note-taking for 8 sessions for 15 speakers	Doctors
	video recording	
	interview by e-mail exchange	
3 Questionnaire to the students	written forms of question sheets	Students

Table1. Methods of data collection

3.2. Participants

3.2.1. Participants of the Interview

Since this is a preliminary study, explanations are omitted. Participants of the interview will be shown in Table 2

Interview Date	Participant's Name *Pseudonym	Gender	Age	Affiliation, Speciality
March, 4 th , 2020	Dr. Kotani	M	66	Veterinarian, research worker, immunology
March, 6 th , 2020	Dr. Funabashi	M	34	Cardiology doctor, graduate student
March, 9 th , 2020	Dr. Tsuchiya	M	43	Medical Director of Cardiology, Associate professor
March, 11 th , 2020	Dr. Hirata	M	47	Endoscopic surgeon, Associate professor
March, 18 th , 2020	Dr. Fujisawa	M	49	Breast endocrinology surgeon, Associate professor
March, 20 th , 2020	Dr. Matsumaru	F	41	Obstetrician and gynecologist
August, 4 th , 2020	Dr. Sakai	M	46	Breast endocrinology surgeon, cytopathology
August, 23 rd , 2020	Dr. Namba	M	43	Emergency doctor, Intensive Care doctor
August, 28 th , 2020	Dr. Nimura	M	55	Chemotherapist, Surgeon
September, 1 st , 2021	Dr. Ishida	F	59	Medical Technologist, Laboratory technician
January, 21 st , 2022	Dr. Kataoka	M	33	Prosthodontics, Dentist, advanced prosthodontics at San Antonio
				Total Length of Interview - 705 min. (11 hours and 45 min.)

Table 2. Interview participants

3.2.2. Participants of the Observation

Participant observation was conducted on May 14th and May 15th 2022, in Kyoto (Japan). The 3rd World Congress of GI Endoscopy, ENDO 2022 was taken place. More than 9,000 participants were expected. Due to the space limitation, explanations are omitted. Participant of the observation will be shown in Table 3 and 4.

ENDO 2022					
Date/time	Title of the sessions I observed	The number of Chairmen and Presenters	Participants of this study	Permission to use the field note	Permission to use the video
May 14th 9:00:00	Optimizing the monitoring strategy monitoring strategy of Crohn's disease	Chair 3 (Japan 2 U.S.1) Commentator1 U.S. Presenter7 (Taiwan2 Japan 3 Belgium 1)	Dr. TAKADA Yoshiaki Dr. KIYOHARA Hiroki	<input type="radio"/> <input type="radio"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
10:30	S09 Advances in colorectal polypectomy and endoscopic mucosal resection	Chair 3 (U.S.1 Vietnam 1 Singapore 1) Presenter4 (China 1 Japan 1 Australia 1 Italy 1)	Dr. MATSUDA Takahisa	<input type="radio"/>	<input type="checkbox"/> he sent my his own video privately
12:00	Luncheon 5	Chair 1 (Japan) Presenter2 (China 1 Japan1)	Dr. FUJISHIRO Dr. ISHIKAWA + two staffs from Olympus	<input type="radio"/> <input type="radio"/>	<input type="checkbox"/> very cooperative manner. The copyright is on the Olympus <input type="checkbox"/>
13:00	Update on endoscopic biliary stenting	Chair 3 (U.S.1 Japan 1 Korea 1) Presenter7 (China 1 Japan 2 Singapore 1 Korea 2 U.S.1)	I couldn't talk to Dr. KATAYAMA Akio Dr. NAKAI Yosuke	<input type="radio"/>	
14:45	BA06 Best Abstracts: Oral	Chair 1 (Japan 1) Presenter6 (China 1 Japan 3 Hong Kong 1 Germany1)	Dr. UCHIDA Ryota Dr. INOUE Ken	<input type="radio"/> <input type="radio"/>	<input type="checkbox"/> doctor in Juntendo hospital <input type="checkbox"/> he was very happy to participate in my research
16:00	The current situation and future endoscopy (IEE) - from polyp detection to characterization including AI technology	Chair 3 (Japan 1 Germany 1 Norway 1) Presenter8 (Italy 1 Spain 1 Belgium 1 Japan 3 Netherlands 1)	Dr. MURAKAMI Takeshi Dr. URAOKA Toshio	<input type="radio"/> <input type="radio"/>	<input type="checkbox"/> doctor in Juntendo hospital <input type="checkbox"/> "plese use my data"

Table 3. Observed participants on June 14th, 2020

Date/time	Title of the sessions I observed	The number of Chairmen and Presenters	Participants of this study	Permission to use the field note	Permission to use the video
May 15th 8:00:00	Breakfast Industry Symposium	Chair 1 (Japan 1) Presenter3 (Japan 3)	Dr. KIDA Mitsuhiro	<input type="radio"/>	<input type="checkbox"/> The copyright is on the cooperation
9:00	joint symposium: Further development of submucosal endoscopy and related techniques	Chair 3 (Japan 1 U.S.2) Presenter7 (U.S.3 Japan 3 Italy 1)			
11:00	BA05 Best Abstracts Asia: Oral	Chair 1 (Japan) Presenter3 (Korea 1 Japan 1 China 1)	Dr. TAKENAKA Mamoru Dr. SATO Tatsuya	<input type="radio"/> <input type="radio"/>	<input type="checkbox"/> "No problem, please use the data" <input type="checkbox"/>
12:00	Luncheon 9	Chair 1 (Japan) Presenter2 (China 1 Japan1)	Dr. SAITO Yutaka	<input type="radio"/>	<input type="checkbox"/> very cooperative
13:00	Joint Symposium	Chair 3 (China1 Japan 1 France 1) Presenter9 (China 6 Japan 2 U.S.1)			

Table 4. Observed participants on June 15th, 2020

3.2.3. Participants of the questionnaire to the students

The participants of this questionnaire were 80 students of the Faculty of Health and Science in Juntendo University.

3.3. Results / Data Analysis

In the following section, the data from actual interviews, participant observations, and questionnaires will be introduced. The initial sub-section, 3.3.1. will categorize and list several literacies considered essential for medical doctor, based on the information obtained

from the interviews. And the second sub-section 3.3.2. will categorize what could be seen from the participant observation through conversation analysis.

3.3.1. Analysis of Doctor's Literacy revealed by interview: Patient-Centric Communication

In this section, the focus will be on how physicians interact with patients during medical consultations, utilizing their expertise and patient data. Given the critical nature of patients' health, ensuring accurate information exchange becomes paramount. Effective communication goes beyond the mere transmission of medical knowledge, as it also involves considering the patient's medical history and present condition.

The upcoming analysis will extract relevant excerpts from the interviews, where physicians express their commitment to clear communication. These statements will be further examined and explained. Moreover, it is essential to recognize that there are situations where absolute clarity might not be appropriate. Consequently, examples will be provided to illustrate how different physicians navigate between communicating clearly and acknowledging settings where clarity might not be the primary objective.

The first excerpt is from a physician working at a cancer center. While it does not pertain to a specific communication scenario with a patient, the physician reflects on a personal experience during his time studying abroad in the United States. This recollection sheds light on how the physician personally experienced the need to express his thoughts clearly.

Excerpt 1

二村：アメリカ留学中）色々ディスカッションは、仕事の話はなんとかできたかなと、だから一般生活の、会話がなかなか難しかったですね。

だから例えば、一番最初に買い物にいて、Paper or plasticって聞かれたんですよ。お金払って、Paperは紙。プラスチックって何かというと、ビニール袋にするか紙袋にするか。そんなのわからないじゃないですか。だからお金払いました。Paperは紙。お金のことじゃないな。向こうの人にしてみたら、すごく単純なこと聞いている。紙袋にしますかビニール袋にしますかって、それぼくわからないんです。こういう日本語の向こうにいてなんとなくわかることば、日常会話。それが苦労した。

だから、自分がやってるそういったことは、論文読むとなんとなくわかっちゃうんです。だからさっきいった、サイエンスだとかネイチャーだとか、イギリスの雑誌なんですけど、難しい論文なんかでも何となく読んでいっちゃうんです。でもさっき言った、ロボットとか、paper or plasticとか、そういった日常生活での、会話が結構苦労しますね。

Nimura: During various discussions (while studying in the U.S.), I felt like I managed to talk if it is about my job, but it was quite difficult to have a conversation in general life. So, for example, when I went shopping at the very early stage of studying abroad, I was asked "Paper or plastic?" I paid by a bill. I thought paper is a bill. The question of "paper or plastic?" meant "plastic bag

or a paper bag?" You wouldn't know that, would you? So, I paid. Paper, it's not about money. When I try to ask people abroad, it's very simple. But I do not understand the question of paper bag or plastic bag. It was a struggle for me. Therefore, such a thing that I am doing as my job is understandable somehow because I usually read thesis. I can read difficult thesis like science or nature a little while ago. But like I said, I have a lot of trouble speaking in everyday life, such as robots, paper or plastic, and so on.

Nimura is a physician working at the Cancer Center who has shown a highly cooperative attitude towards this study. As indicated in the first sentence, and evidenced by his career, he is well accustomed to his daily medical duties and proficient in reading and writing. However, when it comes to engaging in exchanges in English, which is his second foreign language concerning non-specialized subjects, he finds it challenging. He mentioned that even simple everyday conversations in places like supermarkets pose difficulties in comprehension. He perceives a struggle to understand natural conversations. Nevertheless, he exhibits a positive attitude towards conveying information and believes that clear differentiation of content, even at a daily life level, is crucial when communicating in English.

In the following two excerpt, the physician, a breast surgeon, is described in two different situations, both highlighting his efforts to communicate accurately. The first excerpt (excerpt 2) portrays him preparing for his presentation, while the second excerpt (excerpt 3) captures him discussing the topic of cancer diagnosis with patients during clinical consultation. He demonstrates his commitment to convey information accurately regarding the cancer diagnosis

Excerpt 2

藤沢：僕はね、日本語もそうなんですけど、原稿作っちゃうんですよ。それは、あの、働き始めの時の上司の指導がそうで、時間内にきちんと収めるのが一番大事だからって言われて、で、原稿丸読みでいいから、ちゃんと作れて。練習して、原稿丸覚えればしたで、いいんですけど、要は、暗記して詰まっちゃって時間超える、超えちゃったりなんかするようだったら、きちんと原稿書いてそれをゆっくりきちんとしゃべりなさいと。日本語でも、結構最近まで、僕は原稿書いてしゃべる感じでそうすると時間もわかるし。英語もオーラルプレゼンテーションは原稿を書いて読みながら、ま、もちろん練習しますけれども、それで、時間にぴったりで収めるようにしますけれども。

Fujisawa : You know, not only in Japanese but also in English, I tend to write down what I want to say. It's because when I first started working, my boss instructed me that the most important thing is to deliver the presentation within the allotted time. So, he told me that it's fine to read the script word for word as long as I prepare it properly. I practiced and memorized the script, which worked well. However, the problem was that sometimes I got stuck while trying to recall everything from memory and ended up going over the time

limit. In such cases, my boss advised me to write down the script and speak slowly and clearly if I go over the time or stumble. Even in Japanese, until recently, I used to write down my speeches, which helped me keep track of the time. In English, for regular oral presentations, I still write a script and read it aloud while, of course, practicing to ensure that I can deliver it right on time in a natural conversation

Fujisawa is a male breast surgeon. In contrast to other physicians who emphasize expressing their feelings in their own words during presentations, the second excerpt reveals that Fujisawa prioritizes reading the script as it is and adhering to the time constraints during his presentations. During the interview with Fujisawa, he repeatedly mentioned phrases like "genkou-maruyomi" (read the script as it is), "genkou-wo kaku" (write the script), and "jikan-ni osame-ru" (finish on time). These remarks indicate that Fujisawa believes it is crucial to focus on conveying the content of the thesis rather than passionately expressing emotions.

Furthermore, from the following excerpt, it is evident that accuracy in conveying information is crucial to him, even when delivering notifications related to cancer.

Excerpt 3

藤沢：うーん（考えている）ま、そういう方ももちろんいますけれどもね、あの、その受け止め方もそれぞれなので、まあガンでも今、治る方の方が多いですからね、ま、そういう意味で早く見つかって良かったってことで、早くすぐ切り替えられる方もいらっしゃるし、まあ、そんなに今ね、すぐおごことになることはないよ、って説明しても、やっぱりガンってイメージが強くて、昔のガンのイメージが強くて、やっぱりかなりショックをうけて、なんかその落ち込みがひどい人とかもいます。

Fujisawa : Well (thinking), of course there are people like that, but of course, way of receiving it is also different, so there are many people who can recover now from cancer, so there are some people who can switch quickly because it was good to find it early in that sense, and well, now, even if you explain that it will not become too bad immediately. Well, after all, the image of cancer is strong, In the past, the image of cancer was strong, and there are people who are quite shocked.

Fujisawa emphasizes the importance of delivering cancer diagnoses clearly. Excerpt 3 reveals that his ability to do so is not merely based on personal assumptions or beliefs but is substantiated by his experiences as a medical professional. In line 1, he mentions, "Even with cancer, many people can be cured nowadays," and in line 2, he states, "Some patients can quickly switch their mindset to thinking it's good that it was detected early." Such expertise in the field is likely what leads him to take the action of clearly conveying cancer diagnoses.

The following excerpt 4 and 5 introduce the content of an interview with a female obstetrician-gynecologist. Unlike the example of Fujisawa, she mentions that she does not deliver cancer diagnoses explicitly to her patients. However, there is a reason behind not providing a clear diagnosis, and considering this reason, it can be inferred that ultimately, all physicians possess the ability to assess patients' medical history and current condition to determine whether or not to convey information about their present medical condition. In this sense, physicians share a common aspect in their ability to make instantaneous judgments in such situations.

Excerpt 4

松丸：でも、そういう大事な話の時はやっぱり通訳さんつれてきてもらってます。やっぱり言った、言わない。聞いてる、聞いてない。になるし、お互いに多分、第3者がいないってというか、言ったつもりが本当に伝わってなかったのか、ただ聞いてなかっただけなのか、もう問題がでてくるので、やっぱりすごく大事な話で外国の方と話すときは、お互いになんとか普段は通じてても、通訳さん連れてきて、もらって、まあ。

Matsumaru : When we have such an important conversation, the patients would bring in an interpreter. After all, it causes problem if we are not sure by what I said and what I didn't say or what I heard and what I didn't hear. And maybe if there is no one to witness the scene, whatever my intention, that might cause problems. So, when talking to foreign people about very important symptoms, even if we usually pass through each other somehow, we need an interpreter.

Matsumaru is a female gynecologist. Unlike other participants whose interviews mostly took place in their hospitals or offices, she specifically requested to conduct her interview at a café near her home. Throughout the interview, she spoke to me politely. From these aspects, I found that she was conversing with me as an equal woman, without asserting her authority as a medical professional.

Her concern revolved around lacking confidence in delivering presentations in English, which was reflective of her courteous demeanor. She mentioned that if she couldn't communicate fully, she would require an interpreter, underscoring the importance of accurately conveying information in her communication approach.

Excerpt 5

松丸：逆に、悪性腫瘍の患者さんに告知するときもー、ま、合ってるかどうかはわからないですけど、最初から「ガン」っていう言葉を使って告知する人もいれば、まあ「悪いもの」っていう表現をする人もいるのは、まあちょっとはっきり言った方がいい人と、ま、最初からはっきり言わない方がいい人っていうのは多分会話の中で、みるようにはしてるんですけど、あんまり最初からずばって「がん」っていう言葉を使うと、もう、崩れちゃいそうな人には言わない。

Matsumaru : On the other hand, when I announce to patients with malignant tumors, I don't know if there is, but some people use the word "cancer" from the beginning, and some people express it as "bad things" well, I try to see people if I say a little clearly or I should not say clearly from the beginning. I wouldn't tell "cancer" to a patient if I know they would collapse if I use the word.

Excerpt 4 allows for a compelling and intriguing comparison between two distinct speech patterns within the same group of participants and two physicians' different communication styles in the same context. Firstly, the female gynecologist, who emphasized the importance of information accuracy, demonstrates in excerpt 5 (line 7) the ability to differentiate cases where it is better not to speak explicitly based on recognizing the patients' characteristics and mental state.

Furthermore, Matsumaru, a female gynecologist, and Fujisawa, a male breast surgeon, are depicted in these excerpts, both involving scenes of delivering cancer diagnoses. One physician prioritizes clear communication, attributing successful treatment experiences to it. On the other hand, the other physician refrains from explicit statements, seemingly observing the patients' demeanor. Despite their divergent approaches, both physicians are experienced and possess a compassionate understanding of their patients, comprehending their psychological state during cancer diagnoses. The section highlights the literacy of these physicians in adapting their awareness appropriately to the situation, depending on the patient's needs.

3.3.2. Chairperson's Literacy: Elevating Overall Understanding of Presentations by Understanding Presenter and Audience's Abilities

The first scene (scene 1) is from the lunch session held at the conference on May 14th at 12:00. The session was chaired by Fujishiro, and the presenters were Ishihara and Philip Chiu. They presented on the latest technology of an endoscope called EVIS x1, newly released by a medical equipment manufacturer named Olympus. The presentation focused on the practical usage of this endoscope in clinical settings. The excerpt captures a scene where the presenter delivers their presentation, and the chairman provides comments and moderates the Q&A session that follows.

Scene (1)



Video Clip1. Fujishiro asking with smile



Video Clip2. Clapping his hands

23:02	ISHIHARA Ryu	These benefits may enhance early detection of asphaltic cancer. Thank you for your attention.
23:14	FUJISHIRO Mitsuhiro	Thank you Professor Ishela for your wonderful lecture with very very beautiful photos and movies. Is there any comments or question from the audience?
23:27	FUJISHIRO Mitsuhiro	Then, I make one question for you. Actually, you say that NVI with EDoF is very useful. For the diagnosis of esophageal cancer. Right? And what's the standpoint of iodine staining in this situation?
23:50	ISHIHARA Ryu	Maybe iodine staining is still useful for inexperienced endoscopists or in some case, iodine staining can display cancer spread better than NBI.
24:06	ISHIHARA Ryu	So I think NBI and Iodine staining are complementary methods for the diagnosis of asphaltic cancer.
24:17	FUJISHIRO Mitsuhiro	Okay, is there any comments question? Okay, professor, thank you very much for your wonderful talk.
24:28	FUJISHIRO Mitsuhiro	And next speaker is Professor Philip Chu from Hong Kong. He's also very famous professor and he's now in Department of Surgery faculty medicine at the Chinese University of Hong Kong. And his current position is professor and chief of the division of APA GI and Metabolic Surgery and Director of Large scale Medical Robotic center endoscopic center and most important point it would be a president of Endoscopic and Rattlescopic surgeon on Asia.
25:11	FUJISHIRO Mitsuhiro	He performed ESD the as a first person in Hong Kong and then poem also the first person in Hong Kong. He's a very pioneer and therapeutic endoscopy in Hong Kong. His talk today is application of new technologies.
25:35	FUJISHIRO Mitsuhiro	For treatment of asphalt diseases. Professor Philippe Ju. Please start your talk.
25:43	CHIU Philip Wai Yan	Thank you very much. Professor Fuji Shiru. And hello everyone. I'm really delighted to join this wonderful lunch symposium.



Video Clip3. Fujishiro, asking more detailed explanation to the presenter

42:43	FUJISHIRO Mitsuhiro	Thank you so much thank you Philip. Very nice talk at your he will talk about he talk about robotic surgery and ESD for esophagus cancer and poem for a cargial sad space endoscopy for the esophagal roots.
43:05	FUJISHIRO Mitsuhiro	Smt. And finally he will show us he show us conventional versus tonaling ESD technique for esophagal cancer. Is there any comments or question from the audience during your talk ? Philip, you show us TXi which make our finer architecture in cutting in a submucosal layer or making a mucosal incision.
43:40	FUJISHIRO Mitsuhiro	Would you explain more about TXi for treatment?
43:47	CHIU Philip Wai Yan	Yeah.
43:47	CHIU Philip Wai Yan	Thank you so much, professor Fujisuru. I think the use of the TXi in fact, has been enhancing not only the color, but also the background architecture.
44:00	CHIU Philip Wai Yan	So when we are going into the submucosa, you can separate a different layer in a better appreciation. For example, mucosa is above and then the submucosa, you can see some mucosal FRIM c tissue in between, and then you can see the muscle layer.
44:17	CHIU Philip Wai Yan	So in order to avoid damaging the muscle layer, I think the TXi actually allowed me to be better. And very interestingly. When we color the submucosa injection by use of the integral carbine, the blue remains the same as the blue.
44:33	CHIU Philip Wai Yan	So the color doesn't really change, but the architecture is enhanced. So better identification of structure and also like the blood vessel, I can also see better. So that allowed me to have a more precise dissection.
44:46	FUJISHIRO Mitsuhiro	Okay, thank you very much. In terms of marking in the mucosa, what do you think about the usefulness of TXi? Actually, Professor Ishihara mentioned there are similar I don't know, but what do you think about their mucosal enhancement?

At line 23:02, Ishihara concludes his presentation, and then Fujishiro starts speaking as the chairman. At line 23:14, Fujishiro, in his role as the chairman, expresses gratitude for the participants' presentations and compliments the use of photos and videos in the presentations. After that, he encourages the audience to ask questions. At LINE 23:27, Fujishiro asks Ishihara a question. During this moment, his tone is not interrogative but rather gentle and soft-spoken, with a smiling expression. According to Politeness Theory (Brown and Levinson), questions can sometimes be perceived as threatening, so Fujishiro's use of a smiling expression while asking the question likely conveys his gratitude towards the speaker and an attitude of wanting to support and nurture him as a fellow researcher. In addition, according to Searle (1969), there are two types of questions: 'real' questions, where the questioner asks about something they don't know, and 'exam' questions, which inquire about the knowledge of the person being asked. Hutchby and Wooffitt (2000) mention

courtroom questioning as an example of how questions are asked in institutional discourse. In the context of this data, Fujishiro's question can be seen as a question designed to ensure audience comprehension, making it appropriate for this setting.

At the ENDO Conference, the Chairpersons typically hold positions of authority within the same institution or organization as the presenters or have seniority within the same research group, as evident from the introduction of the first presenter and Fujishiro's background. Fujishiro is indeed questioning the presenter (Line2327). However, his questioning style is not confrontational but rather delivered with a soft demeanor and a smiling expression (Video clip 1). This suggests that he is engaging in a type of questioning aimed at eliciting what the presenter intends to convey, considering the presenter's relatively limited experience. This also showcases his literacy of not posing questions abruptly in front of an audience. In this context, his cognition can also be linked to spatial aspects.

For instance, as Canagarajah (2018) points out, in face-to-face conversations, elements such as body language, facial expressions, and gestures play a crucial role in shaping meaning. Additionally, the physical arrangement, including spatial factors like distance, can influence the dynamics of the conversation. If Fujishiro employs specific gestures, refers to spatial locations or directions, or utilizes spatial metaphors to convey meaning, it is likely that spatial cognition is involved.

From the scene in Video Clip 1, it can be inferred that Fujishiro's smiling expression while questioning is not intended to highlight shortcomings in Ishihara's presentation but rather to help Ishihara effectively communicate points that are already known to the audience but might not be presented well. This indicates Fujishiro's intention to enhance not only his relationship with Ishihara but also to elevate the audience's knowledge. Fujishiro's consideration extends beyond his relationship with Ishihara to encompass the broader audience, even those farther away, possibly accounting for the future impact of the video recording.

Furthermore, Fujishiro's act of applauding while praising the presenter (Video clip 2) goes beyond generating applause sounds; it encompasses conveying an attitude through the act of applause, as well as the expression and demeanor of appreciation that would be captured by videos or cameras. In Video clip 3, Fujishiro's meticulous gestures while requesting further explanations from the presenter could also be interpreted as his attempt to mitigate the potential for heightened nervousness in Ishihara due to Fujishiro's questioning.

4. Conclusion

Taken together, these observations indicate that Fujishiro is conscious of both the presenter's face and the audience's perception, while also demonstrating an intent to showcase the presenter's strengths. Additionally, Fujishiro's abilities extend beyond merely addressing the presenter and the immediate audience; he appears to possess the capacity to nurture researchers by aiming to deepen the presenter's and the audience's future research. This suggests Fujishiro's advanced literacy as a physician and researcher.

Therefore, these insights highlight Fujishiro's literacy in fostering an engaging atmosphere during the presentation, potentially representing one facet of physician literacy. Building on the implications suggested in the previous section, it may be argued that literacy skills based on physicians' perceptions are substantiated by observations in this presentation, indicating the presence of consistent elements. Further research is warranted to delve deeper into these findings.

5. Future Study

As outlined in the introduction, the current research serves as a foundational study to conduct a needs analysis for medical English education, which will form a crucial component of my dissertation. The subsequent phases of this research series are dedicated to employing Conversation Analysis methodology to intricately investigate the observational data and strive for a Thick Description. This detailed exploration aims to contribute to the development of comprehensive curricula for future medical English education programs.

References

- Brown, P., & Levinson, S. (1987). *Politeness: Some universals in language usage*. Cambridge: Cambridge University Press.
- Canagarajah, S. (2018). *The unit and focus of analysis in lingua franca English interactions*. International Journal of Bilingual Education and Bilingualism.
- Gee, J. P. (1999). *An Introduction to Discourse Analysis: Theory and Method*. USA and Canada: Routledge Taylor & Francis Group
- Hutchby, I. and Wooffitt, R. (2000). *Conversation analysis*. Cambridge: Cambridge University press.
- Long, M. H. (2005). *Methodological issues in learner needs analysis*. In *Second Language Needs Analysis*. Cambridge: Cambridge University press.
- Sakai, K., & Imaoka, K. (2022). *Daigaku nyūgaku-ji ni okeru hōteki pafōmansu hyōka to hihantekishikō taido no kankei-sei: Daigaku kyōiku ni okeru rīgaruriterashī no ikusei o mezashite*. [Relationship between legal performance evaluation and critical thinking attitude at the time of university entrance: Aiming to foster legal literacy in university education]. Shizuoka University University Education Center.
- Searle, J. (1969). *Speech Acts. An Essay in the Philosophy of Language*. Cambridge: Cambridge University press.
- Small, L. (2019) *How to Raise Proficiency in Intercultural Doctor-Patient Interactions: Suggestions for Medical ESP Course Content*. The Bulletin of Central Research Institute, Fukuoka University 18 (1), 21-49.
- Street, B. V., & Hornberger, N. H. (n.d.). (Eds.) *Encyclopedia of Language and Education*.
- Terauchi, I. (2005). *Bijinesu-kei daigaku no eigo kyōiku inobēshon — esupu no shiten kara*. [Business University English Education Innovation-From an ESP Perspective]. Hakuto Shobo.
- Tomotaki, A., & Masaoka, Y. (2022). *Jōhōshori pasokonriterashī no jugyō tenkai*. [Information processing / PC literacy class development]. Kango kyōiku.
- Tosi, M. T. (2018). *Personal Identity and Moral Discourse in Psychotherapy*. Transactional Analysis Journal.

- Vignoles, V. L. (2017). Identity: Personal And Social. *Oxford Handbook of Personality and Social Psychology*, 1-20.
- Yoshimura, K (2022). The Investigation of the Continuity of Media Literacy Education Practices in the School: Life Story research on the Junior High School Teachers who took part in MELL Project. *J-Stage Advance*, 49-63.