
University assertive communication meta-capability: Analysis in nursing teachers

Metacapacidad comunicativa asertiva universitaria: Análisis en docentes de enfermería

大学自信的交际能力:对护理专业教师的分析

Метаспособность асертивной коммуникации в университете: Анализ на примере преподавателей по медицинскому уходу

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Abstract

The teaching-learning process is a social phenomenon that requires an interpersonal communication between the teacher and students, therefore it's necessary that this is as assertive as possible, especially in university environments. Therefore, the objective was analyze the assertive communication meta-capability in the teachers of Universidad Nacional Experimental de la Fuerza Armada Bolivariana (UNEFAB), in Maracay during second period of year 2011. For this, in a sample of 172 students, a questionnaire with 63 items that presented five answer options with Likert scale (1-5) was applied, to study according to their perceptions the dimensions of communicative competence, speech features and empathy of the teachers; additionally, the students repetition effect in their perceptions about the communicative meta-capability of the teachers was studied, for which an ANOVA was applied to observe if there were differences between repeating and non-repeating students. A high level of presence in the dimensions studied was observed, that on average evidenced a high level of assertive commucative meta-capability ($3.82 \pm .2$) in the teachers; on the other hand, no significant differences ($P > .05$) in the perceptions of repeating and non-repeating students. It concludes that the nursing careers teachers of UNEFAB presented a high level of assertive communicative meta-capability, according to the students' perspective, the teachers were able to communicate openly their ideas, with respect and searching the student benefit.

Keywords: nonverbal communication, communicative competence, linguistics, paralinguistics, empathy.

Resumen

El proceso de enseñanza y aprendizaje es un fenómeno social que requiere una comunicación interpersonal entre el docente y sus estudiantes, por lo cual es necesario que ésta sea lo más asertiva posible. Por ello, se planteó como objetivo analizar la metacapacidad comunicativa asertiva de los docentes de las carreras de Enfermería de la Universidad Nacional Experimental de la Fuerza Armada Bolivariana (UNEFAB), núcleo Maracay durante el segundo periodo del año 2011. Para ello en una muestra de 172 estudiantes, se aplicó un cuestionario con 63 items que presentó cinco opciones de respuestas con escala tipo Likert (1-5), para estudiar según sus percepciones las dimensiones de competencia comunicativa, rasgos del habla y la empatía de los docentes; adicionalmente, se estudió si la repitencia de los estudiantes afectaba la percepción acerca de la metacapacidad comunicativa de los docentes, por lo que se aplicó un ANOVA para observar si existían diferencias significativas entre repitentes y no repitentes. Se observó un alto nivel de presencia para las dimensiones estudiadas, lo que en promedio evidenció un alto nivel de metacapacidad comunicativa asertiva ($3.82 \pm .2$) en los docentes; por otra parte, no se observaron diferencias significativas entre las percepciones de los estudiantes repitentes y no repitentes ($P > .05$). Se concluye que los docentes de las carreras de enfermería de la UNEFAB presentaron un alto nivel de metacapacidad comunicativa asertiva, desde la perspectiva de los estudiantes, los docentes fueron capaces de comunicar abiertamente sus ideas, con respeto y buscando el beneficio estudiantil.

Palabras clave: comunicación no verbal, competencia comunicativa, lingüística, paralingüística, empatía.

摘要

教与学的过程是一种需要教师和学生之间进行人际交流的社会现象,为此该交流应尽可能地展现出老师的自信。出于这个原因,我们对 2011 年第二学期Maracay核心地区玻利瓦尔武装部队国家实验大学 (UNEFAB) 护理专业教师的自信交流能力进行分析。我们对 172 名学生进行了包含63道题目的问卷调查,其中使用李克特式量表 (1-5) 研究其交际能力、言语特征和教师的同理心这几个维度;此外,还研究了学生的复读是否会影响对教师交际能力的感知,为此我们应用了方差分析来观察复读者和非复读者之间是否存在显著差异。在所研究的维度中我们观察到了高水平的存在,这平均证明了教师的高水平自信的交流元能力 ($3.82 \pm .2$);另一方面,在复读生和非复读生之间我们没有观察到起感知方面的显著差异 ($P > .05$)。得出的结论是,UNEFAB大学的护理专业教师呈现出高水平的自信交流元能力,从学生的角度来看,教师能够公开交流他们的想法,尊重并寻求学生的利益。

关键词:非语言交际,交际能力,语言学,副语言学,同理心。

Резюме

Процесс преподавания и обучения - это социальное явление, требующее межличностного общения между преподавателями и их учениками, поэтому необходимо, чтобы он был максимально асертивным. По этой причине целью данного исследования было проанализировать метаспособность асертивной коммуникации преподавателей курсов по уходу за больными в Национальном экспериментальном университете Боливарианских вооруженных сил (UNEFAB), Маракай, во второй период 2011 года. Для этого на выборке из 172 студентов была использована анкета из 63 пунктов, в которой было представлено пять вариантов ответов по шкале Лайкерта (1-5), для изучения их восприятия измерений коммуникативной компетентности, речевых качеств и эмпатии преподавателей; кроме того, было изучено, влияет ли повторное обучение студентов на восприятие коммуникативной метаспособности преподавателей, поэтому был применен ANOVA для наблюдения за тем, есть ли значительные различия между повторниками и неповторниками. Высокий уровень присутствия наблюдался для изучаемых измерений, что в среднем свидетельствовало о высоком уровне асертивной коммуникативной метаспособности ($3,82 \pm .2$) у учителей; с другой стороны, не наблюдалось значительных различий между восприятием повторных и неповторных студентов ($P > .05$). Сделан вывод, что преподаватели сестринского дела UNEFAB продемонстрировали высокий уровень асертивной коммуникативной метаспособности, с точки зрения студентов, преподаватели смогли донести свои идеи открыто, с уважением и с расчетом на интересы студентов.

Ключевые слова: невербальное общение, коммуникативная компетенция, лингвистика, паралингвистика, эмпатия.

Introduction

The language presents an undeniable importance in the development of human beings, being defined as a unique process of this, through a creative and innovating process as a result of his/her cognitive capabilities of higher order. The varied forms of language are part of the general system of the communication, for which the language and the human communication are two concepts and two realities absolutely inseparable (Albaladejo, 2008; Hoon et al., 2017; Pipa & Jaradat, 2010).

The human being as a complex, social and likable being attending to his/her fundamental need to interrelate, satisfies through the communication said need by entering in relation with the rest and with him/herself, always searching to communicate in the most efficient manner possible, assuring a better relation in the different social environments and in great variety of collectives (Levin & Moore, 1977). In this manner, in the educational area is also essential that the communication is energetic and assertive; therefore, the basic parameters that influence in the communication act that the professor carries out during the interaction with the student in the classroom need the inclusion of practical changes that allow to optimize the process of teaching and learning (Turtorean, 2016). In fact, an effective communication is a complex element and dependent of several aspects associated with the issuer as well as the receiver; it is stood out in the same manner, that a theory, proposal, idea or information is only valuable in the measure of how well is resent; being this the importance of the communication as a central process of all the human interactions from any context, whether political, economic, legislative, even religious, among others (Joseph, 2017).

By visualizing the capability of communication of the professor as a complex process in which many of his/her basic resources are conjugated such as the issue of the verb, the vocal characteristics, his/her body and image, among others, this must be capable to inform, convince, teach, and induce behavioral changes in the students. From there that, it is necessary to know the level of this capability of communication in these professionals, specially over people influencing in other individuals such as the students of any educational level. Nevertheless, the technical and university level is where the future people responsible in the attention to the needs of others are trained, even more the professionals of Nursing who deal directly with other people, for that reason, these must develop assertive capabilities of communication (Arnold & Boggs, 2019; Gultekin et al., 2018; Omura et al., 2016, 2019), and it is here where the influence of the professors is also decisive.

In the field of health and specifically for Nursing, the Tuning Project for Latin America, identified the generic and specific competences of this discipline, outstanding the capability of oral and written communication, the communication in a second language, as well as the abilities in the use of the technologies of the information and of the communication (Benitone et al., 2007). In this sense, the professor is one of the main communication influences in the students on every educational level, even though in the higher level is an example towards the professionalism, without losing the humanistic approach that must be presented in an assertive communication meta capability.

For the abovementioned, it is necessary to define what is a meta capability; according to Aguilar and Yepes (2006) this is a capability necessary for the development of other capabilities, very dependent of the challenges and demands that are stated in their environment, also calling it dynamic capabilities. Therefore, the term meta-communication is referenced as the interaction of elements, in addition of the verbal, non-verbal expressions and relative for the communication (Watzlawick et al., 2011). On the other hand, the communication as a meta-capability is of bigger value that it is assertive, that means, with no aggressiveness and emotionally expressive, in addition of direct and honest, without this violating the rights and freedoms of others; which is extremely important inside the classroom (Clares, 2018; Turtorean, 2016).

It corresponds to the education and the investigation to be the true strategic engine to be able to achieve the development and the progress of the modern society; in this sense, an educational system is needed that, in addition of being the possessor of great quality and continuous innovation, to be able to transform and/or educate

the students in order to adapt to the current social context with a big communication capability, for which it is required from individual prepared with a high human training, but specially with communication methods that are capable to serve as example, in addition to transmit the information within the classroom in an effective manner, that generates true pleasant spaces for the process of teaching and learning. For that reason, Florez (2005) stands out the importance of the continuous training of the educators and the role that they execute in their role as university professor in the professional training of other people, indicates that the accurate, coherent and updated performance that the professor has as a mediator of the process of teaching-learning will influence in the training of his/her students, giving in that manner his/her contribution to the improvement of the society.

For the abovementioned, and in order to guarantee the quality of the teaching that the current society demands, we require a highly trained higher education professor, committed with his/her labor, who is trained and improves permanently in the pedagogical competences that allows him to teach the students to learn and to undertake as it is established by the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2009).

Within the pedagogical competences that the university professor must have, there are the information, communication and training competences, typical of the professor and that are brought to light in their functions related to the process of teaching-learning (Khan et al., 2017). Said process, as social phenomenon, is executed mainly in a face-to-face manner within the classroom and implies the communication face to face (interpersonal) between the professor and the students, generating reciprocal interactions that must result motivational between both, the one teaching and the one learning. In fact, currently we talk about emotional communication and the expression as a factor of big importance in the education, specially in those professional careers with bigger interaction between the people (health, education, among others) (Clares, 2018).

When considering the communication as a meta-capability, it becomes one of the critical factors or of bigger importance in the assertive interaction of the people in any context of the current complex world; therefore, it is considered relevant the study of the assertive communication meta-capability in the professor, because this factor allows him/her to recognize the students as people, to listen to them, to make contact and to generate confidence, which constitutes a fundamental tool of their educational function. It is important in the assertive communication, to understand and to respect the rights that all the people have to express freely and honestly, without damaging or blaming, being open to listen to critics, as well as also to evaluate them and if it is necessary to negotiate the changes of behavior that may correspond (Pipa & Jaradat, 2010; Turtorean, 2016). In this job, it is equally used the terms meta-competence and meta-capability; therefore, we make reference to the meta-communication or the assertive communication meta-capability in the same manner.

On the other hand, it is stood out that there are three aspects that contribute significance to the assertive communication meta-capability; (1) the communication competence, that grants the speaker a set of strategies that make possible an efficient and appropriate communication development in contexts socially significant, which includes the manifestation of the verbal and non-verbal elements; (2) the characteristics of the speech of type prosodic (accent, intonation, pauses), paralinguistic (voice quality and vocalizations [laughs, whistles, throat cleaning, among others]) and extralinguistic (kinetic [body movements]); and (3) empathy, which includes a connection

beyond the communication with other people where the elements such as domain and handling of the intercommunication space, visual contact, comprehension, support, listening, confidence, flexibility and respect are important, which allow to create a more social-affective environment (Cabrera & Pelayo, 2001). All these elements perform jointly, in order to generate a communication process more or less efficient as the same is carried out, where the intonation can generate assertively interrogative, assertive acts, among others, as well as throat cleanings, whistles and other vocalizations can distract and cause displeasure, in addition of the body movements that can manifest interest, dynamism, contempt or anxiety and that can influence over the message that is taught during the communication.

For the abovementioned, the objective of this investigation was to analyze the assertive communication meta-capability of the professors of the programs (technical and professional) of Nursing of the Polytechnical Experimental National University of the Bolivarian Armed Forces (UNEFAB), nucleus Maracay, in Venezuela. In this sense, it is pretended to know if the communication situations in the classroom of the professors associated with the program of Nursing are characterized by a level of communication in which the oral expression and the body language denote respect towards the students, if they make use of the regulations of social interaction, if they show a safe, comprehensive and tolerant attitude, in addition that if they listen to the students. This work can represent a methodological manner to measure and to describe the assertive communication meta-capability of the professors in the classroom under any context, beyond that their results are only valid in the context and time studied.

Methodology

Type and design of the investigation

The investigation is essentially positivist, characterized for being a quantitative approach, of descriptive type with a design of non-experimental and transversal field (Hernandez et al., 2014).

Population and Sample

The population (N) was formed by 303 students, registered and studying between the first and fourth semester of the Bachelor's Degree and Higher Technician (TSU) of the program of Nursing of the Polytechnical Experimental National University of the Bolivarian Armed Forces (UNEFAB) nucleus Maracay, during the second academic period of the year 2011. It was selected a stratified probabilistic sample (Arias, 2016; Hernandez et al., 2014), using the equation 1, whose criteria established were a level of confidence of 95% ($Z= 2$), a sampling error of the 5% ($e= .05$), and an equitable proportion of elements of the 50% ($p= .5$; $q= .5$); in the same manner, in order to determine the proportion of stratification was used the equation 2, that calculated this value in .57. The calculations allow to establish a total of 172 students as representative sample (n) (Table 1).

$$n = \frac{N \cdot Zc^2 \cdot p \cdot q}{(N-1) \cdot e^2 \cdot Zc^2 \cdot p \cdot q}$$

$$fh = \frac{n}{N} \quad (2)$$

Table 1

Distribution of the population and sample according to the different semesters that formed the students in the programs of Bachelor's Degree and H.T. in Nursing of the UNEFAB during the second period of 2011.

| Semester | Population | Sample |
|----------|------------|--------|
| 1 | 24 | 12 |
| 2 | 58 | 25 |
| 3 | 143 | 76 |
| 4 | 78 | 59 |
| Total | 303 | 172 |

Technique and instrument

The technique used was the survey, applied to each one of the students through a questionnaire as instrument of data collection, which consisted of 63 items or polytomous closed questions, whose options of answers with scale of Likert were Always (5), Almost always (4), Sometimes (3), Almost never (2) and Never (1).

The questionnaire was built starting from the dimensions and indicators associated to the assertive meta-communication, such as the communication competence (presentation of the information, coherence of the messages, cohesion and linguistic correction, and effectiveness of the messages), the characteristics of the speech (prosodic features, paralinguistic features, extralinguistic features) and the empathy (proxemic elements, visual contact, comprehension, support, listening, confidence, flexibility and respect). The indicators used and their respective items within the instrument can be visualized in the Table 2. The questionnaire was preceded by a introduction sheet that collected the basic information of every participant, in addition of the consent informed, guaranteeing also that their data were treated in an anonymous manner.

The questionnaire was validated by the judgment of three experts of the areas of methodology of investigation and education, at the same time, it was determined its reliability through a pilot test to people with similar characteristics to the sample, to which subsequently was applied the Alpha Cronbach index, which resulted in a value of .93 which confers a very high reliability (Hernandez et al., 2014).

Table 2

Instrument (questionnaire) used to determine the assertive communication meta-capability in professors of the programs of Nursing of the UNEFAB, nucleus Maracay, during the second period of the year 2011.

| Indicators | Items | In the development of the professor in the classroom, you as a student, considers that the professor: | Answer Options | | | | |
|------------------------------------|-----------------|---|----------------|----|----|----|---|
| | | | N | CN | AV | CS | S |
| Presentation of the information | 1 | He/she assures to issue information in a clear manner | 1 | 2 | 3 | 4 | 5 |
| | 2 | He/she aims at everyone equally when it is communicated | | | | | |
| | 3 | He/she assures to let understand the information | | | | | |
| | 4 | He/she presents the same information in different manners | | | | | |
| | 5 | He/she verifies that the guidelines carried out, are understood | | | | | |
| Coherence in the messages | 6 | He/she shows clarity in what he/she says | | | | | |
| | 7 | He/she considers that he/she is conscious of what he/she says | | | | | |
| | 8 | He/she transmits the information in order of importance | | | | | |
| | 9 | He/she realizes if he/she provides contradictory information | | | | | |
| | 10 | He/she assures to clarify the doubts that are suggested by the students | | | | | |
| | 11 | He/she realizes if he/she limits the answers of the students | | | | | |
| | 12 | He/she states coherence between his/her verbal and non-verbal expression | | | | | |
| | 13 ^a | He/she formulates several questions at the same time | | | | | |
| Linguistic cohesion and correction | 14 | He/she realizes when he/she repeats the same words | | | | | |
| | 15 | He/she recognizes when he/she is wrong and corrects | | | | | |
| | 16 | He/she realizes if he/she uses fillers | | | | | |

| Indicators | Items | In the development of the professor in the classroom, you as a student, considers that the professor: | Answer Options | | | | |
|--|-----------------|---|----------------|---------|---------|---------|--------|
| | | | N 1 | CN 2 | AV 3 | CS 4 | S 5 |
| Effectiveness of the messages | 17 | He/she feels that he/she really communicates what he/she desires to communicate | | | | | |
| | 18 | He/she observes with attention to the gestures and attitudes that generate in the students | | | | | |
| | 19 | He/she estimates that he/she is spontaneous, sincere, when he/she communicates with the student | | | | | |
| | 20 | He/she considers that he/she guides the construction of meanings | | | | | |
| | 21 | He/she convinces with his/her arguments | | | | | |
| | 22 | He/she eliminates the barriers that interfere in his/her communication | | | | | |
| Prosodic Features: Accent Intonation Pauses | 23 | He/she uses a tone of voice that denotes tranquility and harmony | | | | | |
| | 24 ^a | He/she uses a tone of voice that denotes irony or contempt | | | | | |
| | 25 ^a | He/she uses a weak tone of voice | | | | | |
| | 26 ^a | He/she uses a very high volume of voice | | | | | |
| | 27 ^a | He/she uses a tone of voice that results monotonous or boring | | | | | |
| | 28 ^a | He/she makes long pauses between the phrases that he/she says | | | | | |
| | 29 ^a | He/she leaves very short pauses between the phrases that he/she says | | | | | |
| Paralinguistic features: The vocalizations | 30 ^a | He/she clears his/her throat frequently during his/her communication with the students. | | | | | |
| | 31 ^a | He/she issues sighs, puffs during his/her communication | | | | | |
| | 32 | He/she laughs in the classroom when he/she communicates | | | | | |

| Indicators | Items | In the development of the professor in the classroom, you as a student, considers that the professor: | Answer Options | | | | |
|---|-----------------|--|----------------|----|----|----|---|
| | | | N | CN | AV | CS | S |
| Extralinguistic Features: Facial Expression | 33 | The expression of his/her face is friendly and favors the communication | 1 | 2 | 3 | 4 | 5 |
| | 34 | The movements of his/her eyebrows favor the communication | | | | | |
| | 35 ^a | He makes funny faces or wrinkles the forehead while he/she communicates | | | | | |
| | 36 ^a | He/she blinks frequently during his/her communication | | | | | |
| | 37 ^a | During his/her communication, he/she states gestures of tiredness, sleep or irritation | | | | | |
| Extralinguistic features: Body Language (body movements and posture) | 38 | He/she supports his/her verbal message with his/her body gestures | | | | | |
| | 39 | He/she has a spontaneous body posture | | | | | |
| | 40 | He/she presents coherence between his/her verbal and non-verbal language | | | | | |
| | 41 ^a | He/she maintains the arms crossed | | | | | |
| Proxemic Elements (personal space, space of the communication exchange) | 42 ^a | He/she moves the hands too much | | | | | |
| | 43 ^a | He/she establishes physical contact with his/her students | | | | | |
| | 44 | He/she makes movements that indicate physical separation between he/she and the students | | | | | |
| Visual Contact | 45 ^a | He/she approaches the student a lot when he/she discusses | | | | | |
| | 46 | He/she establishes the visual contact over the group of students in general | | | | | |
| | 47 ^a | He/she maintains the sustained and direct look over any student in particular during his/her communication | | | | | |
| | 48 | He/she is opened to verbal and non-verbal information that the student provides him/her | | | | | |
| | 49 | He/she establishes empathy with the students | | | | | |

| Indicators | Items | In the development of the professor in the classroom, you as a student, considers that the professor: | Answer Options | | | | |
|---------------|-----------------|---|----------------|---------|---------|---------|--------|
| | | | N 1 | CN 2 | AV 3 | CS 4 | S 5 |
| Comprehension | 50 | He/she establishes an environment of understanding | | | | | |
| | 51 | He/she establishes an atmosphere of acceptance | | | | | |
| Support | 52 | He/she provides support for the student | | | | | |
| | 53 | He/she generates motivation in the student | | | | | |
| | 54 | He/she values the effort that the student carries out | | | | | |
| | 55 | He/she encourages the sincere communication | | | | | |
| Listening | 56 | He/she listens carefully to the students | | | | | |
| Confidence | 57 | He/she generates confidence with the students | | | | | |
| Flexibility | 58 | He/she considers that he/she is flexible | | | | | |
| Respect | 59 | He/she addresses the student in a cordial and friendly manner | | | | | |
| | 60 | He/she realizes to apply the regulations of courtesy during his/her communication | | | | | |
| | 61 | He/she exposes his/her ideas without offending the others | | | | | |
| | 62 ^a | He/she issues judgments of value discrediting the student | | | | | |
| | 63 ^a | He/she produces feeling that he/she interrogating at every moment | | | | | |

Note. a The answers of the items are inverted for their analysis.
N: Never; CN: Almost Never; AV: Sometimes; CS: Almost Always; S: Always.

Analysis and data interpretation

For the determination of the levels of presence for the indicators and dimensions, as well as for the variable assertive communication meta-capability, a scale of ranges between 1 and 5 was used, which categorizes the levels in very high (4.21-5), high (3.41-4.2), medium (2.61-3.4), low (1.81-2.6) and very low (1-1.8). Descriptive statistic was used to express the results, specifically the value average (\bar{x}) and the standard deviation (DE). Additionally, it was evaluated if the condition of grade repetition of the students may affect the answers obtained, for which it was applied an analysis of variance (ANOVA) with a limit value of 5% ($\alpha = .05$) in order to reject the null hypothesis

and in that manner to observe if there is a difference statistically significant in the perception about the professors between the repeating and non-repeating students, for each characteristic and the variable assertive communication meta-capability. The analyses were carried out with the SPSS program version 15.

Results

For the communication competence dimension, the indicators show in general a high level of presence of this variable according to the perception of the students, whose answers presented a bigger percentage in the options Almost always (23.1-34.4%) and Always (34.5-46.1 %). The indicator referred to the presentation of the information obtained the bigger value ($4.18 \pm .68$), which denotes that the professors assure to issue information in a clear manner, are directed for everyone equally when they communicate and assure to let understand the information. The indicators Coherence of the messages and Effectiveness of the messages presented values above 4; while the indicator Cohesion and linguistic correction was the one that presented less valuation ($3.67 \pm .9$). In general, the communication competence evidenced that Always (42.7 %) and Almost always (30.3%) the elements associated to a high level of presence of this capability were perceived (Table 3).

Table 3

Absolute Frequency (n), relative (%), weighted average (\bar{x}) and standard deviation (DE) for every characteristic of the dimension communication competence in professors, based on the answers of the students of Nursing in the UNEFAB, second period 2011.

| Characteristic | N | | CN | | AV | | CS | | S | | \bar{x} | DE | Level |
|------------------------------------|----|-----|----|-----|----|------|----|------|----|------|-----------|-----|-------|
| | n | % | n | % | n | % | n | % | n | % | | | |
| Presentation of the information | 3 | 1.7 | 6 | 3.6 | 26 | 15.1 | 59 | 34.4 | 78 | 45.1 | 4.18 | .68 | High |
| Coherence of the messages | 5 | 3.0 | 7 | 4.1 | 28 | 16.1 | 55 | 31.9 | 77 | 44.9 | 4.12 | .57 | High |
| Linguistic cohesion and correction | 15 | 8.5 | 14 | 8.3 | 44 | 25.6 | 40 | 23.1 | 59 | 34.5 | 3.67 | .9 | High |
| Effectiveness of the messages | 4 | 2.1 | 7 | 4.2 | 27 | 15.6 | 55 | 32 | 79 | 46.1 | 4.16 | .68 | High |
| Communication Competence | 6 | 3.8 | 9 | 5.0 | 31 | 18.1 | 52 | 30.3 | 73 | 42.7 | 4.03 | .54 | High |

Note. N: Never; CN: Almost never; AV: Sometimes; CS: Almost always; S: Always.

In the dimension Characteristics of the speech, the indicator Prosodic Features was the one that showed the lowest value ($3.40 \pm .76$), for which it was evidenced a medium level of presence in the professors. Therefore, according to the answers issued by the students and the value obtained, it can be inferred that there are aspects in the prosodic features of the professors that were not optimal in the process of teaching and learning, according to his/her voice tone and perception of irony. On their part, the paralinguistic and extralinguistic features presented a high level of presence with

more than 50% of the people surveyed who stated that these characteristics are in Always and almost always in the professors. The dimension Characteristics of the speech showed in that manner a high level of presence in the professors of Nursing of the UNEFAB during the period studied (Table 4).

Table 4

Absolute Frequency (n), relative (%), weighted average (\bar{x}) and standard deviation (DE) for every characteristic of the dimension Characteristics of the speech in professors, based on the answers of the students of Nursing in the UNEFAB, second period 2011.

| Characteristic | N | | CN | | AV | | CS | | S | | \bar{x} | DE | Level |
|--------------------------|----|------|----|------|----|------|----|------|----|------|-----------|-----|--------|
| | n | % | n | % | n | % | n | % | n | % | | | |
| Prosodic features | 22 | 13.0 | 23 | 13.4 | 44 | 25.5 | 29 | 16.6 | 54 | 31.4 | 3.40 | .76 | Medium |
| Paralinguistic features | 16 | 9.5 | 16 | 9.5 | 39 | 22.7 | 31 | 18.2 | 69 | 40.1 | 3.70 | .73 | High |
| Extralinguistic features | 16 | 9.0 | 13 | 7.3 | 38 | 22.2 | 41 | 23.5 | 65 | 38.0 | 3.74 | .55 | High |
| Features of the speech | 18 | 10.5 | 17 | 10.1 | 40 | 23.4 | 33 | 19.5 | 63 | 36.5 | 3.6 | .7 | High |

Note. N: Never; CN: Almost Never; AV: Sometimes; CS: Almost always; S: Always.

In the dimension empathy, high levels of presence of each indicator were appreciated, with the exception of the proxemic elements which were the ones that obtained lower values ($2.92 \pm .74$) and a medium level of presence. On the other hand, the indicator with the biggest score was the Listening (4.2 ± 1.04), followed by the Comprehension ($4.13 \pm .93$) of the professor towards the students, while the rest of the indicators presented values between 3.66 and 4.07. Therefore, the dimension Empathy presented a high presence in the professors, with an average value of $3.82 \pm .65$ (Table 5).

Table 5

Absolute frequency (n), relative (%), weighted average (\bar{x}) and standard deviation (DE) for any characteristic of the dimension Empathy of the professors, based on the answers of the students of Nursing in the UNEFAB, second period 2011.

| Characteristic | N | | CN | | AV | | CS | | S | | \bar{x} | DE | Level |
|-------------------|----|------|----|------|----|------|----|------|----|------|-----------|------|--------|
| | n | % | n | % | n | % | n | % | n | % | | | |
| Proxemic Elements | 39 | 22.5 | 30 | 17.4 | 42 | 24.2 | 29 | 16.8 | 33 | 19.0 | 2.92 | .74 | Medium |
| Visual Contact | 14 | 8.3 | 12 | 6.7 | 35 | 20.5 | 37 | 21.5 | 74 | 43.0 | 3.84 | .77 | High |
| Comprehension | 4 | 2.0 | 9 | 5.3 | 29 | 16.6 | 52 | 30.0 | 80 | 46.3 | 4.13 | .93 | High |
| Support | 9 | 5.1 | 8 | 4.8 | 34 | 20 | 40 | 23.3 | 81 | 47.0 | 4.02 | 1 | High |
| Listening | 4 | 2.3 | 10 | 5.8 | 25 | 14.5 | 41 | 23.8 | 92 | 53.5 | 4.2 | 1.04 | High |
| Confidence | 4 | 2.3 | 10 | 5.8 | 37 | 21.5 | 40 | 23.3 | 81 | 47.1 | 4.07 | 1.06 | High |
| Flexibility | 9 | 5.2 | 13 | 7.6 | 56 | 32.6 | 34 | 19.8 | 60 | 34.9 | 3.72 | 1.17 | High |

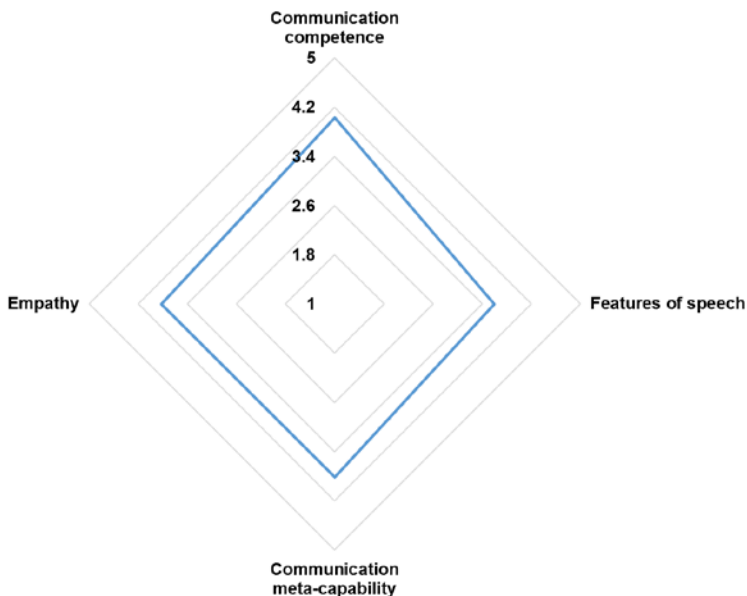
| Characteristic | N | | CN | | AV | | CS | | S | | \bar{x} | DE | Level |
|----------------|----|------|----|-----|----|------|----|------|----|------|-----------|-----|-------|
| | n | % | n | % | n | % | n | % | n | % | | | |
| Respect | 22 | 12.6 | 15 | 8.8 | 33 | 19.3 | 33 | 19.0 | 69 | 40.3 | 3.66 | .79 | High |
| Empathy | 13 | 7.5 | 13 | 7.8 | 36 | 21.1 | 38 | 22.2 | 71 | 41.4 | 3.82 | .65 | High |

Note. N: Never; CN: Almost never; AV: Sometimes; CS: Almost always; S: Always.

In synthesis, the assertive communication meta-capability presented a weighted medium value of $3.82 \pm .2$ which locates it in general lines in a high level of presence in the professors of the programs of Nursing of the UNEFAB during the second period of 2011. Nevertheless, this value evidences, according the range of the complete scale (1-5), that there are elements which were not found in optimal representation (Very high level), maintaining all the dimensions associated to the communication meta-capability in one same level of presence (Figure 1).

Figure 1

Values obtained by the communication meta-capability and each one of its dimensions (communication competence, Features of the speech and Empathy) in the professors of the programs of Nursing of the UNEFAB, nucleus Maracay, Venezuela, second period 2011.



On the other hand, from the total of students for both careers, it was observed that 55.8% (96 students) did not present a condition of repetition of subjects, while 40.7% (70 students) do repeat at least one subject, leaving only a 3.5% (6 students) who did not respond if they repeat or not. The ANOVA allowed to determine that there are no significant differences ($P > .05$) between the perceptions of the students who repeated subjects and those who did not, for none of the characteristics studied as well as for the variable assertive communication meta-capability of the professors evaluated, showing in that manner similar average values between them (Table 6).

Table 6

Values of the level of presence of the characteristics associated with the assertive communication meta-capability according to the condition of repetition of the students of Nursing of the UNEFAB, Maracay, second period 2011.

| Characteristic | Condition | n | \bar{x} | DE | F | P |
|------------------------------------|-----------|----|-----------|------|--------|------|
| Presentation of the information | Repeats | 70 | 4.29 | .65 | 3.042 | .083 |
| | No repeat | 96 | 4.10 | .70 | | |
| Coherence of the messages | Repeats | 70 | 4.15 | .48 | 3.516 | .063 |
| | No Repeat | 96 | 3.98 | .61 | | |
| Cohesion and linguistic correction | Repeats | 70 | 3.59 | .95 | .563 | .454 |
| | No repeat | 96 | 3.69 | .83 | | |
| Effectiveness of the messages | Repeats | 70 | 4.25 | .62 | 2.380 | .125 |
| | No repeat | 96 | 4.09 | .73 | | |
| Prosodic Features | Repeats | 70 | 3.52 | .71 | 20.366 | .126 |
| | No repeat | 96 | 3.34 | .78 | | |
| Paralinguistic features | Repeats | 70 | 3.76 | .72 | 10.890 | .171 |
| | No repeat | 96 | 3.61 | .71 | | |
| Extralinguistic features | Repeats | 70 | 3.76 | .53 | .066 | .797 |
| | No repeat | 96 | 3.73 | .57 | | |
| Proxemic features | Repeats | 70 | 3.01 | .71 | .896 | .345 |
| | No repeat | 96 | 3.13 | .77 | | |
| Visual contact | Repeats | 70 | 3.79 | .73 | .785 | .377 |
| | No repeat | 96 | 3.90 | .81 | | |
| Comprehension | Repeats | 70 | 4.14 | .94 | .001 | .974 |
| | No repeat | 96 | 4.14 | .94 | | |
| Support | Repeats | 70 | 4.03 | 1.01 | .001 | .982 |
| | No repeat | 96 | 4.03 | 1.00 | | |
| Listening | Repeats | 70 | 4.27 | 1.02 | .488 | .486 |
| | No repeat | 96 | 4.16 | 1.07 | | |
| Confidence | Repeats | 70 | 4.14 | 1.09 | .295 | .588 |
| | No repeat | 96 | 4.05 | 1.04 | | |
| Flexibility | Repeats | 70 | 3.71 | 1.16 | .001 | .981 |
| | No repeat | 96 | 3.72 | 1.19 | | |

| Characteristic | Condition | n | \bar{x} | DE | F | P |
|---|-----------|----|-----------|-----|------|------|
| Respect | Repeats | 70 | 3.64 | .77 | .176 | .675 |
| | No repeat | 96 | 3.69 | .81 | | |
| Assertive communication Meta-capability | Repeats | 70 | 3.86 | .43 | .675 | .412 |
| | No repeat | 96 | 3.80 | .54 | | |

Note. n: quantity / de students \bar{x} : weighted average / DE: standard deviation / F: statistic of the test ANOVA / P: value of probability on a level of 5%.

Discussion and conclusions

The results obtained in the dimension communication competence when obtaining a High level of presence, represent what was stated by Cabrera and Pelayo (2001), who indicate that the communication competence allow the speaker to appropriate its linguistic code to transmit, inform and present the knowledge that he/she desires to teach during the communication act in a convincing manner, so that it is translated in an efficient communication. In the same way, an important aspect that it is the style of the professor to handle the classroom, in view that the interaction styles imply that the students interact more between each other that with the same professor, presenting lower levels of presence of communication competence in comparison with intervention styles that are referred to a bigger contact with the students (Hoon et al., 2017); however, this aspect should not be determining in the presence of communication abilities in the professors, because in every moment of the communication, this must be the most efficient possible.

In the features of the speech, specially the ones of type paralinguistic and extralinguistic, which make reference to the vocalizations (throat cleaning, extensions, sighs, laughs and whistles), its high level of presence shows relevant aspects in the communication of the professors; according to Cabrera and Pelayo (2001) these characteristics of the issuer are capable to reveal his/her moods and intentions, even aspects typical of the age and gender of the individual (issuer) in general, standing out that in occasions these features can cause errors in the communication if its issue is not in accordance with the communication situation. In this sense, the level evidencing in the features of the speech by the professors of the program of Nursing of the UNEFAB, nucleus Maracay, is in accordance to show in the students an emotional connection, which opens the interaction towards other of the important characteristics of the assertive communication which is the empathy.

The empathy obtained in general, a value that locates in a high level of presence in the professors evaluated, which indicates that the students considered that these established empathy with them, showing support, generation of confidence, listening and comprehension in the students. In medium level of presence, the professors show the manifestations of proxemic elements, associated with the physical distance that they establish with the students, which indicates that maybe the students state that in a certain measure, there is invasion of their physical space or a lot of approximation. Nevertheless, in general, the presence of comprehension and understanding towards the students is shown, outstanding the empathy for being an element that improves the communication, the comprehension and allows to induce answers desired in the interlocutors (Sims, 2017; Turtorean, 2016). On the other hand, we observed indicators with a wide variation in the answer (bigger standard deviation) within the dimen-

sion empathy (support, listening, confidence, and flexibility) and that imply a more heterogeneous opinion in the students, with opinion in both extremes of the spectrum of answers (never-always), even if they were a little more balanced to the presence to the presence of the empathic elements.

Regarding the condition of repetition of the students, by not finding significant differences between the answers of the repeating and non-repeating students, it cannot be confirmed that this condition influenced the results obtained; therefore, the opinions of the students are considered sufficiently valid to evaluate the meta-capability of the professors of the programs of Nursing of the UNEFAB, nucleus Maracay, in a high level of presence.

In conclusion, the professors of the careers Bachelor's Degree and H.T. of Nursing of the UNEFAB, nucleus Maracay presented a high level of assertive communication meta-capability during the period evaluated. In this sense, the professors, in the opinion of the students, presented a high communication competence, features of the speech and empathy, for that reason they were capable to communicate their ideas in an open, honest and balanced manner, maintaining the esteem, respect and self-confidence, without injuring or damaging, as well as searching in every moment a benefit for the students. The abovementioned, as a consequence of a communication competence that presented the biggest strength and domain of the professor of Nursing of the UNEFAB, nucleus Maracay, during his/her interaction with the student in the classroom, followed by the empathy and finally the features of the speech, standing out that in all the aspects evaluated in the assertive communication meta-capability of the professors, there was a high level, that can even be improved to a very high level, as maximum level possible within the instrument applied.

In view that the process of assertive meta-communication can be considered complex, because different factors of psychological, cognitive and procedural characteristics intervene, it is necessary to establish a constant evaluation of the university professors in order to identify in that manner the strengths and weaknesses in the processes of teaching-learning from the capabilities of this human resource.

Finally, by being the results limited to an educational course of the year 2011, they are considered valid for the conditions studied but not for the current date. Therefore, the value of this study is defined mainly by the methodology and the possible use of this, in order to evaluate the assertive communication meta-capability in professors.

References

- Aguilar, J. J., & Yepes, E. R. (2006). Gestión de capacidades dinámicas e innovación: Una aproximación conceptual. *Ciencias da Administração*, 8(15), 1-15.
- Albaladejo Mur, M. (2008). La comunicación no verbal en el aula. *Padres y Maestros / Journal of Parents and Teachers*, 314, 9-13.
- Arias, F. (2016). *El Proyecto de Investigación: Introducción a lo metodología científica* (Séptima edición). Episteme.
- Arnold, E. C., & Boggs, K. U. (2019). *Interpersonal Relationships E-Book: Professional Communication Skills for Nurses*. Elsevier Health Sciences.
- Beneitone, P., Esquetini, C., González, J., Maletá, M. M., Siufi, G., & Wagenaar, R. (2007). *Informe Final del Proyecto Tuning América Latina 2004-2007: Reflexiones y perspectivas de la Educación Superior en América Latina* (p. 432) [Informe Final]. Tuning

- América Latina. http://tuning.unideusto.org/tuningal/index.php?option=com_docman&task=docclick&Itemid=191&bid=54&limitstart=0&limit=5
- Cabrera, A., & Pelayo, N. (2001). *Lenguaje y comunicación: Conceptos básicos, aspectos teóricos generales, características, estructura, naturaleza y funciones del lenguaje y la comunicación* (Número 2). El Nacional.
- Flórez Ochoa, R. (2005). *Pedagogía del Conocimiento* (2da ed.). McGraw-Hill.
- Gultekin, A., Ozdemir, A. A., & Budak, F. (2018). The Effect of Assertiveness Education on Communication Skills Given to Nursing Students. *International Journal of Caring Sciences*, 11(1), 395–401.
- Hernández, R., Fernández, C., & Baptista, L. (2014). *Metodología de la investigación* (Sexta edición). McGraw-Hill.
- Hoon, T. S., Nasaruddin, N. F. B. M., & Singh, P. (2017). Communication Skills among Different Classroom Management Styles Teachers. *Asian Journal of University Education*, 13(1), 67–78.
- Joseph, P. (2017). *The new humans rights: Reinventing the economy to end oppression*. Benbella.
- Khan, A., Khan, S., Zia-Ul-Islam, S., & Khan, M. (2017). Communication Skills of a Teacher and Its Role in the Development of the Students' Academic Success. *Journal of Education and Practice*, 8(1), 18–21.
- Levin, J. A., & Moore, J. A. (1977). Dialogue-Games: Metacommunication Structures for Natural Language Interaction*. *Cognitive Science*, 1(4), 395–420. https://doi.org/10.1207/s15516709cog0104_2
- Omura, M., Levett, T., & Stone, T. E. (2019). Design and evaluation of an assertiveness communication training programme for nursing students. *Journal of Clinical Nursing*, 28(9–10), 1990–1998. <https://doi.org/10.1111/jocn.14813>
- Omura, M., Maguire, J., Levett, T., & Stone, T. E. (2016). Effectiveness of assertive communication training programs for health professionals and students: A systematic review protocol. *JBISIRIR-2016-003158*
- Pipa, M. D., & Jaradat, M. (2010). Assertive Communication Skills. *Annales Universitatis Apulensis Series Oeconomica*, 12(1), 649–656.
- Sims, C. M. (2017). Do the Big-Five Personality Traits Predict Empathic Listening and Assertive Communication? *International Journal of Listening*, 31(3), 163–188. <https://doi.org/10.1080/10904018.2016.1202770>
- Turtorean, M. A. (2016). *Assertive Communication at Work. Communication Styles in the Classroom* (SSRN Scholarly Paper ID 2829874). Social Science Research Network. <https://doi.org/10.2139/ssrn.2829874>
- United Nations to Education, Science and Culture Organization. (2009). *Conferencia Mundial sobre la Educación Superior – 2009: La nueva dinámica de la educación superior y la investigación para el cambio social y el desarrollo*. UNESCO. http://www.unesco.org/education/WCHE2009/comunicado_es.pdf
- Watzlawick, P., Beavin, J., & Jackson, D. D. (2011). *Pragmatics of Human Communication: A Study of Interactional Patterns, Pathologies and Paradoxes*. W. W. Norton & Company.