The food and nutrition field: an essay on the expansion of nutrition undergraduate courses in the current brazilian university scenario

O campo da alimentação e nutrição: um ensaio sobre a expansão dos cursos de graduação em nutrição no cenário atual da universidade brasileira

Abstract

The profession of nutritionist is embedded in the logic of State policies, which involves a set of economic, social and political interests. There has been significant expansion in these undergraduate courses in the country, mainly in private education institutions. The university system was incorporated by the global capitalist market economy; thus, Food and Nutrition has been developed as scientific field in this scenario. The aim of the present study is to address the expansion of Nutrition undergraduate courses in the current scenario of higher education institutions, as well as to analyze its impacts on nutritionist formation. An analytical and critical research was developed based on documentary analysis in order to identify elements of a symbolic game that covers this journey, as well as to guide the analysis process. Results suggested the accelerated expansion of for-profit higher education institutions in Brazil, which had impact on the Food and Nutrition field, both on the expansion of Nutrition undergraduate courses and on the professional education model adopted to meet economic interests.

Keywords: Nutritionists. Formation. Education. University.

Resumo

A profissão de nutricionista está inserida na lógica das políticas de Estado, que envolve um jogo de interesses econômicos, sociais e políticos. Uma grande expansão nos cursos de graduação tem sido observada no país, principalmente nas instituições de
ensino privado. O sistema universitário foi incorporado pela economia de mercado capitalista global, e a Alimentação e Nutrição, como campo científico, vem se desenvolvendo nesse cenário. O presente ensaio tem por objetivo discutir a expansão dos cursos de graduação em Nutrição no momento atual das instituições de ensino superior e seus impactos sobre a formação do nutricionista. Uma pesquisa analítica e crítica foi desenvolvida a partir de análise documental, identificando elementos de um jogo simbólico que perpassa essa trajetória, orientando o processo de análise. Verificamos acelerada expansão das instituições de ensino superior com fins lucrativos no Brasil, que apresentou impactos no campo da Alimentação e Nutrição, tanto na expansão dos cursos de graduação em Nutrição quanto no modelo de ensino profissionalizante adotado voltado a atender aos interesses econômicos.


**Introduction**

The current essay addresses the expansion of Nutrition undergraduate courses in the current context of higher education institutions (HEIs), as well as some of its impacts on nutritionist formation.

The origin of such profession in Brazil dates back to the mid-20th century. The profession was inserted in the logic of State policies in order to either form professionals to provide individualized, curative and hospital care or to meet populist policies marked by welfarism. It was done to maintain power by providing low-cost food to the poorest layers of society or to use food to manipulate disadvantaged social classes and to expand workers’ exploitation by increasing their productivity.1,2 The study approach was based on documentary analysis and took into account economic, social and political interests to guide the analysis process and to help identifying elements of a symbolic game that covers the herein described journey.

The significant presence of the for-profit private sector in the Brazilian higher education context has strong influence on nutritionist formation process. Besides the strong expansion of private HEIs in the last decades, the country has witnessed significant decrease in resources aimed at expanding and maintaining public HEIs, except for important investments focused on implementing new public universities and on expanding the number of vacancies in the existing ones. These actions were applied as government policy from 2003 to 2016.3
According to Associação Brasileira de Nutrição (Brazilian Association of Nutrition), there were 431 Nutrition undergraduate courses in the country in 2017; 80% of them were held by private HEIs. This number significantly shifted the public-private balance in the Food and Nutrition field towards market gains, which cannot be neglected when it comes to forming in higher education. The recent deterioration in the labor market is another aspect that should be taken into consideration in this scenario, since it is linked to high unemployment level and to limited working conditions, besides changing the professional insertion of graduated individuals. Thus, the teaching process is almost fully focused on professional practice and gives no emphasis to knowledge formation and multidisciplinarity. This new perspective now sets the tone for the pragmatism of professional formation.

These transformations took place throughout the constitution of the Food and Nutrition field. The first Nutrition course dates back to 1939, which corresponds to the period of the National Populist State of Getúlio Vargas' government. The course was implemented in Instituto de Higiene de São Paulo (Hygiene Institute of São Paulo), which is the current Nutrition undergraduate course of Departamento de Nutrição da Faculdade de Saúde Pública da Universidade de São Paulo (Nutrition Department of the Public Health School of University of São Paulo). Until 1969, there were seven Nutrition undergraduate courses in the country, all of them in public higher education institutions.

The number of Nutrition undergraduate courses has significantly increased since the 1970s. To some extent, this increase is in line with governmental actions expressed, for example, in the text of the II Food and Nutrition Program, whose guidelines encouraged the qualification of human resources and the expansion of Nutrition undergraduate courses in Brazil. However, this expansion did not only take place in the Food and Nutrition field; it also affected the Brazilian higher education as a whole, because the University Reform implemented in 1968 (Law N. 5540) enabled opening graduation courses in all knowledge fields and established a single organization model for public and private universities. This model provided didactic-scientific, administrative and financial autonomy to these institutions – although, in many cases, the financial autonomy was nothing more than words in official texts.

More than 38 Nutrition undergraduate courses were implemented from 1970 to 1996. The promulgation of the National Education Guidelines and Framework Law, in 1996, granted autonomy to universities and university centers to implement, organize and extinguish undergraduate courses. Consequently, other 330 courses were implemented, thus totaling 375 courses in 2013; 295 of them were implemented in private institutions; and 80, in public institutions, as shown in the figure below.
It is possible saying that higher education has social, cultural and economic impact on society in general if one takes into consideration the social issues marking the history of the country. Higher education can play a relevant role in finding solutions to existing problems, such as expanding citizenship, reducing poverty and improving people’s health. This perspective significantly contrasts with the expansion of vacancies in different courses in public and private universities. In addition, it is understood as a Brazilian social policy instrument, which predominantly adopts the higher education model with strong technical aspects focused on workforce formation in order to strictly meet the labor market.

Based on a more realistic perspective, one can think that fields such as Education, Professional Formation and Health Sciences are part of the prevailing state policies driven by a set of interests seen in global and/or local capitalism investment strategies. Other sectors such as Art and the Cultural Industry are also part of this workforce production and replacement movement, whereas courses in the Health field take care of its maintenance. Thus, culture, art, education and professional formation are tools that can serve both social inclusion and exclusion: they are part of the State system and strategies.

**Figure 1.** Number of Nutrition undergraduate courses per historical period in Brazil.

Sources: Haddad (2005) and MEC (2015)
The National Education Plan aims at raising the higher education enrollment rate to 33% of the population in the age group 18-to-24 by 2020. In order to do so, the Ministry of Education adopted measures, which boosted growth of private HEIs; among them, one finds FIES - Fundo de Financiamento ao Estudante (Student Financing Fund) launched in 1999 and Prouni - Programa Universidade para Todos (University for All Program) launched in 2004. Both programs aimed at granting funds or scholarships to low-income students so that they could attend graduation courses in private higher education institutions.12-14

Therefore, knowledge production in these fields translates forms of organizing and administrating the State apparatus. The vertiginous growth of private HEIs in the last decades (Figure 1) shows that the professional formation field is changing very rapidly, although with distinct rates in different formation fields. Thus, it is possible saying that education is currently under significant pressure, which is exerted by private institutions focused on professional formation in Nutrition, as well as that such pressure affects the Food and Nutrition field by shifting social actors’ positions.

We herein adopted Pierre Bourdieu’s concept of field as network or as a set of objective relations between positions. These relations are defined by different positions taken by actors (subjects, agents or institutions) in a given (current or potential) situation observed in the distribution structure of different power types (or capital).15 The ownership of different capitals enables taking hierarchical positions (domination, subordination, dependency, homology, among others) in relation to other actors who play the same game.

It is possible assuming that the proximity between the Food and Nutrition fields and the interests of the market and biomedical knowledge-associated sectors determines the research direction, as well as the formation of teachers and new professionals. This process reconfigures the Food and Nutrition field, which, in its early days, was strongly linked to State actions such as professional insertion in universities, hospitals and public restaurants.

The hierarchical power that structures the actions of, and defines the relations between, institutional actors in this field reflects the dynamics of positions and power relations of each actor. The growth of Nutrition undergraduate courses, in face of the overall higher education growth rate, has meanings that go beyond the borders of the field itself. Nowadays, courses are organized based on market demand, because the “privatizing” education policy follows the liberal trend and emphasizes that the market is a system that organizes, self-organizes and reorganizes the universe of knowledge fields. The State, as an actor, withdraws from this place and allows social relations to happen based on a more diffused micro-power movement. Students look for courses capable of assuring better positions in the labor market, of meeting their subjective interest in prestige and social capital, besides enabling an employability scenario increasingly oriented to the private initiative.
Science industrialization, professional formation commodification and labor force erosion processes affect, each in its own way, the commitment of these fields to the decision-making centers of the economic, social and political power held by educational institutions that increasingly influence, direct and define the scientific thinking “priorities” in each professional field.

Professional formation in the Nutrition field takes place in the midst of dialogues, conflicts, paradoxes, contradictions and power disputes with other scientific fields. The asymmetry between the growth rates of different fields, as well as the significant difference between the means of public and/or private professional formation raises questions that must be discussed by field professionals themselves.

Higher education expansion movement in Brazil

Since the 1980s, there have been significant changes in the priority given to public universities by State public policies; such changes were induced by the economic development model known as “neoliberalism”. The 1988 Constitution opened the doors for large educational groups, since it allowed education to generate profits, as expected in capitalist societies. Consequently, it enabled foreign capital inflows and turned the country into an attractive market for investors worldwide.

The university system was incorporated by the economy of the global capitalist market and changed the essence of the university that, nowadays, focuses on satisfying its “customers” and the labor market by launching new courses, granting access to new information and communication technologies, and by offering different (face-to-face, semi-distance and distance) learning modalities to optimize the sale of these products. According to Boaventura de Souza Santos, the two significant processes that took place in this decade - the State disinvestment in public universities and their mercantile globalization - are the two sides of the same coin. They are two pillars of a vast global university policy project designed to deeply change the way public assets, such as universities, have been produced, as well as to transform them into a vast educational capitalism valorization field. This project, which is intended for the medium- and long-term, involves different society commodification levels and forms (Santos, 2004. p. 21).

Thus, this growth, which is linked to market and global capitalism interests, has been disseminating its economic, political and strategic demands in the social world. Education becomes a product, a profitable business (or not), a commercial commodity like any other in the investment portfolio.

Recent merger and acquisition movements in the Brazilian higher education segment have been concentrated in the hands of a few groups, which formed giant private education institutions. The scientific field of Food and Nutrition is also subjected to the same situations, which prioritize
demands of the deteriorated labor market to the detriment of the public nutritionist formation initiative in order to tackle social issues, either in the labor or food production markets.

According to Bourdieu,\textsuperscript{17} the scientific field is a social space of forces and, as such, the social dynamics and importance of its actors influence what it can or cannot do. The place these actors occupy in the social structure determines or guides the positions they adopt. The internal structure of the scientific field can be based on the distribution of scientific capital within it; however, one cannot neglect the fact that such structure is also influenced by external forces. According to the aforementioned author, actors (individuals or institutions) characterized by the volume of their capital act on, and are object of the action by, the structure of the field in proportion to their power to adopt positions. This whole process depends on relationships between actors – by occupying a certain position, an agent interferes in the position of others and, since the space is competitive, the hierarchy of positions favors the action and autonomy of those who have higher social distinction in the field.

Thus, the launching of Nutrition undergraduate courses, the concentration and valorization of certain disciplines in the curriculum framework and the construction of profiles oriented to the labor market and to market interests have influence on, and define, the type of professional to be formed and the perspective to be built.

**Nutritionist formation in the contemporary world**

The National Curricular Guidelines (DCN - Diretrizes Curriculares Nacionais) for Nutrition undergraduate courses\textsuperscript{18,19} suggest forming professionals who are more attentive to social issues and qualified to provide health care based on an integral, interdisciplinary, multiprofessional and equitable approach. The guidelines also demand a series of new contents in the Pedagogical Projects of Nutrition courses such as the valorization of SUS - Sistema Único de Saúde (Unified Health System), the regional diversity, and the cultural, political and economic reality.\textsuperscript{20-23}

Despite the recurrent discourses in a multitude of official documents, the competence of Nutrition undergraduate courses to form professionals – who are able to act in a critical and reflexive way towards the issues of society - has been questioned. Nowadays, pedagogical practices focused on bringing students close to people’s reality, and to the reality of welfare services provided by SUS and by the public network of primary and secondary schools, are encouraged since the beginning of the nutritionist formation process through the articulation among teaching, research and extension.\textsuperscript{18}

The current dynamics of Nutrition undergraduate education brings to light internal struggles and disputes within universities that organize their hierarchical social relations through departments associated with blocks of knowledge and programmatic content. Undergraduate courses have social discrimination and distinction elements involving matters such as gender,
ethnicity and religion; relation to the market and conflicts of interest since students’ formation; competition for space among graduation, postgraduation and extension courses that correspond to different forms of capitalization and prestige; disputes between public and private institutions; competition between private universities for larger education market shares and the inflow of international capital in such competition.

The National Curricular Guidelines address new teaching scenarios and indicate the need of changing the teaching-learning process by seeing students as the center of the learning process and professors as facilitators, mediators and motivators of the knowledge construction process. Thus, the guidelines indicate that professors should encourage students to discuss about political aspects of the profession and of its exercise in society. They should also adopt new pedagogical practices and incorporate the use of information and communication technologies (ICTs) applied to education in order to help forming critical, creative and active individuals, fact that would constitute a fundamental element of knowledge awareness, democratization and universalization.

However, studies carried out with Nutrition professors have identified their difficulty in implementing active teaching-learning methodologies and in evaluating skills and abilities, fact that corroborated the need of implementing a pedagogical formation in order to change teaching practices adopted in Nutrition courses.

Another issue lies on the formation evaluation process based on competence, merit and productivity as categories guiding the teaching and learning process. Other elements in this process, such as taking the insertion in the labor market as qualification indicator, are not always evident. In the case of professionals performing activities associated with services in general, it is also necessary taking into consideration the struggles for positions, wages and financing, the valorization of quantitative production and market-insertion parameters, the loss of autonomy in research, the devaluation of Humanities as an essential element in formation and the option for private financing to supplement wages or to purchase research equipment.

Scenarios in which information and communication technologies are implemented should be taken into consideration, since these technologies can be used to reinforce democratic practices, as well as to reiterate social power and control. The use of these technologies can lead to precarious formation; thus, it is demanding being careful and adopting clear criteria at the time to implement these technologies in order to avoid providing a limited, excessively technical, superficial, uncritical and inhuman formation, which is exactly the opposite of what the National Curriculum Guidelines recommend.

The modernization of educational systems, either in the public or private sectors, triggers a precariousness process that continuously reinforces the subjection of teaching professionals to the need of competitiveness and productivity. The use of information and communication technologies in education also acts on the teaching process and on the working conditions of
teaching professionals. The institutionalization of technological tools in the teaching practice acknowledges the importance of communication and technology in the academic world. However, it has been reproducing productivity-focused and short-termism interests that extend students’ journey from the traditional university space to the leisure space. The time that should be spent in domestic activities and personal life is used in academic activities such as writing articles, attending classes and working in projects.

Nowadays, technological abilities give social distinction to teaching professionals, since they are associated with the ways to produce in the institution; thus, it symbolically capitalizes these professionals. However, the application of ICTs increasingly standardized in the education market segment also forces teaching professionals to adapt to the pace of transformations in place in their work environment and to pursue technological qualification. Although these technologies are a fundamental and necessary tool in labor relations, their use has often expressed blind obedience to the rules of a globalized productivist game. It happens because this technology is alienated from the reflexive thinking, fact that compromises teaching professionals’ autonomy over their practice.29

The expansion of Nutrition undergraduate courses took place mainly through private HEIs; thus, formation tends to respond to commercial interests. The working, formation and permanent education conditions of teaching professionals, as well as the curriculum, teaching-learning process and evaluations, should be taken into consideration at the time to analyze possible advancements, setbacks, inconsistencies, gaps and perspectives of such profession in order to discuss about, and deconstruct, nutritionist formation premises.16,18

**Final considerations**

There has been an accelerated expansion of for-profit higher education institutions in the last two decades in Brazil; such expansion was encouraged by education policies implemented in the country. Nowadays, most higher education institutions in the country are for-profit. This process had impacts on the Food and Nutrition field, both on the expansion of Nutrition undergraduate courses and on the adopted professional formation model focused on meeting economic interests.

If one takes into consideration the great expansion in Nutrition sciences and the performance of nutritionists based on the context conditioned by the current public policies, it is necessary addressing the education of Nutrition professors in order to form nutritionists able to understand, analyze and intervene in the pursuit of Health and of Food and Nutrition Security as a citizens’ right.

If one takes into consideration the DCN statement that “nutritionists should have a generalist, humanistic and critical education”, it is possible saying that the questions guiding the current study remain unanswered. Is Nutrition formation going in this direction? Are we really forming generalist, humanist and critical professionals?
Contributors

Machado PAN, Carvalho MCVS and Ferreira FR participated in all research stages, since the elaboration of the study to the review of the last version of the manuscript.

Conflict of interests: The authors declare no conflict of interests.

Referências

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