



Coffee Consumption and Industry Strategies in Brazil

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CHAPTER 17

Coffee and health in the perspective of young consumers

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17.1 Introduction

Coffee consumption has expanded at continuous and increasing rates in Brazil and in the world, and at the same time the interest by young people aged 16–25 has increased due to category innovations and coffeehouse experiences (Euromonitor, 2016).

Due to their global relevance, researchers from several countries have concentrated their studies on coffee in several aspects, such as: factors influencing consumption (Cailleba and Casteran, 2009; Schollenberg, 2012), the role of communication mix effect on coffee consumer behavior (Chelliah et al., 2013; Wang and Yu, 2016), quality attributes (Carvalho et al., 2016), and the reasons for buying organic coffees and the effect of sustainable claims (Chen and Lee, 2015). However, functional aspects of coffee in consumer perception have received little attention from researchers (Aguirre, 2016). In this context, this chapter seeks to add new knowledge to the existing framework with the central objective of understanding young people's perception of coffee healthiness in their daily lives.

Coffee is a product widely consumed by Brazilians and, despite widespread penetration in homes, the out-of-home consumption market is growing and innovating. One of the variables used to measure the frequency of drinking is age; more than half of the young people in Brazil do not consume coffee daily, whereas 90% of people over 50 have a daily consumption habit. However, the interest by young people aged 16–25 for the drink has been increasing mainly in large metropolitan areas due to category innovations and coffeehouse experiences with innovative concepts, as well as the varied offer of innovative products for home consumption that seek to mimic an experience similar to the cafeteria (Euromonitor, 2016).

Despite increasing investment in communication by roasters present in the Brazilian market ([Ibope Monitor, 2017](#)), a lack of positioning related to the health claims of coffee products is noted ([Portal da Propaganda, 2016](#)), and this fact may contribute to the low knowledge on the functional aspects of the drink.

Previous studies have shown that consumers tend to positively evaluate foods with an explicit claim on the packaging of its health effects ([Asselin, 2005](#); [Teratanavat and Hooker, 2006](#); [Barreiro-Hurlé et al., 2008](#); [Carrillo et al., 2013](#)). The communication of the health benefit was shown to be a key factor for an increase in the consumption of determinant products, such as yogurt ([Ares et al., 2009](#)), wine ([Samoggia, 2016](#)), and soybeans ([Wansink, 2005](#)). Other studies have pointed to the relevance of the content and format of the message to communicate its functional attributes ([Mazis and Raymond, 1997](#)) and the causal relationship between low knowledge of food health benefits by consumers and the respective lower consumption ([Wansink, 2005](#)).

Predictive models of food choice help explain whether or not healthy habits are adopted. One of the models most considered and used by academic research has been the health belief model (HBM). Its adoption allows evidence and prediction of health behaviors as a result of individual beliefs and perceptions about possible threats to health or susceptibility to the disease. The HBM has been previously used to explain and predict the behavior of young people in relation to food consumption ([Garcia and Mann, 2003](#); [Von Ah et al., 2004](#); [Wdowik et al., 2001](#); [Deshpande et al., 2009](#)). However, during the literature review for this chapter of previous papers that used its constructs for empirical application through qualitative research, it was not found.

This chapter is dedicated to understanding the relationship between food and consumption. The HBM model was applied in an innovative way to the Brazilian context of coffee consumption by youngsters and in the qualitative perspective allowing the theoretical direction to interpret the interviews. The results added new knowledge regarding the perception and communication of healthy foods, as well as indicating relevant factors influencing the increase in coffee consumption among young people. In addition, the chapter also provides subsidies to managers in the food market, as the results highlight the potential of health communication to young consumers with a view to adopting healthy habits through the consumption of functional foods.

17.2 Theoretical framework

This section presents a theoretical review of food choice models with the HBM used to compose the research conceptual framework. In addition, the factors that influence the adoption of healthy eating by young people are also discussed.

17.2.1 Model of choice for food

Furst et al. (1996) created a model of choice for food considering monetary, cultural, and sensorial factors. The model was improved by Sobal and Bisogni (2009) and proposes that the choice is a result of the process present in the individual's food system and takes into account three main aspects: lifetime, social influences, and personal system.

The model proposed by Grunert and Grunert (1995) proposes that the choice for food is the result of an analytical process concerning the food's total quality. This model considers the evaluations carried out before the purchase, but also later, as it considers that the consumer has expectations regarding product quality at the moment of purchase. Nevertheless, after the purchase, that is the moment where the real quality evaluation is experienced (Brunso et al., 2002).

It is important to consider that the development and acceptance of any innovation is not a purely rational process, but rather it involves conflicting beliefs, values, perceptions, and social interaction (Wheeler, 2008).

A third model identified in the literature is the HBM, conceived in the 1950s. However, it is considered, among other cognitive models, as one of the most widely used to explain and predict health behaviors (Glanz et al., 2008).

It was initially developed to explain why medical programs offered by the United States Public Health Service, particularly to combat tuberculosis, were unsuccessful (Hochbaum, 1958). The underlying concept of the HBM model is that health-oriented behavior is determined by personal beliefs or perceptions about diseases and the strategies available to reduce the propensity to become ill. Individual perceptions are influenced by several intrapersonal factors.

Over the years, several authors have contributed to the clarification of this model. This is the case of Kirscht's (1974) research on individuals' behaviors with diverse symptoms, and those of Becker et al. (1974) on behaviors before disease diagnosis. These works have come to show that the

various perceptions could be influenced by many other factors. Thus, new psychological variables were added that contribute to the adoption of a certain behavior: the stimuli for action, the modifying factors, and the self-efficacy (Rosenstock et al., 1994).

For Rosenstock et al. (1994), an individual adopts a healthy behavior, such as adhering to tuberculosis screening, a vaccination campaign, or even using condoms if: (a) they consider themselves susceptible to a particular disease (perception of vulnerability); (b) they consider that the disease is or may be serious (perception of severity, which can be assessed by the emotional disturbance caused by thinking about the consequences of the disease); (c) they consider that the adoption of healthy behavior can lead to positive consequences (perceived benefits); and (d) they consider that benefits outweigh the costs of adopting a healthy behavior (perceived barriers).

As shown in Fig. 17.1, modifying factors, action stimuli, and self-efficacy affect the perceptions of susceptibility, severity, benefits, and barriers, and therefore affect health behavior.

HBM has been used to understand a variety of health behaviors in the short and medium term (Janz and Becker, 1984), as well as evaluate participation in preventive exams (hypertension, breast cancer, hepatitis B; Hanson

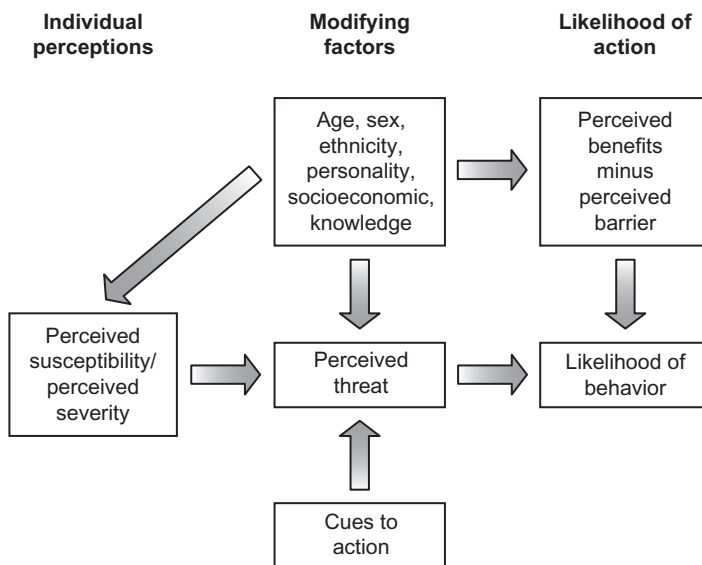


Fig. 17.1 Health belief model (HBM). (Source: Rosenstock, I.M., Strecher, V.J., & Becker, M.H., 1994. *The health belief model and HIV risk behavior change*. In: *Preventing AIDS*. Springer, Boston, MA, pp. 5–24.)

and Benedict, 2002), among others. In addition, there is a lack of knowledge about the importance of food safety. It has also been applied in other areas, such as to evaluate the preventive behavior against the threat of software piracy, condom use behavior, or the use of bicycle helmets and seat belts (Ng et al., 2009; Şimşekoğlu and Lajunen, 2008). The model seems to have implications for a wide range of human behaviors (Ng et al., 2009).

More recently, the HBM has been used to understand consumer perceptions and the intention to eat organic foods (Yazdanpanah et al., 2015). The objective was to analyze the understanding of young adults' decision making regarding organically produced foods and identify strategies to promote their consumption. The results demonstrated that perceived benefits, general health orientation regarding pesticides and organic foods, self-efficacy, and perceived barriers are significant predictors of young adults' willingness to consume organic foods.

Previous studies have also extensively discussed factors influencing eating behaviors among college students (Garcia and Mann, 2003). Deshpande et al. (2009) applied the model to a representative sample of college students and, surprisingly, the results indicated that food characteristics such as price, taste, ease of preparation, and convenience are not barriers to adopting a healthy diet. The application of the HBM model also revealed some aspects regarding the differences between genders. In this sense, this chapter recommended directed and different campaigns for men. In the case of women, they have suggested highlighting the seriousness of not adopting a healthy diet, whereas for men, the campaign should focus on increasing their perceptions of susceptibility.

17.2.2 Forces for healthy eating among young people

The developmental period of young people aged 18–25 is marked by transitions (e.g., life, college, and work arrangements) and the development of some independence, while maintaining a continued reliance on parents for a variety of resources such as financial and emotional support (Aquilino, 2006; Arnett, 2000).

Studies have shown that people usually establish tastes and habits while they are relatively young. This phase is an important period for the development of long-lasting health behaviors (Neumark-Sztainer et al., 2005).

Food choices for younger age groups may be limited by a number of factors, as illustrated in Fig. 17.2.

Personal and family histories are crucial in understanding young people's eating habits. It is understood that one of the basic functions of the

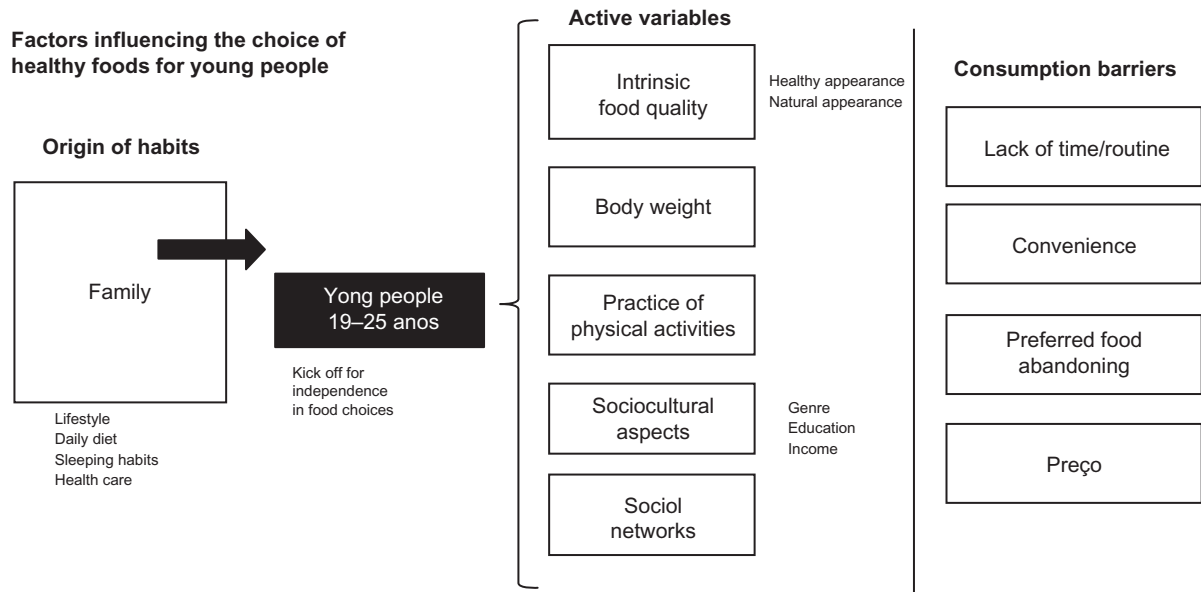


Fig. 17.2 Determinants of choice of healthy foods for young people. (Source: Elaborated based on Moreno, M.A., & Whitehill, J.M., 2014. Influence of social media on alcohol use in adolescents and young adults. *Alcohol Res.* 36(1), 91; Freeland-Graves, J.H., & Nitzke, S., 2013. Position of the academy of nutrition and dietetics: total diet approach to healthy eating. *J. Acad. Nutr. Diet.* 113(2), 307–317; Barreto, S.M., Passos, V.M.A., & Giatti, L., 2009. Comportamento saudável entre adultos jovens no Brasil. *Rev. Saude Publica* 43, 9–17; Marquis, M., 2005. Exploring convenience orientation as a food motivation for college students living in residence halls. *Int. J. Consum. Stud.* 29(1), 55–63; Neumark-Sztainer, D., French, S.A., Hannan, P.J., Story, M., & Fulkerson, J.A., 2005. School lunch and snacking patterns among high school students: associations with school food environment and policies. *Int. J. Behav. Nutr. Phys. Act.* 2(1), 14; Lappalainen, R., Saba, A., Holm, L., Mykkanen, H., Gibney, M.J., & Moles, A., 1997. Difficulties in trying to eat healthier: descriptive analysis of perceived barriers for healthy eating. *Eur. J. Clin. Nutr.* 51(2), S36; Murcott, A., 1995. Social influences on food choice and dietary change: a sociological attitude. *Proc. Nutr. Soc.* 54(3), 729–735; French, S.A., Perry, C.L., Leon, G.R., & Fulkerson, J.A., 1994. Weight concerns, dieting behavior, and smoking initiation among adolescents: a prospective study. *Am. J. Public Health*, 84(11), 1818–1820.)

family is the protection of health and the response to needs in periods of illness. Thus, the family transmits cultural traits to its offspring, and individuals learn the beliefs and practices regarding health and disease.

This health care function is limited by lifestyle, eating habits, sleep and rest habits, physical and leisure activities, self-care practices, the recognition of changes in development, and the demand for health care (Friedman et al., 2003).

An especially important time for food choice is when people start making their own food decisions. The transition to university, for example, is a critical time for young people, who face their first opportunity to make their own food choices (Marquis, 2005).

Thus, the attitudes of young people toward food imply complex factors that interact with each other. The reasons that lead them to consume a range of different products are related to their intrinsic qualities, such as healthy claim, natural ingredients, being tasty, having an attractive aspect, etc., and with the consequences of its consumption in the evolving of body weight. They also weigh the social influences derived from the observation of the juvenile models, as well as the antecedents regarding preferences as a child and with family influences (Murcott, 1995).

Other social and demographic variables also influence young people's food choices. Sex, education, and income are factors that must also be considered. Thus, family, sociocultural, and political factors interacting at various levels contribute to modeling the relationships between body image, weight, physical exercise, and eating (Neumark-Sztainer et al., 2005).

Individuals with less healthy behaviors perceive their health as poor, suggesting that these behaviors negatively influence the perception of one's own health. The fact that healthier young Brazilians have higher levels of education, are white, and live near places to practice sports suggests that there are inequalities in healthy practices access (Barreto et al., 2009)

French et al. (1994) dealt with the feeding of young people in relation to other aspects of lifestyle, such as sports, and found that physical activity was associated with preference and consumption of healthy foods and concern about weight.

Social scientists propose that technology today has a direct influence on behavior, as it is a regular part of the youth experience (McHale et al., 2009). Social media has led to a shift in perceptions, attitudes, and beliefs about nutrition over the last 50 years (Freeland-Graves and Nitzke, 2013).

Recent research has pointed out that young adults have realized that social media serves as a platform for sharing and receiving information about

food (Moreno and Whitehill, 2014). Participants reported that their food choices were expanded through recipes that were readily available on social networking platforms, and these could help people with different meal plans. The Internet has become a superior source for nutritional information, and participants realize that social media has specifically provided information about diets and eating habits.

Thus, the Internet is a normative aspect of young adult life and should be considered as an active force in behavior in relation to health (Coyne et al., 2013).

Better knowledge about nutrition does not necessarily imply a healthier diet. Story and Resnick (1986) found that adolescents and young adults knew how to improve their nutrition from the health point of view. However, they explained the food errors they made and the difficulty in changing, using arguments such as lack of time and not considering it imperative or convenient to use healthier alternatives.

Obstacles to a healthy diet for young people include a lack of time, the desire to continue to consume preferred foods, unwillingness, and price. Healthy eating is often not seen as an easy or attractive alternative to current diet (Lappalainen et al., 1997).

17.2.3 Conceptual framework

The HBM is one of the earliest theories of behavioral science used to explain and predict health behavior (Glanz et al., 2002; Hajian et al., 2011; Hochbaum et al., 1952). This model focuses on two aspects of health behavior: threat perception and behavioral assessment (Rosenstock, 1966).

Traditionally, the HBM is composed of five factors (Hochbaum et al., 1952; Rosenstock, 1966). The most recent revised version of this model consists of five dimensions: perceived susceptibility (as vulnerable individuals feel about health threats), perceived severity (assessment of how serious or dangerous a threat may be), perceived benefits (individuals' beliefs about whether a particular action will reduce the threat of the disease), perceived barriers (beliefs about whether an individual can overcome execution difficulties as a negative consequence of performing recommended actions), and self-efficacy. Self-efficacy, the perceived ability to take a preventive action, was added to the initial model (Rosenstock et al., 1988).

A conceptual framework illustrated was elaborated (Fig. 17.3).

The conceptual model suggests that the coffee consumption by young people meets two central premises based on the HBM model (Vassallo et al., 2009). These are:

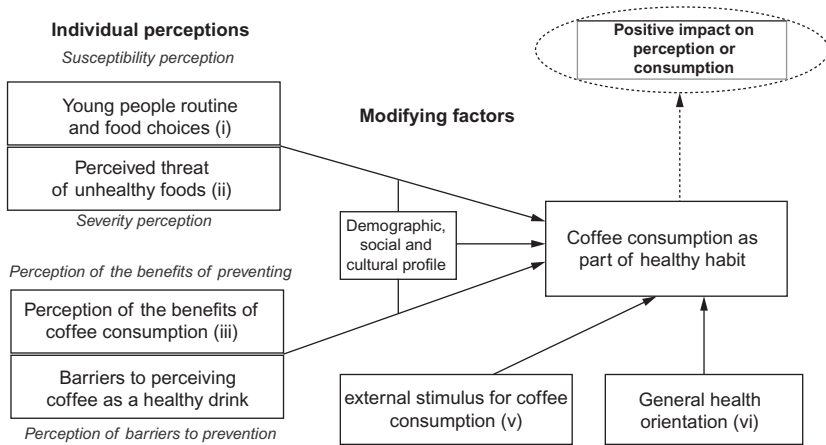


Fig. 17.3 Conceptual model of the research.

1. The perceived threat and perceived susceptibility to the disease are related to:
 - a. the young people's routine and how it impacts on their food
 - b. the significant presence of unhealthy foods in the daily life of the young
2. The benefits perception and barriers to new behavior are related to:
 - a. the health benefits knowledge of the coffee by young people
 - b. barriers to the perception/knowledge of the health benefits of coffee

The model also allowed the elaboration of seven analytical categories guiding empirical research and later codification to interpret the collected data: (1) General orientation for healthy habits; (2) routine of the young and impact on food choices; (3) relevance of unhealthy foods; (4) benefits perception of coffee consumption; (5) barriers to perceiving coffee as a healthy beverage; (6) external stimuli for coffee consumption; and (7) coffee consumption as a healthy habit.

There is an increase in awareness of the purchase decision, with an emphasis on health and practicality as determinants of food consumption (Vabø and Hansen, 2014; Vermeir and Verbeke, 2006).

The HBM is considered a predictor for a healthier diet among adults (Kloeblen and Batish, 1999; Sapp and Jensen, 1998), especially nutrition behaviors (Chew et al., 1998).

Although the current literature has investigations on consumers' eating behavior, healthy eating, and decision making, there is a lack of studies that relate to this model. The HBM has already been applied to understand how diabetic

students manage their problem (Wdowik et al., 2001). Garcia and Mann (2003) used the model to understand how students resist dieting, not how they approach healthy eating (Garcia and Mann, 2003). Von Ah et al. (2004) investigated the influence of HBM variables without correlation with physical activity and nutritional behavior (Von Ah et al., 2004). Vassallo et al. (2009) focused on the role of the HBM in predicting the availability of functional breads in four European countries. The main result was that young consumers appear to be more interested in functional bread consumption with a claim that promotes health rather than reducing the risk of disease, whereas the older ones are more concerned about the risk of disease (Vassallo et al., 2009).

Deshpande et al. (2009) studied the food selection phenomenon with the application of the HBM to predict the likelihood of healthy eating among university students. The findings confirmed that the importance of healthy eating was positively influenced by diet type, perceived severity, perceived susceptibility, and action guidelines; the importance of healthy eating showed a negative relationship with the barriers; the importance of healthy eating showed a positive relationship with food intentions; characteristics positively influenced the barriers; characteristics negatively affected the benefits; barriers have negatively influenced effectiveness; the barriers negatively influenced the intention of the behavior; and self-efficacy positively influenced behavioral intention (Deshpande et al., 2009).

In this manuscript, results are presented and discussed with a focus on the second premise, exploring young people's perception about coffee consumption from analytical categories 4 to 7.

In the next section, the method adopted for data collection and interpretation is presented.

17.3 Methodology

The methodological approach used consisted of descriptive, exploratory, qualitative research. According to Sellitz et al. (1965), all those who seek to discover ideas and intuitions, in an attempt to acquire greater familiarity with the phenomenon researched, fall into the category of exploratory studies.

The conduction of the empirical investigation considers the technique of an in-depth interview, whose purpose is not to test hypotheses but rather to understand people's experiences and the meaning they attribute to such experiences (Seidman, 2013).

A semistructured script was adopted as it allows the interviewer to modify the style, pace, and application of the questions to obtain more com-

plete answers from the interviewee, who is then able to express their habits, behaviors, and perceptions (Kvale and Brinkmann, 2009). Thus, guiding questions were elaborated to explore the perception of the interviewees regarding each of the seven analytical categories proposed. Questions were included according to the need foreseen by the interviewer, following the application norm of semistructured scripts.

Seventeen young people were interviewed, aged 19–25, all residents of Sao Paulo city, Brazil, and coffee users at least once a week. Access to the interviewees was through recruitment made by a contracted research company with payment of a symbolic value for participation.

As a filter, it was required that the interviewee should live with the parents. This criterion allowed a better understanding of the young person's universe at the transition time to adult life, considering a certain dependence (on parents or other relatives). The final number was given using the saturation technique, which is characterized when new information or themes are no longer observed in the data collection.

The interviews were conducted between September and October 2017 in person and lasted about 45–60 min on average each, resulting in 207 transcribed pages.

The analysis and interpretation of the data were performed based on Qualitative Content analysis without the use of software. The analysis steps suggested by Bardin (2009) were used. In this way, the results of the interviews were grouped by similarity of content and organized under the appropriate analytical categories. Patterns and divergences were codified to obtain the aggregate interpretation of the interviews.

17.4 Findings

The results were grouped in four sessions evidencing the findings related to the analytical categories that explore the perception of the young people about the coffee consumption and its relation with health: (1) benefits perception of coffee consumption; (2) barriers to perceiving coffee as a healthy beverage; (3) external stimuli for coffee consumption; and (4) coffee consumption as a healthy habit.

17.4.1 Perception of the benefits of coffee consumption

In general, young people are not familiar with coffee's functional benefits. Spontaneously, coffee becomes an ally of the day and is not directly related to healthy habits.

I do not remember by heart, but there are benefits I've heard about coffee as a healthy food. I've heard, I do not know exactly what this benefit is now. I do not remember.

(João, 22 years old).

While they are in the process of seeking autonomy and independence, coffee becomes relevant for these young people to cope with everyday tasks. They point out that the drink is a source of energy in the moments of the data was collected, in the morning, and also to wake up at work.

The following testimonies reinforce this interpretation:

It stimulates you, makes you think faster. He is the power. It gives you more strength.

(Nina, 21 years old).

Because I had to study for 8 hours in a day, so for me coffee I would recall coffee for that.

(Thiago, 25 years old).

I've always found it bitter. When I started working at the bank the need state has emerged. Because there comes a time of the day that you are falling asleep. So, I started to drink coffee

(Marília, 24 years old).

In addition, coffee can also serve as relaxation and enjoyment, and as a break in the day to recover energy and continue. It can also be valued as a source of well-being.

Anything you do with pleasure brings health benefits.

(João, 22 years old)

In general, coffee reminds me of good things. I like that feeling that coffee brings.

(Enzo, 23 years old)

Especially among the ones who work, coffee also appears to be an important social tool. Coffee drinking happens when people come together to talk about other matters. It makes the coffee moment a symbol of relaxation and openness to new friendships.

Besides these meanings, the universe of coffee seems to represent more than a stimulating drink. The beverage is also a symbol of adult life, serving as an instrument of assistance to this transition phase.

When I started to work. About 4, 5 years ago. 4 years ago. It was at my first job I started to drink coffee.

(Lucas, 23 years old)

Before I think coffee was the same as beer. Until the age of 14, everyone hates it. Then you start to change the taste and talk, no, there are things in life that are very good and we did not know.

(Diego, 21 years old)

I always saw my father drinking and I think: "I have to taste." First of all, it was a psychological thing.

(Caio, 23 years old)

Coffee is often associated as an expression of lifestyle, in the search for freedom and evolution. This aspect was not verbalized directly in interviews but could be consistently observed when interviewees stated that they did not live without coffee or "love" the drink and consume it "all the time."

Interviewer: I said coffee ... you smiled already. Why? Because I'm a fan, I'm a fan.

(Gabriela, 19)

When they were stimulated to talk about coffee's functional benefits presented to them, the benefits linked to disease prevention (risk reduction for Parkinson's disease, diabetes, and heart disease) were not well understood or accepted. However, the ones linked to health improvements (concentration, mood, and performance in sports) were well accepted and seem to be more aligned with coffee's imagery.

17.4.2 Barriers to the perception of coffee as a healthy drink

In general, drinking coffee is not seen as harmful to health, but it is also not perceived as healthy. To some, coffee is perceived as being natural (coming from the fruit, from the farm), although there is the distrust that the industrialized grounds are not totally healthy.

Some doubt that roasted and ground coffee is pure. They believe the coffee industry might introduce other ingredients mixed with coffee. They also questioned the coffee's perishability and whether it contains chemicals or not. However, in general, the statements are favorable to coffee, as follows:

I've never seen anything about the harms of coffee. (João, 22 years old). I will not say he is healthy, but he is not evil.

(Diego, 21 years old).

Natural, it depends. I strongly believe that it's not just the powder inside the capsule

(John, 22).

Although these chemicals are a question raised by some, they do not appear to be a deterrent to consumption. Those who perceive coffee in this way regard it as a normal process of any industrialized product.

However, a barrier to increased consumption seems recurrent: caffeine intake in large amounts. The vast majority claim to control the amount of coffee they drink mainly for two reasons: fears of becoming addicted and unable to sleep at night.

It's something that does not do very well. Caffeine, you consume ends up being a drug as well. It's something I like, well, if taken in moderation.

(Thiago, 25 years old).

I avoid taking caffeine after 4 in the afternoon. I do not take it because I know I'll be awakened.

(Caio, 23 years old).

In addition to the caffeine issue, there are a few other doubts related to the healthy harms of coffee, but many of them came from superficial inputs that interviewees were not sure whether the source was reliable.

I heard it gives gastritis. And I also heard something new, that I've heard up to those days at work, that if you drink coffee soon after lunch it seems like you cannot absorb the nutrients straight away. I do not know if it's true.

(Rodrigo, 23 years old).

It is important to consider that, in general, the negative aspect has a low impact on the overall evaluation of the beverage, which is highly valued. Even with barriers, young people show strong ties to coffee.

Interviewer: I said coffee . . . you smiled already. Because? "Because I'm a fan, I'm a fan."

(Gabriela, 19).

In general coffee brings me to good things. I like the feeling that coffee brings.

(Enzo, 23 years old).

17.4.3 External stimulus for coffee consumption

According to the HBM model, external factors are capable of introducing a change of attitude. A behavioral pattern was observed in relation to how the public is informed about what is happening in the world.

There is a strong belief that relevant information simply reaches them, whether through social networks or a few websites they have selected at some point as a “focal point” for information checking. This is reinforced by a race routine in which they evaluate, because they don't have time to research the information.

Usually I just go see what appears on Facebook or other website, like, "Half post" I read a lot.

(Gariela, 19 years old).

Most of the news I read appears in my Facebook feed, Twitter . . . because then I follow the vehicles and I read. It is more the information that comes to me . . . The only website that I often enter is in GloboEsporte.com to see news of Palmeiras (soccer team in Brazil) and I also like to enter the English site called Metal Renner, specialized in Hard Rock music and Heavy metal.

(Andre, 19 years old).

Young people are faced with a lot of information about food that has health benefits, but they don't value those that do not come from their own nutritional specialist.

There is awareness that not everything posted on the Internet is a safe source and, specifically for food, there may be sudden changes in positive or negative health functions.

In this way, external stimuli linked to food are primarily related to people they trust such as bloggers, YouTubers, social network influencers or, especially, health experts they know.

It's that I do not know if I really believe in these things because I think it's a lot like this ... from big industries. Let's suppose: this chocolate does evil, that fruit does evil, eat a lot of lemon does evil, much egg ... Every day is a thing! So eating too much egg is bad?! Does eating too much potatoes hurt?! Not so ... These are things the big industry does for you to stop buying one thing to buy another.

(Amanda, 22 years old).

I Use [to be informed] social networks in general ... But not everything that is there is true.

(Rodrigo, 23 years old).

Even because a lot of things have been around for a long time and things often seem to boom. There is coconut oil and everyone will use coconut oil. And then they say that lard is bad, but later it is proven that lard does not hurt as much as ordinary oil. So I'm very careful, I always consult with my nutritionist

(Giuliana, 24 years old).

17.4.4 Coffee consumption as a healthy habit

In the perspective of the interviewees, coffee is not among the foods considered important for a healthy habit. It is definitely not a food that they consume thinking about some specific health benefit or disease prevention.

However, this does not mean that there is a perception that coffee is bad for health, unless consumed in a large quantity. Compared to other foods that are also symbols of modern life, such as energy drinks, soft drinks, bakery, industrialized food, and fast food, coffee is not seen as a villain, although it also does not belong to the universe of salad and vegetables.

Therefore, it can be understood from their perspective that coffee is in its own universe, where it is perceived as an ally of adult life. Coffee is positioned between the necessary daily addictions (which are harmful to health) and the universe of healthy foods (which are good for health), as shown in [Fig. 17.4](#).

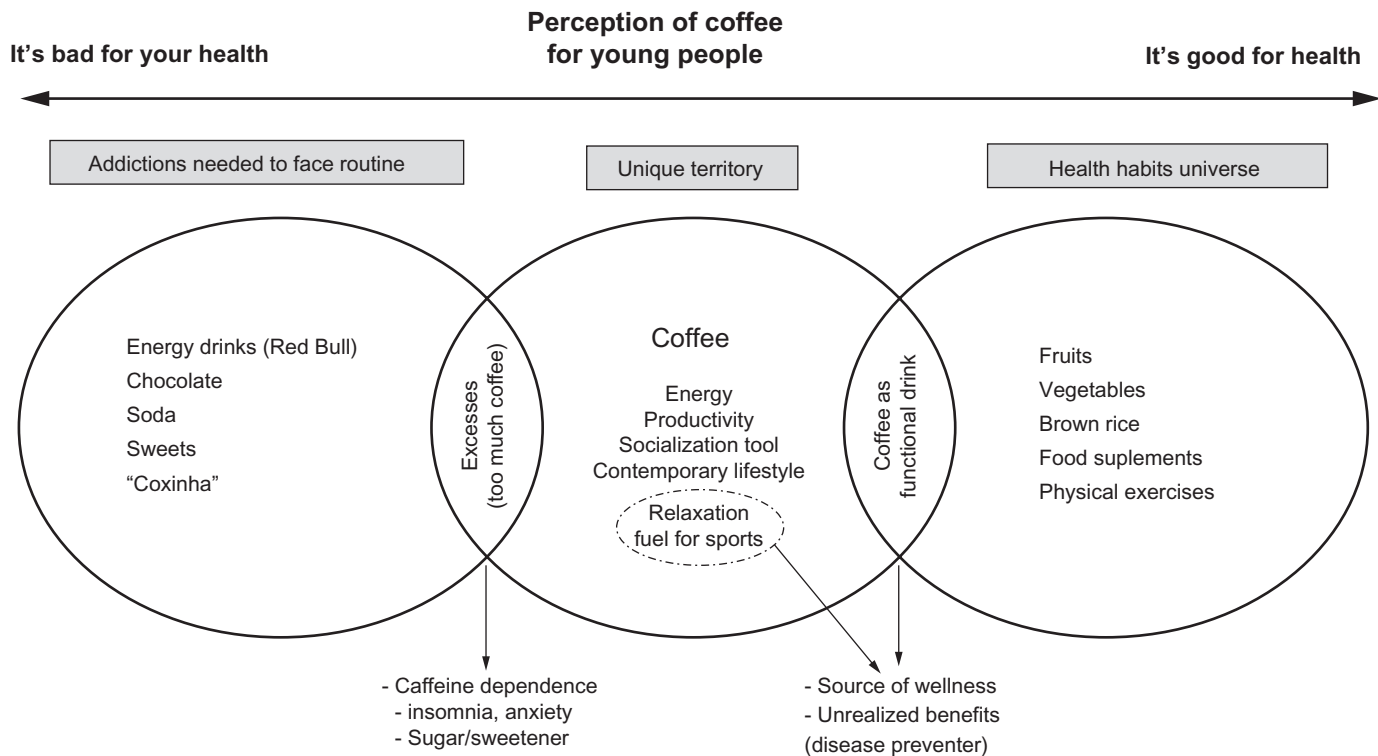


Fig. 17.4 Coffee in the young people's perspective.

I will not say I love to eat salad, anyway. Since it's there in everyday life, I know the importance, I know it's good for health, I know I have to be balanced, I end up eating

(Caio, 23 years old).

So you go to the bakery, buy yourself a "coxinha" (Brazilian food that is made fried and contains a lot of fat) and you're done. You are full for about three hours

(Gabriela, 19 years old).

I went to college, I worked, I had to study for the test, anyway, in the day to day rush I used the coffee to gain a boost of energy. It's part of my habit.

(Caio, 23 years old).

It was at my first job that I started to drink coffee. But I did not like it before. I know that as a child, I did not like it very much. Then I learned to like it. Then I had sugar and today I take it without ... I took it while I work.

(Lucas, 23 years old).

17.5 Discussion

Fig. 17.5 summarizes the findings in the lens of the conceptual model.

Considering previous studies that applied HBM in representative samples, it is possible to use the perceived benefits and barriers of coffee and the general orientation to healthy habits as significant predictors of increased consumption.

These factors were able to predict about 42% of the variation in young people's willingness to consume organic foods (Yazdanpanah et al., 2015).

Based on the previous information, it might be possible to infer that:

Increased awareness of coffee's benefits for health can improve the perception by young people:

- Clarifying the minimum daily safe doses of caffeine could mitigate the impact of consumption barriers.
- Closer relations with health professionals and social media influencers serve as external stimulation for the consumption of coffee by young people.
- Convenience solutions that fit in the daily routine can increase the adoption of coffee by young people.
- The association of coffee consumption as a fuel for physical activities can improve the perception of coffee as part of a healthy habit by young people.
- The association of consumption with modern adult lifestyle can improve the consumption of coffee by young people.

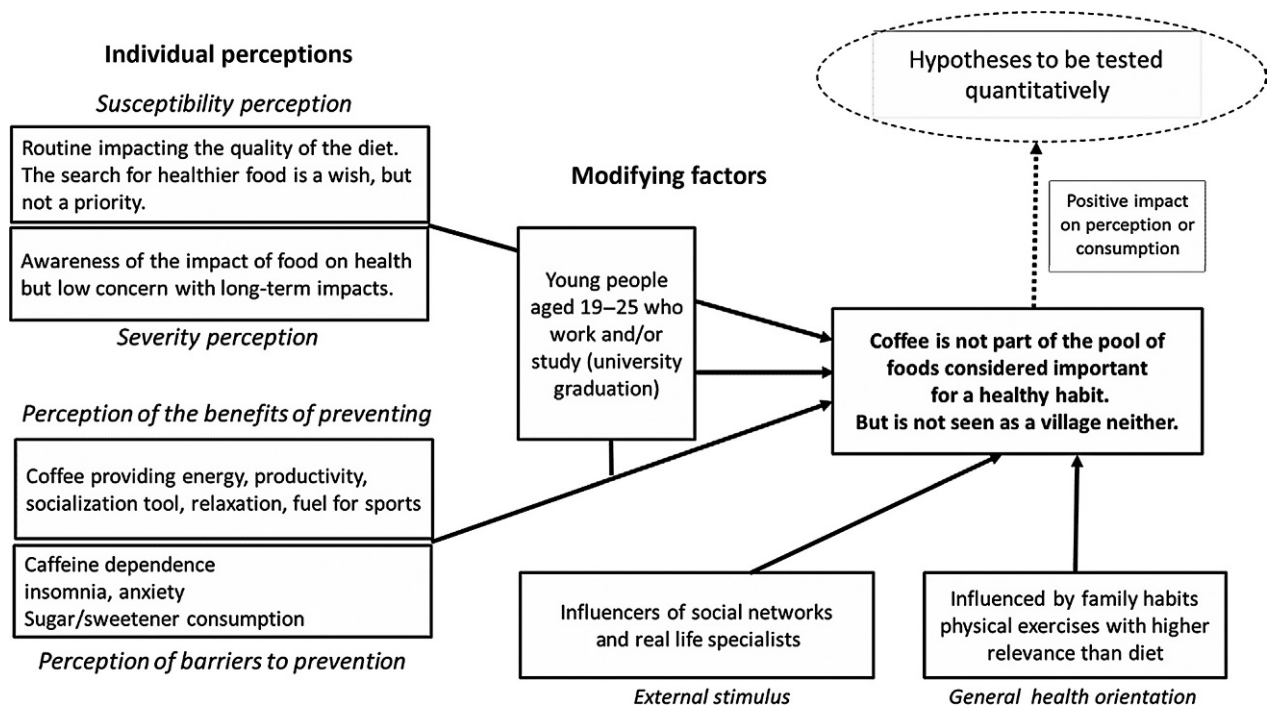


Fig. 17.5 The young perception of coffee consumption and health.

In addition, [Wansink's \(2005\)](#) nutritional knowledge hierarchy demonstrates that there is a potential for increased consumption by young people if they become aware of coffee's benefits for their daily life, as well as the safe doses of caffeine they might have daily, which are still well above what young people usually consume.

The HBM application in previous studies also revealed some differences in health behavior depending on gender ([Deshpande et al., 2009](#)). However, this aspect demonstrated to be not relevant in this research.

17.6 Final conclusions

The findings reveal that coffee is not among the foods considered important for healthy habits in the perspective of young people. Also, this group is not familiar with coffee's functional benefits. The perception of health is limited: coffee is a source of disposition (productivity) and indirectly of well-being when related to pleasure (sensory and relaxation) or fuel for exercise.

The most valued benefits are related to the moment of transition and quest for independence. At this stage, coffee becomes highly relevant not only as a source of energy for the conciliation of studies and career but also as an instrument of socialization. In other words, besides stimulating, the drink is considered as an important ally of adult life and a symbol of contemporary lifestyle, which justifies the bond of the youth with the drink. Therefore, in their perspective, coffee seems to occupy a single territory where no category of food is positioned.

Thus, as already observed by [Samoggia \(2016\)](#) for wine, although today coffee does not belong to the universe of healthy habits, it could be incorporated into this territory through new positioning.

In this sense, there should be external stimulus to increase young people's knowledge about coffee's benefits and provoke association with healthy territory symbols with an emphasis on sports and training in general. In addition, coffee should be associated as a daily energizing fuel to be fitted into young people's routine and demand for concentration, memory, and disposition.

17.6.1 Theoretical contribution

The present research adds to the diverse range of studies that used the HBM to predict consumer behavior in relation to healthy eating. In this research, a qualitative study was undertaken seeking to evaluate in depth the variables based on the model, focusing on the behavior of the young.

The findings demonstrate that coffee consumption for young people is much more influenced by modifying factors than by personal beliefs. The social network and its influencers plays a relevant role in the young's opinion, also acting as a confirmatory channel for their doubts and concerns.

The data analysis made through qualitative narratives also made possible the production of insights and specific knowledge about the generation Y behavior, which has received little attention by recent research on the coffee segment in Brazil.

17.6.2 Management implications

In the managerial context, the main finding is related to the perception of coffee as a unique beverage and food among healthy ones and daily addictions. This knowledge might be very interesting for marketers to better craft and position products that fit into the young's people daily routine and expectations.

Among the practical actions that can be adopted, one might consider development of youth-specific communication platforms and strengthening coffee as a fuel for physical activities and socialization, and increased investment in research on innovations in caffeine products aimed at the young public, such as functional coffees, natural energetics, and capsules for sports, among others.

17.6.3 Limitations of the study

We used as a premise that coffee, with all its properties, could be explored as part of a healthy habit, with benefits to reduce the risk of diseases and to assist in the practice of physical exercises. This premise allows us to consider only the consumer's point of view. However, there may be regulatory and/or scientific barriers to the development of healthy positioning by the coffee industry, but these were not the subjects of this study.

It is also necessary to emphasize that this was an exploratory qualitative research that permits to deepening the knowledge about the phenomenon researched but does not allow the generalization of the findings.

17.6.4 Future research

It is believed that the results of this research may motivate future studies that address the healthy foods choice and the behavior of generation Y.

Drawing on the HBM conceptual basis and adding knowledge about young consumer's potential of coffee consumption as part of a healthy habit,

this study allowed the elaboration of hypotheses that can be tested quantitatively in a future study:

- Increased awareness of coffee's benefits for health can improve the perception by young people.
- Clarifying the minimum daily safe doses of caffeine could mitigate the impact of consumption barriers.
- Closer relations with health professionals and social media influencers serve as external stimulation for the consumption of coffee by young people.
- Convenience solutions that fit in the daily routine can increase the adoption of coffee by young people.
- The association of coffee consumption as a fuel for physical activities can improve the perception of coffee as part of a healthy habit by young people.
- The association of consumption with modern adult lifestyle can improve the consumption of coffee by young people.

References

- Aguirre, J., 2016. Culture, health, gender and coffee drinking: a Costa Rican perspective. *Br. Food J.* 118 (1), 150–163.
- Aquilino, W.S., 2006. Family relationships and support systems in emerging adulthood. In: Arnett, J.J., Tanner, J.L. (Eds.), *Emerging Adults in America: Coming of Age in the 21st Century*. American Psychological Association, Washington, DC, pp. 193–217.
- Ares, G., Giménez, A., Gámbaro, A., 2009. Consumer perceived healthiness and willingness to try functional milk desserts. Influence of ingredient, ingredient name and health claim. *Food Qual. Prefer.* 20 (1), 50–56.
- Arnett, J.J., 2000. Emerging adulthood: a theory of development from the late teens through the twenties. *Am. Psychol.* 55 (5), 469.
- Asselin, A.M., 2005. Egocentric behavior—consumer characteristics that demonstrate greater willingness to pay for functionality. *Am. J. Agric. Econ.* 87 (5), 1339–1344.
- Bardin, L., 2009. *Análise de Conteúdo*. Edições, Lisboa, p.70.
- Barreiro-Hurlé, J., Colombo, S., Cantos-Villar, E., 2008. Is there a market for functional wines? Consumer preferences and willingness to pay for resveratrol-enriched red wine. *Food Qual. Prefer.* 19 (4), 360–371.
- Barreto, S.M., Passos, V.M.A., Giatti, L., 2009. Comportamento saudável entre adultos jovens no Brasil. *Rev. Saude Publica* 43, 9–17.
- Becker, M.H., Drachman, R.H., Kirscht, J.P., 1974. A new approach to explaining sick-role behavior in low-income populations. *Am. J. Public Health* 64 (3), 205–216.
- Brunso, K., Fjord, T.A., Grunert, K.G., 2002. Consumers' Food Choice and Quality Perception. The Aarhus School of Business Publ., Aarhus.
- Cailleba, P., Casteran, H., 2009. Some characteristics of the fair trade coffee customer (No. 1102). Groupe ESC Pau, Research Department.
- Carrillo, E., Prado-Gascó, V., Fiszman, S., Varela, P., 2013. Why buying functional foods? Understanding spending behaviour through structural equation modelling. *Food Res. Int.* 50 (1), 361–368.
- Carvalho, J.M., Paiva, E.L., Vieira, L.M., 2016. Quality attributes of a high specification product: evidences from the speciality coffee business. *Br. Food J.* 118 (1), 132–149.

- Chelliah, S., Kwon, C.K., Annamalah, S., Munusamy, J., 2013. Does marketing mix still relevant? A study on herbal coffee in Malaysia. *Int. J. Manag. Innov.* 5 (1), 31–46.
- Chen, M.F., Lee, C.L., 2015. The impacts of green claims on coffee consumers' purchase intention. *Br. Food J.* 117 (1), 195–209.
- Chew, F., Palmer, S., Kim, S., 1998. Testing the influence of the health belief model and a television program on nutrition behavior. *Health Commun.* 10 (3), 227–245.
- Coyne, S.M., Padilla-Walker, L.M., Howard, E., 2013. Emerging in a digital world: a decade review of media use, effects, and gratifications in emerging adulthood. *Emerg. Adulthood* 1 (2), 125–137.
- Deshpande, S., Basil, M.D., Basil, D.Z., 2009. Factors influencing healthy eating habits among college students: an application of the health belief model. *Health Mark. Q.* 26 (2), 145–164.
- Euromonitor, 2016. *Tendências do Mercado de Café 2015*. Disponível em: http://abic.com.br/src/uploads/2017/10/Final-Presentation-28-Nov-2016-Os_delivery.pdfCESS. Acesso em: 10 Jun. 2017.
- Freeland-Graves, J.H., Nitzke, S., 2013. Position of the academy of nutrition and dietetics: total diet approach to healthy eating. *J. Acad. Nutr. Diet.* 113 (2), 307–317.
- French, S.A., Perry, C.L., Leon, G.R., Fulkerson, J.A., 1994. Weight concerns, dieting behavior, and smoking initiation among adolescents: a prospective study. *Am. J. Public Health* 84 (11), 1818–1820.
- Friedman, M.M., Bowden, V.R., Jones, E., 2003. *Family Nursing: Research, Theory & Practice*. Pearson.
- Furst, T., Connors, M., Bisogni, C.A., Sobal, J., Falk, L.W., 1996. Food choice: a conceptual model of the process. *Appetite* 26 (3), 247–266.
- Garcia, K., Mann, T., 2003. From “I wish” to “I will”: social-cognitive predictors of behavioral intentions. *J. Health Psychol.* 8 (3), 347–360. <https://doi.org/10.1177/1359105303008003005>.
- Glanz, K., Rimer, B.K., Lewis, F.M., 2002. The scope of health behavior and health education. In: *Health Behavior and Health Education*. pp. 3–21.
- Glanz, K., Rimer, B.K., Viswanath, K. (Eds.), 2008. *Health Behavior and Health Education: Theory, Research, and Practice*. John Wiley & Sons.
- Grunert, K.G., Grunert, S.C., 1995. Measuring subjective meaning structures by the ladder-ing method: theoretical considerations and methodological problems. *Int. J. Res. Mark.* 12 (3), 209–225.
- Hajian, S., Vakilian, K., Najabadi, K.M., Hosseini, J., Mirzaei, H.R., 2011. Effects of education based on the health belief model on screening behavior in high risk women for breast cancer, Tehran, Iran. *Asian Pac. J. Cancer Prev.* 12 (1), 49–54.
- Hanson, J.A., Benedict, J.A., 2002. Use of the Health Belief Model to examine older adults' food-handling behaviors. *J. Nutr. Educ. Behav.* 34, S25–S30.
- Hochbaum, G., 1958. *Public Participation in Medical Screening Programs*. DHEW Publication No. 572, Public Health Service, Government Printing Office, Washington, DC.
- Hochbaum, G., Rosenstock, I., Kegels, S., 1952. *Health Belief Model*. United States Public Health Service. W432W8784.
- Ibope, 2017. *Relatório Anual de Investimento de Mídia*. Monitor Ibope, São Paulo.
- Janz, N.K., Becker, M.H., 1984. The health belief model: a decade later. *Health Educ. Q.* 11 (1), 1–47.
- Kirscht, J.P., 1974. The health belief model and illness behavior. *Health Educ. Monogr.* 2 (4), 387–408.
- Kloeblen, A.S., Batish, S.S., 1999. Understanding the intention to permanently follow a high folate diet among a sample of low-income pregnant women according to the Health Belief Model. *Health Educ. Res.* 14 (3), 327–338. <https://doi.org/10.1093/her/14.3.327>.
- Kvale, S., Brinkmann, S., 2009. *Interviews: Learning the Craft of Qualitative Research Interviewing*. Sage, Thousands Oaks.

- Lappalainen, R., Saba, A., Holm, L., Mykkanen, H., Gibney, M.J., Moles, A., 1997. Difficulties in trying to eat healthier: descriptive analysis of perceived barriers for healthy eating. *Eur. J. Clin. Nutr.* 51 (2), S36.
- Marquis, M., 2005. Exploring convenience orientation as a food motivation for college students living in residence halls. *Int. J. Consum. Stud.* 29 (1), 55–63.
- Mazis, M.B., Raymond, M.A., 1997. Consumer perceptions of health claims in advertisements and on food labels. *J. Consum. Aff.* 31 (1), 10–26.
- McHale, S.M., Dotterer, A., Kim, J.Y., 2009. An ecological perspective on the media and youth development. *Am. Behav. Sci.* 52 (8), 1186–1203.
- Moreno, M.A., Whitehill, J.M., 2014. Influence of social media on alcohol use in adolescents and young adults. *Alcohol Res.* 36 (1), 91.
- Murcott, A., 1995. Social influences on food choice and dietary change: a sociological attitude. *Proc. Nutr. Soc.* 54 (3), 729–735.
- Neumark-Sztainer, D., French, S.A., Hannan, P.J., Story, M., Fulkerson, J.A., 2005. School lunch and snacking patterns among high school students: associations with school food environment and policies. *Int. J. Behav. Nutr. Phys. Act.* 2 (1), 14.
- Ng, B.Y., Kankanhalli, A., Xu, Y.C., 2009. Studying users' computer security behavior: a health belief perspective. *Decis. Support. Syst.* 46 (4), 815–825.
- Portal da Propaganda, 2016. Notícias. Disponível em: <http://portaldapropaganda.com.br/noticias/>. Acesso em: 20 dez. 2017.
- Rosenstock, I.M., 1966. Why people use health services. *Milbank Mem. Fund Q.* 44, 94–127. <https://doi.org/10.2307/3348967>.
- Rosenstock, I.M., Strecher, V.J., Becker, M.H., 1988. Social learning theory and the health belief model. *Health Educ. Q.* 15 (2), 175–183. <https://doi.org/10.1177/109019818801500203>.
- Rosenstock, I.M., Strecher, V.J., Becker, M.H., 1994. The health belief model and HIV risk behavior change. In: *Preventing AIDS*. Springer, Boston, MA, pp. 5–24.
- Samoggia, A., 2016. Wine and health: faraway concepts? *Br. Food J.* 118 (4), 946–960.
- Sapp, S.G., Jensen, H.H., 1998. An evaluation of the health belief model for predicting perceived and actual dietary quality 1. *J. Appl. Soc. Psychol.* 28 (3), 235–248. <https://doi.org/10.1111/j.1559-1816.1998.tb01704.x>.
- Schollenberg, L., 2012. Estimating the hedonic price for Fair Trade coffee in Sweden. *Br. Food J.* 114 (3), 428–446.
- Seidman, I., 2013. *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences*. Teachers college press, New York.
- Selltiz, C., Cook, S.W., Wrightsman, L., 1965. *Métodos de Pesquisa nas Relações Sociais*. Pedagógica, São Paulo.
- Şimşekoğlu, Ö., Lajunen, T., 2008. Social psychology of seat belt use: a comparison of theory of planned behavior and health belief model. *Transport. Res. F: Traffic Psychol. Behav.* 11 (3), 181–191.
- Sobal, J., Bisogni, C.A., 2009. Constructing food choice decisions. *Ann. Behav. Med.* 38 (suppl_1), s37–s46.
- Story, M., Resnick, M.D., 1986. Adolescents' views on food and nutrition. *J. Nutr. Educ.* 18 (4), 188–192.
- Teratanavat, R., Hooker, N.H., 2006. Consumer valuations and preference heterogeneity for a novel functional food. *J. Food Sci.* 71 (7), S533–S541.
- Vabø, M., Hansen, H., 2014. The relationship between food preferences and food choice: a theoretical. *Int. J. Bus. Soc. Sci.* 5 (7), 145–157.
- Vassallo, M., Saba, A., Arvola, A., Dean, M., Messina, F., Winkelmann, M., ... Shepherd, R., 2009. Willingness to use functional breads. Applying the Health Belief Model across four European countries. *Appetite* 52 (2), 452–460. <https://doi.org/10.1016/j.appet.2008.12.008>.

- Vermeir, I., Verbeke, W., 2006. Sustainable food consumption: exploring the consumer “attitude—behavioral intention” gap. *J. Agric. Environ. Ethics* 19 (2), 169–194. <https://doi.org/10.1007/s10806-005-5485-3>.
- Von Ah, D., Ebert, S., Ngamvitroj, A., Park, N., Kang, D.H., 2004. Predictors of health behaviours in college students. *J. Adv. Nurs.* 48 (5), 463–474.
- Wang, E.S.T., Yu, J.R., 2016. Effect of product attribute beliefs of ready-to-drink coffee beverages on consumer-perceived value and repurchase intention. *Br. Food J.* 118 (12), 2963–2980.
- Wansink, B., 2005. *Marketing Nutrition: Soy, Functional Foods, Biotechnology, and Obesity*. University of Illinois Press, Champaign.
- Wdowik, M.J., Kendall, P.A., Harris, M.A., Auld, G., 2001. Expanded health belief model predicts diabetes self-management in college students. *J. Nutr. Educ.* 33 (1), 17–23.
- Wheeler, A., 2008. *Design de identidade da marca*. Brookman, Porto Alegre.
- Yazdanpanah, M., Forouzani, M., Hojjati, M., 2015. Willingness of Iranian young adults to eat organic foods: application of the Health Belief Model. *Food Qual. Prefer.* 41, 75–83.