

Innovation in Nutrition undergraduates training: the use of field diary in food and nutrition education groups

Inovação na formação de graduandos em Nutrição: uso do diário de campo em grupos de educação alimentar e nutricional

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Abstract

Objective: To describe the use of field diary as a training strategy for undergraduate students in the facilitation of groups of food and nutrition education. *Methodology:* Twelve reports of field diaries produced by undergraduate students (G1 and G2) were used, who facilitated groups of food and nutrition education constructed upon the benchmarks of Operative Group, from the Food and Nutrition Reference Center – CRNutri. After each of the six meetings, the students wrote their diaries, containing a detailed description of the meetings and their perceptions about the group. To evaluate the facilitation process, the contents of the diaries were confronted with skills and competencies required to a nutritionist in food and nutrition education. The group process was characterized by the evaluation of the Operative Group vectors. *Results and Discussion:* Fourteen skills and competencies were identified. Changes in facilitation held by students were noticeable, such as: the need for preparation prior to the meeting, the search for complementary theoretical references, self-perception of the initial difficulties and reflection on the educational process. The evaluation of the Operative Group vectors (learning, communication, belonging, cooperation, pertinence and tele) was identified in both groups, showing how the group process was built throughout each meeting. *Conclusions:* The field diary, inserted in the student training process, represented not only an instrument which explained how training was taking place, but also provided an opportunity to reflect on the work done, given the scenery students had to report their experience, contemplating their difficulties and advances.

Keywords: Food and Nutrition Education. Nutritionists. Health Education. Higher Education. Human Resources Training in Health.

Resumo

Objetivo: Descrever o uso do diário de campo como estratégia de capacitação de alunos de graduação na facilitação de grupos de educação alimentar e nutricional. *Metodologia:* Foram utilizados 12 relatos de diários de campo produzidos por graduandos (G1 e G2), que facilitaram grupos do Centro de Referência em Alimentação e Nutrição, construídos a partir dos referenciais de Grupo Operativo. Após cada um dos seis encontros, os alunos redigiam o diário, contendo descrição detalhada sobre o encontro e suas percepções sobre o grupo. Para avaliação da facilitação, os conteúdos dos diários foram confrontados com as habilidades e competências preconizadas ao nutricionista em educação alimentar e nutricional. O processo grupal foi caracterizado pelos vetores de avaliação do Grupo Operativo. *Resultados e Discussão:* Identificaram-se 14 habilidades e competências. Mudanças na facilitação realizada pelos alunos foram visíveis, como: necessidade de preparo prévio à realização do encontro, busca por referenciais teóricos complementares, autopercepção das dificuldades iniciais e reflexão sobre o processo educativo. Os vetores de avaliação de Grupo Operativo (aprendizagem, a comunicação, a pertença, a cooperação, a pertinência e a tele) foram identificados em ambos os grupos, evidenciando como o processo grupal foi construído ao longo de cada encontro. *Conclusões:* O diário de campo, inserido no processo de formação do aluno, representou não somente um instrumento que explicita como a capacitação estava se dando, mas também constituiu oportunidade de ele refletir sobre o trabalho realizado, diante do espaço que teve para relatar sua experiência, contemplando suas dificuldades e avanços.

Palavras-chave: Educação Alimentar e Nutricional. Nutricionistas. Educação em Saúde. Educação Superior. Capacitação de Recursos Humanos em Saúde.

Introduction

Food and nutrition education (FNE), defined as a field of continuous and ongoing knowledge and practice aimed at promoting the practice of healthy eating habits, is a process that generates an active and informed participation of the subjects, highlighting the principles related to the promotion of self-care and autonomy. Its principles are to support people so that they become socially responsible agents of their health by generating knowledge and skills related to self-perception, so that they adopt, change and maintain behaviors that contribute to their health.¹ Autonomy, as quoted, is linked to the ability of individuals and groups to decide on issues related to health and its entire context² and is a process of expanding the capacity of individuals and groups to make their choices freely and enlightened according to their intentions, purposes and wills, without causing harm to other individuals or society.³

Among FNE approaches, group actions appear on the public policy agenda related to health promotion because, in addition to the exchange of experiences, it allows the junction between technical and popular knowledge. In addition, the coexistence and the development of interactions between the professionals and participants establish bond formation, contributing to reach the objectives related to health promotion.³

Different reference frames are used for the design of educational groups and, among them, the Operative Group (OG) model, proposed by Pichon-Rivière, an Argentine psychologist and psychiatrist, in the 1940s, has been gaining more attention of health professionals for its applicability potential and systematization of the group process.⁴⁻⁶ The OG represents a group of people linked in time and space, articulated by their mutual internal representation, who propose a task, explicitly or implicitly, assuming a diversity of roles with the establishment of bonds between them.⁷

Regarding the responsibility of FNE, even if it has a multiprofessional character, it is up to the nutritionist to foster the insertion of the food and nutrition actions within the scope of health care strategies, aiming at the planning, execution and evaluation of educational actions from the diagnosis of the nutritional situation identified in the served population.^{8,9} However, there is a scenario where the professional training remains centered on the disease, being observed the limitation of contents that allows the understanding of health from an integral perspective, disregarding the social, emotional, economic, cultural and environmental dimensions.¹⁰

In order to overcome this biologicist activity, it is important that the nutritionist is trained covering the contents of the Human and Social Sciences and that he/she develops his/her role of educator, as well as to experience the professional practice associated with theoretical knowledge throughout his/her undergraduate studies.¹¹ It is recommended to carry out experimental activities that lead students to build their knowledge through interaction with the studied objects, allowing a better apprehension of the contents worked. Considering that this student is the center of the

teaching-learning process, his/her insertion in the work environment throughout the course favors the integration between theory and practice.¹²

Among the strategies to contribute to the recognition of professional practice, the field diary is already widely used in the field of research, and it also helps students to create a habit of observing with attention, accurately describing and reflecting on events of a day's work.¹³

In view of the above, this paper aims to describe the use of the field diary as a support strategy for the qualification of undergraduate students in the facilitation of food and nutrition education groups of a school health center in the city of São Paulo.

Methodology

This is an exploratory and descriptive exercise based on the reports of 12 field diaries (G1 and G2) written by undergraduate students in Nutrition, facilitators of food and nutrition education (FNE) groups, in the months of March and April 2017. Each field diary refers to one of the meetings coordinated by each student.

The groups were developed at the Geraldo de Paula Souza School Health Center (CSEGPS), which is the first School Health Center in Brazil, linked to the Faculty of Public Health of the University of São Paulo (FSP / USP). The nutritional care of the CSEGPS is the responsibility of the Reference Center on Food and Nutrition (CRNutri), a teaching-assistance project that constitutes a field of training for undergraduate students in Nutrition and training for health professionals, besides being a space for the development of scientific research related to public health.

The current group service used in CRNutri was conceived based on the references of OG,⁷ in which it was entitled as innovator in FNE for seeking to promote health and to develop autonomy for food choices of the participants, being the participants protagonists in the group process.

Then, the groups were facilitated by two undergraduate students in Nutrition at USP, who performed part of their obligatory internships at CRNutri, under the supervision of nutritionists of the service. It also counted on the observation of nutritionist of the Program of Professional Improvement of Nutrition in Public Health. Users of the Health Center in question participate in the groups and, at the moment of nutritional screening, they bring demands that meet the goal of care.

The groups had six weekly meetings, each lasting 1h30min, with three moments: reception, integration / reflection and closure. The first three meetings aimed at establishing a link between the participants and the reflection on their life histories, routines and their relationship with the health-disease process. The last three meetings dealt more directly with issues related to food,

such as quality of meals, distribution of food and commensality. The present group model has an established script with its respective theme and activities to be developed.

For the groups, the following routine was used: (1) reading of texts and discussion between the CRNutri team and students about the educational groups, specifically the OG, to bring students closer to the relevant theoretical references; (2) reading and discussion about the route of the meeting to be held, in addition to the appropriation of data recording techniques, in which the field diary is highlighted; (3) facilitating the meeting; (4) writing the field diary by the facilitator with subsequent sharing among team members; and (5) evaluation of the previous meeting and planning of the subsequent meeting. Steps 2 to 5 continued to occur weekly and a final evaluation was performed at the end of the last meeting.

The elaboration of the field diary sought to promote reflection, in addition to allowing a more detailed evaluation of the group process (not just an evaluation of each participant), including the facilitator's own performance within the group. The diaries included: title, date of meeting, topic addressed, name of the facilitator and other team members, total duration of the meeting and each segment, information about attendance of participants and detailed description of each segment of the meeting, as well as perceptions of the facilitator, including before and after the group.

In order to evaluate the contents of the field diaries, thematic content analysis was used which, after successive readings of each material, consisted in subsequent identification of components related to the facilitation carried out by the student and to the group process.¹⁴ With regard to the facilitator, we identified contents that refer to the 19 skills and competencies suggested for action in the perspective of health promotion and FNE, according to the Observatory of Food and Nutrition Security Policies of the University of Brasilia,¹⁵ that permeate the recognition of aspects related to the social determinants of food, nutritional status, health and disease for the planning of food and nutrition education, the valuation of food culture, technical communication appropriate to the socio-cultural context of people, dialogical construction of knowledge and practices and use of participatory methodologies in the different stages of the educational process.

Regarding the group process, categories that refer to the evaluation vectors proposed by Pichon-Rivière were identified:⁷ pertinence (degree of group focus in the task, when the group is identified with this task); communication (how and by whom content is carried out); cooperation (contribution to carry out the task through differentiated roles); belonging (feeling of being integrated with the group, identifying himself/herself with it, including himself/herself and including the other participants in his/her internal world); learning (when the group overcomes their difficulties to perform a task); and tele (feelings of attraction or rejection with a group participant, facilitator, or task).

The project in which the present study is inserted was approved by the Research Ethics Committee of the Faculty of Public Health (process No. 1,035,608). All participants expressed their

consent by signing a Free and Informed Consent Term, respecting the provisions of Resolution No. 466 of 2012 of the National Health Council regarding the ethical aspects of health research.

Results and Discussion

Participants were 12 and 15 participants, respectively in the two groups (G1 and G2), ranging from 49 to 61 years old (G1) and 32 to 86 years old (G2), who sought service due to health problems, such as weight changes, high rates of glycemia, dyslipidemia and hypertension. In both, women were present in a higher proportion (9 and 12 people). Each group presented similarities and differences, such as the male minority, the range of age groups and the existence of diseases that, under the vision of the health professional, require similar care, but may sound disconnected to the service user. As Bastos¹⁶ elucidates, differences between members of an educational group can provide complementarity effects (people are strengthened by differences) or divergences (by non-identification and discomfort among participants). It was interesting to note that G1 and G2 have gone different paths from these very different participants.

These paths are the result not only of their participants, but also of those who facilitate them. Thus, even though they are students in the last year of the undergraduate course in Nutrition that received the same prior training, their personal characteristics tended to influence the way the group was constructed each week, in addition to reflecting on the individual results achieved by each participant. With a dialogical attitude and horizontal performance, the role of the facilitator is challenging in instigating reflection, favoring the empowerment of the participants.¹⁷

With regard to the acquisition of skills and competences, it is worth highlighting that the use of the field diary as an evaluation tool and also for the planning of each meeting is already an important element for the undergraduate student's education in the field of food and nutrition education, insofar as it can identify, compare, elaborate, execute and evaluate the educational process related to the group.¹⁵

Yet, the group model to which the students were exposed favored the development of other skills and competences required to perform with FNE, since it represents a proposal focused on the promotion of autonomy. This could be identified in different sections of the field diary, which illustrate 14 different skills and abilities identified and that are presented in Table 1.

Both facilitators had their first contacts in group leadership, which proved to be challenging. They showed in the diary the importance of planning for the meeting, both in relation to the reflective reading of the scripts and discussion with the team, and the preparation of audiovisual resources to support the meetings. By conducting a FNE group, the students used a proposal that allows them to develop competencies related to the performance of participatory methodologies

of education, in favor of promoting the autonomy of individuals, strengthening them not only with regard to the health-disease process, but on its importance in mobilizing other contexts. This can be identified in Table 1, in the competence to identify, compare and use participatory methodologies in all stages of food and nutrition education.

Table 1. Skills and competences of the nutritionist in the field of food and nutrition education proposed by OPSAN / UnB¹⁵ and respective excerpts of the field diaries. Center of Reference in Food and Nutrition. São Paulo, 2017.

<p>Identify, compare and use participatory methodologies at all stages of FNE (from identification of needs to evaluation of actions).</p>
<p>"In general, their evaluation was positive in relation to most of the topics exposed, with some suggestions about the duration of the meetings (they suggested that it had 2 hours instead of 1h30) and also to have more than 6 meetings." (G1)</p>
<p>Identify and compare the potentialities and limits of the fields of action of Information and Education in the actions of PAAS and FNE.</p>
<p>"The available room was small, a bit tight, and with little air circulation, which caused some disruption for some participants, an issue to be rethought at the next meeting." (G2)</p>
<p>Identify, compare, develop and use informative and educational materials that support FNE actions, contextualized to the socio-cultural and economic reality of groups / communities and populations.</p>
<p>"The separation of the materials we used was very easy and affordable; we had to use the lunch and dinner images taken from the <i>Food Guide for the Brazilian Population</i> and also the food prototypes."</p>
<p>Identify, analyze and interpret the social determinants that affect food, nutritional status, health and disease to plan the promotion of adequate and healthy food and FNE.</p>
<p>"When asking each participant about their childhood feeding, their memories, I noticed many nostalgic feelings and felt that it flowed very well. This is a reflection that we never do. We never think how our body was, how it was my food, what changed and why. I proposed it as a focus and as a reflection for each participant to think what gave the start for these changes to begin. I emphasized that when we find the 'root of the problem', we are able to work better on solutions." (G2)</p>

to be continued

<p>Use the media, information technologies and social networks to disseminate information and mobilize groups, communities and populations.</p>
<p>"In the end, they switched phone numbers. Ivonete wrote down everyone's contacts in a notebook to set up a group on <i>WhatsApp</i>. I was happy that they were keeping in touch outside the meeting and maybe creating a friendship." (G1)</p>
<p>Construct knowledge and practices about healthy eating, in a language that is appropriate and understandable, in a dialogical way, to different publics (age, gender) and in different contexts (socioeconomic and cultural).</p>
<p>"At the next meeting, now that I've felt the guests, I want to better adapt my speech. Try to approach my speech to every reality." (G2)</p>
<p>Identify, analyze and use the anthropological, cultural and socioeconomic aspects of food choices and behavior in planning actions to promote healthy eating.</p>
<p>"I tried to elaborate strategies to meet the demand raised in the second meeting. Based on the <i>Food Guide</i> to deepen some questions about the food groups that make up lunch and dinner." (G2)</p>
<p>Identify, analyze and value the food culture of individuals, groups and populations from different ethnic / social segments and integrate it into the practices of PAAS and FNE.</p>
<p>"... I raised questions - along with them - about culture. Maria Aparecidas' speech at this moment was very important, who reported that she used to eat a lot of that typical food from Minas Gerais at lunch, dinner and, if possible, in the breakfast." (G2)</p>
<p>Identify opportunities for the development of PAAS and FNE strategies in the different stages of the Food System.</p>
<p>"I asked if they missed any food that did not appear there... That's when I introduced the idea of chestnuts, nuts, almonds, yogurt and Ivonete mentioned the dried fruits. Some participants said they are expensive, and I mentioned the Zona Cerealista. M. joked about us making an excursion there together." (G1)</p>
<p>Identify and foster opportunities for intersectoral actions and partnerships for the development of strategies and actions to promote adequate and healthy food and FNE.</p>

to be continued

"The supervisor talked about some services of the Health Center and I supplemented it. We talked about yoga, senior dance, manual labor therapy workshop, community therapy and the Open Nutrition Group. There was interest mainly in senior dance and three participants signed up for it after the meeting and will start dancing next week." (G1)

Identify, compare and use the principles of health education theories, appropriate to the life course phase and to the reality of subjects and populations for FNE actions.

"About 4 participants reported that they achieved the goal, that they were satisfied with that. Most said they could not reach it. I ended up not exploring why they failed to achieve the goal, something I want to work on at the next meeting." (G2)

Interpret, adapt and share technical information related to food and nutrition, according to the sociocultural context of groups and communities.

"At first, I was afraid I was not being clear enough in my explanations (but I tried to speak slowly and loudly than usual). I also had difficulty closing one topic and beginning another, feeling a little lack of fluency. However, with the passing of the activities it became easier, as my nervousness was also diminishing." (G1)

Identify, analyze and use, together with technical knowledge, the popular knowledge in food, food and preparations in strategies and actions to promote healthy and adequate food and FNE.

"...that most have in mind that dinner needs to be a 'lighter' meal, that the choice of your dish will depend on their routine, that there would be no problem having a sweet as dessert."(G2)

Plan, based on evidence, and implement actions to promote adequate and healthy food (PAAS) and FNE for individuals, communities, social spaces and / or organizations.

"I believe that the Innovative Nutrition Group was good for all participants and that they reflected on their lives and routines and also learned about food and nutrition, some more than others, but I believe everyone took advantage of those meetings." (G1)

In a study carried out in the city of São Paulo, Vieira & Cervato-Mancuso¹¹ observed that undergraduate students in Nutrition present scarce experiences of food and nutrition education groups, besides having limitations in the undergraduate studies in Human and Social Sciences and related to acting as an educator. On the other hand, in a work related to the undergraduate studies in Nursing, Lucchese & Barros¹⁸ argue that the professional experience in the role of educator must overcome scientific and empirical knowledge, demanding of this student the need to understand the role of the educator.

In the diaries, the students showed their initial difficulties as facilitators, by means of self-criticisms, such as the perception of lack of clarity, problems with fluency, control of time and closure of activities. The diary also illustrated the overcoming of these difficulties, when students became more secure as facilitators. This can be seen in an excerpt from the diary of the last G1 meeting,

There is always something that could have been different, that could be improved in the meetings, but I leave with a sense of work fulfilled and that we can actually achieve them in some way, aiming at their autonomy and better quality of life.

The student's ability to assess how the appropriate environment was relevant to the group was also verified, referring them to the acquisition of competence to compare the potentialities and limits of the fields of action of education in this action of food and nutrition education. In G2, specifically, it was necessary to perform one of the meetings in an environment with reduced physical space, which forced an approximation between the participants at a time they did not want it and that made it difficult for people to see and move (Table 1). The right environment contributes to the educational process: participants need to feel comfortable to become available to actually participate. This comfort surpasses characteristics of luminosity, ventilation, noise and dimensions of the space, being indispensable that each participant recognizes and identifies itself in that environment.

The use of audiovisual resources as pedagogical materials was also brought as important for the accomplishment of the different tasks in the group, giving dynamism to the proposal, in addition to favoring a richer discussion. Identifying, comparing, developing and using informative and educational materials that support the actions of FNE, contextualized to the sociocultural and economic reality of the group, constitute the competence of the nutritionist in this field of activity,¹⁵ and the use of educational materials can favor the action developed.² Thus, the material must be a facilitator of the process and not the main focus of the action or, then, something that interferes with communication in the group. The use of materials constructed from the *Food Guide for the Brazilian Population* was highlighted by the G1 student (Table 1).

Building a bond with your group contributed to the student's performance. Before meeting the participants, but having already accessed their socioeconomic and health information, the student tends to construct an image of each participant, something observed in sections of the diary, and this could be deconstructed from the moment in which he/she develops the competence to identify, analyze and interpret the social context of their group, as well as the stories, experiences and demands of each component. In addition, in order to strengthen the bond, group work encouraged the use of social networking technology to mobilize participants (Table 1).

Still in relation to the student's contact with models of group attendance, it requires of the undergraduate student to evaluate the process, stimulating him/her to seek solutions at the moment of facilitation, so that the group has its needs met while meeting the objectives of the proposal or, then, to adapt the activity to a new reality, such as a larger or smaller number of participants than expected. Initially, it was possible to observe greater dependence of the student on the information contained in the script, but already in the subsequent meeting, the domain of the model favored that there was no precision of a material guiding it during the facilitation. Thus, students were able to develop in the construction of knowledge and practices about adequate nutrition in a dialogical way, considering the different contexts of the participants, as identified in the section of Table 1.

As the meetings were held, students were more comfortable to suggest adaptations in the script and to seek other theoretical references that could support some of the meetings, mainly regarding the understanding of the anthropological, cultural and socioeconomic aspects of the choices and of the food behavior, to improve the proposed activities. The excerpt from Table 1, which shows the moment the student seeks the reference of the *Food Guide for the Brazilian Population*, a text that highlights the importance of providing information for the adoption of healthier food choices considering the local culture,¹⁹ illustrates this competence, insofar as the document covers discussions related to food according to culture and regionality. In addition to this, students were able to integrate into the discussions content about the food culture shared among the participants of the group, valuing it and enriching the reflections.

A more comprehensive view on feeding was glimpsed by the G1 student, surpassing its biological dimension. The discussion about planting, acquisition and environmental impact of food permeated different moments, leading to the identification of opportunities for discussions related to the different stages of the food system. As Table 1 indicates, the student pointed out that the participants discussed the difficulties of accessing *in natura* food, as well as indicating ways to overcome the problem. This discussion is important for food and nutrition education, since when people seek organic and agroecological food, they rely on producers of family agroecology, strengthening the food system, making it socially and environmentally sustainable.¹⁹

The student was also able to identify intersectoral actions of the service that contributed to the participants achieving their related objectives, stimulating them to connect to different actions that would impact their health. Expanding the care network is an important step in the follow-up of people with demands related to food and nutrition, which shows the change in their perception of health, linking themselves to other activities and professionals for integral care. Excerpts from the diaries related to food system stages and intersectoral actions can be seen in Table 1.

The diary provided the facilitator with the possibility of recognizing the peculiarities of the process of change between people, such as dissatisfaction with appearance, different needs and speeds before setting goals for change, the oscillations of the participants during the meetings (greater and lesser difficulty) and the sense of responsibility with the group and to care for each other. The different inter and intrapersonal characteristics required the student to identify and use different principles of health education theories, appropriate to the life course phase and to the reality of the subjects in each group (Table 1).

The moments in which the student was faced with frustration for not having fulfilled the proposal as he/she had expected were also important. This frustration shows him/her that the group is not focused on the professional figure and that the participants are protagonists in this process, presenting the strength to shape the meeting.

I had difficulty interrupting them to get back to the focus. I did not feel much collaboration of them at that moment, because they were so close that they got lost and talked to each other. (G1)

This feeling, awakened in the students at different moments, also refers to the importance that they develop for the interpretation and adequacy of the technical information related to the sociocultural context of the groups and communities, in order to increase the effectiveness of communication within the group, since different profiles demand forms of communication that favor the integration of all participants. It is illustrated in the student's speech about "try to bring my lines closer to every reality". Within the professional practice, it is observed that the fact of knowing how to deal with realities different from those of the facilitator himself/herself is a cause for concern. By working with nutritionists of primary health care, Vieira²⁰ identified that the professionals classified their undergraduate studies as limited by not providing abilities to work with populations "poor and with low schooling". However, adjusting the intervention to the population does not mean disqualifying the group's power to understand its characteristics,¹ something that still requires deconstruction within the undergraduate studies in Nutrition, as can be seen in the excerpt below (G2).

But the idea there is to work with the majority. And the predominance is of simpler people, without so much education.

Even when explicitly explaining and agreeing with a dialogic and participative model, combining technical knowledge with popular knowledge about food (Table 1), the student's responsibility to transmit knowledge related to food and nutrition was noticeable, reflecting the characteristics of a biomedical model. According to Macedo & Batista,²¹ even with the recognition of the importance of professional training in the area of Human Sciences, the systematization of medical training and scientific rationality still prevails and, more than that, a medicalized view of food, in which there are rigid interventions based exclusively on the nutritional component of food.²² However, when it comes to the FNE and even a OG, the listening space is prioritized, when the members, protagonists in the process, think, talk about themselves and can better elaborate their own questions.¹⁶ An example of this can be seen in the excerpt from one of the G1 diaries.

I also felt happy to be experiencing that moment with them and for trying to answer their doubts, that in a way seemed to be "choked up" in the previous meetings and today they were able to expose, as the food issue arose more strongly.

Broadly speaking, even though the students adopted an intervention proposal already outlined and presenting aspects that require development in their formation, they were able to implement the proposed model, building necessary and evidence-based adaptations, besides recognizing the educational process at the end of the group that facilitated (Table 1).

In addition to the identification of contents directly related to the student's development of competences and abilities, components were found in the diaries that refer to the group process, which favors the recognition of the student's performance as a facilitator of the group in front of the different OG evaluation vectors.⁷ To do so, Table 2 shows some excerpts collected in the diaries for each vector, and all of which are identified in both G1 and G2.

Table 2. Excerpts from the field diaries of the two food and nutrition education groups (G1 and G2) related to the operative group evaluation vectors. Center of Reference in Food and Nutrition. São Paulo, 2017.

Belonging
"It amazed me that, even with the rain, virtually all participants were present. Before starting the meeting, I noticed that they were already more involved." (G2)
Cooperation
"Questions arose as to how to prepare a chicken without so much oil (N.A.C. raised this question), M.F.S. gave very interesting tips on how to prepare chicken fillet with orange juice." (G2)
Learning
"I expounded some questions at the closing, which allowed for more reflection, in addition to questioning them about how willing they are to keep changing, aiming at an improvement in their quality of life. It was when they said that the first step they had already taken was to be there. In my view, they are willing to reflect further and seek changes in their eating and living habits." (G1)
Communication
"I felt that they were a little more quiet at the beginning and I had to instigate them a little bit to talk how they felt and ask other questions to open up for each one to share more things regarding the week." (G1)
Pertinence
"This meeting was different than expected. A.M.G.A. asked a question - 38 minutes before the end of the meeting - innocently. The question was whether the group would only remain in these lectures, because she wanted to know what she could eat." (G2)
Tele
I.S.S. later said that her morning had been different as she discovered the fountain in the garden. She said she came in the rush, sat there for a few minutes to enjoy it, and ended up coming out much lighter. She also mentioned that she was observing a participant who was dispirited, the M.P.C., and invited him to go to the fountain with her at the end of the meeting. (G1)

The students' perceptions of the changes throughout the meetings should be punctuated. In G1, characteristics that referred to the vectors of belonging and cooperation arose already in the first meeting through speeches that valued the existence of that space and the mutual collaboration to carry out the activities. In G2, it was necessary for the facilitator to pay attention to these two vectors by realizing that people were still focused on their individual goals and with little attention to the collective. However, at the end of the group, the student saw changes as participants began to make connections between them outside the meeting to support each other, as shown in an excerpt from Table 2, taken from the fifth meeting.

These nuances refer to the formation of bonds, one of the assumptions of the OG technique,⁷ which tends to be built and strengthened throughout the meetings, favoring that the participants reach the objectives. Through the bond, people establish interactions with each other and share common experiences, occurring identifications and differentiations, which happen in different ways during the educational process.¹⁶ In addition, bonding favors overcoming difficulties related to eating and lifestyle habits, as well as gains in the emotional and social fields.

The learning process took place in different moments of the groups (Table 2), with different evolutions. In G1, the greatest difficulty arose in the last encounters, when people did not bring new demands related to their diet, requiring strategies for group provocation by the facilitator. Yet in G2, learning became quite rich in the final encounters, when topics related to food were discussed with greater emphasis. It is important to emphasize that learning surpasses the transmission of knowledge. In it, participants need to appropriate their speeches and visualize their own growth, rescuing emerging feelings arising from their negative and positive experiences, identifying personal and other aspects that interfered in it, favoring or hindering this relationship.¹⁸

Learning was directly related to the relevance of the proposed tasks, the latter being defined as the way to achieve the objectives and needs of the group.⁷ At one point, participants questioned the group's purpose for their demands, when they disputed the discussion about routines and life history, by waiting for information related to the most adequate diet for their disease. In view of this, the facilitator needed to rethink how important it was to clarify the group model in order to meet the participants' expectations.

Communication between the participants and the facilitator is a weekly construction, with moments of greater difficulty being perceived, whether related to the clarity needed by the facilitator to express the message worked on in the meeting or to explain the task of the day, or to articulate the communication between the participants in order to be productive. For the success of the actions, the communication is expected to exceed the limits of the transmission of information and the verbal form, but it comprises different characteristics, like the horizontality of the relations, the active and qualified listening, the recognition of the different forms of knowledge

and practices, and the shared construction of knowledge, practices and solutions.¹ Students brought both group demands and strategies used to provide more effective communication at subsequent meetings (Table 2).

Moments of affinity or rejection related to the participants themselves and to the task were pointed out in the diary. The positive or negative disposition of the members of the group among themselves, called 'tele', refers to the relationships in the group as they are perceived and lived, only existing when the group is willing to act together.²³ Thus, we could note situations concerning rejection related to participants or some activity in G2 (Table 2), while greater empathy was noted among some participants in G1.

Through the present work, the field diary written in an orientated way as an integral part of the realization of an FNE group was relevant both for the formation of the student and for the group process. When the undergraduate students are led to write about the activity, imputing their feelings in the description of the actions, it is reflected on the encounter experienced, as much in relation to their role in the facilitation as to the participants. At this point, the student recognizes necessary demands to enhance the group. Still regarding the training, the contact with the diary represented support for student supervision, as it provided the supervisor with an additional possibility of getting to know the student, his/her difficulties and advances, and evidenced his/her involvement with the group.

Yet, for the group process, it was possible to structure, through the diary, both the planning of the encounters developed as the evaluation of the process and the end of the group. Even so, it is necessary to emphasize the need for indicators that qualify the educational intervention carried out with a view to autonomy, surpassing the use of anthropometric, biochemical or food consumption markers that fail to translate the complexity that permeates people's role in making their food choices.

Conclusions

All the skills and competences that emerged in the diary were made possible by the experience that the students had during the internship period when they took on the role of facilitator of a food and nutrition education group. The insertion of the field diary into the students' formation process represented not only an instrument that explained how the training was taking place, but also the opportunity for them to reflect on the work done, given the space they had to report on their experience, contemplating difficulties and advances.

The field diary was therefore important for the training process of these students, as it enabled the development of different skills and competencies needed by the nutritionist. These involve the

use of participative methodologies of intervention, the identification of the social determinants of food and health, the approximation with the food culture of the population and the valorization of popular knowledge, the construction of knowledge in a dialogical way, the approach of technical contents according to the different contexts and the recognition of the different stages of the food system, among others indicated in the present work.

In a complementary way, the diary indicated how the group process took place, being representative of the facilitation carried out by the students. By explaining the changes made by the group in relation to the communication, learning, cooperation, belonging and tele, important information related to the interventions carried out by the student during the meetings were also obtained, which were sensitive and attentive to the movements that the group produced.

Therefore, besides being an important instrument in qualitative studies that seek to meet the subjective demands, the field diary faces the challenge of being inserted in a scenario of biomedical rationalities that requires broadening the look with the support of the Social and Human Sciences. It is recommended to use the field diary as a complementary tool to the undergraduate student's training when he / she develops practical activities in the field of public health, not limited to the moment of development of educational groups, but being able to be extended to the actions developed at the individual level, multidisciplinary teamwork and actions implemented in the territory.

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Contributors

Vieira VL was responsible for the design and supervision of the field, analysis and interpretation of the results and writing of the manuscript. Santos BZB contributed to the development of the educational model and writing of the manuscript. Andrade SC was responsible for the supervision of the data collection and revision of the manuscript.

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