ABSTRACT
Objective: to analyze the transactional distance, in the student's perspective, of a long distance Health Management course. Method: a qualitative, holistic study, a single case study. Fifty-nine students enrolled in the in-house support poles in Minas Gerais and São Paulo attended the semistructured interview and the online questionnaire. The Thematic-Categorical Content Analysis technique and the Atlas Ti software were used to systematize the analysis. As a theoretical reference, the Transactional Distance Theory was used. Results: it was verified that the dialogue occurs in a bidirectional, unilateral and noisy way; the course has high structuring and there is low student autonomy. Conclusion: situations have been identified, increasing the perception of transactional distance, which may contribute to the failure of the course and avoidance of students. Interaction and autonomy need to be maximized in this experience, enhancing the adequate training of managers in the public health system. Descritores: Education, Distance; Health Management; Information Technology; Health Human Resource Training; Education, Continuing; Health Systems.

RESUMO
Objetivo: analisar a distância transaccional, na perspectiva discente, de um curso de Gestão em Saúde na modalidade a distância. Método: estudo qualitativo, holístico, tipo estudo de caso único. Participaram 59 alunos vinculados a polos de apoio presencial em Minas Gerais e São Paulo que responderam à entrevista semiestruturada e ao questionário online. Utilizaram-se a técnica de Análise de Conteúdo Temático-Categorial e o software Atlas Ti para sistematizar a análise. Como referencial teórico, utilizou-se a Teoria da Distância Transaccional. Resultados: constatou-se que o diálogo ocorre de forma bidirecional, unilateral e ruidosa; o curso possui alta estruturação e há baixa autonomia discente. Conclusão: identificaram-se situações ampliando a percepção de distância transaccional, o que pode contribuir para o insucesso do curso e evasão de discentes. A interação e a autonomia necessitam ser maximizadas nessa experiência potencializando a formação adequada de gestores atuantes no sistema público de saúde. Descritores: Educação a distância; Gestão em saúde; Tecnologia da informação; Gestão do Conhecimento; Educação Continuada; Sistemas de Saúde.

RESUMEN
Objetivo: analizar la distancia transaccional, en la perspectiva discente, de un curso de Gestión en Salud en la modalidad a distancia. Método: estudio cualitativo, holístico, tipo estudio de caso único. Participaron 59 alumnos, vinculados a polos de apoyo presencial en Minas Gerais y São Paulo que respondieron a la entrevista semiestructurada y al cuestionario en línea. Se utilizó la técnica de Análisis de Contenido Temático-Categorial y el software Atlas Ti para sistematizar el análisis. Como referencial teórico, se utilizó la Teoría de la Distancia Transaccional. Resultados: se constató que el diálogo ocurre de forma bidireccional, unilateral y ruidosa; el curso tiene alta estructuración y hay baja autonomía discente. Conclusión: se identificaron situaciones ampliando la percepción de distancia transaccional, lo que puede contribuir a su fracaso del curso y evasión de los discentes. La interacción y la autonomía necesitan ser maximizadas en esta experiencia, potenciando la formación adecuada de gestores actuantes en el sistema público de salud. Descritores: Educación a Distancia; Gestión en Salud; Tecnología de la Información; Gestión del Conocimiento; Educación Continuada; Sistemas de Salud.
INTRODUCTION

The Open University of Brazil (OUB), in the country’s expansion, had, in 2015, 104 Public Higher Education Institutions (HEI), 645 active poles and more than 340,000 enrolled students, being offered 6,150 thousand new places for the National Public Administration Training Program (NPATP). With such expansion, the NPATP evaluation, specifically, of the specialization course in Health Management is a necessity, given the investment that accompanies it, allowing an understanding of its potentialities and weaknesses.

The Health Management course, offered by NPATP, has been the object of studies in the following aspects: evaluation of course management; training and role of the tutor; student evaluation; avoidance and permanence of students. In addition to these themes, the evaluation of the transactional distance is fundamental to qualify the formative processes, since it allows to contribute with reflections directed to the course, its implications in the teaching-learning process and its dynamics, justifying the proposed study.

The transactional distance, existing in DE, occurs in environments with specific characteristics with physical separation between the student and the teacher. This relationship generates a pattern of behavior interfering directly in teaching and learning, because with separation, a psychological space and communication to be transposed, a space of fragilities and potentialities, this space being the transactional distance.

There are two dimensions that measure the transactional distance: “Distance interaction” and “Student autonomy”. In the first dimension, there are two components that can be measured: dialogue and structure. The dialogue is used to describe interactions between those involved. The structure covers the set of elements used for the preparation and conduct of the course. In the second dimension, the student’s autonomy is the learning relationship, in which the students determine their goals and are responsible for the experiences and decisions to be made.

Thus, transactional distance influences the teaching-learning process, such as autonomy, motivation and interaction among those involved. These findings reinforce the need to understand the transactional distance between those involved in this course with a view to enhance their success, forming managers, potentially qualified for the transformation of daily work in health.

OBJECTIVE

To analyze the transactional distance, in the student’s perspective, of a long distance Health Management course.

METHOD

A unique, holistic and qualitative case study. The specialization course in Health Management, in the distance modality, of a public HEI and as a “unit of analysis” was defined as the “transactional distance” between those involved in this course. The Transactional Distance Theory was used as theoretical reference.

A Health Management specialization course of was evaluated, in the distance modality, of a public HEI, offered in eight poles of face-to-face support, six in the State of Minas Gerais and two in São Paulo. Of the 320 enrolled students, only 120 completed the mentioned course and were chosen for inclusion in the study because of the lower complexity of locating them, since they would be defending their Course Completion Work (CCW) in the face-to-face support pole and, thus, could be invited to participate in the study. However, of the 120 graduating students, 59 accepted to participate in the study and were included.

For the data collection, semi-structured interviews and the application of an online questionnaire were carried out, with the participants in the face-to-face support poles. In the semi-structured script, questions related to interaction dimensions and student autonomy were addressed. The online questionnaire dealt with issues related to the profile of the participants and their study context, as well as other questions that also sought to measure the interaction dimension.

Participants were individually interviewed in a room, reserved at the face-to-face support center. After the interviews, the participants were also referred to the computer lab to answer the online questionnaire composed of open and closed questions. The data collection was carried out by a researcher, at each face-to-face support center, totaling eight properly trained collectors. The interviews were individually recorded, transcribed and coded with the letter “P” followed by a number from one to 59.

The data was analyzed through Content Analysis in the Thematic-Categorical modality. In order to systematize the organization and analysis of the data, the software Atlas Ti was used.

The study complied with Resolution 466/2012 of the National Health Council and
was approved by the Research Ethics Committee of the Federal University of São João del-Rei, under the opinion of No. 714.635.

RESULTS

The majority of the students who participated in this study were 41 (69%) female, ranging in age from 27 to 56 years, and 21 (35%) in the age group between 40 and 49 years. The majority (53 = 89%) had employment in the public sector and six (11%) had a private employment relationship.

As for their performance, only 18 (30%) reported that they acted as manager/administrator in health services and 52 (88%) of the permanent ones acted in some way in the Unified Health System, most of them nurses (25 = 42.3%), followed by nine (15.2%) dentists and five (10.2%) pharmacists. It was identified that 34 (58%) professionals interviewed, already had postgraduate degrees and 35 (60%) already had experiences in distance courses.

Dialogue under evaluation: strengths and weaknesses

The students recognized the dialogue, through the communication between those involved in the course development in the distance modality. Initially, they reported that coordination fulfilled the role and that the course secretariat interacted synergistically.

[...] the coordination fulfilled her role, sent all relevant information, sent a response, were also attentive to everything .... (P17)

[...] at all times, the secretary interacted with us, gave us all the necessary information about the course, the face-to-face tests that changed the dates [...]. (P07)

On the other hand, other interviewees emphasized weaknesses in the dialogue process between students and coordination, and between coordination and polo of face-to-face support.

[...] I needed a statement and no response from the e-mail they sent me, not even to speak like that was received the e-mail [...]. (P10)

[...] many answers that I sought from the pole, they told me: we do not know, you can look straight at so-and-so. Communication between polo and coordination, I thought was not very good [...]. (P29)

As for the communication between polo and students, and among the students themselves, there was positive interaction (synergic), because there was an intentional exchange of information and experiences, sometimes, exceeding the space of the virtual environment.

Dialogue among students, in the virtual environment, also provided discussions in the work environment and vice versa:

[...] I took some points from the course to discuss with them [my co-workers] and helped me to participate in the forums, it helped me to carry out the tasks [...]. (P29)

In relation to the dialogue between students and teachers, it was firstly recognized that the communication between them represented some incentive/support for the development of the course activities. In the following section, communication, through virtual environment, was fundamental, for the understanding of the personal problem experienced by the student and the offer of new possibilities for the development of the course.

[...] my gestation was a little complicated, but soon, then, when I won my baby, I got in touch, even the tasks that I was not able to have delivered in the period I got to deliver, the encouragement that the teachers gave me and the credibility of the course was what most encouraged me [...]. (the teachers) always there with me, always encouraging me [...]. (P10)

But, the attitude of teachers or students in establishing an active and synergic dialogue has not always been successful.

[...] she tried to pull, but the group did not respond, she had ideas, but I felt the group's difficulty in fulfilling that call. (P16)

However, the position of some tutors and teachers, in promoting dialogue, also provided a remoteness and resistance.

[...] I wanted to make some criticism about the discipline, but then we got a little intimidated by the teacher, we did not say anything [...]. (P20)

[...] the first tutor I thought he had some criticism, much of the peculiarity, that had nothing to do because no one knows what the other is going through, the tutor change was worth it, so it was more tasty, it was more interesting because you are getting even with the person's antipathy [...]. (P20)

- The structure under the evaluation of the students

Regarding the Virtual Learning Environment (VLE), as a structural element of the course, the following speech was reported:
In other discourses, the interviewees recognized VLE as a flexible element in the course structure, but that the course depended on its correct handling, access to the internet and the quality of the connection.

[…] I could go back if I wanted to in a previous discipline, had a panorama of my performance, the whole time available, had specific fields for a particular message, individual, for the whole group […]. (P03)

[…] I found it difficult to question the use of the platform, everything depended on AVA […]. (P10)

[…] The internet here, because it is a small city, leaves much to be desired […]. (P11)

The volume of content, in some subjects and in the evaluations, was pointed out as inadequate.

[…] the first evaluation was terrible, eight subjects, it was very long, it was very tiring, it was very difficult even […]. (P30)

Despite this, the various possibilities of evaluation provided were recognized.

[…] evaluated both the question of the activities, the participation in the forum and, in the tests, then, I think it managed to cover in a satisfactory way, these various issues […]. (P24)

Regarding the didactic material, the interviewees emphasized their quality and praised their encouragement.

[…] he had a lot of material, with simple and well-explained information […]. (P14)

The face-to-face poles conformed as an important element of the course structure, being recognized by the students.

[…] brilliant, the staff here note tem even, they even had more information than the university staff themselves […]. (P12)

There were also complaints, related to the absence of materials and structure, as well as complaints related to the organization of processes and communication.

[…] there is a lack of toilet paper in the bathrooms, it had to have invested more in the pole, little structure […]. (P25)

[…] the lack of organization of some things, finding the place of the pole, had no guidance on how to get there, the first day I arrived, I struggled to get there, it was not there, because on the platform I was talking about it, did not have a ticket […]. (P03)

The wear and tear in the face of the need for frequent displacements until the poles of face-to-face support were also questioned.

 […] why in Belo Horizonte does not have a pole? I find it very difficult to move. It is a factor that discourages, I came by bus, because although I drive, I do not take the road yet, so the first bus that has there is 7 o'clock in the morning, as much as I want to arrive here at 8 o'clock I do not I can reach […]. (P18)

♦ The student autonomy dimension under evaluation

In the discourse of the students, it was possible to recognize aspects related to their autonomy or difficulties in exercising it. It was verified that the students had their specific objectives for the course and thus defined their priorities.

[…] I believe that, for us nurses, the management course is extremely important, because the nurse is a manager … this course adds a lot to our training […]. (P19)

[…] I work in the public service and I have contact, directly, related to my experience, so the more information I had, the more I could lead to the execution of my work […]. (P16)

The need of the students for the face-to-face meeting is perceived, for the experience of the physical contact as promoter of the interaction. Reinforcing such dependence, it was common, in the speeches, the need for teachers’ charges to stimulate the accomplishment of activities.

[…] I missed it a lot, but a lot of it, the interaction, the physical presence even with the teacher, I did not have contact with them, I think they have to have face-to-face classes […]. (P12)

[…] teachers who did not charge, then I had difficulty […]. (P11)

The students recognized a certain difficulty in organizing themselves, as to the time allocated to the course.

[…] I had difficulty organizing my time due to the heavy workload, since I am a manager […]. (P24)

At some moments, the challenge of time was overcome, based on the decision to abstain from social and family life, in addition to searching for alternative schedules for the accomplishment of the course activities.

[…] Time is a challenge for people who have to give up some moments with the family, of leisure, to devote […]. (P22)

[…] I really enjoy studying at night, so I used it […]. (P17)

Autonomy, too, was exercised, from the student’s search, to go beyond the proposed material.

[…] we have many resources! Many things I searched for in the material of others too, I sought other knowledge beyond […]. (P01)
DISCUSSION

The results related to the profile of the participants, nurses, for the most part, revealed a profile of adults, already inserted in the context of the public health service and who seek specialization, in the distance modality, as an opportunity to improve knowledge. This fact supports the findings of other studies that demonstrate the search for health professionals, especially nurses, by the DE as an opportunity for continuity of studies and advances in the professional career.10-2

In the case studied, there are situations that amplify and others that minimize the transactional distance in its dimensions, interaction and autonomy. In the interaction dimension, in the dialogue component, it was found that it occurs in an active, bidirectional and technologically favored way, contributing to the reduction of the perception of transactional distance.13,4 Moreover, the fact that the students are inserted in the work in health and be able to apply the knowledge acquired in the course, also contributed to motivate the dialogue, favoring the interaction and minimizing the perception of transactional distance.15

Although the previous situations contributed to the dialogue, others conformed as obstacles tied to the teacher’s positions, tutors and students limiting the possibility of interaction. Teachers and tutors are fundamental in the dialogical process that develops in the distance modality, as they are responsible for conducting this environment and should make communication clear, avoiding vertical teaching processes that limit dialogue, as well as avoiding noise and thus reduce transactional distance.1 In this sense, bidirectional communication must be strengthened by seeking a truly formative (liberating) education in which dialogue is recognized as a space of struggles and struggles that reflect the very aspects of social interaction, as well as negotiation and of conflict mediation. A space in which these conflicts could be welcomed and rethought in order to contribute to the understanding of social reality and its transformation.16

Also, in the interaction dimension, in the structure component, the fact that the course is offered, predominantly through an VLE, required students to depend on internet access, adequate connectivity and a certain skill in handling technologies. VLE allows the user to interact through the use of devices, with structures that do not limit or treat their users in an equal or cast form, valuing individualities (17). However, the presence of an VLE per se is not enough to reduce the perception of the transactional distance, because it is necessary to overcome inequalities related to digital inclusion, situations that are still typical of the Brazilian scenario.18,9

The presence support pole also conformed as an important structural element to reduce the perception of transactional distance. The pole favors the operational extension of the HEI, making it closer to the municipality of the student, being important for the follow-up and orientation of the studies, for laboratory practices and on-site assessments.20 Thus, a pole with organized processes, with adequate infrastructure and welcoming posture, tends to favor interaction and, thus, minimization of Transactional Distance.

The fixed and modular disciplines, content concentration, pre-defined classroom assessments and didactic material, complete the high structuring of said course. These characteristics are peculiar to the pedagogical project of the course, which is pre-formatted throughout the country.1 Something typical of the industrial model, which uses DE, for mass training, with little appreciation of individualities and regionalities11 and, of the diversity of management in the Brazilian public health service (22). It should be emphasized that the characteristics, which guide the structuring of the course, can contribute to widen the transactional distance, harming the achievement of the proposed objectives.6

Still, regarding content assessments, the various possibilities for evaluations and their continuing character were recognized as enhancers of the interaction. Evaluation should be continuous, contributing to better follow-up of the student, during the training process and strengthening learning.23
In the autonomy dimension, the objectives and priorities for the course were well defined by the students, which tends to stimulate the exercise of autonomy, makes learning meaningful and strengthens autonomy.6 However, there is dependence on the physical presence of a teacher, its collections and printed didactic material. These situations refer to the traditional model of face-to-face teaching, in which the teacher is the center of the teaching-learning process, besides being the holder and transmitter of knowledge.24 Thus, even in DE, student behavior replicates, in the virtual context, the format of the traditional face-to-face model. In addition, the difficulty of the student was verified in the organization of their own time, for the accomplishment of the proposed activities, to the detriment of other commitments and daily tasks. Therefore, autonomy is not fully exercised by broadening the perception of transactional distance and weakening learning in the distance modality.25–6

It is emphasized that the student autonomy is built from the search of the subject for their emancipation through a learning of their own. However, others involved, too, can contribute to this process. Thus, the responsibility for the exercise of autonomy is not restricted to the student, and must be co-responsible to the institution and its educational agents.26

Thus, taking the formation of a health manager as a reference, autonomy should be potentialized in order to reduce the transactional distance and train professionals who self-discipline and self-motivate so that they are able to organize their routine to continue their studies and transfer, also, for the services, knowledge mediators of qualified and assertive decision-making processes. The transformation of the reality of the management of public health services depends on involving future managers in the exercise of autonomy, still, in their process of formation, as well as in the continuity of their studies.27 The same authors point out that, in the last decades, in Brazil, encouraged by policies oriented to the decentralization of actions and health services, management has as a challenge, overcoming the traditional model of training, requiring autonomous, creative and capable professionals. To contribute to the transformation of the reality in which they are inserted.

CONCLUSION

In the studied case, there are situations that, predominantly, increase the perception of transactional distance. The dialogic perspective is centered on the transmission of contents and prescription of activities, also, there are conflicts and contradictions, in the practices of communication, potentializing the perception of the increase of the transactional distance. The high structuring of the course demands from the students a certain degree of autonomy, which does not happen in fact, also contributing to increase the perception of transactional distance. On the other hand, the synergic and active communication was recognized, in some moments, between the involved ones, allowing for the socialization and the collaborative learning.

The study presents, as a limit, the fact that it included only the graduating students. The inclusion of dropouts could broaden and deepen the findings of this research, but this fact does not invalidate its use in other scenarios, and the theoretical possibilities that this study provides may be generalized, allowing its results to be directed to other investigations that deepen the understanding of the distance. In addition, other research can be outlined such as the need to measure the impact of the course on the daily work of managers, as well as the study of the incorporation of other technologies beyond the virtual learning environment and its influence on the transactional distance.

REFERENCES


Ribeiro HA, Cavalcante RB, Oliveira PP de et al.


24. Souza CS, Iglesias AG, Pazin-Filho A. New approaches to traditional learning - general
Ribeiro HA, Cavalcante RB, Oliveira PP de et al.


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