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Funding: National Council for Scientific and Technological Development (CNPq), under process no. 407940/2016-2

Living, feeling and eating: A study with adolescents from a private school in a metropolitan region

O viver, o sentir e o comer: estudo com adolescentes de uma escola particular localizada em região metropolitana

Abstract

Introduction: Peer education (PE) is an approach to learning that is centered around the exchange of knowledge between people of the same profile. **Objective:** The present study aimed to describe the exploratory phase of an intervention study through PE aimed at determining the adolescents' conceptions about eating, exercising, and their relationships with their own bodies and the family. **Methods:** Five focus groups consisting of middle school students from a private school in Rio de Janeiro were conducted. Thematic Content Analysis, based on the interpretative perspective, was used as technical reference. **Results:** The themes that emerged pointed to a lack of confidence, privacy, and freedom; the adolescents detailed experiencing excessive demands and their subsequent frustration at these demands not being met. They emphatically expressed their desires to lose weight, gain muscle mass, and become taller; they further acknowledged feeling pressured to reach socially established body standards. They reported eating healthy diets but eventually giving in to junk food. Physical activity was seemingly not part of their routine, although a family member's health problems often motivated this practice. **Conclusion:** It was determined that although a complete approach to addressing these issues may be difficult, it is indeed possible to develop educational strategies targeting the adolescents' realities and problems.

Keywords: Peer education. Adolescents. Focus groups

Resumo

Introdução: A Educação por Pares é uma importante estratégia para promoção de saúde em adolescentes pois permite a troca de conhecimentos entre pessoas do mesmo perfil. A realização de uma fase exploratória para projetos desta natureza é fundamental para produzir conhecimento da realidade a ser pesquisada e ter uma compreensão da problemática dos grupos com os quais se trabalhará. **Objetivo:** descrever a fase exploratória de um estudo de intervenção por meio da educação por pares visando conhecer as concepções de adolescentes sobre o comer e alimentar-se, exercita-se e a relação com o corpo e a família. **Métodos:** Realizaram-se cinco grupos focais, com 8 a 12 participantes em cada, com alunos do ensino fundamental de uma escola particular do município do Rio de Janeiro. Utilizou-se, como referencial técnico, a Análise de Conteúdo Temática, fundamentada na perspectiva interpretativista. **Resultados:** O debate entre os jovens apontou falta de confiança, privacidade e liberdade; exagero das cobranças e frustração por não conseguirem corresponder. O desejo de emagrecer, diminuir barriga, ganhar massa muscular e ter maior estatura foi enfático. Reconheceram sofrer pressões para atingir um padrão corporal. Costumavam comer arroz, feijão, alguma proteína, batata, evitavam o

refrigerante e cediam às “besteiras”. A atividade física pareceu não fazer parte da rotina, mas problemas de saúde motivavam esta prática. **Conclusão:** Por meio da escuta prévia dos sujeitos a uma intervenção, a complexidade do objeto de estudo se revela. Embora uma abordagem completa das questões tenha sido difícil, foi possível desenvolver estratégias educativas mais próximas da realidade e problemas dos adolescentes a partir desta fase exploratória.

Palavras-chave: Educação em saúde. Adolescente. Grupos focais.

INTRODUCTION

Increased energy and nutrient needs during adolescence in addition to lifestyle, food preferences, and vulnerability to environmental influences—make this age group susceptible to nutritional risk¹. This raises the demand for health promotion strategies.

The high consumption of ultra-processed foods and sugary drinks,^{2,3} reduced physical activity, and greater frequency of sedentary behavior⁴ has contributed to the development of obesity considered the most significant nutritional problem in adolescence in Brazil⁵ and several countries.⁶ This age group is also considered to be at greater risk for body image dissatisfaction due to an ideal of beauty, associated with thin or athletic bodies, which cannot always be achieved.^{7,8} Therefore, they live with the paradox of a risk of obesity and the challenge of achieving the desired body. This is often done through inappropriate methods such as restrictive diets, binge eating episodes, and purging behaviors, which can lead to severe eating disorders.⁹ Such a scenario raises the need for developing health promotion activities aimed at adolescents to minimize the negative effects of unhealthy lifestyle habits.

Health promotion is the process of training a community to improve their quality of life and health, including greater participation in controlling this process¹⁰, which is aimed at increasing autonomy of groups in aspects related to their health and living conditions.¹¹ Healthy eating is a fundamental health condition and resource, along with peace, housing, education, income, stable ecosystem, sustainable resources, social justice, and equity; moreover, improved health conditions require a solid foundation for these basic prerequisites.¹⁰

The role of the school is important, particularly in the adolescent age group, as it is considered a favorable setting for health promotion.¹² Discussing health and food within the school context is not an easy task, mainly due to the transversal characteristic of the topic, which must be discussed at all times at school, in addition to the idea of “subjects,” as in some way, it permeates all nuances of life.¹³ Thus, education is one of the main factors for promoting health, creating conditions for students to fully develop their potential, acquiring skills to take care of themselves, and positively relating to environmental and social aspects.

Even with the legitimacy of the school as an appropriate time/space for health promotion actions, there is a lack of theoretical-methodological references that support intervention practices for health promotion at school, particularly in the context of food and nutrition education.¹⁴ In practice, health education actions in this scenario are often isolated from their context while being discontinued, prescriptive, and focused on disease prevention. For this reason, their execution needs to be reviewed so that students can engage more and achieve their objectives.¹⁵

Peer education is a health educational action defined as the exchange of knowledge between people with the same profile and sharing the same experiences, which facilitates the exchange of knowledge.¹⁶ This methodology has already been used in other adolescent health contexts, such as smoking, sexuality, and alcohol consumption, with satisfactory results regarding the impact on decision making and habit changes.^{17,18} However, there are few records of its use on the subject of food and body acceptance.

This study was developed from a broader research conducted in a private school in Rio de Janeiro, called “Projeto Pares,” which aimed to evaluate the effect of a peer intervention to encourage healthy eating, physical activity, reduced sedentary behavior, and better body image acceptance in adolescents. To conduct this research, we considered it essential to understand adolescents’ networks of meanings on topics such as health, food, physical activity, body, family, and school. This made it possible to create strategies that better communicate regarding health. The study started from the assumption that enabling a space for dialogue

between young people, bringing to light the several nuances that make up dietary complexity and the current standard of beauty, could be a way to structure all health education actions.

An important part of “Projeto Pares” is the exploratory phase in which the objective is to produce knowledge on the reality to be researched, subsequently understanding the problems of the groups with which they will work and having a collective view on their perception of own reality.¹⁹ The objective of this article is to present an analysis of the adolescents’ speeches obtained in the exploratory phase of “Projeto Pares” to better understand their conceptions about eating, feeding themselves, and exercising as well as those relating to their own body to guide health education activities that would be later developed in the project.

METHODS

The exploratory phase of “Projeto Pares” employed a qualitative approach, using the focus group (FG) technique. Five FGs were conducted with students from the seventh, eighth, and ninth grades of elementary school of a private school in Rio de Janeiro, RJ, Brazil. This school was selected for having already participated in the previous research on diagnosis of nutritional problems with the same researchers.

The number of components in the FGs ranged between eight and 12, and the number of groups was defined by the criterion of speech saturation,²⁰ observed on site by the researchers. Such saturation was reached with five groups due to the absence of new elements and repetition of ideas, which allowed contemplating the outlined objectives. All participants signed an Assent Form and their guardians signed an Informed Consent Form. The FGs were recorded in digital media and later transcribed, totaling six hours and 23 minutes of audio. The anonymity of the participants was guaranteed. The initial research, conducted in 2018, was approved by the Research Ethics Committee of the Hospital Universitário Clementino Fraga Filho, UFRJ, under number 80306017.0.1001.5257.

The FGs took place with fluidity and good interaction between the research team and the students, as well as among the students themselves. They were conducted in a classroom at the school, ensuring a private environment. All groups included one moderator researcher in charge of conducting the dialogues through a previously prepared and semi-structured script; one observer researcher who helped integrate the less participative students and elucidate some points not noticed by the moderator; two assistant researchers, one in charge of monitoring the digital recording and the other for taking notes that could assist in further analysis.

The basic script for conducting the FG consisted of a series of questions that encouraged dialogue among the adolescents about the project’s intended topics. Questions were raised about the participants’ relationship with food and their eating habits, whether they cooked at home (with or without guardians), what were their forms of leisure, whether they frequently practiced physical activity, and how they understood the bodily changes related to adolescence.

The transcribed text was analyzed using an adaptation of the Bardin’s Thematic Content Analysis,²¹ as proposed by Gomes.²² A floating reading was performed and the corpus of the analysis was defined while exploring and organizing the material. Subsequently, the data were organized by topics and categorized to identify the nuclei of meaning. The results express the analyzed topics and categories.

The following categories were analyzed to understand who these adolescents are and how they live: their relationships with their families; being an adolescent, physical development, and corporeality. The

following categories were analyzed to understand their conceptions about food and physical activity: their usually consumed food, physical activity, and leisure.

The analysis was based on the interpretivist perspective, which seeks to understand the meaning of a phenomenon through an objectivist view, based on respect and fidelity to the discourse of the study subjects.²³

RESULTS AND DISCUSSION

Who are the adolescents and how do they live?

This study included adolescents of both sexes aged between 12 and 15 years who lived close to the school, in a middle-class neighborhood in the northern part of Rio de Janeiro. Many reported being with their grandparents while their parents work outside the home and others reported being alone during the day, even helping taking care of younger siblings. Some of them spent most of the day at school owing to extracurricular activities.

Their relationship with their families

To clarify, adolescents' relationships with their families were not planned to be investigated. However, when we realized that these relationships spontaneously emerged in the FGs and how they may be interconnected with other issues, we chose to analyze this category.

Family coexistence was difficult, both between adolescents and their parents and siblings, especially the older ones. The adolescents reported feeling undervalued and somewhat emotionally neglected. In some situations, older siblings represented what the adolescents understood freedom to be, which was spending considerable time outside the house. Complaints related to neglect by mothers and the intolerance of fathers were reported. In the case of girls, intolerance could be compounded by parental jealousy. In situations of long-standing separation from parents, living with a stepmother could be better than with the father and mother.

"My father, you can't talk to him, he can only understand his side (...)." (FG – eighth grade).

"They've been separated since I was one and a half years old (the parents). We never got to see them together, only in photos. I have more freedom with my stepmother than with my father. My father, I hardly speak with him. My mother doesn't care." (FG – ninth grade).

For the adolescents, the demands by parents and the school seemed to be almost unbearable. They complained about excessive demands and the weight of their responsibilities, since, *until recently, it wasn't like that*. The participants felt an inability to meet these demands, which appeared to generate emotional instability. Although the participants complained about their responsibilities, they understood that they needed to maintain their focus and efforts as finding a job in the future is a significant concern.

"Actually, the downside of being a teenager is that you have more responsibility than when you were a kid. You have to study, you have exams. You have to move to the next grade! Now that my brother is going to be born, I'm going to have to cook, stuff like that... when I was younger I just played..." (FG – eighth grade).

Some studies have reported significant changes in the school structure, in disciplinary control, and in students' performance expectations from both parents and the institution, especially after transitioning to the sixth grade.²⁴ School contexts become broader and more impersonal, and students are usually required to have greater autonomy and behavioral self-control guided by rules, which can increase the feelings of inadequacy and emotional neglect by parents.

Furthermore, a lack of trust weakened coexistence and led the adolescents to lie to their parents. Mothers tend to demand evidence of their children's sincerity more than fathers, which strained the relationship between mothers and their children. Forbidding adolescents to go out either alone or with friends, especially by mothers, was perceived as excessive control by the participants. However, they also recognized that the current situation differs from what it was possible to go out and play in the street without being concerned (referring about violence).

"Then, when I go out, she wants me to send a picture of where I am, who I am with." (FG – ninth grade)

"I usually have to sneak out. I say I go to the gym... and I go out, because my parents don't like when I go out." (FG – ninth grade)

Participants' reports of the lack of space and freedom inside the house were recurrent. Parents and siblings did not respect their boundaries even in their own room, which was considered an invasion of privacy; in some situations, the bathroom seemed to be the only place where they felt their individuality was preserved. The adolescents further indicated that there was substantial parental interference in their choices—ranging from simple activities such as watching a movie to giving opinions about affective relationships. Participants also experienced invasion of their privacy on their mobile phones, especially when mothers went through adolescents' phones to monitor their activities and conversations.

"The bathroom is an impenetrable fortress where you are alone." (FG – ninth grade).

"My mother takes my cell phone and looks through it..." (FG – seventh grade).

A relationship based on dialogue is a fundamental component of family dynamics, and is the main factor for the relationships between parents and children to be healthy and of satisfactory quality.²⁵ However, the dialogue between parents and children must function as an exchange and should not be considered a way to control the adolescent's life. This is because based on the type of communication prevalent in the family context, adolescents tend to filter the information they give their parents. If communication is hindered because of excessive exercise of authority, the conversations between parents and children tend to consist

of banal daily matters, such as school, food, and entertainment. With open communication, family members can express their feelings and ask questions without feeling threatened and talk about various and even personal topics.²⁶

By implementing dialoguing from an early age, parents can constantly guide their children about an array of topics while imposing clear boundaries and also expressing their feelings, which can work as protective factors.²⁷ It is important for adolescents to feel that their parents are interested in their activities, concerns, fears, and apprehensions about their lives in general. This will enable the adolescents to see that their life has meaning.²⁶

Being an adolescent, physical development, and corporeality

The participants reported desires related to changing certain parts of their bodies: losing weight/fat mass; reducing waist, nose, belly, pimples, and blackheads; gaining muscular mass; and being taller. One participant even reported, *"I would like to model myself all over again."* They acknowledged the ideal body, especially for women—tall, thin, in shape, and fit. Most adolescents worry about their appearances due to criticism and pressure, and failing to conform can lead to depression.

"(...) But each one has a different (body). Not always can someone reach these standards of beauty. And then you end up being depressed." (FG – eighth grade).

Adolescence is characterized by bodily changes resulting from physiological growth and hormonal changes. Dealing with these changes is a difficult process for adolescents who seek peer acceptance and the experience of belonging to a group;²⁸ moreover, this is worsened by the standards of beauty and thinness imposed by the mass media on the public.

The influence of the media, strengthened by globalization and society, was described by Anschutz et al.²⁹ and Oliveira and Hutz,³⁰ who emphasized the contradiction between appealing to a healthy lifestyle and encouraging the consumption of high-calorie foods. Mass media have a strong influence on eating behaviors, in both children³¹ and adolescents.³²

Body image plays a critical role in one's life, derived from clothing choices, aesthetic preferences, and social interaction skills and consisting of self-acceptance and self-confidence.³³ Some studies examined how body dissatisfaction affects children and adolescents, impacts their eating behavior, and the practice of certain physical activities for toning the body.^{34,35} A survey of 7,172 adolescents in the field of communication found an association between the desire to look like a media celebrity and the initiation of purgative methods for weight loss.³⁶ The speeches of adolescents described above (*"I would like to model myself all over again"*) and the association they make between failure to achieve prevailing aesthetic standards and risk of depression suggest how such issues compromise their self-confidence and self-acceptance.

A child internalizes at an early age that being overweight is a reason to be ashamed, increasing the risk of developing low self-esteem, social isolation, and disordered eating behaviors aimed at weight loss.³³ Being aware of how young people face these issues is important to correctly guide them in terms of appropriate health and nutrition. Discussing issues related to the complexity of human nutrition with adolescents can

encourage suitable food and nutritional practices. In the same way, understanding beauty standard changes throughout history can help question the standards imposed today.³⁷

FOOD AND PHYSICAL ACTIVITY CONCEPTIONS

The usual food

In general, families tried to eat meals considered healthy during the week and allowed freer food choices on weekends. The participants' reports refer to parents' habit of controlling their food daily, while they are less controlling on the weekends

Defining such eating habits implies knowledge about the food more than of its nutritional form, along with people's knowledge of and attitude toward the act of eating.³⁸

The difference between food and nourishment was analyzed from the perspective of anthropology by Lévi-Strauss,³⁹ who highlighted that food refers to what, how, when, with whom, where, and in what way the food ingested is selected by a certain group. Therefore, food encompasses the entire process of transforming food items (a set of nutrients necessary for human life) into what is eaten in a specific, culturally established form, including what is liked or not and what food is a basic element of the social reproduction of any group.⁴⁰

The traditional system of Brazilian food is divided into six meals, including breakfast, morning snack, lunch, afternoon snack, dinner, and evening snack. However, according to Barbosa,³⁸ surveys show that only about 44% of the population has six meals and 40% have a maximum of four meals a day. Such meals are divided and organized into three major subsystems: weekly meal, weekend meal, and ritual. The ritual subsystem can be related to collective or individual parties and celebrations. Weekly meals are characterized by two hot meals: lunch and dinner.³⁸ This subsystem is implemented from monday to friday at lunchtime, and the meals are very informal with little concern for food presentation. In turn, weekend meals begin from friday to sunday night, have a more extravagant menu characterized by variety, while also including trying new dishes as a weekend tradition and preparations such as barbecue, pasta, chicken salad, and chicken/meat roast, among others.³⁸ Some of the above mentioned points, such as the differentiation between weekday and weekend food, were identified in all FGs and support the adolescents' perception that food can be more varied, healthy or not, on weekends than during the week.

According to the adolescents, mothers had varying behaviors; some made efforts to maintain healthy eating habits for the entire family, while others were unable to do so due to lack of time, thus adopting eating practices that could be criticized by their children.

*"My mother cooks a lot of vegetables, makes a carrot souffle, and puts cheese on top."
(FG – seventh grade)*

"My mother likes Coke a lot, she is addicted. I already had to forbid my mother to drink Coke (...)" (FG – eighth grade).

"My mother doesn't have time to cook, she never does it and I always have to order food. I always order rice, beans, chicken, and potatoes." (FG – ninth grade).

In western societies, women are seeking to detach themselves from cooking activities while pursuing professional activities that demonstrate their social value and enable their financial autonomy.⁴¹ The women's movement from home to the job market has impacted the family's diet, as it is unlikely that another family member will take on the tasks of choosing, planning, shopping, and preparing food daily. According to a study of 101 women in the city of Viçosa, MG, Brazil, more than 50% of them reported changes in eating habits, with the main change being quicker meals by replacing food with snacks.⁴²

Entering the job market does not exempt women from their "domestic role," but creates a new social paradigm—when a woman assumes a professional role, she takes on the additional responsibility for family food, much alike a double shift. Social support mechanisms are not often presented for the non-concentration of these tasks on only women.⁴³

Furthermore, adolescents can even develop some cooking skills due to their own or their family's needs. However, acquiring this skill was pleasant, becoming almost an obligation. Although the mothers worked outside the home, they cooked for the family. Having insufficient time, they performed this task while avoiding help from their children as much as possible. This situation may seem like a paradox, as help can ease the burden of responsibility when the time available is short. This is explained by the centrality that women still maintain in the kitchen and in preparing food. Teaching children how to cook requires more time, and therefore, adolescents do not develop a habit of cooking:

"My mother does it, she doesn't let me touch it when she's at home, but sometimes she asks for help" (Speech common to almost all FGs).

Introducing young people to cooking is likely to be uncommon due to parents' lack of time or patience owing to their busy routine or lack of skills. However, a study that used a cooking workshop to encourage healthy eating in children and adolescents demonstrated participants' increased pleasure when cooking and improvement in their self-efficacy of cooking skills, in addition to increased desire to try new foods⁴⁴ and the mother being the main source of cooking lessons.⁴⁵ Encouraging such practices in young people would help decentralize the task of cooking from the mother, in addition to being a great tool to address food/nutritional issues in adolescents.

According to the FGs, the adolescents ate what they considered basic food, such as rice and beans, some protein and, more often, potatoes, as they did not like vegetables. They avoided drinking soda as much as possible and criticized when their guardians consumed it. However, they admitted to eating junk food, considered by them as the opposite of healthy food. This eating habit has already been reported in past literature.⁴⁶⁻⁴⁸ Junk foods include sweets, snacks, soft drinks, cookies, and instant noodles. However, the adolescents' speeches showed a desire to change the habits they considered harmful, such as the consumption of soft drinks. However, they did not identify other drinks as equally harmful and tended to replace soda with ultra-processed juices and teas. The main difficulty in eating healthy reported by the adolescents was lack of time (mothers who work outside the home, excessive activities) and their laziness in collaborating for cooking activities.

Healthy eating in a family may be triggered after the discovery of a family member's health issues. A girl reported eating everything but in small amounts, while arguing that this behavior was based on the size of her stomach.

"Because before, we realized after doing a blood test that we had something changed and we decided to change that (to eat healthy). Then, as time went by, it became a habit (referring to the family)." (FG – eighth grade).

The consumption of simple sugars and saturated fats is already linked to high body mass index and chronic non-communicable diseases, and this knowledge has been gradually assimilated among the population. However, with the growth of the food industry and the wide range of edible products available, it is becoming increasingly difficult for the population to identify if what they are eating is healthy. Ultra-processed foods are associated with several types of cancer and can cause obesity.⁴⁹ A national survey conducted in Brazil already reported that adolescents are the most vulnerable population to high consumption of ultra-processed foods and low consumption of vegetables and fruit.⁵⁰

Food and nutrition education should involve food labeling; strategies to prepare, freeze, and store meals at home to improve the daily lives of families; tasty and healthy recipes to disprove that healthy foods are tasteless; techniques to optimize time in the kitchen; and habituating to cooking as a way of family integration.

Physical activity and leisure

Physical activity (PA) did not seem to be a part of the families' routines. Some mothers practiced it more often and fathers had difficulty incorporating this practice into their daily lives.

"My dad says he'll go on another day, but that day never comes for my dad (especially because he works a lot)." (FG – eighth grade).

"Once in a while we (my dad and I) go for a run in the condo, try to organize a time to run in the morning." (FG – ninth grade).

The main reasons reported for not performing PA were laziness (especially for adolescents); lack of time (both for adolescents and parents); considering it a boring activity (especially adolescents); lack of financial conditions; and lack of space and equipment (in houses and buildings).

The reasons that led families and adolescents to do PA were often health problems (such as high cholesterol and excess weight) and a desire for bodily changes.

"I have high cholesterol, so I have to do physical activity to control cholesterol and my mother says I have to eat a lot of vegetables and reminds me to eat all the time. Then I am doing physical activity to see if it improves..." (FG – eighth grade)

As for leisure, the adolescents visit the beach, movies, shopping malls, and relatives' houses, almost always accompanied by guardians due to fear of violence in Rio de Janeiro. Even playing on the streets, usually close to the house, became unfeasible for the same reason.

"I live in an apartment; I can't play outside because it's not like it used to be (reason for having little leisure)." (FG – seventh grade)

Practicing regular PA has been encouraged due to its several benefits, including improved cardiovascular, bone, and muscle health; better academic performance; and reduced risk of developing obesity, chronic diseases, and depression.⁵¹

Some factors correlated to the regular practice of PA are linked to the family context,⁵² such as contextual characteristics of the household (e.g., having space), family values, knowledge, and attitudes toward PA.⁵³ In addition, the social support provided to the adolescent by the family, particularly by parents whether through incentives, transport, financing, and giving company in the activities are reported as differentials in the adherence and consistency of PA practice.⁵³ However, such support varies according to the adolescent's family structure and the mother's and father's dissimilar influence on their children's engagement in regular PA.⁵⁴ Adolescents whose parents practice PA are more likely to be equally active.^{55,56} The frequent absence of parents because they have to work, low supply of intersectoral sport and leisure public policies, precarious structural conditions, and violence in the neighborhood are fundamental elements to understand the relationship between family stimulation and PA practice. In this context, adolescents living in vulnerable urban contexts would be susceptible to different health risks resulting from the lack of PA.⁵⁷

CONCLUSION

When designing intervention research on a given topic, it is common to think of strategies focused on the main problem. An example is thinking about nutritional interventions aimed at reducing the consumption of sugary drinks or increasing vegetable and fruit intake. However, working with individuals, endowed with different feelings, experiences, and concepts, introduces the risk of an activity not reaching its objectives.

Adolescents tend to have more intense convictions and attitudes to assert who they are in front of their peers. Therefore, conducting exploratory research prior to the interventions is important to better understand the target audience for such activities and the contexts of their problems, outlining collaboratively constructed solutions.

In this study, we aimed to better understand the experiences and perceptions of adolescents in relation to their bodies, food, PA, and self-esteem. However, several topics not previously considered in the FGs showed a strong relationship with the adolescents' perception of their health.

This study identified the difficulty of being an adolescent while experiencing bodily changes, along with their needs for self-affirmation and to feel confident in dealing with the challenges of today's society and those inherent to life. Such issues have been experienced differently, according to the new structural, social, and emotional demands of contemporaneity. All the issues that permeate the adolescents' health experience influence their decision making, outline their choices regarding food and PA, and directly impact the way they feel about their bodies and manage their feelings.

Strategies for health interventions must extend beyond isolated and punctual practices that, in most cases, either do not obtain significant results in improving the health condition of this population or only momentarily improve some specific parameters, without any lasting impact. Listening to adolescents before an intervention demonstrates the complexity of the problem and that it is impossible to deal with one one's own, as it involves fundamental and broad issues such as public policies, family structure, limiting

socioeconomic issues, thoughts, and rooted experiences. Further, it allows us to work with issues in the most realistic manner while considering these factors and giving them the importance they deserve, looking for ways to appropriately take care of health, considering biopsychosocial nuances, and presenting alternatives in the face of inequalities.

ACKNOWLEDGMENTS

We thank the National Council for Scientific and Technological Development (CNPq) for financing “Projeto Pares” under process no. 407940/2016-2, and the students and the entire social body of the school where the study was conducted.

REFERENCES

1. Enes CC, Slater B. Obesidade na adolescência e seus principais fatores determinantes. *Rev. Bras. Epidemiol.* 2010;13(1):163-171. <https://doi.org/10.1590/S1415-790X2010000100015>.
2. Instituto Brasileiro de Geografia e Estatística. Pesquisa de Orçamentos Familiares 2008-2009. Análise do Consumo Alimentar Pessoal no Brasil. Rio de Janeiro: IBGE; 2011.
3. Instituto Brasileiro de Geografia e Estatística. Pesquisa de Orçamentos Familiares 2017-2018. Análise do Consumo Alimentar Pessoal no Brasil. Rio de Janeiro: IBGE; 2020.
4. Barbosa Filho VC, Campos W, Lopes AS. Epidemiology of physical inactivity, sedentary behaviors, and unhealthy eating habits among Brazilian adolescents. *Cien Saude Colet.* 2014;19(1):173-194. <https://doi.org/10.1590/1413-81232014191.0446>.
5. Instituto Brasileiro de Geografia e Estatística. Pesquisa de Orçamentos Familiares 2008-2009. Antropometria e estado nutricional de crianças, adolescentes e adultos no Brasil. Rio de Janeiro: IBGE; 2010.
6. NCD Risk Collaboration (NCD-RiskC). Worldwide trends in body mass index, underweight, overweight, and obesity from 1975 to 2016: a pooled analysis of 2416 population-based measurement studies in 128,9 million children, adolescents, and adults. *Lancet.* 2017;390:2627-2642.
7. Bair CE, Kelly NR, Serdar KL, Mazeo SE. Does the Internet function like magazines? An exploration of image-focused media, eating pathology, and body dissatisfaction. *Eat Behav.* 2012;13(4):398-401. <https://doi.org/10.1016/j.eatbeh.2012.06.003>.
8. Tiggemann M, Slater A. NetGirls: The Internet, Facebook, and body image concern in adolescent girls. *Int J Eat Disord.* 2013;46(6):630-633. <https://doi.org/10.1002/eat.22141>.
9. Stice E, Shaw H, Marti CN. A meta-analytic review of eating disorder prevention programs: encouraging findings. *Ann Rev Clin Psychol.* 2007; 3:207-231. <https://doi.org/10.1146/annurev.clinpsy.3.022806.091447>.
10. Carta de Ottawa Primeira conferência internacional sobre promoção da saúde Ottawa, novembro, 1986. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/carta_ottawa.pdf. Acesso em: 27 out 2020.
11. Sícoti JL, Nascimento PR. Promoção da saúde-concepções, princípios e operacionalização. *Interface.* 2003; 7(12):101-122. <https://doi.org/10.1590/S1414-32832003000100008>.
12. Chaves ACP, Bezerra EO, Pereira MLD, Wolfgang W. Conhecimentos e atitudes de adolescentes de uma escola pública sobre a transmissão sexual do HIV. *Rev Bras Enferm.* 2014;67(1):48-53. <https://doi.org/10.5935/0034-7167.20140006>.
13. Brasil. Lei nº 13.666/2018, de 16 de maio de 2018. Altera a Lei nº 9.394 de 20 de dezembro de 1996 (Lei de Diretrizes e Bases da Educação Nacional), para incluir o tema transversal da educação alimentar e nutricional no currículo escolar. Maio, 2018. Disponível em <https://www2.camara.leg.br/legin/fed/lei/2018/lei-13666-16-maio-2018-786690-publicacaooriginal-155573-pl.html>. Acesso em: 30 out 2020.
14. Ramos FP, Santos LAS, Reis ABC. Educação alimentar e nutricional em escolares: uma revisão de literatura. *Cad Saúde Pública.* 2013;29(11):2147-2161. <https://doi.org/10.1590/0102-311x00170112>.

15. Ciryno EG, Pereira MLT. Trabalhando com estratégias de ensino-aprendizado por descoberta na área da saúde: a problematização e a aprendizagem baseada em problemas. *Cad. Saúde Pública*. 2004;20(3):780-788.
16. Santos KB, Murta SG. Influência dos pares e educação por pares na prevenção à violência no namoro. *Psicologia: Ciência e Profissão*. 2016;36(4):787-800. <https://doi.org/10.1590/1982-3703000272014>.
17. Mwale M, Muula AS. Systematic review: a review of adolescent behavior change interventions [BCI] and their effectiveness in HIV and AIDS prevention in sub-Saharan Africa. *BMC Public Health*. 2017;17(1):718. <https://doi.org/10.1186/s12889-017-4729-2>.
18. Rose-Clarke K, Bentley A, Marston C, Prost A. Peer-facilitated community-based interventions for adolescent health in low-and middle-income countries: A systematic review. *Plos One*. 2019; 14(1):e0210468. <https://doi.org/10.1371/journal.pone.0210468>.
19. Baldissera A. Pesquisa-ação: uma metodologia do “conhecer” e do “agir” coletivo. *Sociedade em Debate*. 2001;7(2):5-25.
20. Minayo MCS. O desafio do conhecimento. *Pesquisa qualitativa em saúde*. 9ª edição revista e aprimorada. 2006, São Paulo: Hucitec; p. 406.
21. Bardin, L. *Análise de conteúdo*. 1979, Lisboa: Edições 70.
22. Gomes R. A análise de dados em pesquisa qualitativa. In: Minayo MCS, Deslandes SF, Gomes R. 2016. *Pesquisa social: teoria, método e criatividade*, Editora Vozes.
23. Schwandt TA. Interpretativismo, hermenêutica e construcionismo social. In: Denzin, N K, Lincoln YS. *O planejamento da pesquisa qualitativa: teorias e abordagens*. 2006, Porto Alegre: Artmed 193-217pp.
24. Almeida G, Valentini NC, Berleze A. Perceptions of competence in a study with children and adolescents from elementary school. *Movimento, Revista da Escola de Educação Física da UFRGS*. 2009;15(1):1-21.
25. Wagner A, Falcke D, Silveira LMBO, Mosmann CP. A comunicação em famílias com filhos adolescentes. *Psicol Estud*. 2002; 7(1):75-80. <https://doi.org/10.1590/S1413-73722002000100010>.
26. Wagner A, Carpenedo C, de Melo LP, Silveira PG. Estratégias de Comunicação Familiar: A Perspectiva dos Filhos Adolescentes. *Psicologia: Reflexão e Crítica*. 2005;18(2):277-282.
27. Schenker M, Minayo MCS. Fatores de risco e de proteção para o uso de drogas na adolescência. *Ciê Saude Colet*. 2005;10(3):707-717. <https://doi.org/10.1590/S1413-81232005000300027>.
28. Braga PD, Molina MCB, Figueiredo TAMF. Representações do corpo: com a palavra um grupo de adolescentes de classes populares. *Ciê Saude Colet*. 2010;15(1):87-95. <https://doi.org/10.1590/S1413-81232010000100014>.
29. Anschutz D, Engels R, Leeuwe JV, Strien TV. Watching your weight? The relations between watching soaps and music television and body dissatisfaction and restrained eating in young girls. *Psychol Health*. 2009; 24(9):1035-50. <https://doi.org/10.1080/08870440802192268>.
30. Oliveira LL, Hutz CS. Eating disorders: the role of cultural aspects in the contemporary world. *Psicol Estud*. 2010;15(3):575-582.
31. Rossi A, Moreira EAM, Rauen MS. Determinantes do comportamento alimentar: uma revisão com enfoque na família. *Rev Nutr*. 2008;21(6):739-748. <https://doi.org/10.1590/S1415-52732008000600012>.
32. Jackson T, Chen H. Sociocultural experiences of bulimic and non-bulimic adolescents in a school-based chinese sample. *J Abnorm Child Psychol*. 2010;38(1):69-76. <https://doi.org/10.1007/s10802-009-9350-0>.
33. Simões D, Meneses RF. Auto-conceito em crianças com e sem obesidade. *Psicologia: Reflexão e Crítica*. 2007; 20(2):246-251. <https://doi.org/10.1590/S0102-79722007000200010>.
34. Vilela JEM, Lamounier JA, Dellaretti Filho MA, Barros Neto JR, Horta GM. Transtornos alimentares em escolares. *J Pediatr*. 2004;80(1):49-54. <https://doi.org/10.2223/JPED.1133>.

35. Carvalho GX, Nunes APN, Moraes CL, Veiga GV. Insatisfação com a imagem corporal e fatores associados em adolescentes. *Cien Saude Colet.* 2020;25(7):2769-2782. <https://doi.org/10.1590/1413-81232020257.27452018>.
36. Haines J, Kleinman KP, Rifas-Shiman SL, Field AE, Austin SB. Examination of shared risk and protective factors for overweight and disordered eating among adolescents. *Arch Pediatr Adolesc Med.* 2010;164(4):336-343. <https://doi.org/10.1001/archpediatrics.2010.19>.
37. Portronieri FRDS. O jovem, o comer e o perceber-se: concepções de alunos e professores sobre o corpo, a alimentação e a saúde em uma escola municipal do Rio de Janeiro. Dissertação de Mestrado. Núcleo de Tecnologia Educacional para a Saúde, UFRJ. Rio de Janeiro, 2010.
38. Barbosa L. Feijão com arroz e arroz com feijão: o Brasil no prato dos brasileiros. *Horiz Antropol.* 2007;13(28):87-116. <https://doi.org/10.1590/S0104-71832007000200005>.
39. Lévi-Strauss C. The culinary triangle. *Partisan Review.* 1966;33(4) (Fall 1966):586-595.
40. Lévi-Strauss C. Mitológicas I - O cru e o cozido, tr. Beatriz Perrone Moisés, R.J.: Cosac e Naify, 2004, 446pp.
41. Lambert JL, Batalha MO, Sproesser RL, Silva AL, Lucchese T. As principais evoluções dos comportamentos alimentares: o caso da França. *Rev Nutr.* 2005;8(5):577-591. <https://doi.org/10.1590/S1415-52732005000500001>.
42. Lelis C, Teixeira K, Silva N. A inserção feminina no mercado de trabalho e suas implicações para os hábitos alimentares da mulher e de sua família. *Saude em Debate.* 2012;36(95):523-532.
43. Pinheiro ARO. A alimentação saudável e a promoção da saúde no contexto da segurança alimentar e nutricional. *Saude em Debate.* 2005;29(70):125-139.
44. Harmon BE, Smith N, Pirkey P, Beets MW, Blake CE. The Impact of Culinary Skills Training on the Dietary Attitudes and Behaviors of Children and Parents. *Am J Health Educ.* 2015;46(5):283-292. <https://doi.org/10.1080/19325037.2015.1056862>.
45. Lavelle F, Spence M, Hollywood L, McGowan L, Surgenor D, McCloat A, et al. Learning cooking skills at different ages: a cross-sectional study. *Int J Behav Nutr Phys Act.* 2016;13:119. <https://doi.org/10.1186/s12966-016-0446-y>.
46. São Pedro ND, Araújo, MPN, Freitas MCS. Significados do comer no cotidiano de adolescentes: narrativas de estudantes com excesso de peso de uma instituição federal de ensino médio da cidade de Salvador, Bahia. *Demetra: Alimentação, Nutrição e Saúde.* 2016;11(3):847-861. <https://doi.org/10.12957/demetra.2016.22482>.
47. Mendonça CP, Anjos LA. Aspectos das práticas alimentares e da atividade física como determinantes do crescimento do sobrepeso/obesidade no Brasil. *Cad. Saúde Pública.* 2014;20(3):698-709. <https://doi.org/10.1590/S0102-311X2004000300006>.
48. Santos CC, Ressel LB, Alves CN, Wilhelm LA, Stumm KL, Silva SC. A influencia da cultura no comportamento alimentar dos adolescentes: uma revisão integrativa das produções em saúde. *Adolesc Saúde.* 2012;9(4):37-43.
49. Monteiro CA, Levy RB, Claro RM, Castro, IRR, Cannon G. Increasing consumption of ultra-processed foods and likely impact on human health: evidence from Brazil. *Public Health Nutr.* 2011;14(1):5-13. <https://doi.org/10.1017/S1368980010003241>.
50. Canella DS, Louzada MLC, Claro RM, Costa JC, Bandoni DH, Levy RB et al. Consumo de hortaliças e sua relação com os alimentos ultraprocessados no Brasil. *Rev Saude Publica.* 2018;52(50):1-11. <https://doi.org/10.11606/S1518-8787.2018052000111>.
51. World Health Organization 2014. Health for the World's Adolescents, a second chance in the second decade: summary. Geneva: World Health Organization. <https://apps.who.int/iris/handle/10665/112750WHO>.
52. Mehtälä MAK, Sääkslahti AK, Inkinen ME, Poskiparta MEH. A socio-ecological approach to physical activity interventions in childcare: a systematic review. *Int J Behav Nutr Phys Act.* 2014;11(1):22. <https://doi.org/10.1186/1479-5868-11-22>.
53. Beets MW, Cardinal BJ, Alderman BL. Parental social support and the physical activity-related behaviors of youth: a review. *Health Educ Behav.* 2010;37(5):621-644. <http://www.ijbnpa.org/content/11/1/22>.
54. Edwardson CL, Gorely T. Parental influences on different types and intensities of physical activity in youth: A systematic review. *Psychol Sport Exerc.* 2010;11(6):522-535. <https://doi.org/10.1016/j.psychsport.2010.05.001>.
55. Cheng LA, Mendonça G, Farias Júnior JC. Physical activity in adolescents: analysis of the social influence of parents and friends. *J Pediatr.* 2014;90(1):35-41. <https://doi.org/10.1016/j.jpeds.2013.05.006>.

56. Trost SG, McDonald S, Cohen A. Measurement of general and specific approaches to physical activity parenting: a systematic review. *Child Obes.* 2013;9(1):40-50. <https://doi.org/10.1089/chi.2013.0027>.
57. Ramos CGC, Andrade RG, Andrade ACS, Fernandes AP, Costa DAS, Xavier CC et al. Contexto familiar e atividade física de adolescentes: cotejando diferenças. *Rev Bras Epidemiol.* 2017;20(3):537-548. <https://doi.org/10.1590/1980-5497201700030015>.

Contributors

Portronieri FRDS planned and supervised the fieldwork of "Projeto Pares," was a moderator researcher, analyzed the FG audios, wrote the initial draft, and revised the final manuscript; Baião MR collaborated in planning the fieldwork of "Projeto Pares," was an observer researcher, analyzed the FG audios, and revised the final manuscript; Santos ABP participated in field activities of "Projeto Pares," was an assistant researcher, transcribed the FG audios, collaborated in the bibliographic review and in manuscript writing; Veiga GV conceived the idea, coordinated the entire "Projeto Pares," and revised the final article.

Conflict of Interest: The authors declare no conflict of interest.

Received: November 20, 2021

Accepted: April 5, 2022