## CHILDREN'S FOOD WELL-BEING: THE INFLUENCE OF PARENTS AND SCHOOL ON FOOD LITERACY

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#### **Abstract:**

The discussion of issues related to the eating behavior of children and adolescents has gained worldwide relevance in recent years. For instance, the problem of childhood obesity has significant impact on the individual and also on society. This paper analyzes the influence of parents and school on the food literacy of children and adolescents, contributing to the Transformative Consumer Research in the understanding of food well-being, more specifically regarding food literacy. We conducted qualitative research combining open-ended questionnaires answered by students aged 10 to 14 years with interviews with school coordinators. Results show that to some extent parents and children talk about food. However, this dietary dialogue still occurs predominantly from the perspective of health / nutrition. Additionally, schools lack a more active role in promoting food literacy among students.

Keywords: TCR. well-being. literacy.

#### 1. Introduction

The discussion of issues related to the eating behaviors of children and adolescents has gained worldwide relevance. Great part of this discussion has focused on childhood obesity and its impact on the individual and society (Ebbeling, Pawlak, & Ludvig, 2002; Koplan, Liverman, & Kraak, 2005). In emerging countries, such as Brazil, this discussion is also present. For instance, the advertising of unhealthy food for children and adolescents has been questioned by society and regulated by the government (Resolução n. 408, 2009; Resolução n. 163, 2014), and the sale of food in schools started to be regulated in some states and cities (Decreto n. 36.900, 2015; Decreto n. 56.913, 2016; Lei n. 4.352, 2016).

This topic has been widely discussed by researchers from different areas, such as Nutrition, Public Health, Psychology, and Marketing. These researchers have focused on several topics, such as the nutritional quality of the diet of children and adolescents (Bueno, Fisberg, Maximino, Rodrigues, & Fisberg, 2013; Fisberg, Del'Arco, Previdelli, Tosatti, & Nogueira-de-Almeida, 2015), eating disorders in childhood (Naderkoorn, Dassen, Franken, Resch, & Houben, 2015), and how children and adolescents are influenced in the choice of food they eat, which includes the impact of advertising (Dixon, Scully, Wakefield, White, & Crowford, 2007; Boyland & Halford, 2013), the school environment (Lakkakula, Geaghan, Wong, Zanovec, Pierce, & Tuuri, 2011; Osborne, & Forestell, 2012), and the role of parents (Videon & Manning, 2003; Khandpur, Charles, Blaine, Blake, & Davison, 2016).

Block et al. (2011, p. 6) defined as food well-being "positive psychological, physical, emotional, and social relationship with food, both individually and collectively." This idea exists within the scope of Transformative Consumer Research (TCR), a movement gaining momentum in the area of Consumer Behavior (David, Ozanne, & Hill, 2016). Our study builds on children's socialization theory, which posits that children's development on the consumer level happens through socialization agents, such as parents, schools, peers, and the media (John, 1999). One key element, within the scope of food-well being, is the development of food literacy, hereby understood as the use of knowledge to maximize food well-being (Block et al., 2011; Bublitz et al., 2011). Since eating habits of children and adolescents are intermediated and influenced primarily by parents and school, we investigate the influence of these actors on the level of food literacy of children and adolescents.

## 2. Literature Review

## 2.1 Consumer Well-Being and TCR

The idealized notion of a "good life" has been studied in domains and have long been of human interest (Mick, Pettigrew, Pechmann, & Ozanne, 2012). Recent developments in marketing literature point out to the importance of consumer well-being as a significant development of marketing theory. Studies focusing on consumer well-being date to the same time the concept of marketing as a profession and academic activity were developed (Pancer & Handelman, 2012). Interestingly, the term consumer well-being was used only in the 1970s when the idea of Macromarketing was introduced (Pancer & Handelman, 2012). From that time on, studies and concern for consumer well-being advanced, culminating, in the mid-2000s, with the organization of a movement entitled Transformative Consumer Research (TCR). This term emerged to designate consumer behavior research that focuses on the well-being of individuals and societies (Mick, 2006). Nowadays, this movement engages researchers around the world in research that focuses on topics such as consumer vulnerability, diet, and obesity, gambling and organ donation (Davis, Ozanne, & Hill, 2016). Because it involves different areas of knowledge, the study of consumer well-being is very complex and ends up becoming quite fragmented (Mick et al., 2012).

## 2.2 Food Well-being

In the context of TCR, the idea of food well-being arises and is defined by Block et al. (2011, p. 6) as "positive psychological, physical, emotional, and social relationship with food, both individually and collectively." The authors suggest changing the study of diet from a health / nutrition perspective, proposing that a diet should be understood as a factor that impacts well-being more broadly, and propose five components of food well-being: food socialization, food literacy, food marketing, food availability, and food policy.

Still in the TCR paradigm, Bublitz et al. (2011; 2012) present food well-being as a continuum and propose five parameters, similar to the five components previously proposed by Block et al. (2011), to define where each individual is in this continuum: social factors, economic issues, food literacy, emotional knowledge, and physical and psychological traits. This research focuses on food literacy.

## 2.3 Food Literacy

The food literacy parameter includes, in addition to nutritional knowledge, the use of this expertise to maximize food well-being (Block et al., 2011; Bublitz et al., 2011; 2012). Shared by Bublitz et al. (2011; 2012), Block et al. (2011) proposed that food literacy has three main components: 1. conceptual or stated knowledge, the notion of what is healthy eating; 2. procedural knowledge, that is, knowing what is needed to advance towards food well-being; and 3. the ability, opportunity, and motivation to practice healthy eating habits.

Finally, Vidgen and Gallegos (2014, p. 54) define food literacy as "a set of interrelated knowledge, skills, and behaviors needed to plan, manage, select, prepare and eat as needed, determining food intake." The components of food literacy are separated into four major groups: 1. Plan and manage; 2. Select; 3. Prepare, and 4. Eating (Vidgen & Gallegos, 2014). Similar to Vidgen and Gallegos (2014), Pendergast and Dewhurst (2012) point out that it is in childhood that the process of food literacy begins and suggests that this is a determining period in the relationship that the individual will establish with food throughout his or her life. The main influences children receive come from parents, teachers, food companies, and schools (Pendergast & Dewhurst, 2012).

#### 3. Method

Consistent with the objective of discussing the influence of parents and school on the food literacy of children and adolescents, the methodology adopted in this research is exploratory with a qualitative approach, with specific support of descriptive statistics.

We developed two data collection instruments, one for children (a questionnaire with open-ended questions) and an interview script (for pedagogical coordinators). The questionnaire was applied with children aged 10 to 14 years, and focused on three main points: (1) "What do you think healthy eating means?"; (2) "Do you have a healthy diet?"; and (3) "Do your parents talk to you about food? What do they tell you about this subject?" We pre-tested the questionnaire with a class of students within the target age range of the survey and made some fine-tuning to the wording of questions in order to enhance comprehension. We collected 385 valid questionnaires during June 2016 in two private schools in Sao Paulo, chosen due to their size and availability.

Additionally, we conducted interviews with pedagogical coordinators from each school. These interviews were based on food literacy components proposed by Vidgen and Gallegos (2014, the definitions of Block et al. (2011), and Bublitz et al. (2011; 2012) for the food literacy parameter within TCR. The interviews were transcribed for further analysis.

To analyze the data, we used content analysis based on the methods proposed by Bardin (2009) and Bernard and Ryan (2010). In the case of the interviews, according to

Scagliusi, Pereira, Unsain, and Sato (2016), we cut the excerpts from the interviews containing the words "school" and "college" and extracted them for analysis. The analysis of the answers to the open questions of the questionnaire was performed by two of the researchers. Individually, we analyzed the answers and suggested categories for the classification of the subjects identified in each answer. Then, the categories were discussed with a third researcher. Some were merged until we reached a total of 10 categories as described in Table 1. Finally, we classified the answers according to the defined categories. This final process was repeated three times until there was adequate agreement on the ratings.

**Table 1 – Categories and Descriptions** 

CATEGORY	DESCRIPTION
Normative / Restrictive	Suggest what you can and cannot eat, characterizing the
	definition of rules.
Health	Represent well-being, disease prevention, and concern for the
	future.
Physical activity	Relate eating to sports and physical activities.
Variety / Balance	Emphasize the importance of eating a variety of foods and
	eating balance.
Lose weight / Gain weight	Expressions related to food that influences weight gain or loss.
Quantity	Emphasize how much is eaten for both excess and neediness.
Time / Frequency	Expressions related to eating at the right time or at a certain
	frequency.
Fruits and vegetables	Quotations that deal with fruits and vegetables.
Water	Relate food to water intake.
Generic answers	Vague or very comprehensive answers.

## 4. Results

Of the 385 questionnaires analyzed, 198 (52%) respondents were male and 186 (48%) female. One of the respondents did not answer this question. Regarding the age of the respondents, 90 (23%) were 10 or 11 years old, 295 (77%) were between 12 and 14 years old. We grouped ages in this way based on the Child and Adolescent Statute (ECA, 1990), which regulates the rights of children and adolescents in Brazil. A person under 12 years of age is considered a child; between 12 and 18 years, they are considered teenagers (ECA, 1990).

#### 4.1 Opinion of Children and Adolescents

To analyze the question "What do you think healthy eating means?" we considered the percentage of appearance of each category in the responses. The category "Fruits and vegetables" stood out, appearing in 30% of responses. This points to what Block et al. (2011) present as the old dietary paradigm, in which specific foods are associated with the idea of healthy eating. On the other hand, the category "Variety / Balance" was the second most frequent in the answers (19%). This category is more in line with Block et al. 's proposal for food well-being, in which healthy eating is associated with the positive relationship of individuals with food.

Splitting children and adolescents by gender, it is possible to identify some associations in relation to classification ( $\chi^2 = 15.88$ ; p = 0.07). The "Quantity" category is the third most present in girls' answers (17%), while in boys' answers, this category is the fourth (13%). Responses related to the "Time / Frequency" category are more present in girls (5%) than boys (3%). Thus, it is possible to notice paternalistic characteristics more present in the girls' answers, evidencing the old paradigm of feeding described by Block et al. (2011).

Grouping responses by age (children and adolescents), it is possible to observe some associations ( $\chi^2 = 30.68$ ; p = 0.0003). The most noticeable difference is in the "Fruits and vegetables" category, present in 42% of children's responses versus 27% in adolescents' responses. Conversely, responses related to the "Variety / Balance" category are present in 12% of children's responses and 21% of adolescents' responses. This can be positively analyzed, since, as previously explained, this category can be framed in the old food paradigm, while the "Variety / Balance" category is related to the food well-being paradigm. That is, when entering adolescence, it seems that the individual becomes more associated with healthy eating and food well-being and less with paternalistic patterns of the old view of eating (Block et al., 2011).

When asked if they had a healthy diet, most children and adolescents (61%) answered "Sort of," while 26% answered "Yes," 11% "No" and 2% "Don't Know." The low percentage of "Don't know" answers is quite interesting, as it shows that children and adolescents have an opinion about their own diet. No significant differences were observed in response patterns grouped by gender and age.

## 4.2 Parental Influence

Pendergast and Dewhurst (2012) understand that parents are the most important influence on food literacy of children and adolescents. Eighty-one percent of the students surveyed answered "Yes" when asked if their parents talked to them about food. This corroborates the authors' statement. In addition to this question, the influence of parents was analyzed from the answers to the question "What do they tell you about this subject [food]?". Disregarding the category "Generic Responses" (19%), the three categories most present in the answers are directly linked to the old view of eating: "Health" (21%), "Normative / Restrictive" (18%) and "Fruits and vegetables" (16%). That is, when talking to parents about food, children are exposed to imposition of rules and indications of what they should or should not eat, characteristics that do not align with the idea of food well-being.

To reinforce this mismatch, the "Variety / Balance" category, which is the closest category to food well-being, appears in only 8% of the responses of children and adolescents. There were no significant differences when comparing the means of grouped answers (neither by gender nor by age). In contrast to what we observed in the healthy eating responses of children and adolescents, it appears that parents are not yet prepared to talk to their children about eating in the context of food well-being. Thus, we can assume that the categories related to food well-being present in children's opinions may be due to the influence of the school

## 4.3 School Influence

Both respondents agree that the eating habits of children and adolescents at school are different and worse than their eating habits at home. One respondent commented that students take advantage that their parents are absent and consume food they do not eat at home. He illustrated this comment with the speech of a child: "Ah, I buy this candy here at school because my father doesn't let me." The other coordinator mentioned that snacks brought from home tend to be healthier than the ones children buy from the canteen.

When evaluating how the school environment and peers influence children's habits, both coordinators believe that this occurs, especially within the age range of our respondents. One of them commented that it is at this stage that children begin to understand the school routine and that "from this school routine, there is a very large influence of peers also on what they eat and what they do not eat."

The influence of school on food literacy is considered by both respondents to be very large, and both of them acknowledge that schools need to be more active in reinforcing food literacy. One of them believes in actions within the classroom: "there must really be something in the school curriculum that focuses on these practices."

The importance of parents in the food literacy of children and adolescents was quite recurrent in the interviewees' statements. One of them declared that "it is an important job to do with the student, but it is an important job to do with the family as well." The other comments that "guidance is the best way, here at school and at home, too, with parents, which has an important role in this regard."

#### 5. Final Considerations

The purpose of this paper was to analyze the influence of parents and schools on food literacy of children and adolescents, contributing to the understanding of the concepts of food literacy and healthy eating. This work contributes to the advancement of TCR by exploring the parameter of food literacy present in works dealing with food well-being (Block et al., 2011; Bublitz et al., 2011; 2012). Part of this contribution was made possible by bringing the work of Vidgen and Gallegos (2014) to the context of TCR, showing the importance of interdisciplinarity that TCR itself points out as fundamental for the advancement of this academic movement.

The analysis of children's and adolescents' opinions about food indicates that they are influenced by their parents and school, as pointed out by Pendergast and Dewhurst (2012). The presence of the concept of food well-being (Block et al., 2011) within the discourse of children and adolescents is a positive sign, because it indicates a movement towards food well-being, considering the continuum proposed by Bublitz et al. (2011; 2012). On the other hand, the strong presence of characteristics of the old food paradigm (Block et al., 2011) in parent-child conversations about food is a warning sign, as it suggests a negative movement in the food well-being continuum presented Bublitz et al. (2011; 2012).

The influence of schools on the food literacy of children and adolescents became evident in the statements of the interviewees, as we pointed out in the analyzes. However, the results indicate that schools could be more active in this regard, as children and adolescents tend to eat better at home than at school. In this sense, there seems to be room for schools to develop food education projects that involve not only children and adolescents, but also parents. With integrated actions, positive changes in infant feeding can be enhanced.

The main limitation of this research is that we focused on the part of the socialization agents. We suggest a similar survey, interviewing other socialization agents, such as parents or extended family, as suggested by Commuri and Gentry (2000). Other groups and organizations, such as the Church, Boy Scouts of America, or sports centers for recreation can be of significant influence. More attention is needed to the interplay of these influences and how they inhibit each other.

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