REFACS

Original Article
Rev. Fam., Ciclos Vida Saúde Contexto Soc.
http://seer.uftm.edu.br/revistaeletronica/index.php/refacs/index
ISSN: 2318-8413 DOI: 10.18554/refacs.v14i00.8623

Perceptions of food insecurity: agreement between adolescents and their caregivers participating in the Bolsa Família Program

Percepções sobre Insegurança Alimentar: concordância entre adolescentes e seus responsáveis participantes do Programa Bolsa Família

Percepciones sobre inseguridad alimentaria: concordancia entre adolescentes y sus responsables participantes en el Programa Bolsa Familia

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Received: 05/08/2025 **Accepted:** 03/11/2025 **Published:** 26/01/2026

Abstract:
Objective: to compare the perception of food insecurity among adolescents enrolled in the Brazilian social program Bolsa Família and their caregivers. **Methods:** a descriptive cross-sectional study with a quantitative approach was conducted between 2018 and 2019 in Lavras City, MG, Brazil. Adolescents aged 10 to 18 years and their caregivers were assessed. Adolescents aged 10 to 18 years and their caregivers were assessed. Food insecurity was evaluated using the Brazilian Food Insecurity Scale, applied to caregivers, and the Short Food Insecurity Scale. Socioeconomic characteristics, adolescents' food consumption, and strategies for coping with food insecurity were also assessed. **Results:** the perceived prevalence of food insecurity was 42.7% among adolescents, and 79.8% among caregivers. A positive association was observed between adolescents' perception of food insecurity and both household income and per capita income ($p = 0.008$ and $p = 0.046$, respectively). Reasonable agreement ($\kappa = 0.20$) was found between adolescents and caregivers regarding the perception of household food insecurity. **Conclusion:** considering the consequences of food insecurity, continuous monitoring in households with adolescents is essential and should be linked to policies and programs aimed at combating hunger, including actions to promote adequate and healthy eating.
Keywords: Food insecurity; Adolescent health; Nutrition Programs and Policies; Hunger.

Resumo:
Objetivo: comparar a percepção da insegurança alimentar de adolescentes do programa e de seus responsáveis. **Método:** estudo transversal descritivo de abordagem quantitativa desenvolvido entre 2018 a 2019 n a cidade de Lavras, MG. Foram avaliados adolescentes com idades entre 10 e 18 anos e seus responsáveis. A insegurança alimentar foi avaliada pela Escala Brasileira de Insegurança Alimentar, aplicada aos responsáveis, e pela Escala Curta de Insegurança Alimentar, além da avaliação socioeconômica, de consumo alimentar dos adolescentes e estratégias para lidar com insegurança alimentar. **Resultados:** a prevalência de insegurança alimentar percebida pelos adolescentes foi de 42,7%, e, entre os responsáveis, foi de 79,8%. Houve associação positiva entre a percepção de insegurança alimentar dos adolescentes e renda do domicílio e per capita (p= 0,008 e p=0,046, respectivamente). Observou-se concordância razoável ($\kappa = 0,20$) quanto a percepção da insegurança alimentar domiciliar entre os adolescentes e seus responsáveis. **Conclusão:** considerando as consequências da insegurança alimentar, seu monitoramento em domicílios com adolescentes deve ser contínuo e associado a políticas e programas de combate à fome, incluindo ações de promoção da alimentação adequada e saudável.
Palavras-chave: Insegurança alimentar; Saúde do adolescente; Programas e Políticas de Nutrição e Alimentação; Fome.

Resumen:
Objetivo: comparar la percepción de la inseguridad alimentaria de los adolescentes del programa y de sus responsables. **Método:** estudio transversal descriptivo de enfoque cuantitativo desarrollado entre 2018 y 2019, en la ciudad de Lavras, MG, Brasil. Se evaluó a adolescentes de entre 10 y 18 años y a sus responsables. La inseguridad alimentaria se evaluó mediante la Escala Brasileña de Inseguridad Alimentaria, aplicada a los responsables, y la Escala Corta de Inseguridad Alimentaria, además de la evaluación socioeconómica, el consumo alimentario de los adolescentes y las estrategias para hacer frente a la inseguridad alimentaria. **Resultados:** la prevalencia de la inseguridad alimentaria percibida por los adolescentes fue del 42,7 %, y entre los responsables, del 79,8 %. Se observó una asociación positiva entre la percepción de la inseguridad alimentaria de los adolescentes y los ingresos familiares y per cápita ($p = 0,008$ y $p = 0,046$, respectivamente). Se observó una concordancia razonable ($\kappa = 0,20$) en cuanto a la percepción de la inseguridad alimentaria en el hogar entre los adolescentes y sus responsables. **Conclusión:** teniendo en cuenta las consecuencias de la inseguridad alimentaria, su seguimiento en los hogares con adolescentes debe ser continuo y estar asociado a políticas y programas de lucha contra el hambre, incluidas acciones de promoción de una alimentación adecuada y saludable.
Palabras clave: Inseguridad alimentaria; Salud del adolescente; Programas y Políticas de Nutrición y Alimentación; Hambre.

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INTRODUCTION

Addressing hunger, the most severe expression of Food Insecurity (FI), is one of the major challenges of our time due to its consequences for physical, mental, and social health, as well as its negative impact on the development of children and adolescents. The eradication of hunger is also one of the United Nations' Sustainable Development Goals – Agenda 2030[1].

Assessing and monitoring the FI situation in territories is an important step in the development of public policies aimed at reversing hunger and various forms of malnutrition. Given the complexity of FI, no single methods is capable of assessing it in its entirety, making the use of multiple indicators essential[1].

Perception-based scales are considered direct indicators of food security and are widely used to assess the magnitude of FI and different levels of access to food, ranging from uncertainty or concern about scarcity to the experience of hunger[2]. In Brazil, the Brazilian Food Insecurity Scale (*Escala Brasileira de Insegurança Alimentar* - EBIA) is the most widely used instrument. However, most instruments used to investigate the response and behavior of people in situations of food insecurity are based on the perspective of adults. It is well established that individuals within the same family nucleus do not experience food insecurity uniformly[3,4].

Although adolescents are a vulnerable group to food insecurity due to the profound psychobiological changes that are part of this stage of life and the sociocultural context, studies focusing on this population are scarce[5,6]. When experienced during adolescence, food insecurity can increase the risk of malnutrition, depression, suicidal ideation, alcohol and drug use, behavioral disorders, and learning difficulties, compromising the quality of life and future prospects of adolescents[5].

Coelho and colleagues[7] validated a scale to assess food insecurity among the Brazilian adolescents. Evidence has shown that adolescents are capable of reporting food insecurity autonomously, and studies comparing the prevalence of food insecurity as reported by adolescents and their caregivers have shown significant discrepancies between perceptions[8,9]. Relying only the perspective of adults may risk underestimating the prevalence of food insecurity or even neglecting internal processes experienced by adolescents in food insecure contexts[8-10].

Thus, this study aimed to compare the perception of food insecurity among adolescents enrolled in the Bolsa Família program and their guardians.

METHODS

This is a descriptive cross-sectional study with a quantitative approach, and an integral part of the umbrella project entitled: "*Programa Bolsa Família: avaliação da Segurança Alimentar e Nutricional das famílias participantes e acompanhamento das condicionalidades de saúde sob a ótica dos profissionais*" (Bolsa Família Program: assessment of the Food and Nutritional Security of participating families and monitoring of health conditionalities from the perspective of professionals), funded by the National Council of Scientific and Technological Developtment (*Conselho Nacional de Desenvolvimento Científico e Tecnológico* - CNPq). A total of 108 families and 180 adolescents, aged between 10 and 18 years, participated in the study.

The research was conducted in the municipality of Lavras, in the state of Minas Gerais (MG), Brazil, which had 109,884 inhabitants[11]. Of these, 18,552 individuals were registered in the Unified Registry for Social Programs (*Registro Único*) and 8,105 had a per capita household income equivalent to half the minimum wage or less. In June 2025, the Bolsa Família Program (BFP) benefited 5,155 families[12].

Data were collected using validated instruments that were tested by the team for evaluation, review and improvement. Fieldwork was conducted between March 2018 and March 2019 and included the collection of socioeconomic information, nutritional status, perception of food security, and strategies for coping with food insecurity, using a structured questionnaire. Data collection took place in the homes and/or in the community or social facilities closest to the families' residences.

The following variables were analyzed: color/race of the head of household (white, non-white); number of residents in the household (up to 3, 4 or more); marital status of the head of household (married/stable union or single/other); educational level of the head of household (incomplete elementary education, complete elementary education or higher); household income (up to ½ minimum wage, above ½ minimum wage, considering the 2019 minimum wage of R$ 998.00); per capita income (using the 2019 Bolsa Família eligibility cutoff of R$ 178.00); adolescents' gender; duration of Bolsa Família benefit receipt (up to 36 months or more than 36 months); primary use of the benefit (food, or other - payment of water and electricity bills, transportation, medication and clothing); frequency of visits by the community health worker (none, or one or more); and attendance at a Basic Health Unit (yes or no).

Information was collected and evaluated regarding: i) food consumption (food consumption questionnaire adapted from the Food and Nutrition Surveillance System – SISVAN); ii) anthropometry (weight and height measured according to SISVAN protocols; and iii) assessment performed according to the Body Mass Index for Age)[13,14]. Anthropometric

measurements were taken three times, and the final value corresponded to the arithmetic mean.

Household food security was assessed using two different perception-based scales. The Brazilian Food Insecurity Scale (EBIA) was applied to adolescents' caregivers to assess household food security, while the Short Food Insecurity Scale (*Escala Curta de Insegurança Alimentar* - ECIA) was applied directly to adolescents.

The EBIA consists of 14 questions and classifies households as: food secure (FS), mild food insecurity (MiFI), moderate food insecurity (MoFI), or severe food insecurity (SFI)[3]. The ECIA, adapted and validated for Brazilian adolescents, consists of five items and allows classification into mild, moderate, or severe food insecurity[7].

To assess adolescents' strategies and attitudes for coping with food insecurity in their households, a structured questionnaire with 9 questions was developed, adapted from the study by Bernal *et al.*[15].

Questionnaire data were double-entered independently and simultaneously during data collection, with weekly consistency verification. The database was structured in wide format with the support of the Epi-Info 7.1.5 program.

Statistical analyses were performed using Python version 3.8.2. The normality of the variable distribution was assessed using the Kolmogorov-Smirnov test. Exploratory data analysis was conducted, and associations between variables were examined using Pearson's chi-square test, adopting a significance level of 5%.

Agreement of the food security constructs was assessed using the Cohen's Kappa test (κ), and the following constructs were considered: reduced food quality in the household; reduced food availability in the household; reduced food intake among residents; reduced food intake among individuals under 18 years of age; and experience of hunger among individuals under 18 years of age. The following cut-off points were used for Cohen's Kappa test (κ): insignificant (κ < zero); weak (κ = 0 – 0.2); fair (κ = 0.21 – 0.4); moderate (κ = 0.41 – 0.6); strong (κ = 0.61 – 0.8); almost perfect agreement (κ = 0.81 – 1)[16].

The project was approved by the Research Ethics Committee of the Universidade Federal de São Paulo (CAAE nº 87117618.6.0000.5505) and the Universidade Federal de Lavras (CAAE nº 79529017.3.0000.5148), in accordance with Resolution 466/2012. Informed consent and assent forms were read and obtained at all stages of the study.

RESULTS

The sociodemographic characteristics of the population in this study are presented in Table 1. Among adolescents, 53.8% were female and 79.4% had a normal nutritional status. The consumption of at least one ultra-processed food was reported by 89.7% of adolescents, whereas the consumption of fruits and vegetables was reported by only 46.1% and 20.5%, respectively. Regarding participation in the Bolsa Família Program, 41% of families have had been enrolled for more than 3 years, and 69.2% reported using most of the benefits to purchase food.

The prevalence of perceived food insecurity among adolescents was 42.7% (95% CI: 35.5 – 50), with moderate and severe food insecurity accounting for 8.3% (95% CI: 4.3 – 12.3) and 2.2% (95% CI: 0.1 – 4.38), respectively. Among caregivers, the prevalence of food insecurity was 79.8% (95% CI: 72.28 – 87.35) (Figure 1). The prevalence of mild food insecurity was similar between adolescents and caregivers (32.2% and 33.9%); however, severe food insecurity among caregivers was 10 times higher than that reported by adolescents (22.9% and 2.2%). Adolescents' perception of food insecurity was positively associated with pasta consumption ($p = 0.03$), household income ($p = 0.008$), and per capita income ($p = 0.046$) (Table 1).

Table 1. Food insecurity in households with adolescents participating in the Bolsa Família Program. Lavras/MG, Brazil, 2018-2019.

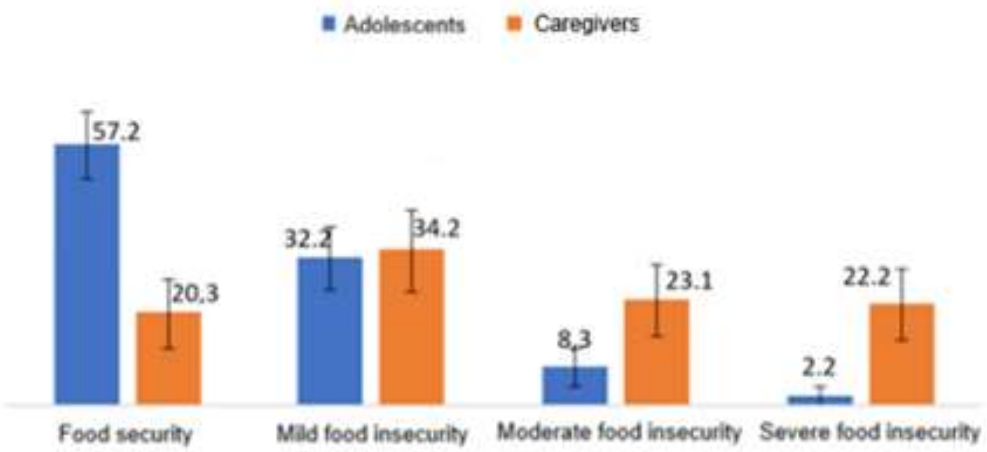
Variable	Caregivers' Perception					Adolescents' Perceptions				
	Food Security		FI (Mild + Moderate + Severe)			Food Security		FI (Mild + Moderate + Severe)		
	N	%	N	%	P-value	N	%	N	%	P-value
Adolescents' genders										
Female	21	53.8	76	53.5	0.994	56	53.8	41	53.9	1
Male	17	43.5	66	46.4		48	46.1	35	46.0	
Adolescents' BMI										
Adequate	31	79.4	108	76.1	0.615	79	75.9	60	78.9	0.77
Inadequate*	7	17.9	34	23.9		25	24.0	16	21.0	
Adolescents' food intake										
Fruits										
Yes	18	46.1	49	34.5	0.205	42	40.4	25	32.9	0.384
No	20	51.3	93	65.4		62	59.6	51	67.1	
Vegetables										
Yes	8	20.5	47	33.1	0.217	35	33.6	20	26.3	0.372
No	30	76.9	95	66.9		69	66.3	56	73.6	
Beans										
Yes	31	79.5	126	88.7	0.368	90	86.5	67	88.1	0.924
No	7	17.9	16	11.2		14	13.4	9	11.8	
Rice										
Yes	35	89.7	136	95.7	0.615	99	95.2	72	94.7	1
No	3	7.7	6	4.2		5	4.81	4	5.26	
Pasta										
Yes	14	35.9	34	23	0.164	21	20.2	27	35.5	**0.033**
No	24	61.5	108	76.1		83	79.8	49	64.5	

Variable	Caregivers' Perception					Adolescents' Perceptions				
	Food Security		FI (Mild + Moderate + Severe)			Food Security		FI (Mild + Moderate + Severe)		
	N	%	N	%	P-value	N	%	N	%	P-value
Ultra-processed food**										
Yes	35	89.7	129	90.8	1	94	90.4	70	92.1	0.892
No	3	7.7	13	9.1		10	9.6	6	7.9	
Socioeconomic										
Family income										
Up to 1/2 minimum wage	3	7.7	18	12.7	0.595	6	5.8	15	19.7	**0.008**
More than 1/2 minimum wage	35	89.7	124	87.3		98	94.2	61	80.3	
Per capita income										
Up to R$178,00	15	38.5	58	40.8	0.903	37	35.6	36	47.4	**0.046**
From R$179,00 to 1/4 minimum wage	9	23.1	37	26.1		24	23.1	22	28.9	
More than 1/4 minimum wage	14	35.9	47	33.1		43	41.3	18	23.7	
Duration of BFP benefit receipt										
Up to 36 months	22	56.4	68	47.9	0.361	49	47.1	41	53.9	0.451
More than 36 months	16	41.0	74	52.1		55	52.9	35	46.0	
Primary use of benefits										
Food	27	69.2	84	59.1	0.249	69	66.3	42	55.3	0.175
Others	11	28.2	58	40.8		35	33.6	34	44.7	

Variable	Caregivers' Perception					Adolescents' Perceptions				
	Food Security		FI (Mild + Moderate + Severe)			Food Security		FI (Mild + Moderate + Severe)		
	N	%	N	%	P-value	N	%	N	%	P-value
Education level of guardian										
Up to 6 years of education	18	46.1	72	50.7	0.855	46	44.2	44	57.9	0.097
7 years of education or more	20	51.3	70	49.3		58	55.8	32	42.1	
Color/race of guardian										
White	10	25.6	27	19.0	0.546	22	21.1	15	19.7	0.494
Not white	28	71.8	114	80.3		82	78.8	60	78.9	
Attends Family Health Unit										
Yes	31	79.5	135	95.1	**0.016**	94	90.4	72	94.7	0.427
No	7	17.9	7	4.9		10	9.6	4	5.3	
Residents										
Up to 3	4	10.3	34	23.9	0.115	17	16.3	21	27.6	0.099
4 or more	34	87.2	108	76.1		87	83.6	55	72.4	

Key: *Inadequate BMI: underweight + severely underweight + overweight + obesity. ** Ultra-processed food: hamburger/cured meat, sweetened beverage, sweets, instant noodles.

Figure 1. Food insecurity according to the perception of adolescents (ECIA: n= 180) and their caregivers (EBIA: N= 108). Lavras/MG, Brazil, 2018-2019.



Figures 2 and 3 present the affirmative responses to each item of the EBIA and ECIA. For both adolescents and their caregivers, the highest percentages were observed in the less severe items of the respective food insecurity scales. Among caregivers, the highest percentage (66%) was found for question 4, which refers to the consumption of the few remaining foods in the household due to a lack of money to buy food.

As shown in Figure 2, the proportion of affirmative responses on the EBIA increase again for items related to food insecurity among individuals under 18 years of age. Among adolescents, question 4, which addresses moderate aspects of food insecurity and evokes a direct self-perception had the third highest percentage (28%).

Figure 2. Short Scale of Food Insecurity – ECIA applied to adolescents. Lavras/MG, Brazil, 2018-2019.

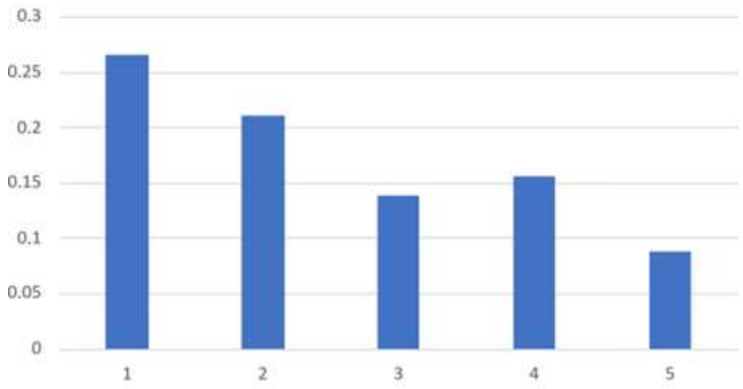
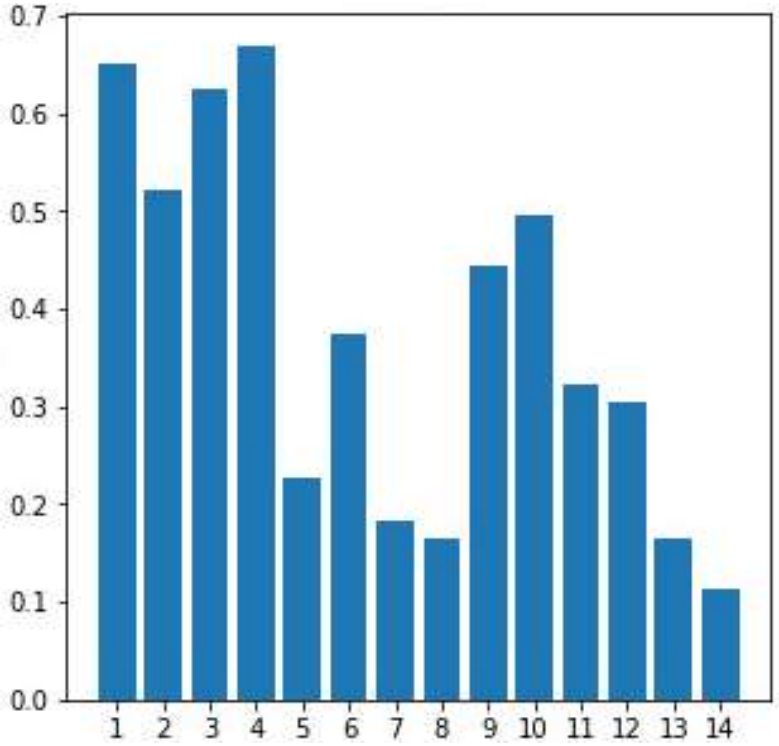


Figure 3. Brazilian Food Insecurity Scale - EBIA applied to caregivers. Lavras/MG, Brazil, 2018-2019.



Reasonable agreement (κ = 0.20) was observed between adolescents and their caregivers regarding the perception of household food insecurity. In 58.3% of households, there was agreement regarding the situation of food (in)security (Table 2). The equivalent constructs of the two scales were compared to assess the differences in perception between adolescents and their caregivers. The results indicate weak agreement in four of the five constructs evaluated (κ between 0 - 0.20), and fair agreement (κ = 0.226) in the construct about the experience of hunger among adolescents. The lowest level of agreement was observed in the construct referring to reduced food intake among household residents (κ = 0.065) (Table 3).

Regarding adolescents' attitudes and strategies for coping with food insecurity at home, 17.8% (95% CI: 12.2 – 23.4) reported leaving home in search of food or visited relatives and neighbors to eat. More than half of the adolescents (55% – 95% CI: 47.7 – 62.3) reported forgoing food so that another child could eat, or so that an adult could eat. Using their own money to purchase food was reported by 38.9% (95% CI: 31.8 – 31.3).

Table 2. Agreement between adolescents and their caregivers regarding the perception of food security at the household. Lavras/MG, Brazil, 2018-2019.

	Level of Food Insecurity	Adolescents		
		Food Security	Food Insecurity	Total (%)
Caregivers	Food Security	20	2	22 (20.3%)
	Food Insecurity	43	43	86 (79.6%)
	Total (%)	63 (58.3%)	45 (41.6%)	
	Kappa Cohen	0.2		
	p value	0.001		

Key: In 46 households (42.5%) there was more than one adolescent, and in these cases the following was considered:

1. Agreement regarding FS: all adolescents and their caregivers perceive FS;

2. Agreement regarding FI: most adolescents perceive FI;

3. Disagreement regarding FI: most adolescents disagree with their caregivers.

Table 3. Agreement between adolescents and their caregivers based on equivalent constructs of food (in)security. Lavras/MG, Brazil, 2018-2019.

Construct	% of Affirmative Response - EBIA	% of Affirmative Response - ECIA	Kappa	Agreement
Reduced food quality	Question 03 – 62%	Question 01 – 26%	0.194	Weak
-Reduced availability of food in the household	Question 02 – 52%	Question 02 – 21%	0.171	Weak
-Reduced food intake among residents	Question 04 – 66%	Question 03 – 13%	0.065	Weak
-Reduced food intake among individuals under 18 years of age	Question 12 – 30%	Question 04 – 15%	0.208	Weak
-Experience of hunger among individuals under 18 years of age	Question 14 – 11%	Question 05 – 8%	0.226	Fair

DISCUSSION

No Brazilian studies that compared the perception of food insecurity between adolescents and their caregivers in the context of the Bolsa Família Program were found. This study shows the use of a scale to assess the perception of food insecurity among adolescents participating in the Bolsa Família Program, and compares it with the perception of their caregivers. The results showed a prevalence of food insecurity of 42.7%, and in 41.6% of families, there was disagreement between adolescents and caregivers regarding the perception of food insecurity.

The data from this study, collected between 2018 and 2019, prior to the COVID-19 pandemic, already indicated a prevalence of food insecurity of 79.8% in households with adolescents participating in the Bolsa Família Program, with severe food insecurity reported by 22.2% of caregivers. The COVID-19 pandemic exacerbated food insecurity in Brazil, which had been increasing since 2017[17,18].

At the end of 2020, food insecurity affected 85.6% of households with a monthly per capita income of up to one-quarter of the minimum wage, and 88.2% of families participating

in the Bolsa Família Program. Between 2020 and 2022, the overall prevalence of food insecurity increased from 9% to 15.5%. Among households with children and adolescents aged 5 to 17, the prevalence of food insecurity was 66.5%, with the highest proportion of severe food insecurity (20.6%) observed in this age group compared to other groups[18-20].

The assessment of food insecurity from the perspective of children and adolescents has been studied internationally for more than 15 years[9,21-23]. Beyond validation and use of scales, qualitative studies have also explored how adolescents perceive and experience food insecurity[5,8,24].

The 2009 edition of the National School Health Survey (*Pesquisa Nacional de Saúde do Escola*r - PeNSE) incorporated a question regarding food restriction and hunger experience. Positive association was observed among adolescents who answered affirmatively to this question and sociodemographic characteristics (living in households with more than five people, not living with their father, and planning to work after finishing the ninth grade)[25].

The Food Insecurity Risk Screening Instrument (*Triagem para Risco de Insegurança Alimentar* - TRIA) was included as part of the care provided by Primary Health Care teams in order to identify families at risk for food insecurity, and also as a tool that can be used by teams in the Unified Social Assistance System[26-28].

In this study, food insecurity was reported by 42.2% of adolescents and was associated with household income (p=0.008), per capita income (p=0.046), and pasta consumption (0.033). Income is one of the strongest determinants of food insecurity and an important indicator for assessing susceptibility to hunger[2]. Studies that sought to assess food insecurity based on the perception of adolescents over the past four years found prevalences ranging from 32% to 61.1%[9,29-31]. Food insecurity has been linked to higher Body Mass Index (BMI), binge-eating episodes, body dissatisfaction, and barriers to adopting healthy eating habits[29,31].

Comparison of the perception of food insecurity between adolescents and their caregivers suggests a discrepancy[30,32-34], and that the perceived food insecurity among adolescents may even be more prevalent[9]. In this study, the proportion of agreement in the perception of household food (in)security was 58.3%, with a prevalence of food insecurity of 42.7% reported by adolescents and 79.8% by caregivers.

Research conducted with adolescents in Latin America found 49% agreement in the reports of household food insecurity, with a higher prevalence reported by caregivers. The presence of conflict between caregivers and adolescents was associated with a higher chance of disagreement in which the adolescent reports food insecurity, but the caregivers do not. Lower chances of disagreement were observed in households with female adolescents and with

an annual income greater than $30,000.00. Greater agreement among adolescent girls was also observed in other investigations and could be explained by their involvement in meal preparation, giving them greater awareness of the food security situation in the household[9,33].

Another study comparing the equivalent constructs of perception scales of children and adolescents and their caregivers found lower agreement for the construct on hunger among children/adolescents, and higher agreement for constructs related to the child/adolescent going an entire day without eating ($\kappa = 0.26$) and consumption of low-cost foods ($\kappa = 0.23$)[35].

Food security is a complex phenomenon that can affect individuals within the same household differently. Discrepancies in the perception of food insecurity between adolescents and their caregivers may be related to parental protection of their children, attempts to shield them food scarcity, and the caregivers's limited awareness of adolescents' physical and emotional experiences of food insecurity. Furthermore, the quality of the parent-adolescent relationship and the sense of responsibility and protective behaviors towards the family developed by adolescents living in food-insecure households may contribute to these differences in perception[8,24,33].

CONCLUSION

Identifying and monitoring food insecurity in the country is necessary to strengthen governance in food and nutritional security. Currently, only the perspective of adults is considered for measuring food insecurity. Considering the vulnerability of adolescents, the consequences of food insecurity for their biopsychosocial health, the evidence related to perception discrepancies, and how adolescents experience food insecurity, it is important that instruments capable of assessing the perception of food insecurity from the adolescents' perspective be incorporated into public policies.

From this perspective, it is both fundamental and urgent to develop instruments that have a good cost-effectiveness ratio and that are capable of contributing to the surveillance of the situation of food insecurity from the perspective of adolescents, and that can be used in different public services (Basic Health Units, schools, Social Assistance Reference Centers, and others), in addition to the national surveys themselves.

Among the study's limitations, it is noteworthy that, despite the validity of the two scales used to measure the phenomenon of food insecurity and the similarity of the questions, the different approaches used with adolescents and their caregivers, and the fact that most interviews took place in a home environment, may have influenced the disagreements.

Thus, perception scales inform about the access to food, and therefore, professionals involved in adolescent care should be attentive to other indicators related to food and nutritional insecurity (food consumption, anthropometry, micronutrient deficiencies), as well as to subjective issues. Effective identification requires active, skilled listening, as well as an understanding of the singularities of adolescents.

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Associated Publisher: Rafael Gomes Ditterich

Conflict of Interests: the authors declared there are no conflict of interests

Financing: none

Contributions:
Concept – Poblacion A, Serenini M, Toloni MHA
Investigation – Inácio MLC, Poblacion A, Serenini M, Serenini R, Toloni MHA
Writing – first draft – Inácio MLC, Serenini M, Serenini R
Writing – writing and editing – Poblacion A, Serenini M, Taddei JAAC, Toloni MHA

How to cite this article (Vancouver)
Serenini M, Serenini R, Inácio MLC, Poblacion A, Toloni MHA, Taddei JAAC. Perceptions of food insecurity: agreement between adolescents and their guardians participating in the Bolsa Família Program. Rev Fam, Ciclos Vida Saúde Contexto Soc. [Internet]. 2026 [cited in *insert day, month and year of access*]; 14:e02600X. DOI: https://doi.org/10.18554/refacs.v14i00.8623

How to cite this article (ABNT)
SERENINI, M.; SERENINI, R.; INÁCIO, M. L. C.; POBLACION, A.; TOLONI, M. H. A.; TADDEI, J. A. A. C. Perceptions of food insecurity: agreement between adolescents and their guardians participating in the Bolsa Família Program. **Revista Família, Ciclos de Vida e Saúde no Contexto Social**, Uberaba, MG, v. 14, e02600X, 2026. DOI: https://doi.org/10.18554/refacs.v14i00.8623. Access in: *insert day, month and year of access*.

How to cite this article (APA)
Serenini, M., Serenini, R., Inácio, M. L. C., Poblacion, A., Toloni, M. H. A., & Taddei, J. A. A. C. (2026). Perceptions of food insecurity: agreement between adolescents and their guardians participating in the Bolsa Família Program. Rev. Fam., Ciclos Vida Saúde Contexto Soc., 14, e02600X. Retrieved in *insert day, month and year of access* from https://doi.org/10.18554/refacs.v14i00.8623

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