Nonverbal Communication and its Importance for the Development of Foreign Language Professional Competence in Medical and Dentistry Students

Mária Bujalková
Senior Lecturer, Head of Institute
Institute of Foreign Languages
Comenius University in Bratislava
Slovakia

Petra Zrníková
Lecturer
Institute of Foreign Languages
Comenius University in Bratislava
Slovakia
An Introduction to
ATINER's Conference Paper Series

ATINER started to publish this conference papers series in 2012. It includes only the papers submitted for publication after they were presented at one of the conferences organized by our Institute every year. This paper has been peer reviewed by at least two academic members of ATINER.

Dr. Gregory T. Papanikos
President
Athens Institute for Education and Research

This paper should be cited as follows:


Athens Institute for Education and Research
8 Valaoritou Street, Kolonaki, 10671 Athens, Greece
Tel: + 30 210 3634210 Fax: + 30 210 3634209 Email: info@atiner.gr URL: www.atiner.gr
URL Conference Papers Series: www.atiner.gr/papers.htm
Printed in Athens, Greece by the Athens Institute for Education and Research. All rights reserved. Reproduction is allowed for non-commercial purposes if the source is fully acknowledged.
ISSN: 2241-2891
14/12/2015
Nonverbal Communication and its Importance for the Development of Foreign Language Professional Competence in Medical and Dentistry Students

Mária Bujalková
Senior Lecturer, Head of Institute of Foreign Languages
Comenius University in Bratislava, Slovakia

Petra Zrníková
Lecturer, Institute of Foreign Languages
Comenius University in Bratislava, Slovakia

Abstract

Research on nonverbal communication has grown significantly since 1970. It concluded that nonverbal behaviour can indicate feelings and attitudes, and body language is far more subtle and less definitive than previously believed. Knowledge of nonverbal communication also plays its significant role in medical professionals, i.e. doctors can communicate better with their patients and understand the signals which can be observed from their nonverbal behaviour.

In our Institute of Foreign Languages at the Jessenius Faculty of Medicine in Martin (Comenius University, Slovakia) we use opportunities to optimize nonverbal communication within students’ presentations. They are one of the activation forms being used in teaching English and German language for specific purposes (LSP). Here a scientific topic of students’ choice is presented and commented, and the presentation is followed up by a discussion among the presenter and the audience in the classroom. Giving talk is a good way for students to conduct training for their future medical practice because it is one of the types of professional communication, which represents synchronization of speech and nonverbal behaviour.

The analysis of nonverbal communication showed that the students are not aware of the importance of the first impression. Moreover, their posture, gesture, keeping distance, mimics, keeping eye-contact were missing or used inappropriately. The reasons can be explained by the fact that the students do not link their verbal behaviour with nonverbal used in the particular foreign language environment. Nonverbal behaviour requires not only sending the isolated signals, but also managing different parts of the body in the same time. As this issue in LSP at the tertiary level is very little developed, thus it deserves more space in education in order to allow students getting real foreign language professional competence.

Keywords: Nonverbal Communication, Language for Specific Purposes, Professional Competence.

Acknowledgments: The paper was supported by the project “Virtual and Simulation Tuition as a New Form of Education at JFM CU in Martin”. The project belongs to the category “Modern education for the knowledge-based society” and was co-financed by the sources of European Union.
Introduction

In the scientific world, the field of nonverbal communication and its research has been known for several decades. This issue was a part of the study of rhetoric as early as in ancient Greece. It dealt with speaker’s oral performance at first place, however there are no doubts that it pointed out the issue of nonverbal communication as well. Nonverbal communication had been considered as a part of rhetoric approximately until the beginning of the 20th century, excluding generally-oriented work *Chirologia: or The Natural Language of the Hand* (1664) by John Bulwer or the important work *The Expression of the Emotions in Man and Animals* (1872) by Charles Darwin.

The issue of nonverbal communication has gained intentional attention among scientists only in the second half of the 20th century. To the most prominent theorists of nonverbal communication of the human body belongs an American anthropologist Ray Birdwhistell, whose works *Introduction to Kinesics* (1952) and *Kinesics and Context* (1970) are still an essential source of information. Next, a significant work edited by R. Hinde called *Non-Verbal Communication* (1972) can be mentioned. Another the work titled *Bodily Communication* by Michael Argyle (1975) has been still cited and further extended. Most of the research devoted to this issue has been conducted by Anglophone authors. It needs to be said that the rest of the world is lagging behind quite significantly.

There are several definitions of the term *communication*. Depending on the code selected, four types of communication can be distinguished (Tubbs et al., 1991): a) Verbal/Vocal communication, i.e. communication through spoken words; b) Verbal/Non-vocal communication that occurs when words are involved but no speaking takes places (writing); c) Nonverbal/Vocal communication including sounds but not words; d) Nonverbal/Non-vocal communication containing non-vocal non-linguistic means. However, in the Central Europe, there has been accepted a simplified classification as follows: *verbal communication, nonverbal communication, and para-verbal/paralinguistic communication*.

Nonverbal communication is not an independent field of study. Its concepts can be found in scientific disciplines such as biology, linguistics, psychology, anthropology or sociology. Moreover, in the list should be included their subdisciplines, e. g. psycholinguistics, social psychology, social linguistics, cultural anthropology. The two authors show simple way to define the term *nonverbal communication*:

“Nonverbal communication is a kind of communication using any other means excluding verbal signals” (Kovářová, 2009).

“Nonverbal communication is a process in which people transmit and receive messages without using words” (Madonik, 2001).
Functions and Types of Nonverbal Communication

**Functions of Nonverbal Communication**

According to Argyle (1988) there are five primary functions of nonverbal bodily behaviour in human communication:

• express emotions,
• express interpersonal attitudes,
• to accompany speech in managing the cues of interaction between speakers and listeners,
• self-presentation of one’s personality,
• rituals (greetings).

**Types of Nonverbal Communication**

There are several types of nonverbal communication. The typology according to K. Cherry (2014) is cited here:

**Facial Expression**

Facial expressions are responsible for a huge proportion of nonverbal communication. Consider how much information can be conveyed with a smile or a frown. While nonverbal communication and behaviour can vary dramatically between cultures, the facial expressions for happiness, sadness, anger and fear are similar throughout the world.

**Gestures**

Deliberate movements and signals are an important way to communicate meaning without words. Common gestures include waving, pointing, and using fingers to indicate numeric amounts. Other gestures are arbitrary and related to culture.

**Para-Linguistics**

Para-linguistics refers to vocal communication that is separate from actual language. This includes factors such as tone of voice, loudness, inflection and pitch. Consider the powerful effect that tone of voice can have on the meaning of a sentence. When said in a strong tone of voice, listeners might interpret approval and enthusiasm. The same words said in a hesitant tone of voice might convey disapproval and a lack of interest.

**Body Language and Posture**

Posture and movement can also convey a great deal on information. While these nonverbal behaviours can indicate feelings and attitudes, research suggests that body language is far more subtle and less definitive that previously believed.

**Proxemics**

People often refer to their need for "personal space," which is also an important type of nonverbal communication. The amount of distance we need and the amount of space we perceive as belonging to us is
influenced by a number of factors including social norms, situational factors, personality characteristics and level of familiarity. For example, the amount of personal space needed when having a casual conversation with another person usually varies between 18 inches to four feet. On the other hand, the personal distance needed when speaking to a crowd of people is around 10 to 12 feet.

Eye Gaze
Looking, staring and blinking can also be important nonverbal behaviour. When people encounter people or things that they like, the rate of blinking increases and pupils dilate. Looking at another person can indicate a range of emotions, including hostility, interest and attraction.

Haptics
Communicating through touch is another important nonverbal behaviour. There has been a substantial amount of research on the importance of touch in infancy and early childhood. Touch can be used to communicate affection, familiarity, sympathy and other emotions.

Appearance
Our choice of colour, clothing, hairstyles and other factors affecting appearance are also considered a means of nonverbal communication. Research on colour psychology has demonstrated that different colours can evoke different moods. Appearance can also alter physiological reactions, judgments and interpretations. Just think of all the subtle judgements you quickly make about someone based on his or her appearance. These first impressions are important, which is why experts suggest that job seekers dress appropriately for interviews with potential employers.

Compliance Verbal and Nonverbal Competencies
The nonverbal communication topic is focused even on particular professions, in which direct or indirect interaction among people takes place, including its role in educational process. Knowledge of nonverbal communication is used by people working in economics (business, marketing, and management of human sources), mass media and it also plays its significant role in medicine. Compliance of verbal and nonverbal competencies in foreign language is required at different levels in top managers compared to participants of an international scientific conference (Dignen, Cracknell, 2006). Their professionalism may be supported with showing respect to nonverbal signals sent by other participant of communication process because, on the contrary, ignoring nonverbal communication habits is a kind of communication as well (Hartley, 2003).

Necessity to deal with compliance between verbal and nonverbal components of communication, which creates the basics of one’s professional
competence, is also confirmed by the research. M. Weisbuch et al. (2010) state that nonverbal behaviour does not change in time and context in the studied group of communicants, whereas their verbal behaviour does. These authors have also found that it is more difficult for communicants to control their nonverbal behaviour as a whole, for example, facial expression, posture, respect the distance, etc., than to be aware of the content of their message transmitted verbally. Nonverbal behaviour requires namely not only sending the isolated signals, but also coordinating different parts of the body in the same time. Parallel perception of verbal and nonverbal signals is very challenging, although very important because communication represents a compact unit, and not a separate linguistic and non-linguistic component.

Critical thinking reflects the interplay of verbal and nonverbal communication as manifested in the model (Campbell and Fuller, 2010):

**Figure 1. Critical Thinking Diagram Based on Truschel (2009), Paul and Elder (2008)**

Sending positive signals to other communicants to gain their confidence and friendliness is a mean, whereas the realization of a set communication plan is an objective (Weisbuch et al., 2010). Professional knowledge and skills itself are not enough. For that reason they should be accompanied by implementation of special verbal and nonverbal competencies (Schulz, 2005). When acquiring competencies in foreign language, which will be applied in particular professional communication situation, it is essential to interpret nonverbal signs adequately to target language community instead of native language community. Sometimes students can use language well, i.e. to form lexical, grammatical, syntactic and stylistic structures which are absolutely appropriate to a situation. On the other hand, it happens quite often that their foreign language competence is marked by traditions and meanings of nonverbal
behaviour coming from their mother tongue so apparently. One of the methods to be used to avoid their future misuse is to implement a training of professional nonverbal behaviour in foreign language teaching (Bergerová, 2010).

In medical environment, compliance between verbal and nonverbal signals is one of the conditions for successful communication, i.e. clear and accurate exchanging and understanding messages in a doctor – patient relationship as well as among a doctor and a paramedic. When having knowledge of nonverbal communication principles, doctors can communicate better with each other, or with their patients, because they can read and understand their signals easily. Doctors’ emotional behaviour and empathy, their ability to show understanding patient’s feelings and actions, plays an unquestionable role in medicine.

Development of Foreign Language Competence in Medicine

At the Jessenius Faculty of Medicine in Martin (Comenius University, Slovakia) English and German language for specific purposes (ESP/GSP) is taught during two semesters for General medicine and Dentistry. Students’ language skills belong to the levels B2 – C1 in average according to the Common European Referential Framework for Languages. In this paper, it is German for professional purposes, which is going to be presented in more details.

During the GSP course, the students are being taught not only language skills, but of course, their attention is being focused on nonverbal communication too. The goal is to allow students acquire intercultural competencies and sensibility to traditions and habits of the other culture. In this way, the students practice textual and visual communication situations continually, mostly by means of a contrastive method. There are used course books by Ivanová and Hromadová (2010), Jarmužek et al. (2003), and Schrimpf et al. (2012) as well as the Internet sources.

At the lessons of GSP, the students are being introduced to the particular, very specific intercultural differences, which are typical for German GP’s surgery and hospital environment. At the surgery in Germany (so called “Praxis”) works a specialized doctor’s assistant officially known as “Medizinische Fachangestellte” (commonly called “Arzthelferin”) who does not exist in the hierarchy of medical professions in Slovakia. She can perform her duties where necessary, e.g. in the consulting room, at the reception, ward rooms or in the laboratory. In short, an assistant supports a practitioner in examination procedures and management work. In more details, this job can be described as a complex including duties of a laboratory technician, a secretary, a technical support and a personal assistant – the all in one person.

When meeting a patient, in Germany a doctor introduces himself and shakes a patient’s hand, which is not common in Slovakia. Moreover, a patient is being informed in details about every doctor’s step to be done during the
examination process. A doctor does not take notes into his computer while talking and explaining a diagnosis to a patient. He faces his patient, keeps eye contact with him instead. The medical report and other notes are being summarized when a patient leaves the consulting room. To say goodbye, a doctor uses a phrase, for example: *gute Besserung, alles Gute, einen schönen Tag noch, wir sehen uns am…*, etc., which is accompanied by a handshake again. “Typical” German feature such as punctuality and timekeeping is obvious for both of them.

One of the activation forms for verbal and nonverbal communication being used in teaching German language for specific purposes are scientific topics presentations (Bergerová, 2007). The students of medical faculty present and comment on topics of their choice individually (occasionally in pairs) and the texts cannot be taken from the textbook. The presentation is followed up by a discussion among a speaker and the audience taking place in the classroom.

It is a fact that a presentation is a very powerful supportive tool for developing competencies in foreign language teaching to medical students. In regard to their future career, the list of the reasons for implementing a presentation in the educational process is as follows:

a) to increase students’ motivation to obtain skills for using the target language actively because it is they who become the active part of the educational process;
b) by means of choosing the topic of a presentation, students can influence the content of the curriculum, and thus they can see whether their performance is informative and interesting enough;
c) it is one of the types of professional communication, which represents synchronization of speech and nonverbal behaviour;
d) from linguistic viewpoint the professional terminology and pronunciation, syntactic and grammatical structures, and idiomatic polite forms are being practiced during it;
e) many features of nonverbal communication are being simulated in it, which will future doctor use in his consulting room, at the conference or at hospital in German-speaking environment;
f) it serves as a tool to acquire the patterns and rules applied in professional nonverbal behaviour, which are closely connected to the language forms of the target language;
g) it allows intentional use of paralingual means, such as intonation, stress and emphasis for key information, pauses giving time to listeners make relations and follow the context, speech rate, etc.;
h) it provides students with knowledge that their nonverbal communication is strongly recognized by the others, and thus it plays a significant role in their future professional communication.
The following part of the paper deals with the medically-oriented situations and attitudes which should be manifested verbally and nonverbally by a speaker in the target language communication:

**Presentation of a scientific topic**
It is a situation, which a doctor will experience at congresses, conferences or workshops in his professional career for several times. He is supposed to present the results of his research, defend and compare them to the other relevant sources; to express his viewpoint to the issues discussed and opinions proposed by the others. During the presentation he will use a wide range of nonverbal signs; beginning with appearance, posture, keeping eye contact, gestures up to facial expression, inflection, intonation, and speech rate.

**Asking and answering questions**
Asking and answering questions between a doctor and a patient is a daily routine when taking medical history to make diagnosis, informing a patient, or as a part of pre-operative examination. Besides patients-friendly behaviour and empathy, also doctor’s ethical acts (for example, which approach to choose when informing a patient about his serious, fatal disease) are assigned a crucial role. Facial expression, friendly and helpful gestures, tone of voice, physical contact appropriate to the situation belongs to nonverbal manifestations in communication situations like this.

**Discussion**
Discussion and dialogue among medical professionals result in exchange of experience, opinions and outcomes of their work in the field of conservative and surgical therapy, research, new methods in medicine and pharmacotherapy, consultations about patient’s condition, etc. A doctor takes part in the discussion in order to share his opinion on the issue, his belief that he is right, to agree or disagree with his colleagues. Of course, these manifestations are accompanied by nonverbal signals including gestures, body posture, eye contact, volume of speech, and respect to the physical distance, etc.

**Evaluation**
In medical practice the evaluation process is present, for example, when assessing patient’s condition, following course of therapeutic or surgical treatment, or to consider medical procedure and approach of a particular doctor, his professional knowledge and the range of total health care provided. Showing tactful manners, respect to interpersonal relationships as well as friendly nonverbal signs is very important in these situations. The posture, mimics, haptics, eye contact and intonation may influence the communication act significantly if they follow the context. The intercultural differences should be taken into consideration as well.
Evaluating Presentations and Nonverbal Signals

Students usually present the topics in clinical medicine: Adipositas, Diabetes mellitus, Schwangerschaft, Wirkungen und Metabolismus von Alkohol, Human Papillomavirus, Die tropischen Krankheiten, Anorexia nervosa, Down Syndrom, Der plötzliche Kindstod, but also Sterbehilfe, Kontakt mit den Autisten, Der Operationssaal, etc.

As mentioned so far, the students are being familiarised with intercultural competencies and the role of nonverbal behaviour when speaking German throughout the course. Importance of these features of communication is emphasized in terms of their future career. For example, the students focus only on speaker’s nonverbal behaviour when they try to evaluate presentations by means of asking questions.

Table 1. Evaluating Nonverbal Signals (According to Segal et al., 2015)

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>Is eye contact being made? If so, is it overly intense or just right?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facial expression</td>
<td>What is her/his face showing? Is it mask-like and inexpressive, or emotionally present and filled with interest?</td>
</tr>
<tr>
<td>Tone of voice</td>
<td>Does her/his voice project warmth, confidence, and interest, or is it strained and blocked?</td>
</tr>
<tr>
<td>Posture and gesture</td>
<td>Are her/his bodies relaxed or stiff and immobile? Are shoulders tense and raised, or slightly sloped?</td>
</tr>
<tr>
<td>Touch</td>
<td>Is there any physical contact? Is it appropriate to the situation?</td>
</tr>
<tr>
<td>Intensity</td>
<td>Do they seem flat, cool, and disinterested, or over-the-top and melodramatic?</td>
</tr>
<tr>
<td>Timing and pace</td>
<td>Is there an easy flow of information back and forth? Do nonverbal responses come too quickly or too slowly?</td>
</tr>
<tr>
<td>Sounds</td>
<td>Do you hear sounds that indicate caring or concern?</td>
</tr>
</tbody>
</table>

We find it very important that every presentation (approximately 10 minutes long) is followed by asking questions by the audience or by discussion on the topic. Finally, the students evaluate the particular presentation in all aspects based on the following chart used to help them in the process (Benišková-Schulze et al., 2000):

Table 2. Criteria for Assessing the Presentation

<table>
<thead>
<tr>
<th>INHALT Contents</th>
<th>Auswahl des Themas, Länge der Präsentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRUKTUR Structure</td>
<td>Klarheit, Kohärenz</td>
</tr>
<tr>
<td>SPRACHE Language</td>
<td>sprachliche Richtigkeit, Flüssigkeit, Aussprache</td>
</tr>
<tr>
<td>UNVERBALE ASPEKTE Nonverbal aspects</td>
<td>Gestik, Augenkontakt, Körpersprache, Selbstsicherheit, Sprachtempo</td>
</tr>
<tr>
<td>VISUELLE UNTERSTÜTZUNG Visual support</td>
<td>ob passend, klar, geschickt angewendet</td>
</tr>
</tbody>
</table>

whether it was used appropriately, clearly, cleverly (proficient)
Of course, also the teacher participates in the process of evaluation; he comments on keeping balance between oral and nonverbal performance throughout the presentation. He points out positives and shortages of the overall structure as well as the particular serious mistakes occurred. It has to be said that students do not always want to admit the critical comments on their nonverbal behaviour. They insist that their intention was different and disagree with teacher’s viewpoint. Only after longer discussion, and sometimes evidence has to be used to demonstrate their mistakes clearly, they can change their nonverbal behaviour in the future.

Analysis of Nonverbal Communication in Medical Students

In general, in Slovakia students are very little educated in principles of nonverbal behaviour. At high schools they are not able to present the topic of their choice sufficiently even in their mother tongue, not to say in German. In this respect, we did not have great expectations from our medical students. Nonverbal communication in their assessment represents a basic requirement resulting in development of their professional foreign language competence that is one of our aims when teaching GSP.

It can be concluded that our concerns have been confirmed. Despite the fact that Slovak and German cultural environment does not differ from each other widely, unfortunately, our students were not able to handle elementary principles of nonverbal communication (same for both countries) at the level required. The analysis revealed that students are not aware of the importance of their nonverbal behaviour when expressing their attitudes (in foreign language speaking) in particular communication situation. The conditions improved partially after intentional training in professional situations by means of students’ presentations during the GSP course, in which the students realized how significantly nonverbal communication can influence and support their professional competencies.

In our opinion, the current unfavourable state is caused by the inadequate training in the mother tongue, in which students also are not able to control and interpret nonverbal signals consciously. Next aspect increasing the risk of incompliance between verbal and nonverbal component of communication is presupposition that perfect graphic-visual layout of a presentation is enough for making overall good impression to the audience and teacher. Unfortunately, it usually dominates over the oral performance, and so the total impression is a small disaster eventually.

The following aspects were noticed recurrently in students’ performance at the faculty: loss of self-confidence in their own presentation skills showing as sticking on cards with notes; intonation and pauses inappropriate to the content and structure of the oral speech; inadequate speech pace, gestures and posture. Also, the students do not always realize the importance of the first impression. Many of them were not able to keep eye contact with the audience; either they looked into their notes, or elsewhere, and also even then when they were
Talking by heart. Students did not like to stand while giving a talk; they tried to make a barrier using the computer. During presentation various nonverbal gestures, smile or friendly atmosphere were missing. In the final discussion emphasising the verbal argument by an appropriate and adequate nonverbal behaviour, such as intonation, haptics or eye contact was omitted. Again, the students were staring on the floor or looking beyond the back of the other communicant. Many of them were staring at the teacher, assuring themselves whether the teacher nods his head to agree with phrase chosen. The last but not least, the amount of text in particular slides is also a signal of one’s level of presentation competencies acquired. Overwhelmed slides with data, or even placing whole sentences and compound clauses occurred very frequently, which regards to be an effort to avoid independent commenting on keywords in foreign language. From the linguistic point of view, rephrasing the content in own words was not always at sufficient stylistic level. Sometimes transforming substantive and adjective phrases to sentences was replaced by using German verb „sein“ (to be) instead of full verbs.

Conclusions

Acquiring compliance between verbal and nonverbal component of communication is a long-term goal, which has been set in language teaching for our medical students. Communication-oriented German language teaching for professional purposes allows us to show the students that their participation in language education is meaningful and useful for their practice because it makes open a wide space for further development and application of their professional communication competencies in German speaking environment as well as in mother tongue environment.

Our long-time experience has showed that the students do not pay adequate attention to the meaning of nonverbal communication. In language communication, simultaneous receiving of verbal and nonverbal signals is very important because they represent one well-integrated whole, instead of separated verbal and nonverbal component. Therefore, we consider it essential to include also training of professional nonverbal behaviour in foreign language teaching.

References


Birdwhistell, R. L. 1952. Introduction to Kinesics: An Annotation System for Analysis of Body Motion and Gesture. Department of State, Foreign Service Institute, Washington, DC.


