

**HEALTH AND TEACHERS IN A SICK SOCIETY: A STUDY IN THE FIELD OF
POSTGRADUATE IN EDUCATION**

**SAÚDE E DOCENTES EM UMA SOCIEDADE ADOECIDA: UM ESTUDO NO CAMPO
DA PÓS-GRADUAÇÃO EM EDUCAÇÃO**

**SALUD Y PROFESORES EN UNA SOCIEDAD ENFERMA: UN ESTUDIO EN EL
ÁMBITO DE LA FORMACIÓN DE POSTGRADO**

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ABSTRACT: The article is about the health literacy of teachers in a postgraduate education program at a federal university in Brazil. The objective is to understand, within the reality of Brazilian higher education, if these professionals exercise their understanding, management and investment skills to adopt a healthy lifestyle. Through semi-structured interviews, ten professors answered a European questionnaire culturally adapted and validated in Brazil, added to open questions by the authors, the method used during the investigation process was participant observation and took place in the institution's facilities. We conclude that 80% of respondents have health literacy, but 70% of the professors have some pathology, despite exercising their understanding and management skills for their health, however, the investment is hampered by the fact of the unavailable time for the adoption of a healthy lifestyle of 70% of respondents.

KEYWORDS: Literacy. Health. Culture. Postgraduate.

RESUMO: O artigo é sobre a literacia para a saúde dos docentes de um programa de pós-graduação em educação de uma universidade federal no Brasil. O objetivo é compreender, dentro da realidade da educação superior brasileira, se estes profissionais exercitam suas capacidades de compreensão, gestão e investimento para a adoção de um estilo de vida saudável. Por meio de entrevistas semiestruturadas, dez professores responderam a um questionário Europeu adaptado culturalmente e validado no Brasil, acrescido de perguntas abertas pelos autores. O método durante o processo de investigação foi o da observação participante e aconteceu nas instalações da própria instituição. Considera-se, que 80% dos pesquisados têm literacia para a saúde, contudo, evidenciou-se que 70% dos docentes possuem alguma patologia, apesar de exercerem suas capacidades de compreensão e gestão

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para a sua saúde. Deste modo, a promoção da saúde é prejudicada pelo fato do tempo indisponível para adoção de um estilo de vida saudável de 70% dos pesquisados.

PALAVRAS-CHAVE: *Literacia. Saúde. Cultura. Pós-graduação.*

RESUMEN: *El artículo trata sobre la literacia en salud de los profesores en un programa de educación de posgrado en una universidad federal en Brasil. El objetivo es comprender, dentro de la realidad de la educación superior brasileña, si estos profesionales ejercen sus capacidades de comprensión, gestión e inversión para adoptar un estilo de vida saludable. A través de entrevistas semiestructuradas, diez profesores respondieron un cuestionario europeo adaptado culturalmente y validado en Brasil, agregado a preguntas abiertas de los autores, el método utilizado durante el proceso de investigación fue la observación participante y se llevó a cabo en las instalaciones de la institución. Concluimos que el 80% de los encuestados tiene alfabetización en salud, pero el 70% de los profesores tiene alguna patología, a pesar de ejercitar sus habilidades de comprensión y gestión para su salud, sin embargo, la inversión se ve obstaculizada por el hecho de que no se dispone de tiempo para la adopción de un estilo de vida saludable del 70% de los encuestados.*

PALABRAS CLAVE: *Literacia. Salud. Cultura. Posgraduación.*

Introduction

This article is about a research developed in the Master in Education (2018-2019), aiming to measure the level of health literacy (LS) of faculty members working in postgraduate education, a segment initially considered a reference in literacy⁴, for which, we will present a diagnosis aimed at the field of work in graduate *stricto sensu*, focused on the LS of faculty members.

Literacy is a human capacity to identify, understand, interpret, create, communicate, and use new technologies according to diverse contexts. It involves a continuous learning process that enables individuals to achieve their goals, develop their potentials and their knowledge (UNESCO, 2003).

The term *literacy* imported from the Anglo-Saxon literature is connected with the understanding that allows us to learn something through the capture of the main ideas we understand from texts, visual arts, the score of a song, the symbolic exchange in social relations, and so on, which in turn is the ability to interpret a given subject (*literacy*), without

⁴ From studies published in English, equivalent terms to “*Literacy*” were created, such as alphabetism and literacy. In Portugal and Latin America, the appropriation of the term “*Literacy*” took place in specific and different ways. In Brazil, the usual term is “*Letramento*”, and in Portugal “*Literacia*”. For these researchers, literacy and literacy are not mutually exclusive concepts and do not compete. But since we are supported by the health literacy methodology of the Escola Nacional de Saúde, at Universidade Nova de Lisboa, we will use only the term literacy.

underestimating the need for pedagogical intervention in teaching the use of connectives, verb tenses, anaphoric and cataphoric referencing processes. Literacy in the understanding of this research only happens from the exchanges of cultural symbols that directly impact the development of the human brain.

For this understanding, the research relies on Geertz (2008), to address the concept of culture, general science of signs, that is, culture is an interpretive science in search of meanings, which consists of structures of meaning socially established, is something to which can be attributed social events, behaviors, institutions and / or processes. We will also dialogue in this field with Levi Strauss (2003), who, in a category of understanding inspired by Linguistics as the central theme for culture, in a relation of the social and the symbolic, understanding that social relations are a secondary reality to communication and that every relation is symbolic, permeated by meanings and senses, with the symbolic constituting the social and not the other way around, introduces the notion of the system of the self and the other, within the phonological method, that is, culture is understood by communication, by speech, which are the symbols to be interpreted.

The term health literacy, on the other hand, is defined by the World Health Organization (WHO, 1998) as the understanding and use of information to promote and maintain good health, which does not imply only knowledge and intellectual capacity, but mainly decision making with the purpose of improving individual and public health, which in the understanding of this research, depend on cultural symbols that represent the modification of behavior for a wellbeing, symbols that may not be present in a sick society, therefore, it is worth highlighting the role of the public and collective health sphere.

For when speaking of "good health" today, it is essential to point to the urgent reduction of school failure levels, public insecurity, unemployment, and improved housing and sanitation. Societies that allow citizens to play an active social, economic, and cultural role will be healthier than those in which individuals face insecurity, rank, exclusion, and social, economic, and cultural deprivation (*SOCIAL DETERMINANTS OF HEALTH*, 2003).

The concept of health literacy with Nutbeam (2000), Kickbusch, (2001; 2006) coheres with the authorial perspective of the questionnaire we applied in our research field⁵. Saboga (1999; 2016) and Saboga *et al.* (2014) report that LS is formatted from social and environmental determinants, these are characterized in personal contexts that contribute to the differentiation of personal abilities to understand, manage, and invest. They are or are

⁵ European Health Literacy Questionnaire (HLS-EU), for Brazil (HLS-EU-BR), applied to professors of a Postgraduate Program in Education, of a Brazilian Federal University.

constituted as key elements throughout a person's life cycle and to their adoption of health-promoting lifestyles. We will also reflect, from the perspective of sustainability, because health literacy means the human being in control of this condition, aiming to improve it and being able to manage and make determinant decisions for personal, social, cultural and environmental well-being, that is, to act for sustainable development, an expression that does not refer only to the damage caused by pollution and erosion of the physical environment, on the one hand, and poverty, on the other, as if they were independent phenomena (VECCHIATI, 2004). Desirable development proposes a reconciliation with economic growth, connected to the social, cultural, and personal dimension, therefore, health literacy.

Therefore, the problems raised and the questions we answer are as follows:

- a) What is the incidence of culture with health, human and sustainable development?
- b) Will postgraduate education faculty, initially considered to have a high level of literacy, know how to make decisions to identify, understand, interpret, create, communicate, and use new technologies, according to the various contexts for their health?
- c) With all the dynamics, responsibilities, demands and difficulties in Brazilian higher education, does the post-graduate university professor in education exercise his or her personal capacities of understanding, management, and investment in the adoption of a health-promoting lifestyle?
- d) By answering these questions, can we conclude that the environment in graduate programs is sustainably fruitful?

In this process of investigating the symbolic dimensions of human social action, we will not retreat from the existential dilemmas of life in favor of some empirical realm of non-emotionalized forms, but rather immerse ourselves in their midst. The essential vocation of interpretive anthropology is not to answer our deepest questions, but to make available to us the answers that others have given, and thus to include them in the record of inquiry into what man has said (GEERTZ, 2008). Geertz's North American Interpretive School will assist in the cultural interpretation of the problems indicated/evidenced.

Therefore, the objective of this article is to demonstrate the level of health literacy of postgraduate professors in education at a federal university, to understand whether these professionals exercise their personal capabilities of understanding, management, and investment for the adoption of a healthy lifestyle in a sustainable perspective. To do so, we will identify the studies of health literacy in theoretical productions on the theme, in the

national and international context; we will present a reflection on the professional environment of university professors in graduate programs; we will point out the concept of culture for literacy competence, in this case, for health, in the context of sustainable development.

Research Methods

By means of audio-recorded semi-structured interviews, ten professors from a graduate program in education, from a Brazilian federal public university, participated by answering a culturally adapted and validated questionnaire, in Brazil. The research was approved by the ethics committee under Opinion number: 3.247.621 The method during the research process was that of participant observation that lasted eight months (from April 2019 to December 2019) and occurred on the premises of the institution itself. The interviewees were explained the purpose of the research and each one signed the informed consent form.

Instruments

The closed-ended questionnaire HLS-EU-PT integrates three domains: health care, health promotion, and disease prevention, and four levels of information processing essential for health decision making - access, understanding, evaluation, and use, a total of 91 closed-ended questions. Thus, the HLS-EU-PT reflects the interaction between individual skills and situational complexities, seeking to identify a set of basic skills such as knowledge and information, cognitive skills, social skills, lifestyles, attitudes, values, and motivation.

Open-ended questions were also designed and included to the HLS-EU-PT questionnaire by the authors with the aim of reflecting on the postgraduate work environment and their deeper understandings of the relationship of social environment, culture, and impact on health. The answers are transcribed according to the conventions of the Federal University of Uberlândia Research Group (PETEDI) related to oral material.

Results Analysis Procedures

Of the 91 closed-ended questions in the HLS-EU-EN questionnaire, 47 questions use a four-point scale, in which the individual self-evaluates the difficulty experienced in

performing relevant tasks in the health area. The Likert scale⁶ used consists of the options: 1 - Very Easy, 2 - Easy, 3 - Difficult, and 4 - Very Difficult, with a fifth alternative, "Don't Know/No Answer".

For each dimension considered in the LS, the main indicators were Health Care (16 items), Disease Prevention (15 items) and Health Promotion (16 items). In these and in relation to the four levels of information processing, "access" includes 13 items, "understanding" 11 items, "evaluation" 12 items and "application" of "information" 11 items, distributed by 47 questions, with a minimum number of valid answers for the scale calculation.

To calculate the indices of the closed questionnaire, the items are inverted. Thus, higher values demonstrate greater health literacy with the following numerical values: 1 = very difficult; 2 = difficult; 3 = easy; 4 = very easy. To simplify comparisons, they were normalized into a metric between 0 and 50 with the following formula: $Index = (mean - 1) (50/3)$.

During the investigative process and for the analysis of the open questions, participant observation was used, based on Brandão (1999) who discusses this method, in which an interweaving of actors-authors occurs. It is a moment of obtaining knowledge, because even though there are essential differences in knowledge, everyone learns with each other and through each other.

The participant-observation, referenced by the North American Interpretive School of Geertz, seeks to analyze behaviors accurately, through the flow of behavior (social action) that the subjects find in articulation. This analysis is of the assessment of conjunctures in an interpretative way, whose object is the movement of social discourse accompanied by the descriptive record.

⁶ *Likert-type* scale is composed of a set of sentences (items) that the subject being evaluated is asked to express the degree of agreement from *strongly disagree* (level 1), to *strongly agree* (level 5, 7 or 11). The subject's attitude is measured by summing, or averaging, the selected level for each item. Initially Likert proposed a method of calculating the result by a weighted average of the answers given, assigning in each item a weight to each level of agreement expressed by the subject. These weights are calculated according to the assumption that a normal distribution underlies the attitude and taking as reference the frequencies of response when gauging the scale. Available: https://repositorio.ul.pt/bitstream/10451/1229/1/18914_ULFC072532_TM.pdf. Access: 19 Dec. 2020.

Results and Discussion

Characterization of the Interviewees

The participants are 60% female and 40% male, ranging from 38 to 60 years old, the average age of those investigated is 47 years old. Height ranged from 1.64 cm to 1.91 cm, the average is 1.71 cm tall. Weight ranged from 62 kg to 91 kg, presenting an average of 74 kg.

Regarding education, all respondents are at level six of the questionnaire, Doctors or Post Doctors (PhD). Regarding marital status, 70% are married, 20% are single, and 10% are divorced. 50% have children older than 15, 20% children younger than 15, and 30% have no children. The working condition is 100% full time, i.e., exclusive dedication to the institution where they work.

30% of the interviewees have a family income between 7.5 and 8 minimum wages and 70% above 9.5 minimum wages per month. On a scale of social level ranging from 01 lowest to 10 highest, the respondents declared themselves 50% at level 5, 10% at level 6, 20% at level 7 and, 20% at level 8. The average self-reported social level of the respondents is level 6, which means, in Brazil, upper middle class.

Regarding easily buying their medicines, 80% said it was very easy and 20% very difficult. Regarding the ease of being seen by their doctor, 70% said it was very easy, 20% difficult, and 10% easy. And if in the last twelve months they had trouble paying their bills at the end of the month, 80% said almost never, 10% occasionally, and 10% most of the time.

Conclusion of the respondents' characterization

Based on the surveyed public who are professors of a graduate program in education at a Federal Public University, either PhD or post-doctoral, we concluded that most of them are women, 60%, and the average age is 47 years old. There are no cases of alarming obesity. 70% are married and have children, so they count on a partner to share the intimate life and the care of the family. They work full time and 70% have a family income of 9.5 minimum wages, well above the national average⁷, which in our opinion, the national average wage, is

⁷ The National Continuous Household Sample Survey (PnadC) showed that the average monthly income of 60% of the population was R\$ 928.00 in 2018, less than the Brazilian minimum wage. The average income of employed workers, on the other hand, is R\$ 2,234. Available at: <https://epocanegocios.globo.com/Brasil/noticia/2019/10/renda-media-de-mais-da-metade-dos-brasileiros-e-inferior-um-salario-minimo.html>. Access: 14 Dec. 2020.

insufficient to maintain a decent life. This implies a low quality of life in terms of food, housing, access to health, education, and culture for 60% of Brazilians.

Respondents, perhaps because of their incomes, are mostly able to buy their medications easily and almost never have difficulty paying their bills at the end of the month, which alludes to a good quality of life in these quantitative demonstrations. However, these need to be further refined in other questions in the HLS-EU-PT questionnaire and in the open-ended questions, because as indicated in the references for theoretical notes in this research, literacy and health literacy do not correlate with income, but there is a strong correlation between LS and financial deprivation, considering some factors together such as low monthly net income, difficulty paying bills or buying medication.

Health Assessment

In assessing general health, 40% of respondents self-reported that their health is very good, 20% good, and 40% fair. Regarding long-term illness(es), we considered problems that lasted six months or more, 50% said they had more than one illness, 30% had none, and 20% had one illness. Of those with health problems, 40% responded that their problems did not limit their activities and 30% that they did, but not severely. In the questions related to the use of the health system, the majority of the interviewees, 70% use private plans, 20% use a private plan and the Unified Health System (SUS), and 10% do not use any health plan.

Regarding use of an emergency room in the past two years, 80% of the faculty members have never used it and 20% have used it once or twice. Regarding trips to the doctor in the past 12 months, 50% were between three and five times, 30% were six times or more, and 20% were once or twice. No respondents used hospital service in the last 12 months. Regarding visits to other health professionals, such as dentist, physical therapist, psychologist, nutritionist, or ophthalmologist, in the past 12 months, 50% reported going once or twice, 20% three to five times, 20% six times or more, and 10% not at all.

Conclusion health assessment

The self-reported health assessment corresponds to an average of "good" health overall, but there is no significant correlation between self-reported health status and LS, but the higher the LS level, the higher the self-reported assessment of mental and physical health status assessed by the respondents.

Regarding long-term illnesses, the average is one illness for each professor, an alarming number. In other words, the professors in this graduate program are sick or have some illness, which differs from their self-reported assessment of good health, but incurs in high LS, because studies reveal that individuals with inadequate literacy have less knowledge regarding illness than individuals with adequate literacy.

To verify if there is a correlation between the use of health services and LS, we considered the answers to the HLS-EU-PT questions referring to the use of an emergency room in the last two years (ER), visits to doctors in the last twelve months (Physician), use of a hospital service in the last twelve months (Hospital), and the use of other health professionals (Other), which showed a positive correlation of LS.

Health Behaviors

90% of those interviewed have never smoked and 10% used to smoke a pipe but stopped. As for alcohol consumption, 90% said they drank in the last 12 months and never had five or more drinks on the same occasion. As for alcohol consumption in the last 30 days, 70% had consumed alcohol, and of these, 50% drank two to three times a month, and 20% two to three times a week, and on the day, they drank alcohol they usually drank one to two drinks. Regarding the practice of physical exercise in the last month, 40% practiced some activity almost every day, 40% a few times a week, 10% a few times a month, and 10% never practiced physical activity.

In social interaction, 60% say that they have someone to accompany them to a medical appointment, be it a friend or a family member. Regarding active involvement in the community

, either volunteering or participating in local activities, the majority, 80% of the respondents do not participate at all, 10% a few times a month, and 10% a few times a year.

Conclusion Health Behaviors

The correlation between healthy lifestyle habits and health behaviors was investigated by Vozikis (2014) arriving at results that concluded a strong correlation between physical exercise and higher HL and a negative and not very significant correlation between HL and individuals reporting smoking and/or drinking.

About the act of drinking alcoholic beverages, Freud (1927), states that life is too hard for us; it gives us too many sufferings, disappointments, and impossible tasks. To endure it, we cannot do without palliative measures. There are perhaps three such measures: powerful derivatives, which make us extract light from our misfortune; substitute satisfactions, which diminish it; and toxic substances, which make us insensitive to it. Something of this kind is indispensable (He who has worries also has spirits, Wilhelm Busch in *Die Fromme Helene*).

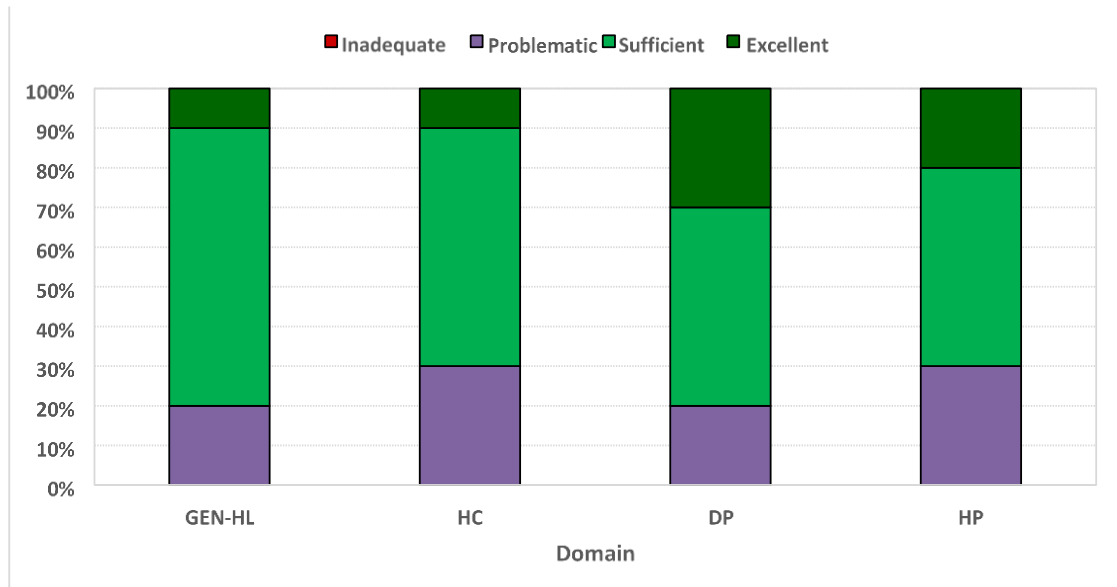
So, the grossest of these three methods mentioned by Freud, although also the most effective is the chemical one: intoxication. We owe to such vehicles not only the immediate production of pleasure, but also a highly desirable degree of independence from the external world, because it is known that with the help of this "worry buffer" it is possible to get away from the pressure of reality and find refuge in a world of one's own, with better conditions of sensitivity. But Freud warns that this property of intoxicants is what determines their danger and their capacity to cause harm, because they are responsible for wasting a large amount of energy that could be used for human improvement. So, to know how to drink moderately without losing your capacity for production is to have LS.

Health Literacy Outcomes (LS)

Regarding the results of the LS, of the ten professors of the graduate program in education of a Federal Public University, the calculation of the data was performed by the Research and Technological Innovation Management sector of the Teaching and Research Management of the Clinical Hospital of a Brazilian Federal University, which made the calculations as guided by the questionnaire analysis protocol and the charts of questions 1 to 47.

The results are as follows in the general index (GEN-HL) (Chart 1): 20% of the teachers have problematic LS; 70% have sufficient LS; 10% have excellent LS.

Chart 1 – Sample score on health literacy



Source: Collection of the authors

From the data presented, we can conclude that 80% of the surveyed teachers enrolled in the graduate program in education, have health literacy. In chart 2 we present the indices of health mastery:

- a) Health Care Index (HC): 30% problematic LS; 60% sufficient LS; 10% excellent LS;
- b) Disease prevention rate (DP): 20% problematic LS; 50% sufficient LS; 30% excellent LS;
- c) Health Promotion Index (HP): 30% problematic LS; 50% sufficient LS; 20% excellent LS.

Table 1 – Results by respondents

Interviewees	GEN-HL	HC	DP	HP
1	35,1	27,1	34,4	43,8
2	29,4	27,1	28,9	32,3
3	36,9	37,5	41,1	32,3
4	40,8	35,4	41,1	45,8
5	30,5	29,2	30,0	32,3
6	38,3	41,7	40,0	33,3
7	42,8	42,2	47,8	38,5

8	40,8	36,5	44,4	41,7
9	36,2	34,4	40,0	34,4
10	41,1	38,5	47,8	37,5

Source: Prepared by the authors

Importantly, the 20% with problematic health literacy are respondents 2 and 5 with low index: health care (HC); disease prevention (DP) and; health promotion (HP). Already in the general framework (table 2), the percentages of all items of the HLS-EU-PT matrix present in the 47 questions, reveal some variation in the difficulty and ease attributed to each item:

Table 2 – Percentages of answers for all questions in the HLS-EU-PT

Questions	On a scale from "very easy" to "very difficult", how easy would you say it is:	Very easy	Easy	Hard	Very difficult	Don't know
Q1	To find information about symptoms of diseases that concern or worry you?	80,0%	20,0%	0,0%	0,0%	0,0%
Q2	To find information about treatments for diseases that concern or worry you?	30,0%	40,0%	10,0%	20,0%	0,0%
Q3	To find out what to do in case of a medical emergency?	40,0%	20,0%	40,0%	0,0%	0,0%
Q4	To find out where to get expert help when you are sick?	30,0%	60,0%	0,0%	10,0%	0,0%
Q5	To understand what your doctor tells you?	40,0%	50,0%	10,0%	0,0%	0,0%
Q6	To understand the package inserts that accompany your medicine?	10,0%	50,0%	30,0%	10,0%	0,0%
Q7	To understand what to do in a medical emergency?	10,0%	60,0%	30,0%	0,0%	0,0%
Q8	To understand instructions from your doctor or pharmacist on how to take a medicine that you have been prescribed?	60,0%	40,0%	0,0%	0,0%	0,0%
Q9	To assess how the information coming from your doctor applies to your case?	20,0%	60,0%	20,0%	0,0%	0,0%
Q10	To evaluate advantages and disadvantages of different treatment?	0,0%	50,0%	30,0%	10,0%	10,0%
Q11	To assess when you may need a second opinion from another doctor?	30,0%	40,0%	10,0%	20,0%	0,0%
Q12	To assess whether the information about the disease in the media is reliable?	30,0%	30,0%	30,0%	10,0%	0,0%
Q13	To use information your doctor gives you to make decisions about your illness?	10,0%	90,0%	0,0%	0,0%	0,0%
Q14	To follow instructions on medication?	60,0%	30,0%	10,0%	0,0%	0,0%
Q15	To call an ambulance in an emergency?	50,0%	30,0%	10,0%	10,0%	0,0%

Q16	To follow the instructions of your doctor or pharmacist?	70,0%	20,0%	10,0%	0,0%	0,0%
Q17	To find information to deal with behaviors that affect your health, such as smoking, not enough physical activity, and drinking too much alcohol?	80,0%	20,0%	0,0%	0,0%	0,0%
Q18	To find information to deal with mental health problems such as stress or depression?	70,0%	20,0%	10,0%	0,0%	0,0%
Q19	To find information about vaccinations and health checkups I should get?	60,0%	40,0%	0,0%	0,0%	0,0%
Q20	To find information on how to prevent or control conditions such as being overweight, having high blood pressure or high cholesterol?	70,0%	30,0%	0,0%	0,0%	0,0%
Q21	To understand health warnings and behaviors such as smoking, not enough physical activity, and drinking too much alcohol?	80,0%	20,0%	0,0%	0,0%	0,0%
Q22	To understand why you need vaccines?	70,0%	30,0%	0,0%	0,0%	0,0%
Q23	To understand why you need health checkups?	80,0%	20,0%	0,0%	0,0%	0,0%
Q24	How safe are the health warnings, on aspects such as smoking, not enough physical activity, and drinking too much alcohol?	70,0%	30,0%	0,0%	0,0%	0,0%
Q25	To assess when you need to go to a doctor for a <i>checkup</i> or general health check?	60,0%	20,0%	20,0%	0,0%	0,0%
Q26	To assess what vaccines you may need?	30,0%	30,0%	40,0%	0,0%	0,0%
Q27	To assess what health tests you need to do?	30,0%	50,0%	20,0%	0,0%	0,0%
Q28	To assess whether information about health risks in the media can be trusted?	30,0%	20,0%	40,0%	10,0%	0,0%
Q29	Deciding whether to get a flu shot?	40,0%	30,0%	20,0%	10,0%	0,0%
Q30	To decide how you can protect yourself from the disease based on the advice of family and friends?	40,0%	20,0%	30,0%	10,0%	0,0%
Q31	To decide how you can protect yourself from the disease based on information given through the media?	30,0%	40,0%	20,0%	10,0%	0,0%
Q32	To find information about healthy activities such as physical activity, healthy eating and nutrition?	80,0%	20,0%	0,0%	0,0%	0,0%
Q33	To know more about the activities that are good for your mental well-being?	70,0%	30,0%	0,0%	0,0%	0,0%
Q34	To find information that will help your neighborhood become more health-friendly?	30,0%	10,0%	20,0%	40,0%	0,0%
Q35	To know more about policy changes that may affect health?	20,0%	40,0%	40,0%	0,0%	0,0%
Q36	To learn more about efforts to promote your health where you work?	20,0%	60,0%	20,0%	0,0%	0,0%
Q37	To understand health advice that comes to you from family members?	60,0%	40,0%	0,0%	0,0%	0,0%

Q38	To understand information on food packaging?	40,0%	50,0%	10,0%	0,0%	0,0%
Q39	To understand the information received from the media to become healthier?	50,0%	50,0%	0,0%	0,0%	0,0%
Q40	To understand information aimed at keeping your mind healthy?	60,0%	40,0%	0,0%	0,0%	0,0%
Q41	To assess to what extent the area where you live affects your health and well-being?	30,0%	30,0%	30,0%	10,0%	0,0%
Q42	To assess how the conditions of your dwelling help you stay healthy?	60,0%	40,0%	0,0%	0,0%	0,0%
Q43	To evaluate which of your day-to-day behaviors are related to your health?	60,0%	40,0%	0,0%	0,0%	0,0%
Q44	To make decisions to improve your health?	40,0%	40,0%	20,0%	0,0%	0,0%
Q45	To join a sports club or gym class if you wish?	40,0%	30,0%	20,0%	10,0%	0,0%
Q46	To influence the conditions in your life that affect your health and well-being?	60,0%	40,0%	0,0%	0,0%	0,0%
Q47	To participate in activities that improve health and wellbeing in your community?	10,0%	20,0%	60,0%	10,0%	0,0%

Source: Prepared by the authors

The questions (Q1, Q17, Q21, Q23 and Q32) are the highest percentages of ease, 80% of the teachers stated that finding and understanding information about their health is a "very easy" task. The question (Q34) was considered the most difficult which is about the neighborhood being more health friendly. The same was perceived in the participation of volunteer activities discussed in the item "Health Behaviors", which marked the non-social interaction in this item, following in this logic of collectivity, the question (Q47) that is the highest in difficulty, affirming the previous notes, that participation in community activities outside the academic universe is of difficult execution for the interviewed teachers.

Open-Ended Question Results

The questions considered for discussion, are: a) What impact does the social environment in which you live have on your decisions, actions, and attitudes towards your health? b) Does your work as a professor in graduate school favor good health? c) If not, what should you change to improve your health?

Analysis of the question (a): what impact does the social environment have on your decisions, actions, and attitudes towards health?

The goal was to qualify the size of the social environment impetus for the next question, about whether working in graduate school promotes good health. For 90% of the professors, the social environment impacts their decisions about health. In the field of observation, it is notable that one learns how to get sick according to the social environment that directly influences how the subject experiences illness, expresses his or her symptoms, and uses the healing resources at his or her disposal. The way "illness" is promoted is culturally shaped.

Freud (1927) states that civilization or society coldly, cruelly, and relentlessly destroys the individual. And that life is hard to bear, because the social environment imposes a certain amount of deprivation on him and men bring him sufferings that cause diseases, such as neurosis. We recognize the influence of the social environment, what we are trying to measure is extent of this control on health to know if literacy allows to make the best decision under this strong scope, from a scientific point of view, is to treat biological, psychological, sociological, and cultural factors as variables within unitary systems of analysis, to help man to have a better quality of life.

So, what we can inform in this sense is that to have literacy for health, is to have control over life events, over individual health, over the ability to seek information and to take responsibility. As we understand that literacy is a cultural practice seen as a set of controls (plans, recipes, rules, and instructions) to govern behavior, which is only translated by social relations and consists of a traffic between signifying symbols that are given in community life. We can conclude that this symbol "health" is not present in the social environment, resulting in a sick society that exchanges influences for the development of diseases and not the promotion of the health of others.

Analysis of question (b): does your work as a professor in postgraduate school favor good health?

For 70% of the professors, their work at the graduate school is not conducive to good health due to the quantitative demand for scientific academic production, the lack of infrastructure or its inadequacy, the lack of understanding of the graduate school's role in the institution, and the bureaucracy which the participants of this study face in and with their work routine in the referred graduate education program.

The main cause of the malaise is the pressure suffered by the quantity of publications and the secondary cause infrastructure and lack of resources. Masters and PhD courses in Brazil must submit annual information in the form of reports for monitoring and evaluation purposes to the Coordination for the Improvement of Higher Education Personnel (CAPES). The process related to this obligation involves the feeding of spreadsheets into the so-called Data Capes or Coleta Capes system or Plataforma Sucupira, to specify the evaluators, all the research and teaching activities carried out throughout the year by the faculty and students resulting, thus, in an evaluation and concept of the graduate program.

According to the Program Evaluation Form, after the reformulation of the evaluation system in 1998, the basic concepts that characterize the level of performance of the programs/courses recognized by the Ministry of Education (MEC) are expressed by grades and assigned concepts: 5 (very good), "4" (good) and "3" (regular). Grades "6" and "7" are reserved and assigned to programs framed as concept "5" in the first phase of the triennial evaluation, which show performance equivalent to that of international centers of excellence and have a highly differentiated level of performance in relation to other programs (CASSANDRE, 2011).

At present, the threats of closing and cutting of funds to graduate programs with "low" grades, aggravates the situation of uneasiness. When the political context is unstable, it is impossible to maintain a principle of pleasure and well-being, because when changes are constant, even the healthiest person finds it difficult to cope with the excess of stimulus in the mental apparatus, which causes anxiety, stress, anguish, or depression.

Regarding time, there is a race to submit the results of research papers to ensure that the program to which the teacher belongs, at least, remains with the same concept before CAPES or, who knows, increase the concept. There are no conditions for this worker to produce scientifically with quality and respecting his free time (CASSANDRE, 2011).

For 10% of the professors, it is indifferent and 20% of the respondents said yes, their work as a graduate professor favors good health because they have seen colleagues fall ill and are able to sublimate the problems faced in teaching. This capacity for sublimation, according to Freud (1930), is one of the techniques to remove the suffering that causes illness and resides in reorienting instinctive goals in a way that eludes the frustration of the external world. For example, when one can sufficiently intensify the production of pleasure from the sources of psychic and intellectual work.

A satisfaction of this kind, such as the artist's joy in creating or the scientist's joy in solving problems, has such a special quality that we can say that such satisfactions seem more

refined and higher. The weak point of this method is that it is not generally applicable since it is only accessible to a few people and does not provide complete protection against suffering.

It doesn't create an impenetrable armor against the onslaughts of fate, and it usually fails when the source of suffering is the person's own body⁸.

Analysis question (C): What should change in postgraduate school to improve teachers' health?

A key concept in all the answers of the professors is the suffering with the requirement of a quantitative academic production, defined by regulatory and normative commissions of post-graduation in Brazil. The pressure to publish causes uneasiness that generates insomnia, anxiety, stress, and frustration.

For 100% of those surveyed, CAPES's evaluation system needs to change, to act with differentiation between areas and based on the reality of each program. Perhaps CAPES needs to resume the Rudolph P. Atcon's report published by the MEC in 1966, which proposed the creation of two funds in each graduate program: a fund for the Improvement of Teaching Staff and another for the Improvement of Higher-Level Staff (ALMEIDA, 2017). For overcharging without investment is the reproduction of the exploitation of the capitalist market in academic scientific production. What should be a liberating principle of a nation, the knowledge, this is increasingly focused on overcoming cold numbers and bureaucracy that permeates this entire process without considering the real scientific development of the country and those researchers and teachers who participate and contribute actively.

We can talk about hypocrisy, because it makes no sense that the post-graduation continues with objectives of a system designed for an elite, since it still maintains a massified education for a saturated labor market. And in the form of objectification that needs to be set aside as observed in relation to the title of Master or Doctor, because it confers the cultural capital that is supposedly the guarantee of entirely original properties (NOGUEIRA; CATANI, 2015) still occurs the power to institute, to recognize and establishes the value at the level of cultural capital in money, for which it could be exchanged in the labor market, there is, in this way, what we understand by a lowering of knowledge, that there is not even that anymore when it comes to its guarantee in the Brazilian academy.

⁸ No other technique for the conduct of life holds the individual so firmly to reality as the emphasis placed on work, for it at least provides him with a secure place in a part of reality and in the human community. Professional activity is a source of special satisfaction if it is freely chosen, that is, by means of sublimation, it makes possible the use of existing inclinations.

Concluding remarks

We indicated at the beginning of this article, three problems for us to contrast. The answers with respect to the problem (a) What is the incidence of culture with health, human and sustainable development? We point out that human thinking is an open act conducted in terms of the objective materials of the common culture, in the sense of both oriented reasoning and the formulation of feelings, as well as the integration of both, man's mental processes occur in the spaces of symbolic exchanges in historically situated social relations. This means that to conceive thinking as a social act performed together with other collective actions that can play a very constructive role, that is, it opens the perspective that thinking consists of a traffic of meaningful symbols and objects in experience on and with which men imprint and produce meanings. Thus, culture not only influences health and sustainable development, but it is through the cultural patterns piled up, ordered, and loaded with meaningful symbols that man finds meaning in the events experienced in order to orient himself in the world, regardless of his level of action. However, intricate the guiding principle is the same: each society contains its own interpretations developed in cultural practices, exchanges, and social relations, and these, in turn, impact brain development and the construction of a higher society. Thus, if we do not live in a healthy and sustainable way, it is because these symbols are not present in the society in which we live.

Regarding problem (b), will postgraduate education teachers, initially considered to have a high level of literacy, know how to make decisions to identify, understand, interpret, create, communicate, and use new technologies, according to the various contexts for their health? We affirm that yes, since 80% of those surveyed have health literacy, but we consider that this is a question that is not so simple. Teachers are inserted in a context that health is not represented, which was proven by the HLS-EU-PT questionnaire, 50% of the respondents stated that they have more than one illness and 20% have a long-term illness. Thus, it is evident that 70% of the professors of this graduate program have some pathology.

Regarding question (c), regarding all the dynamics, responsibilities, demands and difficulties in Brazilian higher education, does the post-graduation university professor in education exercise his/her personal capacities of understanding, management, and investment to adopt a health-promoting lifestyle? We conclude that professors exercise their understanding and management capacities, but health promotion is hindered by the fact that they do not have enough time to adopt a healthy lifestyle, according to the answers of 70% of those surveyed.

And, finally, question (d), answering all these questions: can we conclude that the environment in graduate programs is sustainably fruitful? We have shown that professors are pressured to publish in journals and periodicals, which are often not recognized by their own peers (not active in graduate studies), since it is not an "obligation", there is no salary increase or reduction in the workload at graduation, seen only as an individual vanity. For postgraduation teachers, it is a suffering to deal with the non-understanding of other teachers, because the post-graduation is the place of research development of a university, it is a place of dialogue, of interaction among peers.

We verified that the teaching work causes instability in mental health, because they have no free time and that many of their working hours are not considered. One of the great indices of excitation of the mental apparatus that generates illness is directly linked to the evaluation system of the funding agencies, which levels all researchers and institutions based on parameters that may not differentiate nor respect the conditions of each program: its infrastructure, its history in research, and its time of existence. It is also questioned whether the basis of these criteria for the establishment of rules of performance of the programs would not have been created by observing the performance of the programs of Brazilian universities of reference, holders of national and even international recognition and that, inclusive, may have been working for a long time in academic research being, therefore, institutionalized and legitimized the practice of research as an example to be followed in the academic field.

The management universe in graduate school seems to be in the capitalist and productivist logic and educators are creating an organizational culture that maintains the institutionalized, legitimized, official political power, which directly affects the mental health of teachers. The teacher is influenced by the social environment and sees that his particularities and subjectivities may not be being considered, being replaced by a standardized and hierarchized behavior by the different fields of knowledge that are valid, more or less "relevant" than others. It is admitted that there is an oppressive force of intellectual productive organization, very close to a model exported from North America that has harmed the teachers' health, demanding more than what their production conditions can produce, that they can meet the demand that is placed and imposed on them. Discourses and *modes of operation* that end up producing, reproducing, and inducing the teacher to practices that need to follow this direction and, in this way, contribute to the illness of graduate teachers, as is the case of this research.

It is concluded that the mental health of professors is directly related to the productive process and that there is an increase in intellectual production, but the problems of this design

have brought mental complications. Thus, it is up to the manager, in any institutional nature, to recognize these problems and find alternatives so that the workers do not stop being productive but can also act in an environment that favors their well-being, their recognition, and their contribution to national development.

The purpose of this research was to assess the level of health literacy of graduate education faculty members at a federal university to understand whether these professionals exercise their personal capacities to understand, manage, and invest in adopting a healthy lifestyle from a sustainable perspective. Thus, we come to the end of the weaving of this article with an inquiry: The participants in this research have health literacy (HL), but to what extent can an individual with sufficient or excellent HL be truly healthy in a diseased work or system? If health is a constructed psychosocial phenomenon, then will the development of LS succeed in promoting the empowerment of the individual in a society without the cultural symbols of what health means, necessary to constitute the act of thinking and ordering their lives?

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REFERENCES

ALMEIDA, K. **A pós-graduação no Brasil: história de uma tradição inventada.** 2017. 213 f. Tese (Doutorado) – Faculdade de Educação, Universidade Estadual de Campinas, Campinas, 2017.

BARRETT, S.; PURYEAR, J.; WESTPHELING, K. **Health literacy practices in primary care settings: examples from the field.** Nova Iorque: The Commonwealth Fund., 2008.

Disponível em:

www.commonwealthfund.org/usr_doc/Barrett_hlfliteracypracticesprimarycaresettingsexampl.esfield_1093.pdf?section=4039 Acesso em: 01 set. 2018.

BENAVENTE, A. **A Literacia em Portugal.** Lisboa: Fundação Calouste Gulbenkian/ Conselho Nacional de Educação, 1996.

BOURDIEU, P. **Os usos sociais da ciência: por uma sociologia clínica do campo científico.** São Paulo: UNESP, 2004. 86 p.

BRANDÃO, C. **Pesquisa participante.** São Paulo: Brasiliense, 1999.

CASSANDRE, M. A Saúde de Docentes de Pós-graduação em Universidades Públicas: Os Danos Causados pelas Imposições do Processo Avaliativo. **Revista Mal-estar e**

subjetividade, v. 11, p. 779-816, jun. 2011. Disponível em:
<http://pepsic.bvsalud.org/pdf/malestar/v11n2/13.pdf>. Acesso em 03 jan. 2019.

CATANI, A. M.; CATANI, D. B.; PEREIRA, G. R. M. Pierre Bourdieu: as leituras de sua obra no campo educacional brasileiro. *In*: TURA, M. L. R. (org.) **Sociologia para educadores**. 4. ed. Rio de Janeiro: Quartet, 2006.

FREUD, S. (1920-1922). **Além do Princípio de Prazer, Psicologia de Grupo e outros trabalhos**. Edição standard brasileira das obras psicológicas completas de Sigmund Freud. Rio de Janeiro: Imago, 1996.

FREUD, S. **O futuro de uma ilusão**. Edição Standard Brasileira das Obras Completas de Sigmund Freud. Rio de Janeiro: Imago, 1996[1927].

FREUD, S. **O mal-estar na civilização**. Edição Standard Brasileira das Obras Completas de Sigmund Freud. Rio de Janeiro: Imago, 1996[1930/1929].

GEERTZ, C. **A interpretação das culturas**. Rio de Janeiro: Editora LTC, 2008.

HEALTH Canada. **Toward a healthy future**: second report on the health of Canadians. 1999. Disponível em: www.hc-sc.gc.ca/hppb/phdd/report.html. Acesso em: 01 set. 2018.

HOWARD, A. S. **Um testamento agrícola**. 1. ed. São Paulo: Expressão Popular, 2007.

KICKBUSCH, I. **Health literacy**: addressing the health and education divide. Health Promotion International, 2001.

KICKBUSCH, I.; WAIT, S.; MAAG, D. **Navigating health**: the role of health literacy. London International Longevity Centre. Alliance for Health and the Future, 2006.

KLEINMAN, A.; EISENBERG, L.; GOOD, B. Culture, illness, and care: clinical lessons from anthropologic and cross-cultural research. **Annals of Internal Medicine**, Philadelphia, v. 88, p. 251-258, 1978.

LÉVI-STRAUSS, C. **Antropologia Estrutural**. 6. ed. Rio de Janeiro: Tempo Brasileiro, 2003.

LÉVI-STRAUSS, C. Introdução à obra de Marcel Mauss *In*: **Sociologia e Antropologia**. São Paulo: COSACNAYF, 2003.

MONTEIRO, M. M. C. F. **A Literacia em Saúde**. 2009. Dissertação (Mestrado em Ciências da Educação) – Departamento das Ciências de Educação, Universidade Lusófona de Humanidades e Tecnologias, 2009.

MOROSINI, M. C. (org.). **Professor do ensino superior**: identidade, docência e formação. Brasília: Instituto Nacional de Estudos e Pesquisas Educacionais, 2000.

NOGUEIRA, M. A.; CATANI, A. (org.). **Pierre Bourdieu**. Escritos de educação. 16. ed. Petrópolis: Vozes, 2015.

NUTBEAM, D. **Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century.** Health Promotion International, 2000.

NUTBEAM, D. The evolving concept of health literacy. **Social, Science & Medicine**, 2008.

OLIVEIRA, H. B. A Formação Pedagógica de professores na pós-graduação stricto sensu: Os casos UFU e UFMG. **Póesis Pedagógica**, v. 9, n. 2, p. 03-19, ago./dez. 2012.

OMS. ORGANIZAÇÃO MUNDIAL DA SAÚDE. **Health promotion glossary.** Genebra, 1998.

SABOGA, N. *et al.* Cross-cultural adaptation and validation to portuguese of the european health literacy survey (HLS-EU-PT). **Aten Primaria**, p. 46-13, 2014.

SABOGA, N. Literacia para a saúde: compreendendo seu alcance, objetivos, metodologia e contribuição no contexto da promoção da saúde. Grupo de Disciplinas de Estratégias de Ação em Saúde. *In: Secção de Saúde Pública e Comunidade Escola Nacional de Saúde Pública.* Universidade NOVA de Lisboa, 2016.

SIMONDS, S. K. Health education as social policy. **Health Education Monograph**, 1974.

SOARES, S. A. (org.). **A Educação Superior no Brasil.** Brasília: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior, 2002.

SOCIAL DETERMINANTS OF HEALTH: The Solid Facts, 2003. Disponível em: http://www.euro.who.int/__data/assets/pdf_file/0005/98438/e81384.pdf Acesso em: 22 jul. 2019.

TONES, K. Health literacy: new wine in old bottles. **Health Education Research**, 2002.

UNESCO. **Youth and Adult Literacy in Brazil: learning from practice.** Disponível em: [https://www.google.com.br/search?q=UNESCO+\(2009\).+Education%2FLiteracy.&aq=chrome..69i57.536j0j7&sourceid=chrome&ie=UTF-8](https://www.google.com.br/search?q=UNESCO+(2009).+Education%2FLiteracy.&aq=chrome..69i57.536j0j7&sourceid=chrome&ie=UTF-8). Acesso em: 01 set. 2018.

VECCHIATTI, K. Três fases rumo ao desenvolvimento sustentável: do reducionismo à valorização da cultura. **Perspectivas**, São Paulo, v. 18, n. 3, jul./set. 2004.

VOZIKIS, A. Health literacy among university students in Greece: Determinants and association with self-perceived health, health behaviours and health risks. **Archives of Public Health**, 2014.

WULFF, H. R.; PEDERSEN, S. A.; ROSENBERG, R. **Filosofia Della Medicina.** Milano: Raffaello Cortina Editore, 1995.

ZABALZA, M. A. **O ensino universitário: seu cenário e seus protagonistas.** Porto Alegre: Artmed, 2004.

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