



## Enterprising tendency and interpersonal communication of nursing students

Tendência empreendedora e comunicação interpessoal de estudantes de enfermagem  
Tendencia emprendedora y comunicación interpersonal de estudiantes de enfermería

### How to cite this article:

Fernandes Junior RB, Santos JLG, Copelli FHS, Balsanelli AP. Enterprising tendency and interpersonal communication of nursing students. Rev Esc Enferm USP. 2020;54:e03615. doi: <https://doi.org/10.1590/S1980-220X2018056603615>

**Roberto Barbosa Fernandes Junior**<sup>1</sup>

**José Luís Guedes dos Santos**<sup>2</sup>

**Fernanda Hannah da Silva Copelli**<sup>3</sup>

**Alexandre Pazetto Balsanelli**<sup>4</sup>

<sup>1</sup> Universidade Federal de São Paulo, Escola Paulista de Enfermagem, São Paulo, SP, Brazil.

<sup>2</sup> Universidade Federal de Santa Catarina, Departamento de Enfermagem, Florianópolis, SC, Brazil.

<sup>3</sup> Universidade Federal de Santa Catarina, Programa de Pós-Graduação em Enfermagem, Florianópolis, SC, Brazil.

<sup>4</sup> Universidade Federal de São Paulo, Escola Paulista de Enfermagem, Departamento de Administração em Serviços de Saúde e Enfermagem, São Paulo, SP, Brazil.

**Objective:** To identify general enterprising tendency and competence in interpersonal communication of nursing students and correlate them with personal and academic variables. **Method:** A cross-sectional study at a university in São Paulo, SP, Brazil. Three instruments were used for data collection: 1 - A questionnaire with personal and academic variables; 2 - The General measure of Enterprising Tendency test (GET); and 3 - The Interpersonal Communication Competence Scale (*Escala de Competência em Comunicação Interpessoal – ECCI*). **Results:** The sample consisted of 150 participants. The highest averages were on the GET 'Need for Achievement' dimension ( $M = 7.88$ ;  $SD = 2.12$  and median = 8.00) and the ECCI 'Availability' dimension ( $M = 12.50$ ;  $SD = 1.99$  and median = 13.00). Students in the less advanced periods of the course obtained higher averages on the GET 'Drive and Determination' dimension ( $p = 0.032$ ), while those who performed paid work a higher average on the ECCI 'Interaction Management' dimension ( $p = 0.030$ ). **Conclusion:** Higher Education Institutions should look for strategies to teach the content of these competencies in a more dynamic and engaging way throughout education which encompass the student's capacity and the needs of the labor market.

### DESCRIPTORS

Students, Nursing; Education, Nursing; Competency-Based Education; Communication; Interpersonal Relations; Health Management.

### Corresponding author:

Alexandre Pazetto Balsanelli  
Rua Napoleão de Barros, 754,  
sala 322, Vila Clementino,  
CEP 04024-002 – São Paulo, SP, Brazil.  
[alexandre.balsanelli@unifesp.br](mailto:alexandre.balsanelli@unifesp.br)

Received: 01/03/2019  
Approved: 03/03/2020

## INTRODUCTION

The development of skills for care management is increasingly important for inserting nurses into the job market. In this sense, the challenge of helping students achieve high levels of competence in professional practice is up to the nursing schools<sup>(1)</sup>. For this reason, nursing education in Brazil has been undergoing transformations in training workers with an adequate profile to the population's health demands<sup>(2)</sup>. With the need for changes in the profile of nursing students, it is the responsibility of Higher Education Institutions (HEIs) to adapt the curricula of the undergraduate nursing course in accordance with the National Curriculum Guidelines (DCN)<sup>(3)</sup>.

In this logic, the professional training of nurses started to be based on competences, with the ability to be a critical-reflective professional with decisions being made based on scientific knowledge, along with effective interpersonal communication, leadership, administration and continuous education<sup>(4)</sup>. A competent professional is one who has a balance between knowledge, skill and attitude. Thus, individuals with such characteristics are better prepared for the job market. It is noticed that university education and the supply of qualified labor are interdependent topics. For this reason, investment in qualified education is beneficial for both, and especially for the population which receives better quality service.

In this study, the investigation objects are the entrepreneurial and interpersonal communication skills among nursing students, as they are essential for the future nurse to respond to current health needs. Thus, the question being examined is: How are the entrepreneurship and interpersonal communication skills among nursing students? Is there a relationship between these competencies and personal and academic variables?

Although entrepreneurship is untapped in nursing education<sup>(5)</sup> and is not explicitly presented as a necessary competence for training professional nurses, it is believed that nursing education must be based on creativity, innovation and entrepreneurship<sup>(6)</sup> in order to not only meet the needs of the labor market, but also the rapid changes in health in the everyday world<sup>(7)</sup>.

Nurses are trained to identify problems and prepare solutions to the adversities encountered during a work shift. However, not all professionals solve problems in a similar way, and what differentiates them is their ability to apply these characteristics and innovation to solve problems. Entrepreneurial individuals have greater facility to develop strategies and achieve goals<sup>(8)</sup>; in addition, they have greater adaptability in their careers, according to a study carried out in Istanbul<sup>(8)</sup>. For this reason, inserting entrepreneurship in university education is a great solution to stimulate developing this competence and for training entrepreneurial professionals, as the act of entrepreneurship has been considered an essential path for changes both in the health area aspect and for the country as a whole<sup>(9)</sup>.

However, interpersonal communication is a necessary skill in training nurses and has been recognized by teachers and policy makers in education for a long time<sup>(9)</sup>, being

present in nurses' daily lives from the beginning to the end of their workday. Therefore, such competence must be improved in professional and professional-user relationships. It is up to the nurse to plan situations in which verbal and non-verbal communication are efficiently established, and that aspects which negatively interfere in the process are identified and corrected<sup>(4)</sup>.

The combination of interpersonal communication and entrepreneurship skills enables nurses to promote improvements in their work environment and assists in the leadership and involvement of the team with the changes to be made, so that everyone works towards this goal. Thus, the importance of conducting this research in the context of nursing is evidenced, making it possible to trace correlations between the knowledge incorporated by the students and that expected regarding teaching these skills throughout the Nursing Undergraduate course, especially in view of the scarcity of studies with this focus in health and specifically in nursing<sup>(5-6,10)</sup>. Moreover, in this context it is intended to reflect on the entrepreneurial training of nurses as suggested in the literature reviews<sup>(10-11)</sup>, contributing to fill this knowledge gap.

Therefore, this study aims to: identify the general enterprising tendency and the competence level in interpersonal communication of nursing students; and to correlate general enterprising tendency and interpersonal communication with personal and academic variables.

## METHOD

### STUDY DESIGN

This is a cross-sectional study.

### SCENARIO

The study scenario was the Nursing Graduation Course of a public Higher Education Institution located in the city of São Paulo, SP, Brazil.

### POPULATION

The year 2017 was considered as the base year of identification of the series, in which there were 311 students regularly enrolled. The population size references were obtained by one of the researchers from the undergraduate nursing course secretariat, which has direct control of active enrollments.

The inclusion criterion implemented was to be regularly enrolled in the undergraduate nursing course. Exclusion criteria were participants who were on leave, absent from the course or unavailable during the data collection period.

Of the 311 students approached, 150 (48.23%) answered the data collection instruments, thus constituting the convenience sample.

### DATA COLLECTION

The data collection period was from November 2017 to February 2018. Students were approached in the afternoon about the research objectives at the beginning of the curricular classes with prior authorization of the professor

responsible for the content of that day. They received the Informed Consent Form after one of the researchers had clarified any of their questions. Those who agreed to participate signed the informed consent form and immediately received the printed collection instruments to be filled out manually in the classroom and returned to the researcher who remained in the room waiting. There was no identification of the participants and no reward for joining the study.

Personal and academic variables were defined to characterize the students (gender, age, marital status, year of entry into the course, course period, previous graduation, presence of a technical level in nursing, performance of paid activity, scientific initiation, extension programs, monitoring program and if they had a research/extension grant).

Data collection consisted of using three instruments: 1) a questionnaire prepared by the authors with personal and academic variables; 2) The General measure of Enterprising Tendency Test (GET); and 3) The Interpersonal Communication Competency Scale (ECCI).

The GET presents its own methodology for identifying entrepreneurial traits and psychological characteristics of the participants. It was developed at the Business and Industrial Training Unit at Durham University Business School, and has been used in Brazilian studies<sup>(12-14)</sup>, but has not been validated. The test consists of marking “I agree” or “I disagree” for each of the 54 statements, which are divided into five dimensions: need for achievement, need for autonomy/independence, creative tendency, propensity for taking calculated risks and drive and determination. A score is assigned for each dimension according to the following rule: one point is added for each disagreement noted on odd questions; one point is added for agreement on even questions. Thus, the score for each question is added and the final sum of each dimension is obtained. The maximum GET score for the ‘Need for achievement’ dimension is 12 and the average score is 9, while the maximum score for the ‘Need for autonomy/independence’ dimension is 6 and the average is 4. The maximum score for the other dimensions is 12 and the average is 8. In the end, the number of maximum scores that the respondent reached is analyzed: if they reached the maximum score in five dimensions, they have a very high level of enterprising tendency; in four, they have a high level; in three, average; in two, a low level; in one or none, very low level.

The Interpersonal Communication Competency Scale, validated in Brazil in 2014<sup>(15)</sup>, aims to assess the individual’s ability to exchange information effectively between two or more people through verbal and non-verbal communication and language codes. It consists of 17 items grouped into five dimensions: Environment Control, Self-disclosure, Assertiveness, Interaction Management and Availability. The ‘Environmental Control’ dimension assesses the individual’s suitability for an environment to achieve their goals. The ‘Self-disclosure’ dimension represents the ability to demonstrate ideas and thoughts through communication. The ‘Assertiveness’ dimension assesses firmness and decision in words and attitudes. The ‘Interaction Management’ dimension is related to managing and interpreting verbal or non-verbal reactions of the message recipient during a conversation. The ‘Availability’ dimension assesses whether

the individual is open and available for communication. The measurement scale originally used was the five-point Likert scale. The inverse items (“I have difficulty defending myself” and “It is difficult to find the right words to express myself”) were recoded to obtain the total score.

## DATA ANALYSIS AND PROCESSING

Descriptive statistics using the mean, median, standard deviation and 95% confidence interval were used. Student’s t-parametric tests and Pearson’s correlation were used for variables with normal distribution, while the Mann-Whitney U and Spearman correlation tests were used for the other variables. Cohen or Rosenthal coefficients were used to verify the effect of differences between variables, with the following ranges for the Rosenthal coefficients: small between 0.200 and 0.499; medium between 0.500 and 0.799; and large above 0.800; and for Cohen: small between 0.100 and 0.299; medium between 0.300 and 0.500; and large above 0.500<sup>(16)</sup>. The adopted value of statistical significance was equal to 5% ( $p < 0.05$ ). Cronbach’s alpha was also adopted to verify the reliability of the GET and ECCI. The IBM SPSS Statistics software program version 23.0 was used.

## ETHICAL ASPECTS

This study was submitted to the Research Ethics Committee of the Hospital São Paulo of the Universidade Federal de São Paulo and approved under opinion No. 2.156.843 of July 5, 2017. The present study followed the guidelines recommendations of Resolution 466/2012 of the National Health Council in order to meet all ethical aspects. All study subjects had their rights ensured by clarifying the objectives and the proposed method and signing the Informed Consent Form.

It is noteworthy that this study is part of a multicenter project in which other Brazilian universities were researched. However, the data presented herein are only for one of them.

## RESULTS

It was identified that 126 (84%) of the 150 study participants are female, and 24 (16%) are male. The students’ age range was  $M = 22.57$  years ( $SD = 3.04$ , median = 22.00, minimum 18 years and maximum 41 years). Regarding marital status, 140 (93.33%) were single and 9 (6.67%) were married or in a stable relationship. In relation to the course period with 2017 as the base year, 26 (17.33%) were taking the 1<sup>st</sup> year of the Course, 53 (35.34%) were in the 2<sup>nd</sup> year, 48 (32.00%) in the 3<sup>rd</sup>, and 23 (15.33%) in the 4<sup>th</sup> year. Regarding academic data, 8 (5.33%) of the students had some previous degree, 14 (9.33%) had a technical level in nursing, and 10 (6.67%) perform paid work. There were 96 students (64.00%) participating in scientific initiation or extension projects, of which 30 (20.00%) are research fellows and 16 (10.67%) are extension group fellows. Finally, 10 (6.67%) develop activities as an assistant.

Table 1 presents the central tendency and dispersion measurements of the total score and for each dimension of the General measure of Enterprising Tendency Test (GET).

**Table 1** – Descriptive values of the total score and for each dimension of the General measure of Enterprising Tendency Test – São Paulo, SP, Brazil, 2017.

GET	M [95%CI]	SD	Median [95%CI]	Minimum	Maximum
Need for achievement	7.88 [7.55. 8.21]	2.12	8.00 [8.00. 8.00]	2.00	12.00
Need for autonomy	3.16 [2.97. 3.35]	1.33	3.00 [3.00. 4.00]	1.00	6.00
Creative tendency	5.83 [5.51. 6.17]	1.98	6.00 [6.00. 6.00]	0.00	11.00
Propensity to take calculated risks	6.35 [6.07. 6.62]	1.77	6.00 [6.00. 7.00]	2.00	11.00
Drive and determination	7.65 [7.33. 7.96]	2.03	8.00 [8.00. 8.00]	3.00	12.00
Total	30.87 [30.01. 31.73]	5.47	30.00 [30.00. 31.00]	17.00	42.00

Legend: GET: General measure of Enterprising Tendency Test; M: Mean; SD: Standard deviation; CI: confidence interval – calculated by the corrected and accelerated bias method based on 2000 bootstrap samples.

According to Table 1, the ‘Creative tendency’ dimension was the smallest. In addition, it is worth mentioning that none of the participants reached the maximum score (12.00) in the ‘Creative tendency’ and ‘Propensity to take calculated risks’ dimensions, and that at least one of the students did not get this score in the ‘Creative tendency’ dimension.

It is noteworthy that the internal consistency of GET by Cronbach’s alpha obtained in this study was 0.80.

Table 2 shows the statistically significant correlations of the GET dimensions with the personal and academic variables, as well as the tests used and the Cohen or Rosenthal coefficient measurements.

**Table 2** – Correlations and statistically significant differences in the dimensions of the General measure of Enterprising Tendency Test with the personal and academic variables – São Paulo, SP, Brazil, 2017.

GET Dimensions	Marital status (single)	Year of entry into the course (first years)	Period of the course (1 <sup>st</sup> and 2 <sup>nd</sup> years)	Gender (female)
Need for achievement	Mann-Whitney U test p=0.047 r=0.162	Spearman’s correlation test p=0.004 r=0.234	Spearman’s correlation test p=0.005 r=-0.227	ns
Propensity to take calculated risks	ns	ns	ns	Student’s t-test p=0.019 d=0.527
Drive and determination	ns	ns	ns	Student’s t-test p=0.032 d=0.483
Total	ns	Spearman’s correlation test p=0.010 r=0.208	Spearman’s correlation test p=0.008 r=0.215	Student’s t-test p=0.042 d=0.456

Legend: GET: General measure of Enterprising Tendency Test; p: p-value; d: Cohen coefficient; r: Rosenthal coefficient; ns: not significant.

None of the variables showed a statistically significant correlation or difference for the ‘Need for Autonomy/Independence’ and ‘Creative Tendency’ dimensions.

Table 3 presents the central tendency and dispersion measures of the total score and for each dimension of the Interpersonal Communication Competency Scale (ECCI).

**Table 3** – Descriptive values of the total score and for each dimension of the Interpersonal Communication Competency Scale – São Paulo, SP, Brazil, 2017.

ECCI	M [95%CI]	SD	Median [95%CI]	Minimum	Maximum
Environmental control	13.52 [13.08. 13.96]	2.78	14.00 [14.00. 14.00]	5.00	20.00
Self-disclosure	14.89 [14.41. 15.33]	2.82	15.00 [15.00. 15.00]	8.00	20.00
Assertiveness	14.27 [13.85. 14.69]	2.61	15.00 [15.00. 15.00]	7.00	20.00

continue...

...continuation

ECCI	M [95%CI]	SD	Median [95%CI]	Minimum	Maximum
Interaction management	8.25 [8.02. 8.47]	1.47	8.00 [8.00. 8.00]	3.00	10.00
Availability	12.50 [12.19. 12.81]	1.99	13.00 [13.00. 13.00]	5.00	15.00
Total	63.42 [62.25. 64.56]	7.47	63.00 [62.00. 65.00]	38.00	81.00

Legend: ECCI: Interpersonal Communication Competence Scale; M: Mean; SD: Standard deviation and CI: confidence interval – calculated by the corrected and accelerated bias method based on 2000 bootstrap samples.

The internal consistency of the ECCI by Cronbach's alpha in this study was 0.75.

Table 4 shows the statistically significant correlations and differences of the ECCI dimensions with the personal and

academic variables, as well as the tests used and the Cohen or Rosenthal coefficient measures.

There were no statistically significant correlations or differences for the other variables and dimensions of the ECCI not mentioned.

**Table 4** – Correlations and statistically significant differences in the Interpersonal Communication Competency Scale dimensions with personal and academic variables – São Paulo, SP, Brazil, 2017.

ECCI Dimensions	Year of entry into the course (first years)	Period of the course (1 <sup>st</sup> and 2 <sup>nd</sup> years)	Being a Nursing technician	Marital status (married)	Perform paid work
Environmental control	Spearman's correlation test p=0.016 r=0.197	Spearman's correlation test p=0.033 r=-0.174	ns	ns	ns
Self-disclosure	ns	ns	Student's t-test p=0.0032 d=0.610	ns	ns
Assertiveness	ns	ns	ns	Mann-Whitney U test p=0.016 r=0.195	ns
Availability	ns	ns	ns	Mann-Whitney U test p=0.048 r=0.101	ns
Interaction management	ns	ns	ns	ns	Student's t-test p=0.030 r=0.178

Legend: ECCI: Interpersonal Communication Competence Scale; p: p-value; d: Cohen coefficient; r: Rosenthal coefficient; ns: not significant.

## DISCUSSION

This study presented limitations regarding the sample size, considering that there was an adhesion of 48.23% of the total number of students. However, it advances knowledge by correlating two important skills for training nurses: entrepreneurship and interpersonal communication, thus contributing to nursing education.

It can generally be said that the students in this research had a medium-high level of general enterprising tendency. A study carried out in Istanbul concluded that nursing students with this result are better adapted to the profession<sup>(8)</sup>. However, it is noteworthy that the highest achieved average was in the 'Drive and Determination' dimension; therefore, students have defining characteristics for this dimension such as having confidence in themselves, being motivated when facing a significant obstacle and looking for alternative strategies. A similar result was obtained in a study<sup>(17)</sup> with the aim of identifying the enterprising profile of nursing residents at a public university. The highest average obtained in the 'Drive and Determination' dimension suggests that

undergraduate or residency nursing students are optimistic and determined when looking for new opportunities and knowledge. In addition, the analysis of the presence of these characteristics in students is essential for developing a culture of training enterprising nurses who are capable of changing their field of action according to the market needs.

On the other hand, the lowest average achieved was in the 'Creative Tendency' dimension. A study on the social representations of entrepreneurship reveals that creativity, together with innovation, are central elements of entrepreneurship<sup>(18)</sup>. Furthermore, a study conducted at a private university in the city of São Paulo also showed the 'Creative Tendency' as the lowest average reached by students, which allows us to suppose that there is a deficiency in the stimulus of creation, imagination and problem-solving on the part of HEIs<sup>(19)</sup>. In this sense, it is necessary to train nurses who, in addition to technical-scientific knowledge and its application, are committed to developing managerial and intrapersonal skills such as versatility, perception of situations and intuition<sup>(20)</sup>, in addition to content related to the business world<sup>(11)</sup>.

Another interesting statistical data extracted from the GET is that students from less advanced periods of the course obtained a higher average than students from more advanced periods of the course in the 'Drive and Determination' dimension, meaning that students have entrepreneurial characteristics when they enter university such as thinking about alternative strategies, looking for solutions and enjoying new challenges, but they lose those characteristics during the course. It is necessary for the HEI curriculum to include curricular units which encourage students to have entrepreneurial characteristics and interpersonal skills, because this makes a difference in the selection processes of employing institutions<sup>(1)</sup>.

According to a study<sup>(21)</sup> carried out at an HEI in Rio Grande do Sul state which interviewed students of the undergraduate course in Administration and also used GET as an instrument of data collection, it was evidenced that students obtained better results in the 'Drive and Determination' dimension, as in the present study. This data allows one to conclude that undergraduate students have the characteristics inherent to this dimension, such as being proactive and convinced of their determinations, and do not measure their effort to realize their dreams. HEIs should be aware of this profile of incoming students and develop strategies which take advantage of this potential to train more dedicated professionals and who are aware of their role in society<sup>(22)</sup>.

Students had high ECCI averages both by dimension and in the final result of the scale. The highest average reached was in the 'Availability' dimension. According to the scale validation study in Brazil<sup>(15)</sup>, this dimension is responsible for pointing out individuals who are available and are open to interpersonal communication. Looking is important for the communication process in this dimension, because in order to be available, you need to look at the other person, pay attention and show interest. A study<sup>(23)</sup> with the objective of analyzing the communication of the nursing student in listening to patients in psychological distress admitted to a psychiatric hospital showed that the student must be open and available to communicate for the dialogue between students and patients to be effective. However, it is recommended that the opening for effective communication be strengthened in nursing education.

The lowest average reached by the students was in the 'Environmental Control' dimension. This dimension is responsible for showing the person's ability to adapt to different environments to achieve their goals. In addition, it assesses how space and environment influence people's conversation, expression and persuasion. In a study carried out in central Portugal<sup>(24)</sup>, also with nursing students, it was evidenced that the vast majority of students (85%)

considered the professional and technical skills of care to be more important to the detriment of developing interpersonal relationships. Thus, the importance of HEIs to develop interpersonal skills in their curricula such as communication and entrepreneurship is evident, as they are as important as professional skills and are necessary for nurses to provide care and manage the environment in which care takes place<sup>(11,25)</sup>.

Other important data extracted from the ECCI is that students who perform paid activities have a higher average than those who do not in the 'Interaction Management' dimension. This dimension represents the individual's ability to demonstrate understanding during conversation and perceive what people feel through non-verbal cues. This difference between students who perform paid activities and those who do not can be attributed to the fact that students with paid activity have access to different opportunities outside the classroom than those who do not work. This is because teaching communication in the classroom has limitations, especially in the relationship between theory and practice<sup>(26)</sup>.

The performance of studies with the objective of analyzing enterprising tendency and interpersonal communication in other areas in addition to health enriches the research on such topics, enabling for more scientifically sound comparisons and inferences, and highlight the importance of studying students' understanding of the relevance, teaching and the applicability of these skills. Thus, it is possible to understand how students see the content so that curricula are taught in a more appropriate way for each course, and further so that they understand the need for learning for their professional training.

## CONCLUSION

The highest averages achieved in the scenario of this study were in the GET 'Need for Achievement' dimension and in the ECCI 'Availability' dimension. In addition, it is noteworthy that the less advanced periods of the course obtained higher averages in the GET 'Drive and Determination' dimension, and that students who performed paid activity obtained a higher average in the ECCI 'Interaction Management' dimension. Thus, due to the importance of Entrepreneurship and Interpersonal Communication in the nursing work environment, employing companies must encourage professionals to improve them by supporting continuing education, congresses, symposiums and alternatives which keep their employees up to date and competent to perform care. Likewise, HEIs should look for strategies to teach the content of these competencies in a more dynamic and engaging way throughout the training which encompass the student's capacity and the labor market needs.

## RESUMO

**Objetivo:** Identificar tendência empreendedora geral e competência em comunicação interpessoal de estudantes de enfermagem e correlacioná-las com variáveis pessoais e acadêmicas. **Método:** Estudo transversal numa universidade de São Paulo, SP, Brasil. Para coleta de dados realizada, utilizou-se três instrumentos: 1- Questionário com variáveis pessoais e acadêmicas; 2- Teste de Tendência Empreendedora Geral (TEG) e 3 - Escala de Competência em Comunicação Interpessoal (ECCI). **Resultados:** A amostra foi de 150 participantes. As maiores médias foram nos Domínios Necessidade de Sucesso do TEG (M=7,88; DP=2,12 e mediana=8,00) e

Disponibilidade da ECCI (M=12,50; DP=1,99 e mediana=13,00). Os estudantes dos períodos menos avançados do curso obtiveram maiores médias no domínio Impulso e Determinação do TEG (p=0,032) e aqueles que realizavam atividade remunerada, maior média em “Manejo das Interações” da ECCI (p=0,030). **Conclusão:** As Instituições de Ensino Superior devem procurar estratégias para ensinar o conteúdo dessas competências de uma forma mais dinâmica e palatável ao longo da formação, que acompanhe a capacidade do estudante e as necessidades do mercado de trabalho.

## DESCRITORES

Estudantes de Enfermagem; Educação em Enfermagem; Educação Baseada em Competências; Comunicação; Relações Interpessoais; Gestão em Saúde.

## RESUMEN

**Objetivo:** Identificar las tendencias empresariales generales y las habilidades de comunicación interpersonal de los estudiantes de enfermería y correlacionarlas con las variables personales y académicas. **Método:** Estudio transversal en una universidad de São Paulo, SP, Brasil. Para la recopilación de datos se utilizaron tres instrumentos: 1 - Cuestionario con variables personales y académicas; 2 - Prueba de tendencias empresariales generales (TEG); y 3 - Escala de competencia en comunicación interpersonal (ECCI). **Resultados:** La muestra fue de 150 participantes. Las medias más altas se dieron en los dominios de ‘Necesidad de Éxito’ de TEG (M=7,88; SD=2,12 y mediana=8,00) y ‘Disponibilidad’ de ECCI (M=12,50; SD=1,99 y mediana=13,00). Los estudiantes en los períodos menos avanzados del curso tenían mayores medios en ‘Impulso y Determinación’ de TEG (p=0.032) y los que tenían mayor actividad remunerada en ECCI ‘Gestión de la Interacción’ (p=0.030). **Conclusión:** Las instituciones de educación superior deben buscar estrategias para enseñar el contenido de estas habilidades de una manera más dinámica y agradable a lo largo de la formación, que siga la capacidad del estudiante y las necesidades del mercado laboral.

## DESCRIPTORES

Estudantes de Enfermería; Educación em Enfermería; Educación Basada em Competencias; Comunicación; Relaciones Interpersonales; Gestión en Salud.

## REFERENCES

1. Farshi MR, Vahidi M, Jabraeili M. Relationship between emotional intelligence and clinical competencies of nursing students in Tabriz Nursing and Midwifery School. *Res Dev Med Educ.* 2015;4(1):91-5. DOI: 10.15171/rdme.2015.015
2. Dias MAS, Silva LMS, Silva LCC, Silva AV, Torres RAM, Brito MCC. Caracterização das graduações em enfermagem segundo Exame Nacional de Desempenho de Estudantes. *Rev Bras Enferm.* 2016;69(2):375-81. DOI: <http://dx.doi.org/10.1590/0034-7167.2016690222i>
3. Vieira MA, Souto LES, Souza SM, Lima CA, Ohana CVS, Domenico EBL. Diretrizes Curriculares Nacionais para a área da enfermagem: o papel das competências na formação do enfermeiro. *Rev Norte Min Enferm.* 2016;5(1):105-21.
4. Treviso P, Peres SC, Silva AD, Santos AA. Competências do enfermeiro na gestão do cuidado. *Rev Adm Saúde.* 2017;17(69):1-14. DOI: <http://dx.doi.org/10.23973/ras.69.59>
5. Jahani S, Babazadeh M, Haghghi S, Cheraghian B. The effect of entrepreneurship education on self-efficacy beliefs and entrepreneurial intention of nurses. *J Clin Diagn Res.* 2018;12(6):18-21.
6. Copelli FHS, Erdmann AL, Santos JLG, Lanzoni GMM, Andrade SR. Empreendedorismo na gestão universitária pública de enfermagem: entraves e estratégias. *Rev Rene.* 2017;18(5):577-83.
7. Paulino VCP, Silva LA, Prado MA, Barbosa MA, Porto CC. Formação e saberes para a docência nos cursos de Graduação em Enfermagem. *J Health NPEPS [Internet].* 2017;2(1):272-84.
8. Ispir O, Elibol E, Sonmez B. The relationship of personality traits and entrepreneurship tendencies with career adaptability of nursing students. *Nurse Educ Today.* 2019;79:41-7. DOI: <https://doi.org/10.1016/j.nedt.2019.05.017>
9. Trifkovic KC, Lorber M, Denny M, Gönc SDV. Attitudes of nursing students towards learning communication skills. *Teach Learn Nurs.* 2017. DOI: 10.5772/67622
10. Copelli FHS, Erdmann AL, Santos JLG. Empreendedorismo na enfermagem: revisão integrativa da literatura. *Rev Bras Enferm.* 2019;72 Supl.1:S289-98. DOI: <http://dx.doi.org/10.1590/0034-7167-2017-0523>
11. Arnaert A, Mills J, Bruno FS, Ponzoni N. The educational gaps of nurses in entrepreneurial roles: an integrative review. *J Prof Nurs.* 2018;34(6):494-501. DOI: 10.1016/j.profnurs.2018.03.004
12. Russo RFSM, Sbragia R. Tendência empreendedora do gerente: uma análise de sua relevância para o sucesso de projetos inovadores. *Gestão Produção.* 2007;14(3):581-93. DOI: <https://dx.doi.org/10.1590/S0104-530X2007000300012>
13. Carvalho DP, Vaghetti HH, Dias JS, Rocha LP. Entrepreneurial characteristics of nurses: a study in southern Brazil. *Rev Baiana Enferm.* 2016;30(4):1-11. DOI 10.18471/rbe.v30i4.16803
14. Costa FG, Vaghetti HH, Martinello DFG, Mendes DP, Terra AC, Alvarez SQ, et al. Enterprising tendencies of nurses in a university hospital. *Rev Gaúcha Enferm.* 2013;34(2):147-54.
15. Puggina AC, Silva MJP. Interpersonal Communication Competence Scale: brazilian translation, validation and cultural adaptation. *Acta Paul Enferm.* 2014;27(2):108-14. DOI: <http://dx.doi.org/10.1590/1982-0194201400020>
16. Espírito-Santo H, Daniel F. Calcular e apresentar tamanhos do efeito em trabalhos científicos (2): guia para reportar a força das relações. *Rev Portug Investig Compport Soc.* 2017;3(1): 53-64.
17. Ferreira AMD, Rossancis MA, Oliveira JLC, Haddad MCFL, Vannuchi MTO. Perfil empreendedor entre residentes de enfermagem. *Rev Baiana Enferm.* 2018;32:e27365. DOI: 10.18471/rbe.v32.27365
18. Parreira PM, Pereira FC, Arreguy-Sena C, Salgueiro A, Gomes AMT, Marques SC, et al. Representações sociais do empreendedorismo: o papel da formação na aquisição de competências empreendedoras. *Rev Ibero Am Saúde Env.* 2015;1(3):266-85.

19. Roncon PF, Munhoz S. Estudantes de enfermagem têm perfil empreendedor? Rev Bras Enferm. 2009;62(5):695-700. DOI: <http://dx.doi.org/10.1590/S0034-71672009000500007>
20. Kilimnik ZM, Oliveira LCV, Santos Neto SP. Transição da docência para o empreendedorismo: motivos e dinâmicas de inserção. RECAPE. 2016;4(1):2-18. DOI: <https://doi.org/10.20503/recape.v6i1.28020>
21. Flores AADM, Santos LF. O perfil empreendedor de acadêmicos em administração em uma cidade do sul do país. Rev Acad São Marcos. 2014;4(1):71-88.
22. Mello AL, Brito LJS, Terra MG, Camelo SH. Estratégia organizacional para o desenvolvimento de competências de enfermeiros: possibilidades de educação permanente em saúde. Esc Anna Nery. 2018;22(1):e20170192. DOI: <http://dx.doi.org/10.1590/2177-9465-ean-2017-0192>
23. Azevedo A L, Araújo STC, Pessoa Júnior JM, Silva J, Santos BTU, Bastos SSF. A comunicação do estudante de enfermagem na escuta de pacientes em hospital psiquiátrico. Esc Anna Nery. 2017;21(3):e20160325. DOI: <http://dx.doi.org/10.1590/2177-9465-ean-2016-0325>
24. Lopes RCC, Azeredo ZAS, Rodrigues RMC. Competências relacionais: necessidades sentidas pelos estudantes de enfermagem. Rev Latino Am Enfermagem. 2012;20(6):1081-90.
25. Leal LA, Camelo SHH, Soares MI, Santos FC, CR, Chaves LDP. Competências profissionais para enfermeiros: a visão de discentes de graduação em Enfermagem. Rev Baiana Enferm. 2016;30 (3):1-12. DOI: <http://dx.doi.org/10.18471/rbe.v30i3.16380>.
26. Dalcól C, Garanhani ML, Fonseca LF, Carvalho BG. Polaridades vivenciadas por estudantes de enfermagem na aprendizagem da comunicação: perspectivas do pensamento complexo. Cienc Cuid Saúde. 2017;16(1):1-8. DOI: 10.4025/ciencucuidsaude.v16i1.34517

---

### Financial support

Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq). Projeto Universal – Chamada MCTIC/CNPq No. 28/2018. Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – Brasil (CAPES) – Finance Code 001.

---



This is an open-access article distributed under the terms of the Creative Commons Attribution License.