CONSTRUCTION AND VALIDATION OF THE INSTRUMENT TO EVALUATE STRESS IN TEACHERS

CONSTRUÇÃO E VALIDAÇÃO DO INSTRUMENTO PARA AVALIAR O ESTRESSE EM PROFESSORES

CONSTRUCCIÓN Y VALIDACIÓN DEL INSTRUMENTO PARA EVALUAR EL ESTRÉS EN PROFESORES

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ABSTRACT

Objective: to validate an interview tool based on Betty Neuman's theory for teacher stress assessment. **Method:** a methodological study developed during the construction of the items, content analysis by a panel of judges and validation of appearance. The data were described in simple frequency and analyzed by calculating the Content Validity Index (CVI) and the binomial test. **Results:** in the analysis of content and appearance, the instrument obtained the CVI of 0.82 and 0.92, respectively. **Conclusion:** the proposed instrument is valid from the point of view of content and appearance. Its content is related to the Betty Neuman model and is able to identify the three types of stressors and the five variables that make up the individual. Their employment allows one to evaluate the causes of stress, to what types of stressors teachers are exposed and which dimensional variables are in imbalance. **Descriptors:** Psychological stress; Validation studies; Nursing care; Health Education; Education, Primary and Secondary; Data Collection.

RESUMO

Objetivo: validar um instrumento de entrevista baseado na teoria de Betty Neuman para a avaliação do estresse de professores. **Método:** estudo metodológico desenvolvido nas etapas de construção dos itens, análise de conteúdo por um painel de juízes e validação de aparência. Os dados foram descritos em frequência simples e analisados por meio do cálculo do Índice de Validade de Conteúdo (IVC) e do teste binomial. **Resultados:** Na análise de conteúdo e aparência, o instrumento obteve o IVC_t de 0.82 e 0.92, respectivamente. **Conclusão:** o instrumento proposto é válido do ponto de vista do conteúdo e aparência. Seu conteúdo está relacionado ao modelo de Betty Neuman e é capaz de identificar os três tipos de estressores e as cinco variáveis que compõem o indivíduo. Seu emprego permite avaliar as causas de estresses e a quais tipos de estressores os professores estão expostos e quais variáveis dimensionais estão em desequilíbrio. **Descritores:** Estresse Psicológico; Estudos de Validação; Cuidados de Enfermagem; Educação em Saúde; Ensino Fundamental e Médio; Coleta de Dados.

RESUMEN

Objetivo: validar un instrumento de entrevista basado en la teoría de Betty Neuman para la evaluación del estrés de los profesores. **Método:** estudio metodológico desarrollado en las etapas de construcción de los ítems, análisis de contenido por un panel de jueces y validación de apariencia. Los datos se describieron en frecuencia simple y se analizaron mediante el cálculo del Índice de Validez de Contenido (IVC) y de la prueba binomial. **Resultados:** en el análisis de contenido y apariencia, el instrumento obtuvo el IVC_t de 0.82 y 0.92, respectivamente. **Conclusión:** el instrumento propuesto es válido desde el punto de vista del contenido y la apariencia. Su contenido está relacionado con el modelo de Betty Neuman y es capaz de identificar los tres tipos de estresores y los cinco variables que componen el individuo. Su empleo permite evaluar las causas de estrés, a cuales tipos de estresores los profesores están expuestos y cuales variables dimensionales están en desequilibrio. **Descritores:** Estrés Psicológico; Estudios de Validación; Cuidados de Enfermería; Educación en Salud; Educación Primaria y Secundaria; Recolección de Datos.

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INTRODUCTION

It is pointed out that this article proposed the validation of an Interview Instrument based on Betty Neuman's Open Systems model to evaluate teacher stress. Brazil has two million teachers in Basic Education, most of them working in the public school system (76.8%) and in the highest concentration in the urban area (84.5%) 1. Elementary School 2 (6th to 9th grade) is the stage with the highest number of teachers (almost 800,000).¹ This population, especially the public school system, coexists with a sense of professional devaluation, increased violence, the inadequate physical structure, the reduction of didactic resources and the complexity of information speed.²⁻³ These are components that, in turn, can interfere in the quality of life of this professional leading to intense stress.⁴⁻⁵

It is known that teacher stress leads him to a negative response in the psychosocial area, which can interfere in the teaching-learning process since, in imbalance, he has difficulty motivating his students and maintaining a necessary affective relationship.⁶ Identifying ways to improve the quality of life of these professionals means directly favoring the teacher-student relationship and the teaching-learning process.³

It is understood that the Betty Neuman model comprises the person, the family and / or the community as an open, comprehensive and dynamic system, with a multidimensional perspective composed of physiological, psychological, social, cultural, developmental and spiritual variables that are in constant interaction with the environment and its stressors.⁷⁻⁸ Stressors and reactions to stressors are two main elements of the model. Extra-personal stressors are those related to the external environment (the number of students in the classroom or the work environment); interpersonal - that occur in the relationship between one or more individuals (teacher-student, co-workers or even with the direction of the school) and intrapersonal (internal forces of the individual: anger, resilience).⁷⁻¹⁰

It tries to construct and validate an instrument based on the Betty Neumann model that identifies the stressors interfering in the lines of defense of the teacher and allows the nurse to evaluate the stressors that are compromising the balance of the individual directing their assistance.

It is noticed that these lines of defense are interrelated with the five dimensional

variables of the individual orienting the actions of the nurse in front of the stress of this in the primary, secondary and tertiary levels.

OBJECTIVE

- To validate an instrument constructed in the light of Betty Neuman's theory for the evaluation of teachers' stressors.

METHOD

It is a methodological study carried out in three stages: the construction of the items, the analysis of content validity by a panel of judges and the validation of appearance to verify the applicability of the instrument in the target population.

It is evidenced that the constructs used for the elaboration of the instrument were the understanding of the health and disease process of Open Systems proposed by Betty Neuman and the literature on stress in teachers.¹⁻¹⁰ The first version of the instrument contained 39 items that investigated the relationship with the work and its interface with other aspects of life that addressed demographic, social, physiological and labor factors to be associated with interpersonal, intrapersonal and extrapersonal Betty Neumann's stressors (Figure 1).

Item	Issues assessed by judges.	Betty Neuman's Classification
1.	Do you work in more than one school?	Interpersonal () Intrapersonal () Extrapersonal()
2.	How do you reconcile work shifts?	Interpersonal () Intrapersonal () Extrapersonal()
3.	Do you take work home?	Interpersonal () Intrapersonal () Extrapersonal()
4.	Do you work on the weekends? How do you feel about this?	Interpersonal () Intrapersonal () Extrapersonal()
5.	Do you do any parallel courses with work? Tell me about it.	Interpersonal () Intrapersonal () Extrapersonal()
6.	How do you feel about your work?	Interpersonal () Intrapersonal () Extrapersonal()
7.	What is the average number of students per class? What is your perception about class sizes?	Interpersonal () Intrapersonal () Extrapersonal()
8.	Can you "disconnect" from work?	Interpersonal () Intrapersonal () Extrapersonal()
9.	How is your confidence in your work? Do you feel capable?	Interpersonal () Intrapersonal () Extrapersonal()
10.	Do you feel fulfilled with what you do? Was it what you expected?	Interpersonal () Intrapersonal () Extrapersonal()
11.	Do you expect anything from your workmates and students? Tell me more about your work.	Interpersonal () Intrapersonal () Extrapersonal()
12.	Do you live with anyone? For how long?	Interpersonal () Intrapersonal () Extrapersonal()
13.	What is your feeling about living alone or with family members?	Interpersonal () Intrapersonal () Extrapersonal()
14.	How is the relationship dynamics of your home? Explain better.	Interpersonal () Intrapersonal () Extrapersonal()
15.	Do you like the dynamics of your home's relationship? Explain better.	Interpersonal () Intrapersonal () Extrapersonal()
16.	Are there dependent people in your household (children, parents, siblings, in-laws and in-laws)? How is your relationship with these people?	Interpersonal () Intrapersonal () Extrapersonal()
17.	Do you usually have leisure time? How does it happen?	Interpersonal () Intrapersonal () Extrapersonal()
18.	Do you usually drink (alcohol) or use cigarettes or others? Can you tell me the quantity and frequency?	Interpersonal () Intrapersonal () Extrapersonal()
19.	Do you have friends? Where are they from? How is your relationship with them?	Interpersonal () Intrapersonal () Extrapersonal()
20.	Do you have neighbors? Do you like them? If not, why?	Interpersonal () Intrapersonal () Extrapersonal()
21.	Are you currently worried about loved ones? Tell me about this concern.	Interpersonal () Intrapersonal () Extrapersonal()
22.	Has something happened that you cannot digest? Do you want to talk about that?	Interpersonal () Intrapersonal () Extrapersonal()
23.	In these last days, do you feel irritated or impatient?	Interpersonal () Intrapersonal () Extrapersonal()
24.	How do you feel about yourself? How do you perceive yourself?	Interpersonal () Intrapersonal () Extrapersonal()
25.	How do you think your state of humor is?	Interpersonal () Intrapersonal ()

		Extrapersonal()
26.	What do you feel for life? What do you expect from it? What you like about your life and what you do not like?	Interpersonal ()
		Intrapersonal ()
		Extrapersonal()
27.	What do you lack in life?	Interpersonal ()
		Intrapersonal ()
		Extrapersonal()
28.	Are you afraid of getting exhausted and losing control?	Interpersonal ()
		Intrapersonal ()
		Extrapersonal()
29.	As for your own opinion, you feel that you are right?	Interpersonal ()
		Intrapersonal ()
		Extrapersonal()
30.	What are the great emotions of your life? Are you motivated? Tell me more.	Interpersonal ()
		Intrapersonal ()
		Extrapersonal()
31.	What time of day do you feel better?	Interpersonal ()
		Intrapersonal ()
		Extrapersonal()
32.	Do you feel like crying for no apparent reason? What is the moment of the day when you perceive yourself angry, impatient or sad?	Interpersonal ()
		Intrapersonal ()
		Extrapersonal()
33.	How do you deal with the symptoms of stress, anxiety, and sadness?	Interpersonal ()
		Intrapersonal ()
		Extrapersonal()
34.	How is your sleep? If you think you have insomnia, what do you attribute it to?	Interpersonal ()
		Intrapersonal ()
		Extrapersonal()
35.	How is your awakening?	Interpersonal ()
		Intrapersonal ()
		Extrapersonal()
36.	How is your willingness to face the day?	Interpersonal ()
		Intrapersonal ()
		Extrapersonal()
37.	How is your appetite? How's your diet going?	Interpersonal ()
		Intrapersonal ()
		Extrapersonal()
38.	Do you menstruate? Do you use contraception? Which one? How do you feel during the menstrual period?	Interpersonal ()
		Intrapersonal ()
		Extrapersonal()
39.	Does the desire to have sex continue? How do you feel about your sex life?	Interpersonal ()
		Intrapersonal ()
		Extrapersonal()

Figure 1. Initial version of the items of the instrument constructed in light of Betty Neuman's theory for the evaluation of teachers' stressors. Recife (PE), Brazil, 2017.

It is revealed that the instrument was submitted to the evaluation of content by the judges, selected based on pre-defined criteria, and adapted from what the literature recommends in validation studies¹¹. The identification of the sample for validation of content was performed through the active search of nursing professionals who worked with Nursing and Adult Health Theories in the Lattes Platform of the National Council for Scientific and Technological Development (CNPq) (Lattes Curricula and Directory of Groups of Search). From the first selected judges, snowball sampling was used, which consists of the selection of the participants through the indication or recommendation of the previous ones.

It is clear that the number of judges was estimated from the sample calculation represented by the equation $n = (Z\alpha)^2 \cdot P \cdot (1-P) / e^2$, where $(Z\alpha)^2$ is the confidence level adopted (1.96), "P" represents the expected proportion of specialists that indicate the

adequacy of each item and "e" represents the acceptable proportional difference in relation to what would be expected¹², being adopted in this study the proportions of 0.80 and 0.20, respectively. The sample was composed of 15 specialists. The invitation was made to 70 judges, of whom 24 responded by totaling the final sample.

It should be noted that the electronic instrument validation form was built on the Google platform (<https://docs.google.com>) and contained a presentation on the research, sociodemographic data of the participants and the evaluation of the instrument. The form was sent by e-mail to each judge along with the Free and Informed Consent Term (FICT). The consent of the judge's participation in the survey was considered positive when the same signed the FICT and indicated, in the form, their agreement to participate in the study.

The instrument was evaluated by the judges based on the following criteria: language clarity and comprehension, being

evaluated if the language used in each item was sufficiently clear, comprehensible and adequate for the target audience. Besides these aspects, the judges analyzed the association of items with the stressors of the Betty Neuman model: 1. Intrapersonal; 2. Interpersonal and 3. Extra-personal. In order to evaluate if the content of the item is representative of the phenomenon to be measured, its degree of relevance was identified: 1. Irrelevant; 2. Slightly relevant; 3. Really relevant and 4. Very relevant.

Data was analyzed using the simple frequency of item responses and the Content Validity Index (CVI), by calculating the CVI of each item individually (CVI_f) and then by the instrument as a whole (CVI_t Total)¹³. For the maintenance of the item and evaluation of the validity of the instrument, the value of the CVI was equal to or greater than 0.80. The binomial test was performed to verify the proportion of judges who considered the appropriate item¹⁴, being defined a value equal or superior to 80% to consider the appropriate item if the test was not statistically significant ($p > 0.05$).

It is noted that, after the content validation process, the instrument received the improvement suggested by the judges and was submitted to the third stage of validation of appearance with the target audience.

It is noteworthy that the appearance validation occurred in two municipal public elementary schools through an individual interview in a reserved room with a sample of ten teachers. The validation protocol consisted of a two-part form: the first consisted of the sociodemographic data of the participants and the second part was the assessment of language clarity and comprehension. It was evaluated whether the language used in each item was sufficiently clear, understandable and adequate for the target audience, with the degree of relevance of the item signed in: 1. Irrelevant; 2. Slightly relevant; 3. Really relevant and 4. Very relevant.

The appearance validity was analyzed using the Binomial Test and the Content Validity Index. For this stage, the value equal or superior to 90% was determined to be considered the clear, comprehensible, relevant and adequate item.

The data in the IBM® SPSS © software, version 18.0, was entered for descriptive analysis at all stages. They were then analyzed by the R Project for Statistical Computing®. This research was approved by the Research Ethics Committee of the Health Sciences Center of the Federal University of

Pernambuco (CEP / CCS / UFPE) and has the CAAE Registry: 61374916.4.0000.5208.

RESULTS

It is known that the judges who participated in the content validation of this instrument were nurses, 60.6% female and 30.4% male. Regarding the area of action, 91.3% were teachers and 8.7%, researchers and nursing assistants. In relation to the degree, 30.4% were masters and 69.6%, doctors; 91.3% had previous experience as a judge in validation studies.

It is judged, in the content analysis, that the instrument obtained a general agreement index of (CVI_{total}) 0.82, which can be considered valid. Items one, two, three, four, six, eight, nine, ten, 11, 17, 18, 19, 21, 23, 24, 25, 26, 28, 32, 33, 34, 37 and 39 obtained CVI_f the same or greater than 0.80 remaining in the instrument. The items 12, 13, 14, 15, 20, 22, 27, 29, 30, 31, 35 and 38 obtained CVI_f less than 0.80 being excluded from the instrument. Although items five, seven and 11 had lower than expected CVI_f, they were analyzed individually.

It was recalled that items five and seven obtained CVI_f of 0.76, but remained in the instrument because they were considered relevant to the study and presented a fitness ratio, according to the binomial test, within the minimum acceptable value¹⁴ (Table 1).

It should be noted that another item that changed was eight, which obtained a value of 0.65 in the binomial test, which shows the need for adequacy and was modified from: "Can you 'disconnect' from work?" To "When arrives at home or during weekends, holidays or vacations, can forget or disconnect from the teaching activity? Thus, the suggestion of the judges was accepted and the item remained in the instrument.

It is considered that item 11 obtained a value of 0.54 in the binomial test for language clarity and p-value of 0.00, which shows that the question was not understandable but was considered by the judges as very relevant, with CVI_f of 0.91. The judges' recommendations were accepted and the item was modified to: In relation to your co-workers and students, do you expect recognition, reciprocity, or gratitude? Tell me more about this feeling (Tables 1 and 2).

It is clarified that item 16, despite having obtained CVI_f of 0.81, was withdrawn because it is related to item 15, which was excluded because it had CVI_f of 0.72.

Items 34 and 36 are presented with a concordance greater than 0.80, but, at the

suggestion of the judges, they were
condensed into a single item: Is your sleep

reparative? Feeling tired during the day?

Table 1. Judges' agreement on the validation of the items of the instrument related to the clarity, comprehension and adequacy of the language to the target audience. Recife (PE), Brazil, 2017 (n = 24).

Item	Test b	p-value	CVIf	P ^J
1	0.86	0.66	0.90	100
2	0.78	0.25	0.80	100
3	0.86	0.66	0.86	97.7
4	0.90	0.82	0.88	91.3
5	0.95	0.97	0.76	86.9
6	1.0	1.0	0.94	100
7	0.95	0.97	0.76	78.2
8	0.65	0.01	0.80	81.8
9	0.76	0.19	0.84	95.7
10	0.85	0.59	0.94	68.2
11	0.54	0.00	0.91	87.3
12	0.90	0.86	0.71	68.2
13	0.90	0.84	0.73	87.3
14	0.77	0.22	0.74	69.6
15	0.68	0.03	0.72	86.9
16	0.84	0.55	0.81	76.2
17	0.95	0.97	0.92	100
18	0.86	0.66	0.84	86.3
19	0.90	0.84	0.86	91.3
20	0.90	0.86	0.68	52.1
21	0.90	0.86	0.83	90.9
22	0.63	0.01	0.74	68.2
23	0.90	0.86	0.91	95.7
24	0.91	0.87	0.91	100
25	0.73	0.11	0.85	95.6
26	0.76	0.19	0.84	95.6
27	0.78	0.25	0.76	78.3
28	0.86	0.66	0.88	95.6
29	0.50	0.00	0.65	76.5
30	0.90	0.86	0.68	63.7
31	0.95	0.97	0.77	81.9
32	0.95	0.97	0.82	90.0
33	0.91	0.87	0.95	100
34	0.94	0.84	0.92	91.0
35	0.91	0.87	0.66	61.9
36	0.95	0.97	0.87	61.7
37	0.86	0.66	0.82	86.9
38	0.90	0.86	0.77	76.2
39	0.75	0.17	0.92	82.6

Test b - binomial test; p-value> 0.05; P^J: proportion of judges who evaluated the item as really relevant or very relevant; CVIf- Content Validity Index finishing.

It is revealed that the validation counted on the association of the items to the stressors of the theoretical model of Betty Neuman according to the judges' evaluation (Table 2).

It is stated that the items of the instrument classified under the stress-promoting factors in the teachers were: one, three, five and seven - extrapersonal (10.25%); Intrapersonal (53.8%), two, four, six, eight, nine, ten, 18, 22, 23, 26, 27, 28, 29, 31, 32, 33, 34, 35, 36, 38. 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 24, 30 and 37 as interpersonal (33.3%) (Table 2).

It is observed that after the validation of content, the instrument composed of 25 items of the 39 proposals was submitted to the validation of appearance with the target audience.

Table 2. Adequacy of items and association with Betty Neumann's theory according to the judges' evaluation. Recife (PE), Brazil, 2017 (n = 24).

Item	Test b	p-value	Inter (%)	Intra (%)	Extra (%)
1	0.90	0.844	27.3	28.2	54.5
2	0.91	0.87	28.6	52.4	19.0
3	0.91	0.87	27.3	27.3	45.5
4	0.91	0.87	17.4	43.5	39.1
5	0.86	0.66	22.7	27.3	50.0
6	1.0	1.0	8.7	91.3	0.00
7	0.86	0.66	42.9	23.8	42.9
8	0.78	0.25	14.3	81.0	0.00
9	0.95	0.97	13.6	81.6	0.00
10	1.0	1.0	13.0	82.6	0.00
11	0.82	0.46	63.6	13.6	22.7
12	0.90	0.86	81.8	13.6	0.00
13	0.86	0.66	54.5	45.5	0.00
14	0.90	0.86	90.9	8.1	0.00
15	0.86	0.66	57.1	33.3	9.5
16	0.90	0.86	85.7	9.5	4.6
17	1.00	1.00	39.1	34.8	26.1
18	0.95	0.96	23.8	71.4	4.8
19	0.95	0.97	87.0	13.0	0.00
20	0.95	0.97	77.3	9.1	13.6
21	1.00	1.00	65.2	30.4	4.4
22	0.82	0.46	31.8	50.0	18.2
23	1.00	1.00	18.2	81.8	0.00
24	1.00	1.00	91.3	8.7	0.00
25	0.95	0.97	13.4	82.6	0.00
26	1.00	1.00	26.1	73.0	0.00
27	0.86	0.69	13.6	72.7	13.6
28	1.00	1.00	13.0	87.00	0.00
29	0.73	0.11	31.8	68.2	0.00
30	0.91	0.87	82.6	17.4	0.00
31	0.95	0.97	18.2	77.3	4.5
32	0.91	0.87	20.0	80.0	0.00
33	1.00	1.00	13.0	82.6	4.4
34	1.00	1.00	13.0	73.9	3.1
35	0.81	0.42	21.1	68.4	10.5
36	1.00	1.00	26.1	60.9	13.0
37	0.95	0.97	73.9	17.4	8.7
38	0.77	0.22	10.0	90.0	0.00
39	0.95	0.96	47.8	52.2	0.00

Test b - binomial test; p-value> 0.05; Inter - interpersonal; Intra - intrapersonal; Extra - extrapersonal.

● Appearance Validation

It is stated that the target audience was composed of nine teachers of the feminine gender and one, masculine. As for the age group, six were between 30 and 40 years and four, between 40 and 50 years. All of them had a specialization, of which six worked in two shifts; two in three shifts and one in a single shift. As for graduation, three were trained in Pedagogy; two in Biology; one, in History; three, in Letters and one in Geography.

The results of the appearance validation are presented in Table 3. The CVItotal was 0.92, which characterizes the instrument as valid. For the target audience, the version of the instrument with the recommendations and concordances of the judges obtained, in all items, CVI greater than 0.80. And 100% stated that the items are very relevant as to the clarity, comprehension and adequacy of the language.

It is verified that the final version of the instrument consists of 25 items that evaluate

the extra, intra and interpersonal stressors distributed as follows: 16% extrapersonal; 64% intrapersonal and 20% interpersonal. In relation to the physiological, psychological, sociocultural, spiritual and evolutionary or developmental dimensions, the items were classified into: 24% in the physiological dimension (one, two, three, 24 and 25); 48% in psychological (four, six, seven, eight, nine, 11, 13, 16, 18, 20, 21 and 24); 8% in sociocultural (12 and 14); 4% in spiritual sizing (19) and 8% in developmental or developmental (ten and 17).

Table 3. Clarity, comprehension and adequacy of the language of the instrument according to the evaluation of the teachers of Vitória de Santo Antão, PE, Brazil, 2017 (n = 10).

Evaluated items	p-value	P ^p	CVIf
1. Do you work in more than one school? How many?	1	100	0.850
2. How do you reconcile work shifts?	1	100	0.825
3. Do you take work home?	1	100	0.900
4. Do you work on the weekends? How do you feel about this?	1	100	0.875
5. Do you do any parallel courses with work? Tell me about it.	1	100	0.875
6. How do you feel about your work?	1	100	0.950
7. What is the average number of students per class? What is your perception about class sizes?	1	100	0.975
8. When you arrive at home or at weekends, holidays or vacations, can you forget or switch off from the teaching activity?	1	100	0.900
9. How is your confidence in your work? Do you feel capable?	1	100	0.900
10. Do you feel fulfilled with what you do? Was it what you expected?	1	100	0.975
11. With regard to your co-workers and students, do you expect recognition, reciprocity, or gratitude? Tell me more about this feeling.	1	100	0.950
12. Do you usually have leisure time? How does it happen?	1	100	0.925
13. Do you usually drink (alcohol) or use cigarettes or others? Can you tell me the quantity and frequency?	1	100	0.875
14. Do you have friends? Where are they from? How is your relationship with them?	1	100	0.950
15. Are you currently worried about loved ones? Tell me about this concern.	1	100	1.000
16. In these last days, do you feel irritated or impatient? Tell me of your irritation or impatience.	1	100	0.950
17. How do you feel about yourself? How do you perceive yourself?	1	100	0.950
18. How do you think your state of humor is?	1	100	0.950
19. What do you feel for life? What do you expect from it? What you like about your life and what you do not like?	1	100	0.925
20. You are afraid of being exhausted and losing control.?	1	100	0.900
21. Do you feel like crying for no apparent reason? What is the moment of the day when you perceive yourself angry, impatient or sad?	1	100	0.950
22. How do you deal with the symptoms of stress, anxiety, and sadness?	1	100	1.000
23. Is your sleep refreshing? Do you feel tired during the day?	1	100	0.925
24. How is your appetite? How's your diet going?	1	100	0.925
25. Does the desire to have sex continue? How do you feel about your sex life?	1	100	0.975

Test b - binomial test; p-value (> 0.05); PJ: proportion of target audience that evaluated the item as really relevant or very relevant; CVIf- Content Validity Index finishing

DISCUSSION

It is understood that the instrument for the evaluation of stressors in teachers is valid in content and appearance and can be used by other researchers and contribute to the planning of prevention and health promotion actions for this population.

It refers to its differential to the specificity of the target population, since teachers are increasingly developing occupational stress, and Brazil is among the countries with the highest number of stressed individuals¹⁵. The prevention of stress must be based on the human dimension and indicate the necessary care for the promotion of worker health¹⁶ minimizing damages to the individual, companies and society.

It is understood that in the validation of content, the participation of doctoral or master judges and with expertise in the area of Nursing theories conferred greater credibility in the evaluation. In this sense, recruiting professionals with more experience in the area ensures greater accuracy in the selection and evaluation of the instrument¹⁷.

It is verified that the majority of them agreed on the relevance of the items by means of satisfactory CVI values, in

agreement with the one recommended in the literature to be considered valid¹⁸. However, fourteen items were excluded due to the low agreement of the judges. Those who remained in the instrument were modified to make them more coherent, clear and understandable to the population.

It is reported that the first version of the instrument contained 39 items that, after the judges' evaluation, included 10.25% of the items as extra-personal stressors; 33.3% as interpersonal and 52.3% as intrapersonal. After the validation of content and the suggestions made by the judges, the instrument had 25 items optimizing the interview time. Stress can be considered a process where the situations transpose the individual's repertoire of coping⁶ and, therefore, the greater prevalence of the items of the instrument to be investigated is within the possible intrapersonal stressors.

It is also observed that the characterization of a stress phenomenon depends on the individual's perception in evaluating the events as stressors. Therefore, the cognitive has an important role in the process that occurs between the potentially stressful stimuli and the individual's responses to them.^{15,19}

It is advised that the use of this instrument allows assessing the causes of stress, which types of stressors teachers are exposed and which dimensional variables are in imbalance. He investigates feelings and perceptions about this exposure; aspects related to the sensation of security, capacity and self-realization; expectations and frustrations about work, colleagues and students. It also identifies the relationship of the teacher and the consumption of alcoholic beverages and cigarettes, as well as nutritional, sexual, rest and social support aspects. It also surveys the capacity for resilience, fears and longings, which assists and guides the actions of nurses facing this problem in the three levels of attention: primary, secondary and tertiary.

CONCLUSION

It is concluded that the proposed instrument for assessing teacher stress is valid in content and semantics. It is based on the Betty Neuman model, which enables the health professional and, in particular, the nurse, a holistic approach that involves the various dimensions of the individual.

It is understood that the validation of an instrument in the light of Betty Neuman's Theory, to evaluate the level of teacher stress directed towards the types of stressors, is able to promote better evaluation of the influence and meaning of each stressor in the individual system and and the understanding of the coping skills that are fundamental for adequate planning of Nursing interventions.

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