Reliability of the "Meals in Our Household Questionnaire" in Portuguese Preschool Children

Fiabilidade do Questionário "Meals in Our Household Questionnaire" em Crianças Portuguesas do Pré-escolar

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ABSTRACT

Assessment tools of mealtimes in families are limited and there is none which comprehensively measures Portuguese children's mealtime structure, environment, behavior and its effects on the household. This paper aims at translating, culturally adapting and testing the psychometric properties of the Meals in Our Household Questionnaire in Portuguese preschool children. The Meals in Our Household Questionnaire was translated into Portuguese and back-translated into English by an expert translator. Questionnaires were filled in twice by the same participants, with two weeks in-between. The Meals in Our Household Questionnaire reliability analysis included internal consistency, assessed by Cronbach's alpha, and reproducibility, assessed by Spearman's correlation coefficient. We found satisfactory internal consistency across all of the Meals in Our Household Questionnaire domains and moderate to strong test-retest correlations. The questionnaire's translation led to a satisfactory reliable tool to assess parents' perception of the Portuguese preschoolers' family mealtime behaviors and environments, which can be quite useful for healthcare interventions.

KEYWORDS: Eating behavior, Family mealtime, Mealtime behavior, Reliability

RESUMO

Os instrumentos para avaliação das refeições em família são limitados e não existe nenhum que meça de forma abrangente a estrutura, o ambiente, o comportamento e os respectivos efeitos na família, próprio para crianças Portuguesas. Este artigo tem como objectivo traduzir, adaptar culturalmente e testar as propriedades psicométricas do Questionário Sobre as Refeições na Nossa Casa (Meals in Our Household Questionnaire) em crianças portuguesas do ensino pré-escolar. O Questionário Sobre as Refeições na Nossa Casa foi submetido a tradução e retroversão por um tradutor especialista. Os questionários foram preenchidos por duas vezes pelos mesmos participantes, com duas semanas de intervalo. A análise de fiabilidade do Questionário Sobre as Refeições na Nossa Casa incluiu a consistência interna, avaliada pelo alfa de Cronbach, e a reprodutibilidade, avaliada pelo coeficiente de correlação de Spearman. A consistência interna encontrada em todos os domínios do Questionário Sobre as Refeições na Nossa Casa foi satisfatória e as correlações entre teste-reteste foram moderadas a fortes. A tradução do questionário conduziu a um instrumento satisfatoriamente fiável para avaliar a percepção dos pais de crianças pré-escolares portugueses relativamente aos comportamentos e ambiente durante as refeições em família, o qual pode ser bastante útil em intervenções no âmbito da saúde.

PALAVRAS-CHAVE: Comportamento alimentar; Comportamento às refeições; Fiabilidade; Refeições em família

INTRODUCTION

To share mealtimes is one of the characteristics of the eating environment in Mediterranean countries, which, in its simplest form, joins family and friends around the table, enjoying home cooked meals in a convivial conversation (1, 2). There is increasing evidence that the frequency of shared family mealtimes is associated with many positive dietary outcomes for children and youth (3-6), namely higher intake of fruit (7-9), vegetables (7-10), calcium-rich foods (7-9), grains (8), dietary fiber (7), along with the lower intake of soft drinks (7, 8), fried foods, saturated and trans fat (7), as well as the decreased frequency of skipping breakfast (9). In addition to the nutritional benefits stated above, shared family mealtimes can involve pleasant conversations (4) and freedom from negative moods (11). They have been associated with such diverse outcomes as improved family communication and functioning (4, 10, 12), promotion of language development (13), improved literacy and academic achievement (13), reduced risk of substance abuse (14-17), lower risk of eating disorders (14, 16, 18-20), fewer psychosocial health problems (14, 15, 17, 21), children's enjoyment of eating and hedonic reactions to new food items (22) and an inverse relationship with the risk of pediatric overweight or obesity (4, 10-15, 18, 20, 23, 24).

Recent social changes have created some obstacles to family meals (5, 6, 25), namely the increasing rates of female employment, more parents working nonstandard or shifts, longer journeys to and from work, difficulty in selecting meals and challenges with cooking, and children participating in an increasing number of extracurricular activities. Different child-feeding parental practices may also affect family meals, from coercing children to eat specific foods by promising rewards, or withholding favorite food as punishment, thereby shaping the availability and accessibility to specific food, either healthy or unhealthy food items (26, 27). The restriction and the pressure-to-eat food-related parenting practices can disrupt children's regulation of energy intake (28), with a negative impact on children's dietary intake.

Assessment tools of mealtime behavior and family environment are limited (3) and, to our

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best knowledge, there isn't one validated to Portuguese language which comprehensively measures family meal structure and environment, children's mealtime behavior and its impact on the family, parental concerns about children's diet and use of food as a reward. No such tools have been used in preschool and school-aged Portuguese children. Since mealtimes in families with young children may have an impact on the dietary quality and risk of childhood obesity, it seems relevant to have a validated tool to assess different mealtime dimensions. The structure of family meals is one domain that aims at characterizing the preparation of meals and how they are usually consumed (with who, where and what). Nevertheless, it is known that some of the characteristics of these family meals also have a meaningful connection to weight (4). This paper aims at translating, culturally adapting and testing the psychometric properties of the Meals in Our Household Questionnaire (MOHQ) (3) in Portuguese preschool children. As a result, this new tool could allow to develop research on family meals, and to give support to health professionals in assessing family meals' environment. This would constitute a good basis for intervening in families, intending to promote healthier homemade meals.

METHODOLOGY

Participants

The Portuguese version of the MOHQ was applied individually to a convenience sample of parents of preschool children (3 to 6 years of age), which were completed by parents at home, in the same week period, without interference of the researcher. All parents (96 in total) from a private institution of social solidarity (non-profit organized private institution for people of all social conditions) in Faro (Algarve), were invited to take part in the study, 80 of which agreed to complete the questionnaires. A total of 78 parents completed the questionnaire the first time it was presented (Q1 - test) but, due to loss of follow-up, only 49 parents completed the questionnaire the second time around (Q2 – retest), when it was applied two weeks later. Forty-seven questionnaires were filled in twice by the same participants (60.3%), as required in test-retest methodology. Socio-demographic data were recorded only in the Q2-retest, related to parents' professional occupation and education level, given its association with eating behavior. Fifty three percent of the participants' children were boys (n=25). All participants signed an informed consent form to participate in the study. The research protocol was approved by the Scientific Council of the Faculty of Sports of University of Porto and local Health Ethical Committee of Algarve Regional Health Administration of the Ministry of Health. Further procedures complied with the Helsinki Declaration (29).

Data Collection

The original MOHQ consists of a set of questions that characterize mealtime behaviors and environments of 3- to 11-year-old children, considering the previous three months of their lives, across six domains: 1) "Structure of Family Meals" assesses the frequency the child is exposed to traditionally structured family meals; 2) "Problematic Child Mealtime Behaviors" assesses the frequency of problematic behavior the child may exhibit at mealtimes and the extent to which the parent recognizes it as problematic; 3) "Use of Food as a Reward" assesses how frequently the parents use food to reward or manage the child's behavior; 4) "Parental Concern about Child Diet" measures the degree of concern the parent shows about what the child does or does not eat; 5) "Spousal Stress Related to Child's Mealtime Behavior" assesses the extent to which the parent believes the child's mealtime behavior negatively impacts on his or her spouse or partner, and/or whether it is a source of stress in their personal relationship; and 6) "Influence of Child's Food Preferences" measures how much the child's food preferences have impact on what other family members eat (3).

The MOHQ, originally written in English, was translated into Portuguese by two health researchers carrying out the necessary semantic and cultural linguistic adjustments to obtain an adequate correspondence in meaning. Permission for translation and validation was granted by the first author of the original MOHQ validation study (3). The Portuguese version of the MOHQ was translated back into English by an independent expert in the English language, with due specialization and experience in translation from the University of Algarve (who was blinded to the original version). Subsequently, the back-translation was compared to the original version of MOHQ to ensure equivalence between the two versions. The questionnaire was piloted in a convenience sample (n=7) of parents of other preschool children to evaluate its cultural adaptation. No question was identified as being difficult to interpret and the translation of the questionnaire was considered achieved.

The Portuguese version of the questionnaire is available by request to the authors.

Statistical Analysis

Socio-demographics were described as frequencies. The internal consistency of the scale was tested using the Cronbach's alpha coefficient (30). The reproducibility was also analyzed by using Spearman's correlation coefficient between the two tests. Additionally, due to the ordinal nature of the variables in the questionnaire, we also included a paired-sample of Wilcoxon's test to assess test-retest differences in median domain scores (30). We also used Spearman's correlation coefficients to analyze the association between scores in each of the questionnaire's domains. The statistical analysis was conducted using IBM SPSS Statistics (version 22.0, 2013), and the significance level was set at 5%.

RESULTS

Parents Socio-demographic Data

In order to organize socio-demographic information, we just collected data on the parents' professional occupation and education level (n=42). Occupation was categorized into five groups according to skills and specialization, as proposed by the Portuguese National Institute of Statistics, and education was assessed by last academic level completed by participants. Results for occupation category and education level are presented in Table 1.

Reliability

The analysis of internal consistency showed that MOHQ is an overall reliable tool, both in Q1 and Q2 (Table 2). Cronbach´s alpha coefficients ranged between 0.602 for the domain of the structure of family meals and 0.980 for the domain of using food as a reward in the application of the first questionnaire.

The test–retest scoring shows good reproducibility in all domains, as can be inferred by the positive moderate to high correlations in our data, higher than 0.7 for five of the six domains (Table 3).

TABLE 1: Parents' education level and occupation category (n=42)

Education level n (%)		Occupation category n (%)	
<6 years	3 (7.1)	Intellectual and scientific activities	19 (45.2)
6-9 years	10 (23.8)	Technicians and intermediate level jobs	4 (9.5)
10-12 years	5 (11.9)	Administrative services	3 (7.1)
>12 years	24 (57.1)	Personal services, protection and security, and sales	15 (35.7)
		Unemployed	1 (2.4)

TABLE 2: Cronbach's alpha in the test-retest procedure (n=47)

Domains	Cronbach's alpha	
	Q1 (test)	Q2 (retest)
Structure of Family Meals	0.602	0.665
Problematic Child Mealtime Behavior	0.903	0.733
Parental Concern about Child Diet	0.846	0.981
Use of Food as a Reward	0.98	0.901
Spousal Stress	0.759	0.848
Influence of Child's Food Preferences	0.829	0.943

TABLE 3: Domain scores, Wilcoxon's test and test-retest correlation (n=47)

Domains	Q1 score (test)			Q2 score (retest)			Wilcoxon's test p	Test-retest correlation p
	Med[a]	Min[b]	Max[c]	Med[a]	Min[b]	Max[c]		
Structure of Family Meals	40	30	49	39	31	47	0.819	0.867*
Problematic Child Mealtime Behavior	48	23	70	48	27	74	0.741	0.793*
Parental Concern about Child Diet	11	6	22	11	6	21	1.0	0.917*
Use of Food as a Reward	80	19	97	78.5	19	101	0.634	0.725*
Spousal Stress	4	4	13	5	4	14	0.572	0.788*
Influence of Child's Food Preferences	5.5	3	14	6	3	14	0.355	0.603*

[a] Median; [b] Minimum; [c] Maximum; * p<0.001 for Spearman correlation coefficient

TABLE 4: Correlation between domains in Q1 (test) and Q2 (retest) (n=47)

Domains	Spearman's correlation coefficient an statistical significance (p-value)									
	Problematic Child Mealtime Behavior		Parental Concern about Child Diet		Use of Food as a Reward		Spousal Stress		Influence of Child's Food Preferences	
	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2
Structure of Family Meals	-0.279 (0.1)	-0.174 (0.276)	-0.296 (0.067)	-0.272 (0.078)	0.156 (0.388)	0.250 (0.125)	-0.360 (0.031)	-0.298 (0.066)	-0.087 (0.612)	-0.233 (0.153)
Problematic Child Mealtime Behavior			0.283 (0.072)	0.368 (0.013)	0.430 (0.011)	0.442 (0.004)	0.237 (0.237)	0.262 (0.107)	0.233 (0.165)	0.228 (0.162)
Parental Concern about Child Diet					0.148 (0.367)	-0.086 (0.588)	0.186 (0.244)	0.272 (0.086)	0.108 (0.498)	0.321 (0.041)
Use of Food as a Reward							0.042 (0.814)	-0.054 (0.746)	0.157 (0.368)	-0.102 (0.543)
Spousal Stress									0.144 (0.370)	0.186 (0.243)

TABLE 5: Domain scores and educational level (n = 47)

Domains	Education level				
	<6 years	6-9 years	10-12 years	>12 years	p
Structure of Family Meals	47 (1.4)	40.4 (5.1)	38 (3.5)	38.5 (3.3)	0.104
Problematic Child Mealtime Behavior	53 (14.1)	47.8 (9.4)	51.4 (10.8)	44.8 (10.7)	0.385
Parental Concern about Child Diet	9 (5.2)	13.6 (3.1)	11 (3.9)	10.7 (3.8)	0.095
Use of Food as a Reward	23 (4.2)	65 (26.8)	86.2 (6.7)	70 (21.5)	0.053
Spousal Stress	4 (0.0)	5.7 (2.0)	5.3 (1.3)	6.1 (2.6)	0.385
Influence of Child's Food Preferences	4.3 (1.5)	5.3 (2.3)	6 (2.6)	6.1 (3.1)	0.797

Data presented as mean (SD); Statistical differences between groups assessed with Kruskal-Wallis's test

Furthermore, when comparing median values for each domain using Wilcoxon's paired-samples non-parametric test, the scores were considered statistically similar (p>0.05).

Inter-domains correlations

When analyzing the correlations between the different domains in the test phase (Table 4), we found that families who scored higher on the "Structure of Family Meals" domain showed lower scores in "Problematic Child Mealtime Behavior", "Parental Concern about Child Diet", "Spousal Stress", as evidenced in the negative correlations found between these domains. Nevertheless, the correlation with "Spousal Stress" was the only one we considered statistically significant (p=0.031). High scores in "Problematic Child Mealtime Behaviors" were positively correlated with "Parental Concern about Child Diet", "Use of Food as a Reward", "Spousal Stress" and "Influence of Child's Food Preferences". The only correlation considered statistically significant in this area was the one reported for the "Use of Food as a Reward" (p=0.011). The correlations and level of statistical significance from the data collected during the retest phase are also presented in Table 4.

Between test and retest procedures, only the correlation between "Problematic Child Mealtime Behavior" and "Use of Food as a Reward" was statistically significant. However, the correlation types (positive/ negative) remained the same.

When analyzing the mean scores in all of the MOHQ domains according to caregivers´ educational level, we did not find statistically significant differences (Table 5). However, the score on "Structure of Family Meals" decreases with the education level and the score in the domains "Use of Food as a Reward" and "Influence of Child's Food Preferences" increase with schooling.

DISCUSSION

In the present study, we aimed at describing the adaptation and psychometric properties of the Portuguese version of the MOHQ to address the lack of available tools to assess mealtime environment in Portuguese preschool children's households.

The dimension regarding "Structure of Family Meals" showed Cronbach's alpha values between 0.6 - 0.7, which some authors may consider questionable (30), as the cut-point for considering a measure as reliable has traditionally been 0.70. When analyzing the expected internal consistency after the removal of each of the items in this domain, Cronbach's alpha was lower than 0.6, leading us to believe that, at this point, all items are necessary for the questionnaire's reliability. However, and considering the potential factors that may influence Cronbach's alpha, such as the number of items on a scale or the sample size (31), we believe that the value we report for the "Structure of Family Meals" domain is acceptable in the context of our research.

The correlations in our study are in accordance with studies linking the frequency and quality of family meals to positive child and family outcomes (8, 10,

32). This was also found by the authors of the original MOHQ (3), who propose that this is evidence for the construct validity of the questionnaire.

The MOHQ was translated for researchers interested in understanding mealtimes in families with preschool children living in Portugal or other Portuguese-speaking countries. Yet it is important to acknowledge the limitations of our study, namely the use of a convenience sample and the limited possibility of generalization concerning socio-demographic characteristics. A further limitation of this study is that it is subject to social desirability bias and it is not known whether participants differed in their interpretation or understanding of the questions. Given that socio-demographic data were recorded only at the time of the retest, it is not possible to characterize the socio-demographic specificity of parents who responded to the test and did not respond to retest, not knowing, therefore, to what extent this may be a bias in the study. Additionally, considering that the recording of socio-demographic data was free, from the 47 retest completed questionnaires by the same parents, only 42 presented the respective socio-demographic characteristics. Still, the dropout rate between test and retest was undoubtedly high. However, parents completed the questionnaires voluntarily and without any gratuity or reward. Our results must be cautiously related with the different cultural and socio-demographic backgrounds in the sample; hence cross-national comparisons of MOHQ are not advisable without further studies. Additionally, as the majority of our sample held higher education degrees, further studies analyzing its psychometric properties, in a more diversified sample, are needed to fully assess this tool's usefulness. Despite these shortcomings and gaps, the translation and psychometric properties analysis accomplished in the present study could be crucial to address mealtime behavior and family environment which may cause impact on nutritional intake and hence on the global health of general children and of preschool children in particular.

For nutritionists and dietetics practitioners or other health professionals who counsel families, the application of the questionnaire may allow for the identification of specific or general problems, and consequently may help facilitate discussion with parents about their children's mealtime behavior, their concerns about their child's diet, and their use of food to reward children or manage problematic behavior (3), thus promoting healthier household meals.

CONCLUSIONS

Our results allow us to conclude that the questionnaire's translation and validation analysis led to a satisfactory valid and reliable tool to assess the parent's perception of Portuguese preschoolers' mealtime behaviors and environments, being both a cheap and easy instrument to apply. Although additional studies are needed, results show promising results, which allows us to go a step further in recommending the widespread use of this tool, in the Portuguese language, by researchers aiming at addressing these particular dimensions of eating behavior.

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REFERENCES

1. Costarelli V, Koretsi E, Georgitsogianni E. Health-related quality of life of Greek adolescents: the role of the Mediterranean diet. Quality of Life Research. 2013;22(5):951-6.
2. Hilgers L. The sun-kissed diet. Shape. 1993;13(1):84.
3. Anderson SE, Must A, Curtin C, Bandini LG. Meals in Our Household: Reliability and Initial Validation of a Questionnaire to Assess Child Mealtime Behaviors and Family Mealtime Environments. Journal of the Academy of Nutrition and Dietetics. 2012;112(2):276-84.
4. Fiese BH, Hammons A, Grigsby-Toussaint D. Family mealtimes: a contextual approach to understanding childhood obesity. Economics And Human Biology. 2012;10(4):365-74.
5. Cason KL. Family mealtimes: More than just eating together. Journal of the American Dietetic Association. 2006;106(4):532-3.
6. Quick BL, Fiese BH, Anderson B, Koester BD, Marlin DW. A Formative Evaluation of Shared Family Mealtime for Parents of Toddlers and Young Children. Health Communication. 2011;26(7):656-66.
7. Gillman MW, Rifas-Shiman SL, Frazier AL, Rockett HRH, Camargo CA, Field AE, et al. Family dinner and diet quality among older children and adolescents. Archives of Family Medicine. 2000;9(3):235-40.
8. Neumark-Sztainer D, Hannan PJ, Story M, Croll J, Perry C. Family meal patterns: Associations with sociodemogpaphic characteristics and improved dietary intake among adolescents. Journal of the American Dietetic Association. 2003;103(3):317-22.
9. Videon TM, Manning CK. Influences on adolescent eating patterns: The importance of family meals. Journal of Adolescent Health. 2003;32(5):365-73.
10. Berge JM, Jin SW, Hannan P, Neumark-Sztainer D. Structural and Interpersonal Characteristics of Family Meals: Associations with Adolescent Body Mass Index and Dietary Patterns. Journal of the Academy of Nutrition and Dietetics. 2013;113(6):816-22.
11. Burnier D, Dubois L, Girard M. Arguments at Mealtime and Child Energy Intake. Journal of Nutrition Education and Behavior. 2011;43(6):473-81.
12. Moens E, Braet C, Soetens B. Observation of family functioning at mealtime: A comparison between families of children with and without overweight. Journal of Pediatric Psychology. 2007;32(1):52-63.
13. Fiese BH, Schwartz M. Reclaiming the Family Table: Mealtimes and Child Health and Wellbeing: Social Policy Report. Society for Research in Child Development. 2008;22(4):3-19.
14. Neumark-Sztainer D, Larson NI, Fulkerson JA, Eisenberg ME, Story M. Family meals and adolescents: what have we learned from Project EAT (Eating Among Teens)? Public Health Nutrition. 2010;13(7):1113-21.
15. Eisenberg ME, Olson RE, Neumark-Sztainer D, Story M, Bearinger LH. Correlations between family meals and psychosocial well-being among adolescents. Archives of Pediatrics & Adolescent Medicine. 2004;158(8):792-6.
16. Fulkerson JA, Story M, Mellin A, Leffert N, Neumark-Sztainer D, French SA. Family dinner meal frequency and adolescent development: Relationships with developmental assets and high-risk behaviors. Journal of Adolescent Health. 2006;39(3):337-45.
17. Sen B. The relationship between frequency of family dinner and adolescent problem behaviors after adjusting for other family characteristics. Journal of Adolescence. 2010;33(1):187-96.
18. Hammons AJ, Fiese BH. Is Frequency of Shared Family Meals Related to the Nutritional Health of Children and Adolescents? Pediatrics. 2011;127(6):E1565-E74.
19. Godfrey K, Rhodes P, Hunt C. The relationship between family mealtime interactions and eating disorder in childhood and adolescence: A systematic review. Australian and New Zealand Journal of Family Therapy. 2013;34(1):54-74.
20. Martin-Biggers J, Spaccarotella K, Berhaupt-Glickstein A, Hongu N, Worobey J, Byrd-Bredbenner C. Come and get it! A discussion of family mealtime literature and factors affecting obesity risk. Advances in Nutrition. 2014;5(3):235-47.
21. Fulkerson JA, Neumark-Sztainer D, Hannan PJ, Story M. Family Meal Frequency and Weight Status Among Adolescents: Cross- sectional and 5-year Longitudinal Associations. Obesity. 2008;16(11):2529-34.
22. Wardle J, Guthrie CA, Sanderson S, Rapoport L. Development of the children's eating behaviour questionnaire. Journal of Child Psychology and Psychiatry. 2001;42(7):963-70.
23. Rockett HRH. Family dinner: More than just a meal. Journal of the American Dietetic Association. 2007;107(9):1498-501.
24. Taveras EM, Rifas-Shiman S, Berkey CS, Rockett HRH, Field AE, Frazir AL, et al. Family dinner and adolescent overweight. Obesity Research. 2005;13(5):900-6.
25. Fulkerson JA, Story M, Neumark-Sztainer D, Rydell S. Family meals: perceptions of benefits and challenges among parents of 8- to 10-year-old children. Journal of the American Dietetic Association. 2008;108(4):706-9.
26. Stang J, Loth KA. Parenting Style and Child Feeding Practices: Potential Mitigating Factors in the Etiology of Childhood Obesity. Journal of the American Dietetic Association. 2011;111(9):1301-5.
27. Johannsen DL, Johannsen NM, Specker BL. Influence of parents' eating Behaviors and child feeding practices on children's weight status. Obesity. 2006;14(3):431-9.
28. Birch LL, Fisher JO. Development of eating behaviors among children and adolescents. Pediatrics. 1998;101(3 Pt 2):539-49.
29. World Medical Association. Declaration of Helsinki 2013 [12 December 2014]. Available from: http://www.wma.net/en/30publications/10policies/b3/index.html.pdf?print-media-type&footer-right=[page]/[toPage].
30. Nunnally JC, Bernstein, I. H. Psychometric theory. 3 ed. Hill M, editor. New York.1994.
31. Daniel WWC, Chad L. Biostatistics: A Foundation for Analysis in the Health Sciences. 10 ed: Wiley Global Education; 2012.
32. Fruh SM, Fulkerson JA, Mulekar MS, Kendrick LAJ, Clanton C. The surprising benefits of the family meal. Journal for Nurse Practitioners. 2011;7(1):18-22.