

Interpersonal Conversation Analysis of Physician Identity Construction Based on Doctor-patient Corpus

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Abstract: In recent years, the use of identity construction theory to study institutional conversation has become one of the research hotspots in the field of pragmatics. Based on the real doctor-patient conversation corpus, this study analyzes how doctors construct their identity in the special context of doctor-patient conversation from the perspective of interpersonal pragmatics. This article first summarizes the four main identities that doctors construct in conversation: expert, comforter, educator and equal partner. Then, based on the four identities constructed by doctors, it analyzes whether gender factors affect the construction of different individualized identities of doctors. This research will provide a reference for doctors to choose a suitable conversational identity. It is hoped that this research will help doctors and patients better understand each other's communicative intentions and play a role in promoting the realization of a harmonious doctor-patient relationship.

Keywords: Identity Construction; Doctor-patient Conversation; Interpersonal Pragmatics; Conversation and Analysis

1. Introduction

In recent years, many linguists' research perspectives on institutional discourse have gradually turned to interpersonal pragmatics, and many Western pragmatics scholars clearly pointed out that interpersonal pragmatics can reveal the interpersonal rationale for identity construction and explain its interpersonal pragmatic function [1-4]. Haugh believes that the related research on interpersonal communication overlaps with the pragmatic research on (im) politeness, face, identity and other phenomena [5]. Language plays different roles in human life and has different functions

[6-7]. Contemporary interpersonal pragmatics, as a pragmatic perspective to explore interpersonal relationships in speech interaction and interpersonal communication, includes topics such as interpersonal relationship construction, interpersonal modality expression, and interpersonal relationship evaluation. These issues go beyond the analytical perspective of conventional issues such as face and (im) politeness, and extend their scope to issues such as interpersonal emotions, interpersonal relationships, and social instructions related to identity construction [8-9]. Identity is not only constructed in verbal communication, but also in "co-construction". The construction of identity is a gradual occurrence in social interaction between individuals and others. Language can express and construct complex identities in different contexts [10]. Language and identity are inseparable [1, 11-13], language behavior is identity behavior [14]. The interpersonal relationship established by doctors and patients in the process of communication also belongs to the category of interpersonal pragmatics. The different words used by doctors in conversation construct their different identities. In doctor-patient conversation, the construction of doctor's professional identity must involve multiple dimensions of interpersonal relationship. Therefore, this research mainly explores the interpersonal pragmatic rationale of doctor's identity construction in a specific context from the perspective of interpersonal pragmatics, and analyzes its impact on conversation. It is hoped that it can help doctor better construct and adjust their conversational identities in conversations, so as to ensure the orderly progress of doctor-patient conversations and alleviate doctor-patient conflicts.

2. Corpus Construction

2.1 Corpus Collection and Transcription

The corpus based on this research is selected from the author's self-built medium-sized doctor-patient conversation corpus. The content of this corpus includes doctor-patient conversations in outpatient departments of 4 Linyi hospitals, including emergency department, obstetrics and gynecology, orthopedics, and pediatrics. The author recorded on-site conversations between doctors and patients, and transcribed the collected audio in strict accordance with the rules for transcribing the conversation. Through direct recording and commissioned recording, more than 100 hours of recording were collected and 200,000 words of effective corpus were screened out. Both collection methods have been explained to the parties that all the collected recordings will not be used for any commercial operations, but only for academic research. The author keeps confidential the personal privacy involved in the recording materials, and fully guarantees the anonymity of doctors, patients and their families. In the corpus collection process, in order to more accurately restore the emotional changes between the doctor and the patient at the moment, and maintain the integrity of the conversation, in addition to recording, the author also recorded the basic information of the conversation participants (such as gender, age, occupation, education degree, follow-up members, etc.) and numbered in sequence, and mark and supplement the corpus in the later transcribing process of the recording.

2.2 Corpus Annotation

In order to analyze the process of doctor identity construction in doctor-patient conversations more intuitively and concretely, for selected conversation examples, the expressions used by doctors when constructing different identities are underlined, and the relative responses of patients are marked in italics. Non-verbal acts or explanations are enclosed in "()".

3. Research Questions

In a complete doctor-patient conversation, the doctor dynamically constructs his identity as the turn of the conversation changes. The doctor's choice of different identities to communicate with patients will have different

effects on the conversation. There are also certain differences in the identity construction of male and female doctors when communicating with patients. Therefore, this study mainly discusses two issues:

(1) Different types of doctor's identity construction and the influence of different identities on conversation.

(2) The difference in the identity construction of male and female doctors and the impact of this difference on conversation.

(Note: In order to ensure the accuracy of the research results, the study uses a combination of qualitative and quantitative methods. We select the corpus of 5 male doctors and 5 female doctors for the study, and the corpus of each doctor is about 5000 words. Select the corpus The total number of words is 53,422 words, and the total number of words of doctors is 41278 words.)

4. Types of Doctors Identity Construction

4.1 Expert

Expert identity is a common identity in doctor-patient conversation. When diagnosing patients' conditions, doctors usually use professional words to explain to patients. On the one hand, it is to ensure the accuracy of information transmission, and on the other hand, it is to show patients the power of doctor's identity in the medical field. As the listener, patient is in a relatively low position at this time.

Example 1 Pediatrics:

D: Did you check it outside? Show it to me. This itself is a corpus callosum hypertrophy, no wonder he has some clinically autistic manifestations.

PM: *Sorry?*

D: The corpus callosum is hypertrophic. That is to say, the two white matter are a little overdeveloped. The corpus callosum is hypertrophic.

PM: *Mmm.*

D: A child's hypertrophy of the corpus callosum affects the development of the surrounding brain. The clinical manifestations of some children are a bit like autism. But your child just has a hypertrophy of the corpus callosum, and nothing else related to autism.

PM: *Oh.*

D: So the main consideration for this child is *the lack of intelligence*. The rest of the brain is

fine. Please show me the result of the ability scale just now. Then there is no need to check, in fact, his fine motor ability can be seen from his score. He checked the fine motor ability, the score inside can see that it is not related to autism. It's enough for him to do training.

PM: *Hmm, okay.*

(D = doctor; PM= patient's mother)

In this example from the pediatric clinic, we can see that the doctor used the technical term five times in succession when analyzing the patient's results. The doctor's answers are still extremely professional, and the patient's mother is always on the defensive during the next round. It can be seen that the mother of the patient does not have the domain of knowledge expected by the doctor. In the following session, the patient transferred the right to speak twice. The doctor found that the conversation was stagnant and told the mother in plain language that the child's diagnosis was "mental retardation" and suggested "training". The mother responded positively to the doctor. This suggests that changing the doctor's strategy to use colloquial language has a positive effect on conversation.

Through calculation and statistics, in doctor-patient conversations, the frequency of professional terms used by male doctors and female doctors is shown in Table 1.

Table 1. Frequency Chart of the Use of Medical Professional Terms

The Doctor Gender	Total Frequency of Terms Used	Average Frequency
Male Doctor	158	32
Female Doctor	162	32

According to the data in the table 1, it can be found that there is no significant difference in the use of technical terms between male and female doctors. Both male and female doctors use professional terms in doctor-patient conversations to reflect the professionalism of doctors. In addition, due to the particularity of institutionalization, the communication between doctors and patients is mainly to inform patients of their conditions and make analysis and diagnosis, and the language used by doctors is professional. In both male and female doctors, when doctors found that obscure technical terms affected the process of conversation, they would adjust the negotiation appropriately and explain it in different ways. However, in general, the

negotiation ability of male doctors was weaker than that of female doctors.

4.2 Comforter

Persuasion, which means the act of persuading sb to do something or to believe something. In our daily life, persuading behavior is a very common kind of behavior, which plays a special role in interpersonal communication. "When the person concerned is in a state of sadness, anger, pain and other negative emotions due to misfortune and frustration, the speaker acts in order to change his negative attitude" [15]. In the general clinic, the antagonism between the doctor and the patient is less intense. Most of the questions raised in the communication process between patients and doctors are about the inquiry and detection of basic symptoms, so there is less pressure for doctors to play the role of comforter at this time. According to the patient's condition statement and test results, the doctor can give the patient appropriate suggestions and put forward solutions for their puzzles, which can effectively achieve the comforting effect.

Example 2 Department of orthopedics:

D: The main thing is that you should pay attention to your usual activities. Sleep on a hard bed when you get home. Do you understand what I said?

P: *Understood.*

D: Then go for a swim when your body is about to recover, and practice your lower back muscles.

PH: *Go get fit.*

D: Yes, proper fitness, running, walking.

PH: *OK.*

D: She usually doesn't work much, and her back muscles are weak. So when working...

P: *I just stand for two hours sometimes, and suddenly I bend over, and then it starts to hurt.*

D: It's normal, because this ligament loosens after we give birth. With such a big child, you have to have room in your body, so the ligaments are loose, and the ligaments are still loose after giving birth. You can't take the ligament when you work, you know what I mean?

P: *Yes.*

(D = doctor; PH= patient's husband; P=patient)

In this doctor-patient conversation, the severity of the patient's disease was relatively mild, and the patient and his family members were

calm in the consultation, so the description of the symptoms was objective and detailed. The doctor can give appropriate advice to the patient according to the actual condition of the disease. At this time, the doctor has successfully constructed his identity as a consoler and gradually answered the patient's doubts and worries. Doctors first put forward rehabilitation suggestions, and then explain the doubts of patients and their families, thus forming a good conversational environment between doctors and patients. Finally, the patient successfully ended the consultation and the doctor-patient relationship tended to be harmonious.

When comparing and analyzing the characteristics of male and female doctors in constructing the identity of comforter, the strategies used by the 10 tested doctors were statistically analyzed, as shown in Table 2.

By comparison, we can find that male doctors and female doctors will use different strategies to comfort patients when constructing the identity of comforter. In a doctor-patient conversation, the physician uses a combination of strategies to construct the comforter identity. When constructing the comforter identity, male doctors used the strategies of "negating or attenuating the patient's negative emotions" and "emotional threat" more often than female doctors. The frequency of "desalination of patient responsibility" and "diverting attention" strategies used by female doctors was higher than that of male doctors, while the frequency of other strategies was relatively stable. It can be seen that female doctors pay more attention to the patient's acceptance of the condition than male doctors when constructing the identity of comforter. Female doctors mostly use positive strategies to comfort patients. Male doctors mostly use the reverse strategy when consoling patients, and the emotional care for patients is relatively weak. Different strategies can comfort patients in different aspects, doctors should be in the conversation according to the actual situation of patients to have a selective comfort.

4.3 Educator

Educator refers to the person who is engaged in educational activities. In a broad sense, the educator refers to the person who can influence the development of the body and mind of the educate. In this sense, educators

not only include the profession of teacher, parents, doctors, teachers of a certain profession and other people who play the role of education can all be called educators. In the special institutional conversation of doctor-patient, due to the influence of many aspects such as the patient's educational level, doctors will also construct the identity of educator in the conversation. Doctors not only put forward the diagnosis and treatment plan for the patient's disease, but also carry out certain education and persuasion according to the patient's psychology to promote the conversation to develop in a positive direction.

Table 2. Frequency of Physician's Use of Consolation Strategies (Total)

Strategy	Male Doctor	Female Doctor
1. Reasonable Inquiry	28	32
2. Negate Or Attenuate The Negative Emotions Of The Patient	34	26
3. Make Up The Loss	7	11
4. Explain	34	45
5. Desalination Of Patient Responsibility	5	12
6. Diverting Attention	10	18
7. Emotional Threat	12	4
8. Affirm The Positives Of Negative Events	5	9

Example 3 Emergency:

PS: *I called them all over. We will listen to you together.*

D: Oh yes. They're all here, right? Let me briefly tell you what's going on. The old lady broke her hipbone. This is the right, this is the left. The bones of the elderly are not the same as those of our young people. We young people have hard bones, you know? If the bone is loose, this osteoporosis is just in the corner, and it is easy to fracture.

There are two treatment options for her fracture. One option is to have surgery. Another option is conservative treatment. However, both surgical and conservative treatment have their own risks. It's good for you to have surgery, but only if you can tolerate it. If it is said that it is not resistant to surgery, (this is very dangerous), put a nail on it to make it grow slowly, and it is also convenient to fix it. *You know what I mean?*

But no one knows the risk of surgery. 84, right? There is a saying in the countryside, "Do not

keep a man of seventy in the house for the night, and do not keep an man of eighty in the house for dinner.” I don’t know you older folks know what this means? (... omit content) She is already in her 80s. Let me give a simple example, many 80-year-old men and women in rural areas are actually in good health, but they died the next day after sleeping. Of course, the doctor would not dare to say such things.

PS: This is the actual situation.

(D = doctor; PS= patient’s son)

From this emergency conversation, it can be seen that the patient’s health condition is not optimistic at this time, and the patient’s family members are very hesitant about further treatment for the patient. The doctor explained the patient’s condition to the patient’s family members. After mastering the initiative of the turn of the conversation, the doctor first introduced the patient’s condition to the patient’s family members in plain language, and then shifted from the identity of expert to the identity of educator, giving the patient’s family members an example of “Do not keep a man of seventy in the house for the night, and do not keep an man of eighty in the house for dinner.” and gave another example to further explain this truth. After listening to the doctor’s words, the patient’s family members agreed with the doctor’s point of view and made a treatment decision after comprehensive consideration based on the actual situation of the patient.

Through the conversation analysis of male and female doctors, we find that the gender difference of doctors’ construction of educator status is not obvious. The difference in the construction of educators’ identity is mostly reflected in the conversation between general doctors and experts. Doctors play the role of educators in the conversation, which can calm patients’ emotions and help patients accept their conditions faster. Doctors’ proper construction of the identity of educators plays a role in promoting doctor-patient communication.

4.4 Equal Partner

Equal partner is a relationship with a relatively close interpersonal distance. In the doctor-patient conversation, when facing patients of different ages, such as younger children and elderly people, the identity of equal partner can well enable patients to adapt

to the strange environment and cooperate with doctors in diagnosis and treatment.

Example 4 Emergency:

D: Come, little boy, come and let me take a look.

PF: Let this uncle look at you.

P: (crying), woo woo woo.

D: How old are you?

P: woo woo woo, two years old.

D: You can speak so well at the age of two!

P: (crying) Woo-woo, grandpa, woo-woo, mom, woo-woo, grandpa, grandpa.

D: Oh, it’s grandpa who usually looks at you! Haven’t you seen this pen? Here it is for you.

P: (stop crying and grab the pen).

(D = doctor; PF= patient’s father; P=patient)

In this doctor-patient conversation, the patient was young, his physical discomfort and the fear of coming to a strange environment led to his emotional breakdown, so he could not cooperate with the doctor. At this time, the doctor did not diagnose directly, but used the address “little boy” to narrow the distance with the patient and build an equal partner relationship. The doctor uses add-ons such as “speak so well” to show how much he cares about the patient. At the same time, he has weakened his own powerful position by giving the patient the option. This identity building drives the doctor-patient conversation.

Based on the conversation analysis of ten doctors, the frequency of strategies used by male and female doctors in constructing the identity of “equal partners” is shown in Table 3.

Table 3. Frequency of the Use of Pragmatic Categories by Doctors

Gender	Frequency of Use of Pragmatic Categories		Subtotal
	Salutation	Adjunct	
Male Doctor	45	21	66
Female Doctor	23	30	53

According to the frequency chart of the pragmatic categories used by doctors to construct the identity of equal partnership, male doctors use salutations more frequently than female doctors, and female doctors use adjuncts more frequently than male doctors. Generally speaking, male doctors construct the identity of equal partnership in conversation more often than female doctors.

5. Conclusions

The results of this study show that doctors construct identities dynamically in doctor-patient conversations. The main identities constructed include expert identity, comforter identity, educator identity, equal partner identity, etc. Doctors communicate with patients through the construction of different identities, which meets the emotional needs of patients at different stages of the conversation, and ensures the smooth progress of doctor-patient communication. In exploring the difference of male and female doctors' identity construction, it can be found that male doctors and female doctors use different strategies when constructing the identity of comforter. Male doctors used the strategies of "negating or mitigating patients' negative emotions" and "emotional threat" more frequently, while female doctors used the strategies of "downplaying patients' responsibility" and "diverting attention" more frequently. When constructing the identity of equal partner, there are also differences in the frequency of the use of pragmatic categories between male and female doctors. Male doctors use address forms more frequently, while female doctors use additional markers more frequently. However, in the process of constructing expert identity and educator identity, the difference of doctors' gender factors is relatively small. The proper identity construction of doctors is conducive to improving the efficiency of doctor-patient communication, alleviating the potential conflicts between the two parties in the communication and promoting the efficiency of doctor-patient communication. Besides, it is providing a new inspiration for effective doctor-patient communication.

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