

Nursing faculty's opinion on effectiveness of non-verbal communication in the classroom

Opinião de docentes de enfermagem sobre a efetividade da comunicação não verbal durante a aula

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Abstract

Objective: To determine the opinion of nursing faculty and a researcher on the effectiveness of non-verbal communication in the classroom.

Methods: This descriptive study included 11 nursing professors filmed for 220 minutes. Fourteen aspects of non-verbal communication were evaluated. Opinions about the effectiveness of non-verbal communication are expressed as simple frequencies.

Results: Professors identified 71.43% of postures (as coherent, good, effective, and adequate), 62.5% of facial expressions (efficient, positive, and reinforcing/following the speech), 83.33% of voice rhythms (effective, good, and adequate speed), 61.11% of physical energy levels (good rhythm, active, attentive, effective, adequate, and alert), and 78.95% of body postures (kept moving, standing, remaining on feet, using hand movements to illustrate points, attention focused on students, position close to students' desks). A less frequent inefficient non-verbal communication was seen among.

Conclusion: Nursing professors' opinions on non-verbal communication in the classroom were general and non-specific, indicating inadequate application of non-verbal communication. Professors identified inefficient non-verbal communication behavior less often than did one of the current researchers.

Resumo

Objetivo: Conhecer a opinião de docentes de enfermagem e da pesquisadora sobre a efetividade da comunicação não verbal durante as aulas.

Métodos: Estudo descritivo no qual foram incluídos 11 docentes de enfermagem em 220 minutos de filmagem. Foram avaliados 14 aspectos da comunicação não verbal. A opinião sobre a efetividade da comunicação não verbal foi apresentada em frequência simples.

Resultados: Os docentes identificaram: 71,43% da postura (coerente, boa, efetiva e adequada); 62,5% das expressões faciais (eficientes, positivas e reforçando/acompanhando a fala); 83,33% do ritmo da voz (efetivo, bom e com velocidade adequada); 61,11% do nível de energia – física (ritmo bom, ativo, atento, efetivo, adequado e alerta); 78,95% da postura corporal (manter-se em movimento, estar ereto, de pé, usar gestos ilustradores, voltar-se para os alunos, estar próximo dos alunos das carteiras da frente). Além disso, houve uma menor frequência de comunicação não verbal ineficaz entre os docentes.

Conclusão: A opinião dos docentes de enfermagem sobre a comunicação não verbal durante as aulas é geral e inespecífica, indicando inadequação na aplicação desta comunicação. Os docentes identificaram comportamentos comunicativos não verbais ineficazes em menor frequência do que a pesquisadora.

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Conflicts of interest: none to report.

Introduction

Technologic advances have been gaining prominence everywhere, including the classroom environment. The use of computers, smartphones, and tablets by students presents undeniable interference. These devices divert students' attention from the professor and change the professor-student relationship. This reflects how both professor and students have been interacting in this context.

Study of the professor-student relationship deserves emphasis to establish positive affective ties that enable productive information and knowledge exchange in this new reality. To ensure an adequate relationship, nursing professors should understand methods of communication, including non-verbal communication. Communication involves an interpersonal dimension that characterizes relationships and should be understood to be effectively used.

Educators mention that effective professors must model behavior and qualities that are in consonance with the lesson taught, be positive and hopeful, how to listen and talk, and show concern for students' well-being. These abilities can be developed, especially through effective non-verbal communication, which is an instrument to achieve this result.⁽¹⁾

Humans differ from other animals by their ability to perform actions consciously (i.e., to act intentionally and not by instinct or by conditioned reflex); this is called praxis or work. Work is also an interventional instrument and a measure of human appropriation of the world.⁽²⁾ For this reason, if a professor's role is to build knowledge for students through information transmission and exchange, the professor must communicate appropriately using conscious transformative knowledge and non-verbal communication. This will provide the professor the skills to develop an activity that is in consonance with his or her intentions as a learning mediator.

There is a schematic chart of non-verbal communication models that can be adapted to the professor-student relationship. This chart shows how the use of non-verbal is effective in interpersonal interactions. Non-verbal communicative behavior

is separated into effective/efficacious use and ineffective use with regard to the following: physical posture, eye contact, the use of furniture, clothing, facial expressions, and interpersonal distance. The behaviors considered effective/efficacious are those that encourage the other person to talk because he or she feels accepted and respected; the ineffective behaviors are those that weaken the conversation.⁽³⁾

Studies on nursing communication that approach the teaching-learning process point out that the mediator aspect is the importance of conscience that the professor must have on his/her communicative role.⁽⁴⁻⁶⁾

The difficulty of codifying students' non-verbal communication behavior was noted in a study with nursing faculty that aimed to verify the existence of differences in professors' perceptions of students' feelings before and after an explanatory presentation.⁽⁶⁾ The study found that professors' perceptions with regard to identifying feelings improved after the explanation, when their attention was directed toward non-verbal communication.⁽⁶⁾

Because of the interference of technologic advances and new teaching-learning techniques in the classroom, studies on interpersonal communication involving professor-student should be redone, reviewed, and discussed in this new context. This especially pertains to studies on relative changes in non-verbal communication, an interpersonal dimension that qualifies the relationships.

This study sought to determine the opinions of nursing faculty and a researcher's on the effectiveness of non-verbal communication in the classroom.

Methods

This descriptive study was carried out at private university in the city of São Paulo, located in the southeast region of Brazil. We included 11 nursing professors who taught in at least two disciplines in the nursing undergraduate program.

Communication is a dynamic process. For this reason, we used video recording in the teaching-learning context in the classroom environment.

The filming started 30 minutes after the start of class and lasted for 20 minutes without interruptions. The camera was placed at medium body frame because most non-verbal communication occurs in this perspective.

Because filming focused on the professor, the camera was positioned so that only the professor was captured. Only the backs of students were filmed. All students were informed about the reason of the filming and were told they would not appear in the video because the focus was only the professor.

In the second step, a day was scheduled with each professor to watch the video with the researcher. Before the viewing began, the researcher explained to the professor how the data collection instrument was composed and how it must be completed. The professor was also told that he/she was authorized to see the video twice, if necessary. On the data collection form professors described their perceptions after watching the video, pointing out efficient and inefficient examples of the 14 aspects of non-verbal communication assessed (posture, eye contact, furniture, clothes, facial expression, mannerism, rhythm and volume of voice, level of physical energy, interpersonal distance, touch, head movement, body posture, and paraverbal characteristics).

The researcher also watched each video by herself and completed the instrument. Data collected from professors and from the researcher were analyzed based on the adopted theoretical reference. Results were expressed using simple frequencies of professors who were able to identify the times they expressed non-verbal signs in the classroom for each aspect.

Development of this study followed national and international ethical and legal aspects of research on human subjects.

Results

Eleven nursing faculty were filmed and interviewed. The participants' mean time as a professor was 18 years (range, 7 to 29 years).

All professors were filmed in the classroom, with student desks organized into rows. The classroom also contained a support table for the teacher that was placed closed to a white board, generally on the side opposite the entrance door. The white board was used to project slides from a monitor connected to the professor's personal computer. Some professors used the white board to make notes while explaining the subjects addressed during the class. In the institution where this study was conducted, the use of a white coat by the professor was optional.

Table 1. Nursing faculty and the researcher's opinion

Non-verbal communication	Researcher's opinion		Faculty's opinion	
	Effective use	Inefficient use	Effective use	Inefficient use
Posture	14	10	10	3
Eye contact	20	4	11	5
Furniture	12	10	7	7
Clothes	7	8	11	0
Facial expression	16	10	10	3
Mannerism	0*	39	4*	9
Volume of voice	19	3	10	1
Tone of voice	12	10	10	3
Level of energy	18	5	11	1
Personal distance	27	12	9	5
Touch	20	2	6**	3
Head movement	22	2	11	1
Body posture	19	24	15	5
Paraverbal	20	13	10	5

*Os maneirismos não devem existir, portanto, o eficaz é zero de maneirismos, embora quatro docentes tenham achado seus maneirismos efetivos; ** um docente tocou uma aluna, considerando o toque efetivo; outros cinco docentes, que não fizeram uso do toque com os alunos, julgaram a ausência do toque efetiva, por entenderem que o mesmo não caberia naquela situação

Table 1 shows the professors' and the researcher's opinions regarding the efficient and inefficient use of non-verbal communication.

During the 20 minutes of filming observed by the researcher for each non-verbal dimension, the absolute number of effective or ineffective instances she perceived computed and considered as 100%. For example, for posture, there were 14 instances of effective use and 10 instances of ineffective use of non-verbal communication, which represent the sum of the videos of all professors.

The dimensions perceived more by the professors than by researcher concerned the effectiveness of non-verbal signs produced (over 60%) and how professors described each dimension (noted in parentheses). Professors identified 71.43% of

postures (coherent, good, effective and adequate), 62.5% of facial expressions (efficient, positive and reinforcing/following the speech), 83.33% of voice rhythms (effective, good and adequate speed), 61.11% of physical energy levels (good rhythm, active, attentive, effective, adequate, and alert), 78.95% of body postures (kept moving, standing, remained on feet, using hand movements to illustrate points, attention focused on students, position close to students' desks).

All professors considered clothes to be standard and adequate for the classroom, with pleasing and neutral colors; however, the researcher considered inappropriate that some professors had their white coat opened. The majority of professors, 54.5%, did not know the meaning of the term "mannerism."

Professors perceived fewer inefficient non-verbal communication behavior than did the researcher (Table 1). They did not perceive details that could harm the professor-student relationship, such as those found in posture, organization of furniture, mannerisms, rhythm of voice, interpersonal distance, absence of touch (even in situations where it seemed appropriate), head movement, body posture, and paraverbal aspects.

Discussion

A limitation of this study was its descriptive design, which did not permit the researchers to establish relations of cause and effect, the subjective characteristics of non-verbal communication, the objective of the study, and the comparison between professors and the researcher.

Our results show the importance of non-verbal communication in the learning-teaching environment.

Adequate codification of non-verbal communication requires capacitation, training, conscience, and constant attention during the observation period; several non-verbal signs are transmitted at the same time as verbalization mainly. These can be considered microexpressions that last 1/12 to 1/5 seconds and represent, in a non-verbal form, the speakers' true feelings.⁽⁷⁾

Most people cannot, without training, perceive microexpressions during a conversation because these are mixed with words, tone of voice, and gestures.⁽⁷⁾ This difficulty also stems from the fact that people tend to think beforehand of what they will say unless they only observe and listen.

We verified that after the initial 5 minutes of adaptations and adjustments, some professors retained their ineffective communicative behaviors throughout the rest of the filming. Such behaviors included distance and posture in relation to students, tense and angry facial expressions, mannerisms, low voice, accelerated rhythm of voice, keeping a distance from the students, positioning of the head at variance with voice projection, tense body posture, and repetitive paraverbal characteristics, with word repetitions at the end of the discourse.

Mannerisms that were seen several times in all films deserve to be highlighted for the meaning they could transmit in addition to those already reported (tension, nervousness, and anxiety) and for the distraction they can generate. In general, the gesture of running hands through one's hair is codified as a sign used by women while dating or flirting;⁽⁸⁾ however, in the classroom context it is more related to concern about physical appearance. In this particular instance, it can also be considered in relation to concern about appearance to those who will see the video.

A body posture that involves walking with the chin up and hands crossed behind the back indicates superiority and self-confidence; keeping hands in pockets may indicate that something is being hidden; scratching eyebrows, face, nose, and mouth are signs related to filtering of information or lying about what has been said, saw, or heard.⁽⁹⁾

Audiovisual resources have an important role in interpersonal distance and body posture. Some professors tend to stand on one side of the room, as close as possible to the audiovisual resources, or they tend to be positioned laterally or back toward the students for long periods of times, reading slides. The function of audiovisual resources is to illustrate, clarify, and simplify presentations and, during their use, eye contact must be kept with the audience/

students. The professor/speaker should avoid, as much as possible, reading the slides or speaking while looking at the audiovisual resources.⁽¹⁰⁾

The head movements used most were the sign of a positive response (inclining the head forward indicating “yes” or affirmation) and the sign of negation (moving the head from one side to another, indicating “no”).⁽⁹⁾ In other cultures, such as in Bulgaria, some parts of the Greece, Yugoslavia, Turkey, Iran, and Bengal, these movements have the opposite meaning (i.e., moving the head up and down is a sign for “no,” and moving the head side to side is a sign for “yes”).⁽¹¹⁾ In filming of the professors, almost all used their head to indicate consenting, which stimulated the students’ participation (positive movement).

During interactions, it is important to note if the speaker is affirming something verbally but is making a different movement with the head, indicating, for example, a hidden objection.⁽⁸⁾ Furniture organization in the classroom did not change, even in the classrooms that enabled certain mobility and had few students (maximum of eight), in order to make the teaching-learning environment more welcoming, inclusive, and productive. Hence, learning can be compromised in some classrooms even with professors with an audible voice because there is too much external noise.

With few exceptions in which professors touched students, professors kept a distance that varied between personal distance (45 to 125 centimeters in relation to the students in the first row) and social distance (124 to 360 centimeters in relation to intermediary rows).⁽¹²⁾ In large classroom and those with more distance between rows, professors kept a public distance, which necessitated using a microphone to amplify their voice. This relationship could be different if professors circulate more in the classroom, keeping a personal distance among more students; show more accessibility and availability in the learning-teaching process; facilitate contact, interaction and flow of communication needed to comprehend the content. Such improvements would also help the students apply communicative learning with patients, families, and multidisciplinary teams after they leave the classroom.

Without a doubt, the professor is the person who inspires and encourages students as they develop their communicative ability. In developing this communicative ability, it is important that contact with professor is a positive experience; this is mainly achieved via the proximity to student in the classroom.

Professors mention that their incomprehension of the generation, unfolding of values and lack of knowledge related to those they interact with is a large obstacle for an autonomous pedagogical relationship.⁽²⁾ For professors for whom pedagogical autonomous relationships occur easily, the knowledge domain and applicability of non-verbal communication in classroom are fundamental instruments.

The study of non-verbal communication requires knowledge, training, and observation of others, but mainly self-knowledge.^(5,13) The latter is developed in several forms: body conscience, thoughts, intentions and emotions, aligned with objectives, interior serenity, internal balance, and constant reflection.⁽¹³⁾

Conclusion

The opinion of nursing faculty regarding non-verbal communication in the classroom is general and unspecified, indicating inadequate application of this communication in the classroom. The professors identified inefficient non-verbal communication behavior less frequently than did the researcher.

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Collaborations

Amorim RKFCC contributed to the conception of the project and the research and drafting of the manuscript. Silva MJP contributed to conception of the project, critical review to improve the manu-

script intellectual content and final approval of this final version for publication.

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