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FACULDADE DE ECONOMIA, ADMINISTRAÇÃO, CONTABILIDADE E
GESTÃO DE POLÍTICAS PÚBLICAS – FACE

PROGRAMA DE PÓS-GRADUAÇÃO EM ADMINISTRAÇÃO – PPGA

**MARKETING AS A PATHWAY TO PROMOTE SUSTAINABLE BEHAVIOR:
THE GOAL FRAMING THEORY AS A SOURCE FOR THE FORMULATION
OF STRATEGIES IN THE ORGANIC FOOD MARKET**

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Brasília, DF

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PHD dissertation submitted to the Programa de Pós-Graduação em Administração from Universidade de Brasília as requirement for obtaining the business PHD degree.

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MARKETING AS A PATHWAY TO PROMOTE SUSTAINABLE BEHAVIOR: THE
GOAL FRAMING THEORY AS A SOURCE FOR THE FORMULATION OF
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SUMMARY

Introduction	11
Background	11
Purpose and rationale	15
Theoretical background	19
Goals as consumption behavior guides.....	19
Goal Framing Theory	21
Study I: State of the art regarding the market of organic food.....	25
Theoretical background	25
Method.....	28
Results and discussion.....	29
Theory analysis regarding organic food purchase motivators and barriers.....	31
Application of the Goal System Theories in the consumption of organic food.....	37
The wellness goal.....	39
Analysis of the Brazilian literature regarding organic food consumption.....	43
Final considerations	45
Study II: Analyzing the motivational factor: the role of values and subgoals in the consumption of organic food	47
Theoretical background	47
Method.....	56
Results	59
Discussion.....	64
Final considerations	68
Study III: Marketing strategies based on Goal Framing: the usage of priming to influence organic purchases.....	70
Theoretical background	70
Method.....	73
Results	77
Discussion.....	83
Final considerations	86
Study IV: The impact of individual and collective aspects of the normative goal in consumers' buying behavior.....	89
Theoretical background	89
Method.....	92
Results	95

Discussion.....	98
Final considerations	100
Conclusion.....	102
References	104
Appendix A: Formulated questionnaires.....	125

ABSTRACT

The last years were marked by a shift in the population's view regarding the way they behave in relation to their consumption. A new paradigm is being constructed, where a purely individual thinking is no longer an option: the collective impact of consumers' decision, rather social or environmental, must be addressed in every purchase moment and in every decision made by individuals. This new paradigm increased the search for products that are less aggressive to both humans and environment, with the organic food being one of those. However, several studies show that, despite the growing demand, organic food is still little sought or effectively bought by the population, especially in growing countries like Brazil. This phenomenon highlights an attitudinal-behavioral gap that might be addressed by both academy and managers.

With all the discussed in mind, this dissertation's main objective was to test if marketing strategies, such as written messages and eco-labeling, had an efficient effect on consumers' purchase behavior, aiming the growth of organic food consumption in simulated scenarios of purchase. In order to construct the strategies, a specific goal-achievement theory was used, the Goal Framing Theory - GFT, developed by Lindenberg and Steg (2007).

This objective derived in four separated studies, which one with its specific theoretical backgrounds and methods, in order to test the framework proposed by Steg et al. (2014) on the usage of the GFT as base for marketing strategies: a state of the art analysis regarding motivations and barriers of consumption; a construction of a hierarchical motivational chain; the usage of written messages and motivation types to change behavior; and the analysis of the importance of individual and collective aspects on consumption.

Several implications are discussed as the articles are presented, aiming most of the time in the practical usage of the findings, for both academic researches and marketing managers. In short, it was possible to achieve the main objective addressed, and highlight several implications regarding organic food consumption and ways to improve its status in its market.

LIST OF FIGURES

Figure 1: Illustration of a hierarchical goal system	20
Figure 2: The structure of the studies conducted in the present dissertation.....	24
Figure 3: Organic food consumption by countries studied.....	30
Figure 4: Organic food consumption publications by journals.	31
Figure 5: The refined structure of human values.....	49
Figure 6: resumed theoretical model, without the hypothesis, illustrating the direct and indirect effects of values in organic food purchase behavior.	56
Figure 7: Results of the SEM conducted in study II.....	64
Figure 8: Theoretical model proposed to test the effect of motivational and situational factors in organic food purchase behavior.....	73
Figure 9: Results from the confirmatory factorial analysis for the Goal Framing Theory subgoals instrument.	78
Figure 10: graphical analysis of the significant differences found using the rate of organic food products in the basket as dependent variable.	80
Figure 11: graphical analysis of the significant differences found using the rate of organic food ticket average in the basket as dependent variable.....	82
Figure 12: Graphical analysis of the SEM conducted.	84
Figure 13: Certifications used in the choice experiment.	94
Figure 14: Example of a choice presented to the respondents, with them having to pick one of the two presented products, observing their certifications and their prices.	96

LIST OF TABLES

Table 1: Definitions of the Goal Framing Theory's major goals	22
Table 2: Main influencing factors in the organic food consumption and purchase.....	32
Table 3: Summary of the proposed goals and subgoals	43
Table 4: Main findings regarding the motivations and barriers of Brazilian organic food consumption	44
Table 5: Egocentric and ecoaltruistic values	53
Table 6: Sociodemographic data from study II's sample.	57
Table 7: Results from exploratory factor analysis for the egocentric and ecoaltruistic values	59
Table 8: Factors' names and definitions.....	60
Table 9: Results for the exploratory factor analysis for the proposed subgoals.....	61
Table 10: Regression scores for the relations studied in the proposed theoretical model	63
Table 11: The hypothesis of the study and its results.....	66
Table 12: Summary of products used and their prices in Brazilian Reais.....	74
Table 13: Phrases showed in the messages	75
Table 14: Experiment design used in study III.....	76
Table 15: Results for the Kruskal-Wallis and post hoc tests conducted with the rate of organic food products in the basket as dependent variable.	79
Table 16: Results for the Kruskal-Wallis and post hoc tests conducted with the rate of organic food average ticket in the final basket as dependent variable.	81
Table 17: Regression scores for SEM conducted with the statistical significant variables	83
Table 18: Definitions of the attributes and levels studied	94
Table 19: Results for Group I with only two certification attributes tested	97
Table 20: Results for the analysis of the marginal willingness to pay for Group I with only two attributes tested.....	98
Table 21: Results for Group II with the three certification attributes tested	98
Table 22: Results for the analysis of the marginal willingness to pay for Group II, with the three attributes tested	99

LIST OF ACRONYMS AND ABBREVIATIONS

IFOAM - International Federation of Organic Agriculture Movements

GFT – Goal Framing Theory

RCOF – Regular Consumers of Organic Food

TPB – Theory of Planned Behavior

EBSCO - Elton B. Stephens Co

JSTOR - Journal Storage

B.R. – Brazilian Reais

PVQ – Portrait Value Questionnaire

CFA – Confirmatory factor analysis

EFA – Exploratory factor analysis

SES – Sociodemographic data

SEM – Structural equation modelling

KMO - Kaiser-Meyer-Olkin

OFPB – Organic food purchase behavior

M – Mean

SD – Standard deviation

Df – Degrees of freedom

Std – Standard

GMO - Genetically Modified Organisms

ABNT - Associação Brasileira de Normas Técnicas

Mwtp – Marginal willingness to pay

1. Introduction

1.1. Background

Lots of environmental issues are consequences of human behavior and how they treat natural resources, mainly of them regarding the excessive consumption of water, energy, fossil fuels, and even the consumption of food products that harm the environment both in short and long term. There is a belief, however, that through changes in the human behavior it is possible to decrease the negative effect that humans cause in the environment, and, by consequence, improve the life around the globe. Therefore, the study and the understanding of human behavior related to environment becomes essential to reduce negative impacts on nature, thus improving the life quality for our societies around the globe (Agovino, Crociata, Quaglione, Sacco, & Sarra, 2017; Steg & Gifford, 2008; P. Stern, 2000; John Thøgersen & Ölander, 2002).

One of the big issues addressed by social scientists, and source to many researches, is the food consumption and its impacts, both at individual and collective levels. In the last years, news about toxic substances in food that is consumed by a significant part of the world population and its consequences to health and to the environment caused a shift in the market demands, with people searching for a more secure kind of purchase, whether for an improvement in their personal life and in the environmental (Coley, Howard, & Winter, 2009; Hughner, McDonagh, Prothero, Shultz II, & Stanton, 2007; Rong-Da Liang, 2014).

As the importance given to the negative impacts of the traditional food industry increases, the demand for products that are manufactured without pesticides or any aggressive chemicals, and for products that show concern about themes like animal welfare, food security and other related issues. Consequently, the pursuit for organic food also risen, as it takes in consideration health issues, and also environmental, cultural and ethical impacts of food production and selling (Ngobo, 2011; Rong-Da Liang, 2014).

Organic agriculture and production, as stated by the IFOAM's Principles of Organic Agriculture (IFOAM, 2005), must follow four principles. First, the principle of health states that the welfare of individuals, groups and societies cannot be addressed

separately from the environment's health. As specified by the document, the organic agriculture is intended to produce high quality, nutritious food, contributing to preventive health care and well-being, from soil to consumers. The principle of ecology states that organic production must be based on ecological processes and recycling, respecting the cycles and ecological balances of nature. Farming systems design, establishment of habitats and maintenance of genetic and agricultural diversity must respect the environment and the way it leads the production of foods.

The third principle addresses to the fairness in the organic market. Fairness, as cited in the document, revolves around equity, respect, justice stewardship of the world both people and nature share. People involved in organic agriculture must “conduct human relationships in a manner that ensures fairness at all levels and to all parties – farmers, workers, processors, distributors, traders and consumers” (IFOAM, 2005, p. 4), providing life quality and reduction of poverty to everyone involved in the process, including animals and nature diversity.

The fourth and last principle, named the principle of care, defends that organic culture must be managed precautionary and responsibly, in order to protect the health and well-being of current and future generations, as well as the environment. Organic production must prevent significant risks, adopting appropriate and secure technologies in the production. Science is important just as experience, accumulated wisdom and knowledge, but respecting and protecting those involved in the processes.

As the four principles of the organic production stated by IFOAM show, the organic food production, manufacturing and selling, in short, must respect all aspects related to human and animal well-being, reduce all environmental negative impacts and respect cultural differences and economic equity and justice. As shown before, the demand for products with this concerns had risen all over the globe, increasing, by consequence, the relevance of the market and its importance socially, economically and scientifically.

The increase of the organic food market around the world lead researchers to an increase in the volume of studies about the topic. Trying to understand how and why people develop the concerns related to the purchase of organic food, and, on the second step, what makes them actually purchase these products, had a great impact on the studies about the subject. This kind of studies help both scientists and managers to

understand the market, and how to advance the concern of people related to nature's well-being, and even their own (Hughner et al., 2007; Nuttavuthisit & Thøgersen, 2017; Rong-Da Liang, 2014; Steg, Lindenberg, & Keizer, 2016; John Thøgersen, 2011).

Also, studies created to understand human behavior on organic food purchases helps government agents and managers on the creation of public policies related to the food consumption, aiming the increase of the demand and consumption of this product. The same reasoning applies to the private corporations, where the understanding of the organic food consumer might increase the effectiveness of advertisement in the market (Aertsens, Mondelaers, Verbeke, Buysse, & Van Huylenbroeck, 2011; Thøgersen et al., 2002).

Considering all the arguments above, organic food is an important product to consumers, as it promotes better health, both at individual, collective and environmental levels, in addition to equity and justice markets, with relevant concern to cultural individualities, and, in a general way, the well-being of humans, animals, natures and cultures. The relevance of this market and the growing importance given by people to organic food can be seen in the IFOAM's annual report (Willer & Lernoud, 2018) that shows an approximate 290% increase in the size of this market in US dollars in 15 years (from 20.9 billion dollars in 2000 to 81.6 billion in 2015) and an 16% increase in the organic agricultural land and wild collection areas in 6 years (from 78.2 mn ha in 2009 to 90.6 mn ha in 2015).

The growth of the organic food market, as of its organizations and the number of consumers, make indispensable the understanding of those consumers, and also allows the formulation of clearer questions like why (and why not) people have preferences for the purchase of organic food, and what can be done to incentive people who do not consume organic food to do so and to purchase it (Hughner et al., 2007; Nuttavuthisit & Thøgersen, 2017; Shafie & Rennie, 2012). Despite the large number of studies about the reasons people purchase organic food around the globe, several reasons are pointed, both at individual level (e.g., health concern, food security, and product quality) and at collective level (e.g., environmental protection, animal welfare, and equity). However, the studies do not achieve a consensus on several questions, such as why people buy organic food, or what kind of tools have influence on this behavior towards a more sustainable consumption (Hemmerling, Hamm, & Spiller, 2015; Hughner et al., 2007; Shafie & Rennie, 2012).

Regarding the latter question, social marketing might appear as a significant structure to address the influence on food consumption behavior towards a more sustainable path. As addressed by Stead, Gordon, Angus and McDermott (2007), studies and public policies that used social marketing principles and knowledge had effective results in a great range of behaviors, influencing individuals to take more conscious actions and choices.

As defined by Kotler and Zaltman (1971), social marketing is a framework that has influences across other bodies of knowledge, such as psychology, sociology, anthropology and communications theory, aiming to understand how to influence people's behavior. Taking this definition into account, combined with the social marketing's end goal to improve individual and societies welfare (Stead et al., 2007), it is possible to analyze social marketing as a tool to understand and change consumers' behaviors.

In short, this research seeks to understand if the usage of social marketing, and tools originated in the conventional marketing with focus on the development of both individual and social welfare, have the capacity to impact consumers' choices and purchase behavior, towards more conscious actions. Stead et al. (2007) reviewed the literature about the theme, and found that social marketing strategies had effectiveness in studies about tobacco, alcohol and drugs usage, and physical activity. Expanding the author's findings, the present research tries to answer the following question: can social marketing and its tools be considered a way to promote and encourage sustainable behavior in the food market?

Taking the question above in consideration, this study tries to address the matter with a psychological theory nominated goal activation, or goal achievement (Förster, Liberman, & Friedman, 2007; Kruglanski et al., 2002). The majority of human behavior, including the consumption behavior, is oriented to the goals' achievement. People buy products and services as a way to develop and reach one or more goals that they have in mind (Bagozzi & Dholakia, 1999). The consumption of organic food should not be different: people buy it, so they can achieve their personal goals, and these goals vary according to various aspects, both individual (e.g., demographic and psychological) and collective (e.g., culture, social norms and environmental concern).

The first objective of this study, therefore, consists on analysing the consumer market of organic food from the goal achievement perspective. The intention of this analysis revolves around the need of understanding the motivation factors that influence the organic food consumers, and, therefore, apply the new knowledge to the product's market. Understanding people's motivations when purchasing green products can help both private and public managers in their performance in the food market, with better marketing campaigns and public policies (Nuttavuthisit & Thøgersen, 2017; Stern, 2000).

1.2. Purpose and rationale

Aligning all the discussion above, the objective of this study consists on utilizing the goal achievement approach, more specifically the Goal Framing Theory (GFT) (Lindenberg & Steg, 2007), as a social marketing strategy in order to promote behavioral change among food consumers, from the conventional food marketing to the consumption of organic food, providing a higher welfare to those involved in the whole production process (Hughner et al., 2007; IFOAM, 2005). More specifically, this study addresses several minor objectives:

- To analyse the current organic food consumption literature from the GFT perspective;
- To measure the motivational aspects of organic food consumption based on the GFT;
- To analyse the influences of GFT-based primed messages in the consumers' purchase behaviors;
- To analyse through eco-labelling the importance of individualist and collectivist attributes of the product in the consumers' behavior.

This study has several theoretical and managerial applications. Applying the goal achievement perspective to the organic food market might assist in the understanding of several questions, as the influence of motivators factors that might cause people to purchase the product in question, and also a question involving the distance between purchase intention and actually purchase, on the main issues related to the organic food consumption researches (Carrington, Neville, & Whitwell, 2014; Hughner et al., 2007; Vermeir & Verbeke, 2006).

To accomplish the objectives above, the Goal Framing Theory (Lindenberg & Steg, 2007; Steg et al., 2016) will be applied as a starting point. Based mostly in social psychology research about the influence of the goals in cognitive processes, the Goal Framing Theory (GFT) has as principal idea the importance goals have in people's behavior, in their evaluations of motivational and situational aspects, and which alternatives are estimated in the decision process (Lindenberg & Steg, 2007). The GFT was selected among others based on the assumption that it was created to understand social and environmental-concerned behaviors, such as organic food consumption (Barbopoulos & Johansson, 2017; Steg, 2005; Steg & Vlek, 2009).

Several implications of the possible findings are relevant in all social, management and academic spheres. Firstly, as shown by IFOAM (2005) organic agriculture principles listed earlier, the production, manufacture and distribution of organic grown products must respect humans, nature and culture in all levels, maintaining a sustainable chain of production and, therefore, contributing to a cleaner, healthier world to all its agents (IFOAM, 2005, 2016). The understanding of the organic food consumers helps in the maintenance of the market, thus impacting consistently in the health and sustainability of both humans and environment (Nuttavuthisit & Thøgersen, 2017). Studying the human impact in the environment becomes extremely relevant in the sustainability context, as the understanding and later changing of their behavior is more significant than correction actions that are taken after, like health issues, in the food market perspective (Steg & Vlek, 2009).

In the Brazilian context, the organic food market share is relatively small. As shown by IFOAM's report (Willer & Lernoud, 2018), although being the fifth biggest country in the world, the total area of organic agriculture in Brazil is smaller than countries like Spain and Argentina. The number of registered producers is small and decreasing (from 14,003 in 2004 to 10,336 in 2016), and with less producers than, for example, Peru and Mexico. The organic market share is also small in Brazil (0.3%), with countries like Peru (1.3%) ahead. All that data shows that the Brazilian market of organic food has still a lot to develop, and, by understanding its consumers and how to prospect new ones, public and private managers could have information to make this growth sustainable and effective.

In addition to the help regarding the Brazilian organic food marketing, a national research, organized by Organis (2018) showed that only 15% of the country's

population answered as regular or eventual organic consumer, but 85% of the interviewed stated that they wish they could buy more organic food. This data shows a market with high capacity of growth and with a high concern for the issues related to organic food, but with no clear way on how to transform positive attitudes into behavior. Thus, studies about these consumers and their behavior in market situations might help providing more insights related to the issue.

The understanding of the organic food consumers has several more managerial impacts, both in public and private spheres. As stated by Nuttavuthisit and Thøgersen (2017), the studies focused on organic products consumers have great practical importance. Producers, sellers and retailers can benefit from these researches by utilizing that knowledge on their marketing mix, and so in advertisement and communication channels (Agovino et al., 2017; Kareklas, Carlson, & Muehling, 2014; Murphy, 2008; Ngobo, 2011).

As in the private sector, the knowledge related to organic consumers is also important to public managers and creators of public policies related to the nourishment and security of the population. By studying and understanding the motivations behind the purchase of these products, new and improved policies can be addressed regarding the public health and quality of life (Daugbjerg & Sønderskov, 2012). Knowing what consumers consider important in their food purchase might help in developing incremental and more accessible agenda addressed to improve the quality of life of the population.

As will be shown in the state of art session, the number of studies published in the international literature conducted in emerging countries is small, with just two of them made in Brazil, taking into consideration only the English-based international literature. Although there was, in the last years (2013 to 2018), a relevant increase in studies conducted in east Asia, Latin America has very few studies. Regarding this situation, this study becomes relevant by conducting researches in a non-typical country of the international literature.

Another issue related to this study's relevance to the literature is the analysis of the organic food consumption by the goal achievement perspective. Although there are several studies conducted to understand the motivations related to the preference and purchase of these products, which will be shown in the state of art session, there's none

that proposes an integrative view with the goal achievement as a starting point. Hence, this study proposes an innovative way to understand the organic food consumers. Also, the results found in literature are fragmented and mixed (Agovino et al., 2017), which brings up the necessity for integrative studies.

In short, the proposed study may have significant impact in the organic market in emerging countries, especially in Brazil. Understanding the consumers' process in his decision process related to their choice of organic or traditional food, why do they choose organic over traditional, or why they keep purchasing the traditional one, have several social, managerial and academic implications, as shown above. Thereby, the present study proposes to address the organic food purchase in an innovative way: by the goal achievement theories.

The next session presents the theoretical background, exploring the goal achievement as a behavior guide, as the Goal Framing Theory with the proposed adaptation based on the motivations of purchasing organic products. Also, a state of the art over the international production regarding the theme will also be displayed.

2. Theoretical Background

2.1. Goals as consumption behavior guides

The human behaviour responses are divided in four groups: reflexive response, accidental response, intentional response made to bring or maintain a desirable state, and intentional response made to control or prevent an undesirable state. The last two are guided by motivation and belong to the control domain (Kruglanski et al., 2002; Wegner & Bargh, 1998).

This motivation that guides the two types of intentional responses has a specific end, to which all of the responses are taken. These ends are called goals, which direct human behaviour over time. Thus, goals are the guides that direct all kinds of non-accidental human behaviour (Bagozzi & Dholakia, 1999; Barbopoulos & Johansson, 2017; Kruglanski & Köpetz, 2009; Lindenberg & Steg, 2007).

Therefore, an individual, when facing a situation and a decision, seeks to reach their goals, consciously or unconsciously. Based on the assumption that more than one goal is pursued or avoided in just one decision, it is understood that, for each individual, not only one goal has importance, but a system of goals (Kruglanski et al., 2002; Kruglanski & Köpetz, 2009).

According to Heidi and Gelety (2009), the goals theory has great relevance in the human behaviour studies for the fact that it has its bases in the motivation as a cognition paradigm, where the human motivation has a dynamic and soft character, that is, our desires and aspirations change from time to time, depending on several aspects (Kruglanski et al., 2002).

Goals systems have several properties. The first one is the interconnectivity, which refers to the relation that goals and subgoals (minor goals that lead to the achievement of bigger goals (Lindenberg & Steg, 2007) and means of obtaining these goals have between them, varying in shape and strength. The second property refers to the transfer of property inside the goals system, where the activation might be reached from goals to subgoals and then to the means, and vice versa. These two properties can be visualized in figure 1.

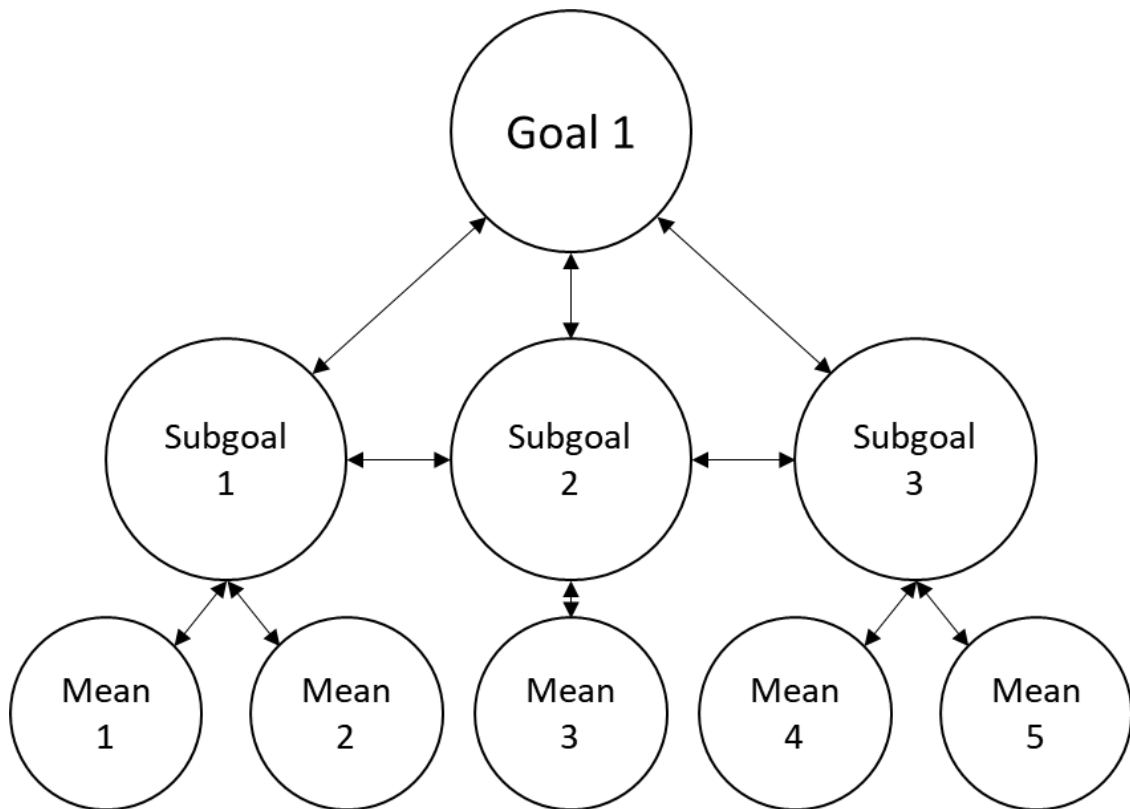


Figure 1: Illustration of a hierarchical goal system

Note. Adapted from Kruglanski, J., Shah, J., Fishbach, A., Friedman, R., Chun, W., Sleeth-Keppler, D. (2002). A Theory of Goal Systems. *Advances in Experimental Social Psychology*, 34, 331-378.

The third property is about the unconscious impact in the system. There are two types of goals: focal goals, that are explicit, understood and pursued by the individual; and background goals, that are not registered consciously. The fourth property verses about the dependency to the context in every situation, that means a goal might be pursued through different means that depend on the context of the situation, evidencing the dynamism and the elasticity of the goals systems (Kruglanski et al., 2002; Lindenberg & Steg, 2007).

The fifth property is nominated as allocation. As all cognitive process, the goals system needs mental resources. Therefore, bigger the number of resources invested in a specific goal, less resources will be directed to other goals achievement (Kruglanski et al., 2002). Those five properties are based in the assumption that goals systems involve a cognitive process.

The theory describes two more properties of goals systems based on motivational aspects: the effort to achieve goals, that can result in success (normally

creating positive effects) or flaw (normally creating negative effects); and the goals commitment, which is the degree a person is determined to achieve any goal (Kruglanski et al., 2002).

In short, given a goals system, several goals and subgoals might be pursued every moment, in every decision an individual face himself. The strength used to pursue them varies accordingly with motivational and situational aspects (Lindenberg & Steg, 2007). Regarding consumption behaviour, there is no difference: a great part of this kind of cognitive process is directed by goals that individuals pursue, not only the final state of purchasing itself, but also the whole experience involved in the consumption process (Bagozzi & Dholakia, 1999).

Given the goal achievement's capacity to explain consumption behaviour found in current theory (Bagozzi & Dholakia, 1999; Barbopoulos & Johansson, 2017; Lindenberg & Steg, 2007; Steg et al., 2016), this study focus the consumption of organic food through this approach. Considering this phenomenon, a social and environmental impacting behaviour, the goals theory adopted to analyse this market is the Goal Framing Theory, and it is explored next.

2.2. Goal Framing Theory

Lindenberg and Steg (2007) developed the Goal Framing Theory (GFT) focusing in the rising phenomena of pro-environmental and pro-social behaviours. This theory helps in the understanding on why people take on conscious behaviours by using goals systems, supporting also the idea that this kind of behaviour is not always result of normative or altruist matters, but also from economic, pleasure or rational goals (Steg et al., 2016; Stern, 2000; Thøgersen, 1996).

The GFT, as the rest of the goals system theories, proposes that the way people process information and select alternatives depends on the relevance and the strength given to determined goals (Lindenberg & Steg, 2007; Steg et al., 2016). The theory takes into account the influence of both motivational factors and situational factors in conscious behaviour, going according to the idea proposed by Kruglanski et al. (2002).

Focusing conscious consumption and pro-environmental and social behaviour, the GFT also follows the properties described earlier and created by Kruglanski et al. (2002), taking as base also the hierarchy described by Bagozzi and Dholakia (1999),

where bigger goals are accomplished by the achievement of smaller goals (subgoals), which are accomplished by their means.

Given the cited theories and the focus on the pro-environmental behaviour, Lindenberg and Steg (2007) developed, through theory, three major goals that consumers tend to seek in their purchase process. The first one is the gain goal, which aims the preservation or improvement of an individual's resources (Steg et al., 2016). People that focuses this goal give more importance to subgoals related to their resources, like saving money, increasing the income, time waste, among others. This kind of consumer also takes into account matters like risk management and the applications of sanctions (Lindenberg & Steg, 2007).

The second major goal is the hedonic. This goal activates subgoals related to the commitment of improving the way an individual feels in a given particular situation, like avoiding effort, negative events or displeasure; self-esteem increase, among others (Barbopoulos & Johansson, 2017; Lindenberg & Steg, 2007). People that seek that goal try to feel good in the present, with a focus on the short term (Steg, 2003, 2005).

The third and last major goal is the normative, which refers to taking the appropriate action because it's the right thing to do (Steg et al., 2016). Individuals that pursue that goal have higher sensibility to what he should do, considering social and personal norms, moral obligations, social desirability (Lindenberg & Steg, 2007). It is normally linked with pro-environmental and pro-social behaviours, as the individuals that pursue this goal have a more altruistic cognitive process, putting the interests of others and the environment first. Table 1 shows a resume of the three major goals and their definitions.

Table 1
Definitions of the Goal Framing Theory's major goals

Goal	Definition
Gain	Higher concern with resources expenditure, trying hard to preserve or increase one's resources.
Hedonic	Improve the pleasure and the immediate well-being, seeking to improve the individual's current state.
Normative	Taking the right decision, aiming to respect moral matters, social norms and third-party opinions. Doing the right thing.

Note. Adapted from Lindenberg, S. & Steg, L. (2007). Normative, Gain and Hedonic Goal Frames Guiding Environmental Behaviour. *Journal of Social Sciences*, 63(1), 117-137.

Practical implications of the GFT are still rare, since it is a recent theory. The utilization of private transportation instead public was evaluated, and the findings showed that the hedonic goal is highly pursued by people who prefer the private transportation (Steg, 2003, 2005). The pollution of natural resources was also tested through the GFT, and the study evidenced a higher activation of the normative goal in people more concerned with the preservation of water and air (Liobikiene & Juknys, 2016).

In relation to the food theme specifically, one study was conducted. Its objective was to analyse the community newspapers' content related to food behaviour, to identify the goals that were activated when people read them. The ads that were analysed focused in the hedonic goal rather than health issues, and people gave more importance to questions related to pleasure instead of health (Andsager, Chen, Miles, Smith, & Nothwehr, 2015).

Studies about the consumption of organic food itself related to the Goal Framing Theory are yet to be found, showing the innovation behind the proposed studies in this work. To do so, firstly, in the next session, a panorama of the current state of the art about the motivations to purchase organic food was conducted.

In order to achieve the objectives of utilizing the GFT as a pathway to social marketing strategies, several studies were conducted. The first one aimed to analyse marketing and consumer behaviour literature through the GFT's point of view, grouping both motivations and barriers of organic food consumption and purchase into the three main goals listed by Lindenberg and Steg (2007).

The second study aimed to analyse the motivational aspects regarding the consumption of organic food, following the ideas in the work of Steg, Bolderdijk, Keizer, and Perlaviciute (2014) on the effect of values on the pro-environmental behaviour. In order to do so, both Schwartz et al. (2012) human values refined theory and López and Cuervo-Arango (2008) ecoaltruistic and egocentric values were analysed as possible antecedents of organic food purchase, in addition to an Organic Food Motivational Scale, developed through the second study, as will be shown later.

The third and fourth studies concentrated in the main objective of this work, to analyse the Goal Framing Theory as a pathway to the creation of effective marketing strategies in the organic food market. Study III focused on Lehman and Geller (2004) and Minton, Cornwell and Kahle (2016) agendas, creating purchase scenarios with different primed strategies, based on the GFT's frames.

Study IV, finally, focused on another marketing strategy, named eco-labelling (Daugbjerg & Sønderskov, 2012; Lohr, 1998). In order to understand what kind of label, created based on the two-polarized dimensions cited by Eckersley (1992), egocentric or ecocentric, is more important to the consumers in the food purchase moment, a discrete choice experiment was conducted, simulating coffee purchase. Figure 2 shows a resume of the studies, and study I is presented.

	Minor objective	Methodological procedures	Data analysis
Study I	1	Literature review	Documental analysis
Study II	2	Survey	EFA, CFA, SEM
Study III	2 and 3	Experimental design	Kruskal-Wallis, SEM
Study IV	4	Choice experiment	Clogit model, marginal wtp

Figure 2: The structure of the studies conducted in the present dissertation.

3. State of the art regarding the market of organic food

Following the main objective of this work, to analyze the usage of the Goal Framing Theory as a marketing strategy in the organic food market, the first study conducted was a literature review, aiming to collect and define the main motivators and barriers from the consumers' perspective in the organic food market.

Following the definition of the most important motivators and barriers, they were divided accordingly to Lindenberg and Steg (2007) major goals, namely: Gain, Hedonic and Normative goals. The idea behind this exercise was to give theoretical background to the next studies conducted, creating groups of consumers divided by their different motivations on buying organic food.

Study I is divided into four sections. Firstly, the theoretical background, analyzing other literature review conducted previously; the method section defines the methodological procedures used in the analysis; the results and discussion section shows the data collected, the main motivators and barriers found in literature, and also their allocation in the Goal Framing Theory's major goals; the final considerations section addresses the main findings, together with future research agenda.

3.1. Theoretical background

Organic food, or organic products, are the food not genetically modified, produced specifically without the utilization or handling of chemical components like pesticides or fertilizers, and not using genetically modified organisms (GMOs) and antibiotics in animal husbandry (Chen, 2007; Shafie & Rennie, 2012). Therefore, the organic food has less aggressive additions and more nutrients required for a life with good quality (Hsu & Chen, 2014). Because of the several food crises and the rising of the concern in relation with the food that is consumed in a global level, consumers all around the globe increased their pursue for organic food, both for individual and collective issues (Hsu & Chen, 2014; Kareklas et al., 2014; Nuttavuthisit & Thøgersen, 2017).

This advantages regarding organic products made the market grow in the last years: in a global level, it has an annual increase of 13,5% (Becker, Tavor, Friedler, &

Bar, 2016). In the United States, the organic market has more than three hundred certified products, and an estimated sales value of four hundred million dollars (Kareklas et al., 2014). Europe and Asia have experienced substantial rises in their organic market also (Hughner et al., 2007; Teng & Lu, 2016). In Brazil, there is a growth in the production and in the demand for such a product, presenting also an increase of the market (Sampaio, Gosling, Fagundes, & Sousa, 2013).

The growth of the market and the demand for organic products lead to an increase in the academic studies about the subject: from the early 2000's, several studies tried to understand this phenomenon, since production until consumption (Hemmerling et al., 2015; Hughner et al., 2007). The present study focuses in the last part: the reasons that lead people to consume, or avoid consuming, organic products.

About the theme, several studies tried to explain the influence of diverse variables in the intention and in actual purchase of organic food. Shafie and Rennie (2012) conducted a review with articles about the theme until the year of 2011, and concluded that demographic variables, like age, sex, income and schooling were largely studied, however they have no significance in the choice between organic and conventional food.

The authors divide the motivators to purchase organic food in two groups: individual aspects, like health, food security, taste, scent, freshness, looks; and collective aspects, like animal wellbeing, environmental impact, aid to small producers. At last, they observed that the major barriers that keep consumers to buy organic food is the price of the products, and the consumer's willingness to pay premium prices for that kind of food (Shafie & Rennie, 2012).

In another study that performed a state of the art research, Hughner et al. (2007) carried out a survey of studies made until 2005, seeking to understand who are the organic food consumers, and the reasons that people consume (or not) these products. The authors used the term Regular Consumers of Organic Food (RCOF) (Schifferstein & Ophuist, 1998) to define the consumers of that market. The RCOF are people with an ideology that aims both individual and collective welfare. In the individual aspect, they are concern with their health and the preparation of their own food, while in the collective aspect questions like the environment impact and animal welfare are taken into account (Hughner et al., 2007; Schifferstein & Ophuist, 1998).

As for the motivators and barriers on the purchase of organic food, fifteen topics were addressed about this matter: health concern, taste, environmental concern, food security, animal welfare, support to local economy, holistic (“more wholesome”, although there is no explanation on this variable (Hughner et al., 2007)), nostalgia and fashion as motivators; high prices, availability, skepticism with products and certificates, not enough advertisement, satisfaction with current diet and sensorial defects as barriers of consumption (Hughner et al., 2007).

The understanding of organic food purchase motivators helps in the maintenance of the market, like advertisement and public policies, whereas to understand the barriers that prevent people to become organic food consumers might decrease the gap between attitudes and behavior in that matter (Hughner et al., 2007). That vision agrees with Stern's (2000) idea that, in a choice between two products with similar characteristics, one being environmental friendly and another destructive one in nature's perspective, the tendency of all consumers is to opt for the friendly one; however, if other characteristics are different, like price or availability, they can become barriers for those consumers.

Stern's (2000) idea is also used by the Goal Framing Theory: the motivators act like attitudinal factors, that will help consumers to achieve the goals they are pursuing and can also take form as context motivators and barriers, like availability, sensorial aspects and price. As so, the adoption of the GFT seems accurate in the perspective of motivators and barriers of purchase.

The third research that analyzed the literature about the organic food consumption was conducted by Hemmerling, Hamm and Spiller (2015). The authors completed a study of the papers published between 2000 and 2011, focusing in the following marketing variables: consumers' benefit and value, consumers' cost, information and communication need and distribution and convenience (Hemmerling et al., 2015). The authors attest the growth in the number of papers along the years about the theme, showing the importance of the subject to the current literature.

Regarding the purchase motivators, the findings of this paper meet the results of Shafie and Rennie's (2012) study, dividing the motivators in individualistic (taste, health, wellbeing, etc.) and altruistic (animal welfare, environmental protection, etc.) (Hemmerling et al., 2015). The authors also pay attention to the differences that might

rise depending on the product in question, the local of purchase and the culture that is being studied, going according to the ideas of the GFT and the goals theories in general, where the situational factors might change the behaviour of an individual in their goal pursue (Lindenberg & Steg, 2007).

The final study that showed a state of the art regarding the consumption of organic food was conducted by Scalco, Noventa, Sartori and Ceschi (2017), where the authors made a survey about the application of the Theory of Planned Behaviour (TPB) (Ajzen, 1991) on the organic food purchase behaviour. The authors conclude that the TPB has great robustness in this kind of study, and also a mediation effect of subjective norms to individual attitude in the analysed context. Finally, the addition of other variables is endorsed by the authors, as so by Ajzen's (1991) work.

The papers showed several issues in agreement regarding the motivators and barriers that impact the intention and actual purchase of organic food. These researches also pay attention to the needs of future studies where these several factors might be analyzed together (Hughner et al., 2007; Shafie & Rennie, 2012). In view of these suggestions, in the present study a new survey was conducted with the most recent papers, between the years of 2011 and 2017, to describe and compare the factors listed in these studies, and secondly analyze the results found based on the goals system theories.

3.2. Method

A search for articles about organic food and its consumption was conducted in five major data bases: Emerald Insights, EBSCO, JSTOR, Science Direct and AgEcon, the same data bases included by Hemmerling et al. (2015), with an additional search in Google Scholar base, intending to find other articles that did not belong to the cited bases. The terms used were “organic food”, “consumer” and “consumption”, used both individually and together. Also, there were an age filter for the articles (only articles from 2013 to 2018 were analyzed).

These conditions resulted in a list of 427 papers. This list was firstly analyzed by the theme of the papers, and this analysis showed that the majority of this works had no analysis on marketing and purchase as aspects, being papers from other scientific areas,

such as health (nutrition and medicinal issues, for example) and biology (agribusiness and agronomy, for example). These 427 papers were then analyzed one by one, in order to filter only the ones regarding the consumer motivations and barriers in the organic food purchasing and consumption.

These new conditions resulted in 183 papers matched. The little participation of Brazil among the studied countries must be addressed, since only three articles were found (Barbosa, Aguiar-Oliveira, Oliveira, & Maldonado, 2015; Hoppe, Vieira, & Barcellos, 2013; Thøgersen, Barcellos, Perin, & Zhou, 2015). As the search conducted only used English terms, it is possible that more articles were published in Portuguese, but, as the objective was to analyze the English-based literature of the theme worldwide, only these three articles found were considered. From the first list of 183 papers, a second analysis was conducted to filter the empirical works on the analysis of motivations and barriers, totaling 167 papers. The results are shown next.

3.3. Results and discussion

A descriptive analysis of these works shows that the most studied countries were Germany, United States, India and China. Figure 3 shows graphically these analyses. It is also important to address the big participation of Asian countries in the pool. India (13 articles), China (11 articles), Malaysia (7 articles) and Taiwan (also 7) showed a big participation among the studied countries, with a big growth since 2014. Comparing the results on the state of art conducted by Hughner et al. (2007), the growth on the number of studies on emerging countries is evident.

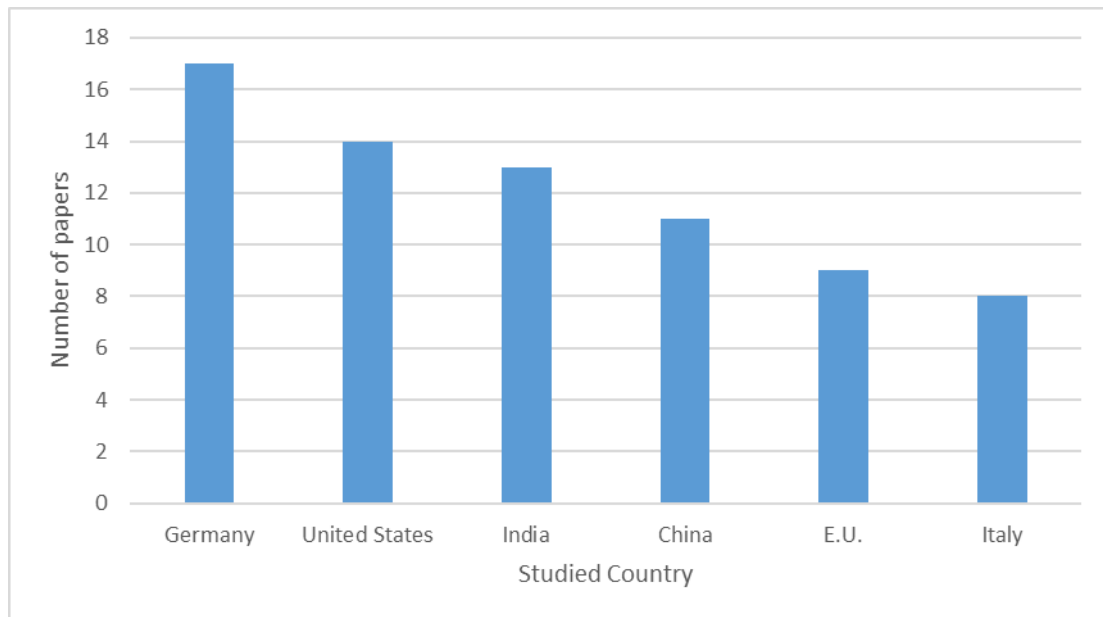


Figure 3: Organic food consumption by countries studied.

Although the importance is evident, Latin American countries had little participation, with Brazil (2 articles) and Chile (1 article) being behind countries like Thailand and Romania (3 articles each). That data indicates a necessity of more studies in the Latin America region, since there are countries in that area that are relevant to the organic agriculture economy: Argentina, for example, is the second country with more organic production area, and Peru, besides its geographical and demographical size, is one of the most important countries regarding the organic consumption and cultural importance of this product (Willer & Lernoud, 2018).

Regarding the journals that publish about organic consumption (figure 4), the British Food Journal (20 papers), the Food Quality and Preferences (9 papers), and the Appetite (8 papers) were the journals with the most publications, followed by the Journal of Cleaner Production, the Journal of Food Products Marketing and the Organic Agriculture, with four papers each. Fifteen journals published two articles, and 95 published one article, showing a big distribution between journals.

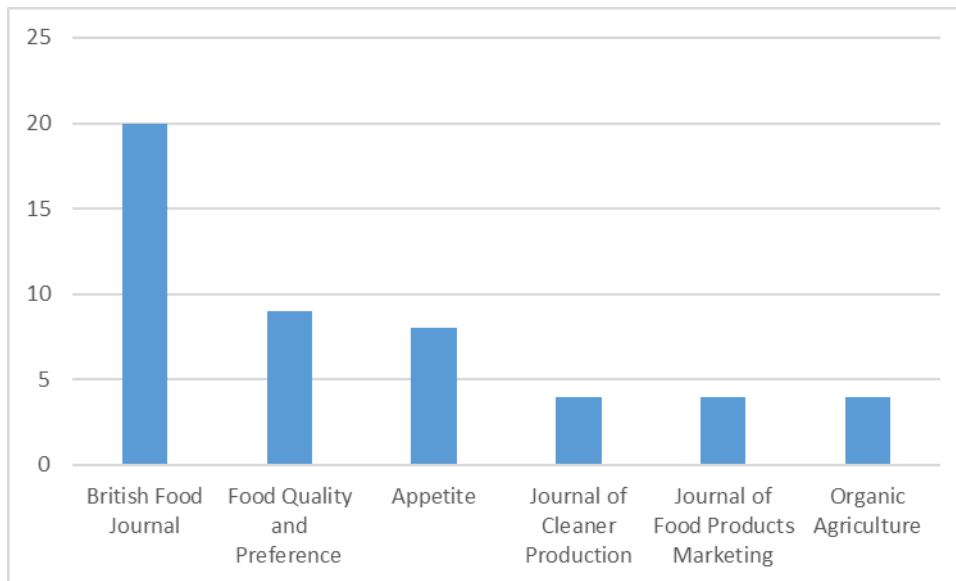


Figure 4: Organic food consumption publications by journals.

Regarding the methodological approaches used in the 167 papers, 79,1% of them used a quantitative approach, 15,8% a qualitative approach, and 5,1% used both qualitative and quantitative methodologies. Besides, 76,6% of the studies used survey as main research design, and 14,4% used semi structured interviews.

Another analysis that can be made inside this data is the most used theories to study organic food consumption. Among the 167 empirical papers, the Ajzen's (1991) Theory of Planned Behavior was the most used theory in the data. Fourteen articles utilized the TPB (8.3%) to study the intention and actual purchase of the product. The importance of that theory was attested by the study conducted by Scalco et al. (2017). Also, the theory was greatly used because of its capacity to accept modification, with the possibility of inclusion of other constructs in the model. It is the case, for example, of Nuttavuthisit and Thøgersen (2017), where the authors tested the model with the trust variable impacting the intention and purchase of organic food.

Another theory highly used in the study of organic food is the Schwartz' (1992) theory of basic human values. Values are desirable situational ends, that vary in importance, and serve as principles in an individual's life (Schwartz et al., 2012). In resume, values showed themselves as a good moderator variables (Mørk, Bech-Larsen, Grunert, & Tsalis, 2017; Thøgersen, Barcellos, Perin, & Zhou, 2015; Thøgersen, Zhou, & Huang, 2016). This analysis matches Steg, Lindenberg & Keizer's (2016) view on the

capacity of human values to help explaining pro-social and pro-environmental behaviors through the goals system perspective, and will be explored in Study II.

3.3.1. Theory analysis regarding organic food purchase motivators and barriers

This topic concerns the analysis of the factors that act like motivators or barriers in the consumption or intention to buy organic food. To achieve that, the papers that had as main objective to explore the motivators and barriers on the organic food consumption were separated, and 88 articles filled these requirements. These final 88 papers were analyzed, and the main factors of influence in the literature are summarized in table 2.

Table 2

Main influencing factors in the organic food consumption and purchase

Motivator factors	# of articles	Barrier factors	# of articles
Health	38	Price	20
Environment protection	28	Lack of knowledge	15
Quality of the product	18	Lack of availability	12
Lifestyle, diet, culture	9	Lack of trust	12
Food security	8		
Local economy support	4		
Animal welfare	2		

The most cited organic consumption motivator was the individual health issue, found in 38 studies. Consumers see organic food as products free of chemical materials used in the conventional production (Irianto, 2015; Zagata, 2014). They perceive the impact of their diet in themselves, influencing in humor, immunity and disease protection (Florczak & Rembia, 2015; Lim, Yong, & Suryadi, 2014).

It is relevant to emphasize that, regarding the impact of organic diet in health, the consumer's concern addresses both their own health as the health of close people, like family and members of their residence (Hoppe et al., 2013; Janssen, 2018; Vietoris et al., 2016; Xie, Wang, Yang, Wang, & Zhang, 2015).

As predictor of purchase intention, several papers found health as the main motivator in organic consumption, directly or indirectly related to the phenomenon (Aertsens et al., 2011; Bruschi, Shershneva, Dolgopolova, Canavari, & Teuber, 2015; Florczak & Rembia, 2015; Haas, Sterns, Meixner, Nyob, & Traar, 2013; Hoppe et al., 2013; Lim et al., 2014; Mi & Park, 2014; Petrescu & Petrescu-Mag, 2015; Wee et al., 2014). The health issue related to organic consumption can be defined as the concern of the consumer with his physical and mental integrity and well-being, considering the concern for himself and for his family. This concern, that addresses the well-being in all short, medium and long terms, is one of the great factors that motivates the consumption of organic food.

Although the main reason found for organic food involves individual aspects, the second most cited was the environment concern. Thus, 28 articles found this factor as an important matter in the organic food consumption. As the chemical products utilized in the conventional agriculture impact in the individual level of the individuals health, they also have a negative impact in the environmental welfare (Eves, Lumbers, & Morgan, 2012; Pearson, 2012).

In the found studies, the environmental concern is important in the attitudes and perception explanation regarding organic food (Hoffmann & Schlicht, 2013; Janssen, 2018; Thøgersen & Zhou, 2012). The environmental issue is used in advertisement and public policies that addresses the organic consumption, and their impact are relevant in the consumer's attitudes and perceptions (Laheri & Arya, 2015).

The third most cited factor as motivator to organic consumption was the quality of the product. This factor involves issues related to sensorial aspects of the product, like appearance, smell, and taste (Skulskis & Girgzdiene, 2013; John Thøgersen & Zhou, 2012). The taste of the food was found to be the most important sensorial aspect in several studies (Hughner et al., 2007; Lobo & Chen, 2012; Qendro, 2015; Zakowska-Biemans, 2011).

The product quality also involves the nutritional content issue. In some studies, organic food are of higher quality by having nutrients for a healthy diet in larger quantities than conventional food, which rises its quality (Chen & Lobo, 2012; Lee & Yun, 2015; Lobo & Chen, 2012). Following this reasoning, the relation between perceived product quality can be argued to have a relation with the consumer's health

concern. The quality issue can be defined, thus, as the consumer's perception regarding both sensorial (appearance, taste, smell, texture, etc.), and nutritive aspects of the organic product.

The lifestyle, diet style and culture were factors found to be also relevant in the organic food consumption literature. Diets related to a healthy foods, vegetarianism and veganism are some of the life styles identified as motivators of organic food (Olivas, Díaz, & Bernabéu, 2013; Tung, Tsay, & Lin, 2015). Besides, life styles related to the sport practice and relaxing were also found as influencers of organic food consumption (Goetzke & Spiller, 2014).

The food safety is the next reason to be considered. The concept is intimately connected to the health issue, and involves the belief that organic food are more safe for having less chance of transmission and contagion of food related diseases (Hughner et al., 2007; Zakowska-Biemans, 2011). The food safety also involves the consumer perception that organic food are free of pesticides and chemical additives, which can cause several diseases (Mostafalou & Abdollahi, 2017; Rainey et al., 2011).

Studies show that the search for healthier food, with less contaminants, is a factor that motivates the organic food consumption also for increasing the consumer's willingness to pay premium prices for these products, decreasing the importance of the price barrier in the consumption itself (Hwang, 2015; Wee et al., 2014).

The support for small producers and for the local economy was also a relevant factor identified in the literature regarding the consumption of organic food. This issue evolves both the economic impact as the social impact of consumption, in addition to the importance given to traditional methods of food's conservation and preparation (Haas et al., 2013; Hughner et al., 2007).

The support to the local producers shows the social impact of the food industry and the organic food consumption, and was found important motivator in the papers that addressed the issue (Annunziata & Vecchio, 2016; Haas et al., 2013; Shaheen, El-nakhlawy, & Al-shareef, 2013). The studied consumers feel more trust and more prone to the organic consumption when they see that the product in question was locally and organically produced (Rainey et al., 2011).

Finally, the last factor identified was the animal welfare. Only two studies addressed the theme, and that low production might be explained for the larger number of studies regarding the consumption of vegetal foods, like fruits and vegetables. Despite the low number of publications, the factor was identified as really important in the organic food consumption analysis, especially in the consumption of meat and eggs (Wee et al., 2014). The animal welfare is a factor found to be more important to regular consumers of organic food in comparison with occasional buyers, indicating that there is a relation between this factor and frequency of purchase (Krömker & Matthies, 2014).

Once the main motivators of organic purchase were cited one by one, the factors that diminish the probability of that purchase are now addressed. Defined as consumption barriers, the understanding of that matter can also help understanding organic consumers (Buder, Feldmann, & Hamm, 2014; Nuttavuthisit & Thøgersen, 2017). Four main factors were identified in the literature regarding the consumption of organic food. The most cited of those, by the number of studies, is the price of organic food. For several authors, organic food are considered premium price products, that is, products with less attractive prices in relation to its competitors, in this case, conventionally produced food (Aschemann-Witzel & Zielke, 2015; Becker et al., 2016; Buder et al., 2014; Frýdlová & Vostrá, 2011; Mohamed, Chymis, & Shelaby, 2012).

Although none of this studies verify empirically if organic food prices are in fact higher in comparison to conventional food, there is a belief that the organic products have premium prices (Aschemann-Witzel & Zielke, 2015; Henryks, Cooksey, & Wright, 2014), and this would be a consumer delimiter in both developed and emerging countries (Meixner, Haas, Perevoshchikova, & Canavari, 2014).

The premium price as a barrier involves also income and willingness to pay issues (Frýdlová & Vostrá, 2011; Lim et al., 2014; Mohamed et al., 2012). It was also studied as barrier among the organic consumers, and the main justification to keep purchasing conventional food (Buder et al., 2014).

The price issue had a paper, conducted by Aschemann-Witzel and Zielke (2015), that elaborated a state of the art regarding the price as a consumption barrier, and discusses the main issues involving the theme. The authors concluded that the importance of the price varies from country to country, showing the need of research to address the phenomenon importance, and for comparison purposes. In the specific case

of Brazil, the consumers see the organic prices higher than the conventional products, and consider the price difference the main barrier in the organic consumption (Hoppe et al., 2013).

The second main barrier regarding the consumption of organic food was the lack of knowledge, or the disinformation about the organic products. This factor involves insufficient advertisement and information about the products, which has already been empirically analysed and shown as important in the consumer's perception (Hughner et al., 2007; Kiesel, 2012; Leong & Paim, 2015).

The lack of knowledge issue is related to the lack of information provided to the consumers regarding the organic products, both for nutritional content and information contained in their label (Henryks, Pearson, Anisimova, & Sultan, 2015; Meixner et al., 2014).

Accordingly to evidences from emerging countries, the consumers' lack of knowledge is greater in comparison to countries where the organic market is well established, and it affects negatively the attitudes and behaviour related to organic consumption (Leong & Paim, 2015; Xie et al., 2015). In the specifically Brazilian case, consumers have low degree of knowledge about organic food, which, as shown before, decreases the search and consumption (Barbosa et al., 2015).

The availability of organic products is also a barrier regarding consumption behaviour, involving, besides the issue related to the existence of the products for the purchase, the variety of available organic products (Aschemann-Witzel & Aagaard, 2014; Henryks et al., 2015). As the case of the premium price, the lack of availability and diversity are barriers that make even the organic food consumers to keep purchasing conventional food (Buder et al., 2014).

Some studies understand that availability is one of the main obstacles that enlarge the gap between attitudes and behaviour regarding organic food purchase. Even positive attitudes, willingness to pay and knowledge cannot guarantee the purchase if there is no availability or diversity of organic products (Aschemann-Witzel & Aagaard, 2014; Suh, Eves, & Lumbers, 2012).

Another issue addressed as a barrier in the organic food consumption is the consumers' lack of trust regarding these products. This factor shows as a great

disadvantage of the market in general, since, in cases of scandals and market frauds, the consumers tend to stop believing in the positive impact of their behaviour easily (Nuttavuthisit & Thøgersen, 2017; Thorsøe, Christensen, & Povlsen, 2016).

The lack of trust specifically in the organic market have two principal focus. The first one is the mistrust in the product itself, its quality and its real impact in health, showing a relation to the lack of information and knowledge (Skulskis & Girgzdiene, 2013). The second focus is related to the product's labels and certificates of authenticity. These certifications exist to attest the quality of the organic product and its means of production, however there is a mistrust regarding these certificates, both in emerging and developed countries (Krömker & Matthies, 2014; Nuttavuthisit & Thøgersen, 2017). Even comparing several seals of different countries and organizations, consumers have different levels of trust for each one of them (Janssen & Hamm, 2014).

As occurred with the motivator factors, some barriers cited by Hughner et al. (2007) were not found in the most recent studies: the satisfaction with the current diet and appearance defects. The first one might be included in the lifestyle factor, as a more conservative life style, where the seek for new food products is not important (Nie & Zepeda, 2011). This point of view gives the lifestyle factor an ambiguous character that can be identified both as motivator and barrier.

These several factors that influence both positively and negatively the consumption of organic food will be analysed based on the goal system theories, more specifically the Goal Framing Theory, trying to encompass them in the three main goals: gain, hedonic and normative.

3.3.2. Application of the Goal System Theories in the consumption of organic food

As attested previously, the goal system theories, including the Goal Framing Theory, have an specific hierarchical order: means (behaviours) take to the achievement of subgoals, that lead to the success to achieve higher goals (Barbopoulos & Johansson, 2017; Kruglanski et al., 2002; Kruglanski & Köpetz, 2009; Lindenberg & Steg, 2007).

This work analyses a specific mean to achieve goals: the consumption of organic food. Departing from this mean, several reasons exist related to consume them or not, which will be treated as subgoals. For example: a subgoal nominated “not to pay

premium prices for food” achieves the gain goal, saving up resources, and the mean to achieve that subgoal would be “not consuming organic food”, as they are considered more expensive.

Studies that used the Theory of Planned Behaviour (Ajzen, 1991) to analyse the consumption of organic food found a significant impact of social norms in the intention of organic food purchase (Irianto, 2015; Nuttavuthisit & Thøgersen, 2017). Thus, this factor will be included, although had not being listed previously. Subjective social norms are the a person’s perceived social pressure in acting or behaving in a certain way (Ajzen, 1991).

The several factors listed are now analysed based on the GFT three great goals. The first analysed goal is the normative. Factors connected to issues related to duties of a person to the society must be considered subgoals for the normative goal. By the Ajzen's (1991) definition of social norms cited previously, the factor should be included as a normative subgoal. As well as social norms, the environmental concern, the support of the local economy and the animal welfare are also considered normative subgoals. Also, the moral norms are related to behaving in the right way, being, thus, related to the normative goal, and also have an important impact in the pro-environmental behaviour (Stern, Dietz, & Black, 1986).

Since these kind of concern is considered pro-social and pro-environmental, in addition of being altruistic, it is concluded that the importance given to those subgoals is related to the correct and expected behaviour (Kareklas et al., 2014; Magnusson, Arvola, Hursti, Åberg, & Sjöden, 2003).

The gain goal is related to the recourse expenditure. People that are inclined to this goal are more sensitive to changes in their economic status, focusing in the short and medium term, objectifying to raise or save their resources or their efficiency (Lindenberg & Steg, 2007). Therefore, motivators and barriers connected to the expend or economy of resources, or the willingness to spend them, must be analysed as subgoals related to the gain goal.

Consumers show themselves more prone to spend their resources if they consider organic food to have a higher level of utility or valour (Lim et al., 2014). This definition implies the relation between willingness to pay, lack of trust and lack of information. In the case of consumers that do not purchase organic food for the fact that

they don't want to spend their money in a product that they don't trust, this consumer endorses the gain goal (Aschemann-Witzel & Zielke, 2015; Lindenberg & Steg, 2007). The same reasoning might be applied in matters involving the lack of information that the consumer has about the products in question. In short, regarding the gain goal, the identified subgoals in the literature were the willingness to pay, lack of trust, and willingness to seek information.

The carefulness in spending money is addressed in the organic food purchasing theory as an important barrier, as a matter of economy, trust and lack of information. Kareklas et al. (2014) named this phenomenon as frugality. In this study, the authors a negative relation between frugality and organic purchase. Frugality will be treated as subgoal of the GFT's gain major goal.

Finally, the hedonic goal is related to how an individual seek to increase his pleasure in a particular situation, concerning exclusively with the short term (Lindenberg & Steg, 2007). In other words, the hedonic goal is about "feeling good now" (Steg, Lindenberg, & Keizer, 2016, p. 182).

From this definition, the main factors related to the organic food consumption identified as potentials hedonic subgoals were the quality of the product and food safety, besides the health concern and the availability and variety of products. The product quality, linked with sensorial issues about the product itself, like taste, odour and appearance, influences the organic food consumption by the pleasure that consumers get by perceiving this qualities (Asioli et al., 2011; Lobo & Chen, 2012).

The availability of organic products is translated in this analysis as the willingness to seek this kind of products and is also linked with the hedonic goal. It can be argued that an individual might not consume organic food because by looking for them would decrease his immediate well-being, opting then for competitors that are easier to find (Lobo & Chen, 2012). This consumer is concern about its immediate pleasure, not seeking to annoy himself with the search for a specific product.

In relation to food safety and health, as defined before, these subgoals are related to the consumer's concern with diseases and a good and healthy life, in addition to decrease the difficulties that can come with the conventional food products and the well-being that comes with a healthier nourishment (Florczak & Rembia, 2015; Hoppe et al., 2013).

However, given the definition of the hedonic goal, where the individual seek only to improve of the short term (Lindenberg & Steg, 2007), long term issues, like bigger longevity and risk of infection management, linked with the consumption of organic food (Barbosa et al., 2015; Kareklas et al., 2014), are not encompassed by the hedonic goal.

The issues related to health and food security in the long term, thus, cannot be included in the Goal Framing Theory main goals without an adaptation, as they are linked with wellness, but are not oriented to the short term. In order to cover all the factors listed as relevant in the organic food consumption, the present work proposes a fourth and new main goal, named wellness goal, where the subgoals related to health and food security are considered. The next section discourses about this new main goal.

Adaptations of the main goals have already been carried out in recent literature, in order to improve the theory capacity of interpretation of the reality. Dijkstra, Kretschmer, Lindenberg and Veenstra (2015) defined three goals: hedonic, normative and instrumental, adapting the gain goal. Gölz and Hahnel (2016), based on the GFT, created their own goals: having fun, learning to save electricity, controlling and reducing costs, avoiding inconvenience.

3.3.3. The wellness goal

With all that stated, this work opted to add a fourth goal to the Goal Framing Theory. The proposed wellness goal intents to cover all the subgoals related to the long and short terms related to health concerns, like the prevention of diseases and longevity of human life.

Health concern and food security are major motivators for the consumption of organic food (Goetzke, Nitzko, & Spiller, 2014; Goetzke & Spiller, 2014; Hughner et al., 2007; Shafie & Rennie, 2012). In the same way, long term impacts are relevant to the organic food consumption (Bénard et al., 2018), showing the necessity to address the theme when discussing the consumption of this product.

It becomes important, thus, to define what are considered health and food security aspects in this work. The health issue was defined previously as the concern of the consumer with his physical and mental integrity and well-being, considering the

concern for himself and for his family, in both short and long terms. Food security, in its turn, involves the belief that organic food are more safe for having less chance of transmission and contagion of food related diseases, for both having more nutrient content and being free of chemical products (Hughner et al., 2007; Rainey et al., 2011).

In order to simplify the view of these two factors, they will be treated as one large factor called health impact. Although there is a separation between health and food security, it is possible to understand that the impacts of food security are mostly related to health concerns: minor chance of disease transmission, risk of health management and minor impact of chemical compounds (Hughner et al., 2007). As stated by Hughner et al. (2007) and Squires, Juric and Cornwell (2001), the food safety's definition itself isn't a concrete concept, leaving researches to make their own interpretations. Rather than separate in health issues and food security, these two factors will be treated as one.

Several subgoals found in literature are linked with the health concern. Goetzke and Spiller (2014) addressed that the consumption of organic food is linked with an active way of life, sports practice, beauty and appearance and disease prevention. Other papers use the health consciousness construct (Husic-Mehmedovic, Arslanagic-Kalajdzic, Kadic-Maglajlic, & Vajnberger, 2017), and the health beliefs (Apaolaza, Hartmann, D'Souza, & López, 2018). There is also the mental health construct, addressed by Goetzke and Spiller (2014), related to having a mental relaxation because you, and maybe your family, are eating safe food.

To address these matter in the present work, the starting point to describe health subgoals will be Steptoe, Pollard and Wardle's (2013) Food Choice Questionnaire. In this instrument, the authors cite several factors that motivate people on buying their daily food. Four of the nine factors are related to the health aspects discussed previously: health, mood, natural content and weight control.

The health factor includes nutritional questions, like “contains vitamins and minerals” and “contains protein”. In this work, this factor will be considered the nutritional subgoal, which is pursued by people that by organic food looking for its nutritional benefits, seeking by this action an improve in their health, and, by consequence, succeed in the wellness major goal.

The mood factor in the Food Choice Questionnaire addresses questions about stress, relaxation and alert. These questions impact in one individual's health, and might

influence in any food choice, including the organic or conventional choice (Steptoe et al., 2013). The mood subgoal might have an immediate impact in the pleasure one is feeling at any moment, being, by this, included in the wellness major goal.

The natural content factor includes items related to the usage of additives and artificial ingredients in food. Speaking specifically of organic food purchase, this factor might be enlarged to address questions of pesticides and GMOs (Meyer-Höfer, Nitzko, & Spiller, 2015). This factor will be treated as the food safety subgoal, as it is related to the way food is produced, whether it is a secure way or not. As people that seek this subgoal are thinking about their health, this subgoal might be related to the proposed wellness major goal.

The final factor analyzed from the Food Choice Questionnaire is the weight control, related to issues like calories and fat. This factor is related to the idea of beauty cited by Goetzke and Spiller (2014), and it is related to the aesthetic side of the organic food consumption. Related to any person's immediate well-being, this aesthetic subgoal is related to the proposed wellness goal.

In addition to the four subgoals extracted from the Steptoe's et al. (2013) Food Choice Questionnaire, a subgoal related to the forward thinking health impacts must be addressed too, considering the discussed relevance of this matter to organic consumers (Bénard et al., 2018). The future impact subgoal is related to consumers that think about the future consequences of their behavior, and by doing it they show a preference for products that have a positive impact in their longevity and quality of life in the future (Bénard et al., 2018; Strathman, Gleicher, Boninger, & Edwards, 1994).

These five subgoals are believed to address the health issue regarding organic food, both in the short and long terms. In addition to the food's sensorial quality and the willingness to seek for organic food, these subgoals form the proposed wellness major goal. Table 3 shows a summary of the three proposed major goals to explain the organic food consumption in this work, in addition with their respective subgoals. It is important to address that a subgoal might impact different goals (Bagozzi & Dholakia, 1999; Kruglanski et al., 2002; Lindenberg & Steg, 2007), but a theoretical separation must be done as a starting point.

The goals here addressed go in a small disagree with the Goal Framing Theory's idea that, while the normative goal affects positively the wanted pro-social/pro-

environmental behavior, the hedonic and gain goals generally affect it negatively, as this kind of behavior is “boring and expensive” (Steg et al., 2016). However, with the creation of the wellness goal, it is certain that the health concern affects positively the consumption of organic food, as stated previously in this work. This observation brings to light the necessity to verify the application of the goal system theories case by case, because the effect of a goal in a certain behavior might be positive or negative, and a generalization cannot be made. With the major goals and subgoals defined for this study, the theoretical model of the research might be proposed. In the next session, this model is explained.

Table 3
Summary of the proposed goals and subgoals

Wellness Goal	Nutritional
	Mood
	Food Safety
	Personal Aesthetic
	Future Impact on health
Hedonic Goal	Product Quality
	Willingness to Seek for Organic Food
Normative Goal	Social Norms
	Moral Norms
	Environmental Concern
	Support to Local Economy
	Animal Welfare
Gain Goal	Willingness to Pay
	Lack of Trust
	Lack of Information
	Frugality

In order to complete the analysis of the organic food consumption literature, the next section uses the defined subgoals to analyze the Brazilian literature about the organic food consumption, with two main motivations: first, to analyze if these papers might show new subgoals not covered in the international literature; secondly, to try to cover all the motivations that the Brazilian consumers have to purchase and consume

organic food, in order to analyze if the proposed goals and subgoals are really sufficient to address the objective of this work, namely, create a integrative model to analyze the organic food consumption.

3.3.4. Analysis of the Brazilian literature regarding organic food consumption

Another literature analysis was conducted, now with studies conducted and published in Brazil. As stated before, the aim of this section is to analyse Brazilian literature under the proposed adaptation of the Goal Framing Theory and its four major goals: normative, hedonic, gain and wellness.

The literature research was conducted in the *Periódicos Capes* database, covering the same keywords of the international literature’s research: “*alimentos orgânicos*” as the first; “*consumo*” or “*consumidores*” as the second. Only five-year-old (from 2014 to august 2018) Brazilian papers were considered for this analysis. In a first search, 892 articles were identified in the described terms. However, the majority of them was excluded from this analysis, as they had different approaches than consumer behaviour: agriculture techniques, nutrition and technological innovation were the main themes addressed in those articles.

Focusing only in consumer behaviour and marketing articles regarding the purchase of organic food and its motivations and barriers, only twelve papers were considered in the Brazilian literature. Table 4 summarizes the main findings regarding the motivations and barriers that the literature pointed out in Brazil.

Table 4
Main findings regarding the motivations and barriers of Brazilian organic food consumption

Barriers	Major goal	References
Price/willingness to pay	Gain goal	Ferreira and Coelho (2017); Terra and Costa (2017); Varella and Souza-Esquerdo (2015)
Willingness to Seek for Organic Food	Hedonic goal	Silva, Oliveira, Souto, and Alves (2017); Terra and Costa (2017); Varella and Souza-Esquerdo (2015)
Lack of information	Gain goal	Silva et al. (2017); Terra and Costa (2017);

Motivators	Major goal	References
Nutritional	Wellness	Oliveira and Hoffmann (2015); Terra and Costa (2017)
Future Impact on health	Wellness	Pinheiro, Carneiro, Pinheiro and Nascimento (2018); Silva-Lacerda, Vasconcelos, Silva and Abreu (2016)
Food safety	Wellness	Braga Junior, Veiga Neto, and Moraes(2014); Pereira et al.(2015); Torquato, Cândido and Ramalho(2015)
Product quality	Hedonic	Braga Júnior et al. (Braga Junior et al., 2014)
Environmental protection	Normative	Barcellos, Bossle, Perinand Vieira(2015); Zamberlan, Sparemberger, Cappellari, Sausen, and Baggio (2017)

Table 4 shows that, despite some considerations and an environmental protection level (Barcellos et al., 2015; Zamberlan et al., 2017), the Brazilian consumer of organic food seems, based on the found studies, to give more importance to the health and safety issues addressed by the proposed wellness goal.

Goals related to animal welfare, mood, personal aesthetic, social and moral norms, support to local economy, lack of trust and frugality were not found on the Brazilian literature. However, the low number of studies could have contributed to this, showing a necessity of more research regarding the country.

As the main objective of the Brazilian literature analysis, all of its motivators and barriers seem fitted on the proposed four major goals (gain, hedonic, normative and wellness). Since no need to adapt the proposed goals was found, next section approaches the theoretical model of this research.

3.4. Final Considerations

Comparing the present research of the state of the art regarding the organic food with the ones previously published, it is possible to observe that the main motivators and barriers did not change over the years: individual health is a major motivator, together with environmental protection and animal welfare.

Instead of dividing the motivators and barriers of organic food purchase in two groups, altruistic (concerned with collective issues) and individualist (concerned with individual impact) as done by Shafie and Rennie (2012) and Hemmerling et al. (2015), this research proposed a new way to group these dimensions, through the Goal Framing Theory.

As stated, the theoretical analysis of the motivators and barriers related to the organic consumption showed that the health and food security issues, two of the most important motivators regarding the studied behavior, were not satisfactorily placed in one of the three previously proposed by Lindenberg and Steg (2007) major goals. The answer for this question was the creation of a new major goal, named wellness.

The wellness goal groups all the concerns consumers might have regarding their own health, or the health of their family. Issues related to nutritional value of their food, the future impact on the individuals' health and food security were all grouped in this new major goal.

As stated before, several studies used adaptations from the Goal Framing Theory to be able to address in a holistic way their studied behaviors (Dijkstra et al., 2015; Götz & Hahnel, 2016). In a similar way, the theoretical analysis conducted in this study showed the necessity to create a new major goal, which must be analyzed in future studies, as the ones presented next in this work.

In short, the literature analysis conducted in this paper helped in the understanding of the organic consumers' motivations and barriers regarding the consumption of this product and proposed that four major goals must be addressed when studying the organic food market: gain, hedonic, normative and wellness goals. This new division was used as bases for the next study, where the motivational issues regarding the organic food consumption were analyzed, together with human values.

4. Study II: Analyzing the motivational factor: the role of values and subgoals in the consumption of organic food

The main objective of the second study was to analyze the organic food consumers regarding their intrinsic motivations, and how these motivations affect their consumption behavior. In order to achieve this, a survey was conducted to gather data regarding the consumers' given importance to issues related to organic food motivators and barriers to its consumption, addressed and defined on study I.

Also, this study analyzed the motivation issue based on Steg et al. (2014) idea that values are an important way to understand how people focus on a specific goal, and why individuals behave in certain ways. Bringing this idea to the present work, values were studied through the lens of two different theories: basic human values, defended by Steg et al. (2014) based on Schwartz (1992) proposed theory; and ecoaltruistic and egocentric values, following the findings of Shafie and Rennie (2012) and Hemmerling et al. (2015), in which they divided the motivations driven the organic consumption in two groups, individual and collective.

In addition to values, based on the hierarchical properties of the goal achievement theories (Bagozzi & Dholakia, 1999), an instrument was developed, based on several already created scales, to measure four subgoals, which one related to the four major goals defined in study I: gain, hedonic, normative and wellness. This instrument was created in order to analyze the impact of values in the consumers' importance given to this four subgoals, and serve as base to future research. Study II is divided in five sections: theoretical background, method, results, discussion and final considerations.

4.1. Theoretical background

Both Steg et al. (2014) and Lindenberg and Steg (2007) papers addressed the importance of two main groups of variables that impact the behavior of individuals: motivation and situational issues. In short, motivation issues are intrinsic to the person, and deals with her interpretation of a particular subject, or desired behavior; situational issues, on the other hand, are external from the individual, and aim to change people's main aimed goal and, consequently, their behavior.

This paper focus on the effect of the motivational part only on the behavior of individuals: analyzing how the way that one person thinks, or the subjects they find as important impact their behavior, specifically the organic food purchase behavior. To analyze how consumers' motivation affect their goal achievement structure and, consequently, their behavior toward organic food purchase, this paper analyzes the values theory, following Steg et al. (Steg et al., 2014) proposed model.

Accordingly to López and Cuervo-Arango (2008), several environmental problems might be related to how people see the world and what is important to them, turning it important to analyze this matter. In this perspective, the values and beliefs people share become important issues to analyze when aiming for behavioral change toward environmental and social behaviors.

Values are “desirable goals, varying in importance, that serve as guiding principles in people’s lives” (Schwartz, 1992). Steg et al. (Steg et al., 2014) defended that values are different from goals, as they are not changeable in situations, being stable over time, but have influence on how people construct their hierarchical goal structure and which goal will be more intense pursued in a specific situation.

In a hierarchical approach, it is possible to assume that values are deeper than goals, being the guides that drive people to seek a determined goal, subgoals and, consequently, defines their behavior. The analysis of this hierarchical relationship between values and goals is the main objective of this paper, analyzing how values impact determined subgoals related to food purchase.

In order to achieve this objective, this study used two theories of values. The first one was Schwartz' (Schwartz, 1992) basic human values. The author defined several types of human values, defined in ten motivational types of values: universalism, benevolence, tradition, conformity, security, power, achievement, hedonism, stimulation and self-direction. Twenty years later, the human values theory was refined, and a new structure of motivational types was showed by Schwartz et al. (Schwartz et al., 2012), as shown in figure 5.

The new structure shows not only that ten initial ten motivational values were transformed into nineteen, but also that they were allocated in different groups, depending on their definitions and impacts on human behavior, defined by Schwartz et al. (Schwartz et al., 2012) as higher order values. Three levels of higher order values

were defined, and the first one was used in this research for its hypothesis and analysis, with its four higher values.



Figure 5. The refined structure of human values.

Note. Schwartz et al. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology*, 103(4), 663-688.

The first higher order value is defined as openness to change, and its values “emphasize readiness for new ideas, actions, and experiences”, contrasting with conservation values, that “emphasize self-restriction, order, and avoiding change” (Schwartz et al., 2012). In other words, openness to change values are related to a person that is open to new experiences, including products and services, while the conservation values are related to people that are seeking to maintain their current behaviors.

The other two higher order values are also in a polarized structure: self-enhancement values are related to one’s importance given to his own interests and growth, while self-transcendence values are connected to a collective view, and importance given to others (Schwartz et al., 2012).

Regarding the objective of the present research, several questions might be addressed regarding Schwartz' basic human values and the consumption of organic food. The first one is related to the discussion about individual and collective reasons why people buy organic food (Hemmerling et al., 2015; Shafie & Rennie, 2012). As stated in study I, the two main motivators driving people to purchase this product are individual health (individual motivator) and environmental protection (collective motivator). Following the idea that human values drives human behavior and their pursue for determined goals (Schwartz et al., 2012; Steg et al., 2014), its plausible to assume that the four higher order values have impact on the goals that people seek in their food purchase actions. Thus, hypotheses 1 states that:

H1: Higher order human values have a significant impact on motivation aspects of food purchase (Schwartz et al., 2012; Steg et al., 2014).

Following the previous discussion, it is possible to assume that human values linked with both nature concern and conservation of personal security and health have a positive impact on organic food consumption. Thus, the following hypotheses are constructed:

H2: Conservation values have a significant and positive impact on organic food consumption (Hemmerling et al., 2015; Shafie & Rennie, 2012).

H3: Self-transcendence values have a significant and positive impact on organic food consumption (Aragão, Alfinito, & Antunes, 2017; Thøgersen & Ölander, 2002).

The effect of self-transcendence values, mainly universalism values, in pro social-environmental behavior were already tested in the literature and had significant results, as stated by Thøgersen and Ölander (2002) and Aragão, Alfinito and Antunes (2017). On the other hand, conservation values have usually negative effects on this kind of behavior (Caracciolo et al., 2015), given their polarized structure.

Study I showed that both individual and collective issues are positively related to organic food consumption. This view reinforces hypothesis 2 and 3. In a similar way of thought, it is possible to assume that these two higher order values would have a significant impact on the motivational subgoals related to normative and wellness goals. As discussed above, self-transcendence values are related to collective issues, as conservation values are related to individual issues. With that stated, hypotheses 4 and 5 translate this point of view:

H4: Self-transcendence values have a significant and positive impact on normative related subgoals (Schwartz et al., 2012; Steg et al., 2014).

H5: Conservation values have a significant and positive impact on wellness related subgoals (Hemmerling et al., 2015; Steg et al., 2014).

Regarding the other polarized relationship among higher level values, organic food is a new kind of product, that is purchased by a small number of people in Brazil (Organis, 2018), which makes safe to assume that the ones purchasing this kind of product are opened to a new behavior, regardless its barriers such as price and availability. Thus, it is safe to assume that openness to change values are positively related to organic food purchase.

H6: Openness to change values have a significant and positive impact on organic food consumption (Aragão et al., 2017; Steg et al., 2014; John Thøgersen & Ölander, 2002).

Regarding the gain goal and its subgoals, Lindenberg and Steg (2007) define them as the goals related to the great importance to resources and its administration aiming to save or improve their actual state. This definition brings this goal closer to the power over resources and dominance values, that are related to the self-enhancement higher value. Based on these definitions, and on the lack of studies relating the Goal Framing Theory and the human values continuum, hypothesis 7 states that:

H7: Self-enhancement values have a significant and positive impact on gain related subgoals (Lindenberg & Steg, 2007; Schwartz et al., 2012).

Lastly, the hedonic goal is defined as pleasure-driven, with people that seek this kind of goal and subgoals giving importance to the immediate wellbeing and happiness (Lindenberg & Steg, 2007). This definition puts the hedonic goal near the idea of hedonism and pleasure stated by Schwartz et al. (Schwartz et al., 2012). As this value has no definition to which higher value it is contained (might be both openness to change and self-enhancement, accordingly to Schwartz et al. (Schwartz et al., 2012)), no hypothesis might be formulated regarding the hedonic goal and higher values. In this matter, it is possible to assume, though, that the hedonic goal and its subgoals are related to the hedonism value, as stated in hypothesis 8:

H8: The hedonism value has a significant and positive impact on hedonic related subgoals (Lindenberg & Steg, 2007; Schwartz et al., 2012).

Besides with the higher order values, following the findings of Hemmerling et al. (2015) and Shafie and Rennie (2012) regarding the individual and collective motivations driven people to purchase and consume organic food, another theory of values was used to analyze the relationship between values and goals, developed by López and Cuervo-Arango (2008).

The authors, based on the value-belief-norm theory and its relation to environmental and ecological actions (Stern, Dietz, Abel, Guagnano, & Kalof, 1999), conducted a study to analyze the role of egocentric and ecoaltruistic values in the ecological behavior. Egocentric values were defined as related to achievement of personal self-interest, as ecoaltruistic values were related to the welfare of others and of the environment (López & Cuervo-Arango, 2008). Table 5 addresses the values and its two categories.

These definitions of the two polarized groups of values might have positive impacts on the subgoals addressed in the present research. As stated by Steg et al. (Steg et al., 2014), the pro-environmentally behavior, in many cases, “is [...] less profitable, less pleasurable, more time-consuming or more effortful than environmentally-harmful actions”. By this definition, it is possible to assume that people profitable-oriented or pleasure-oriented, in other words, self-oriented, would have less probability to take pro-environmental behaviors.

Table 5

Egocentric and ecoaltruistic values

Egocentric values	Ecoaltruistic values
Social power	Equality
An exciting life	A world at peace
Wealth	Union with nature
A varied life	Natural beauty
Authority	Social Justice
Influence	Respecting the earth
Life enjoyment	Helping and protecting the environment
Curiosity	Preventing pollution

Note. López, A. G., & Cuervo-Arango, M. A. (2008). Relationship among values, beliefs, norms and ecological behavior. *Psicothema*, 20(4), 623–629.

On the other hand, people collective-driven, that give more importance to nature, animals and other people would be more willing to take pro-environmental and pro-social behavior. In that way, following also Lindenberg and Steg (2007) definitions on the three major goals and the definition presented by this work on the wellness goal, it is possible to assume that ecoaltruistic values are related to the normative goal, and that the egocentric values are related to the wellness, gain and hedonic goals, as stated on hypothesis 9 through 12:

H9: Ecoaltruistic values have a significant and positive impact on normative related subgoals (López & Cuervo-Arango, 2008; Steg et al., 2014).

H10: Egocentric values have a significant and positive impact on gain related subgoals (López & Cuervo-Arango, 2008; Steg et al., 2014).

H11: Egocentric values have a significant and positive impact on hedonic related subgoals (López & Cuervo-Arango, 2008; Steg et al., 2014).

H12: Egocentric values have a significant and positive impact on wellness related subgoals (López & Cuervo-Arango, 2008; Steg et al., 2014).

Finally, following the properties presented previously on the goal achievement theories (Bagozzi & Dholakia, 1999; Förster et al., 2007), it is possible to assume that higher goals lead to minor goals, and finally to the behavior itself. This idea had driven the hypothesis twelve listed so far: values influencing minor goals and behavior.

But it might be reasonable to also hypothesize that the minor goals studied in this paper also have impact on the behavior, following the hierarchical property of the goal achievement process, illustrated in figure 1. Following Steg et al. (Steg et al., 2014) theoretical background, normative goal and its subgoals would have a positive impact on organic food consumption, as gain would have a negative effect, formulating the next two hypothesis:

H13: Normative goal and its subgoals have a significant and positive effect on the organic food consumption (Lindenberg & Steg, 2007; Steg et al., 2014; Thøgersen, 2011).

H14: Gain goal and its subgoals have a significant and negative effect on the organic food consumption (Lindenberg & Steg, 2007; Steg et al., 2014).

Regarding the hedonic goal, it might have both positive (product quality) and negative (willingness to search for the product) effects, varying accordingly to its subgoals that will be tested. As shown further in this research, the product quality was the chosen subgoal studied, helping to formulate, thus, hypothesis 15:

H15: Hedonic subgoal “product quality” have a significant and positive impact on organic food consumption (Lindenberg & Steg, 2007; Steg et al., 2014).

Finally, as stated in study I, wellness goal groups several subgoals that are positively related to organic food consumption, such as individual health and food security. As stated in several studies (Goetzke et al., 2014; Goetzke & Spiller, 2014; Hughner et al., 2007; Shafie & Rennie, 2012), consumers highly concerned with health issues have a more organic food oriented consumption pattern, which endorses the next hypothesis:

H16: Wellness goal and its subgoals have a significant and positive impact on organic food consumption (Lindenberg & Steg, 2007; Steg et al., 2014).

All the previously stated hypothesis helped constructing the theoretical model of the research, illustrated in figure 6. In short, values (basic human values, ecoaltruistic and egocentric) have both direct and indirect influence on behavior (organic food purchase), mediated by the subgoals used in this study (price, product quality, health, environmental protection for gain, hedonic, wellness and normative goals respectively). Both theoretical model and hypothesis were tested through a survey research, described in the next section.

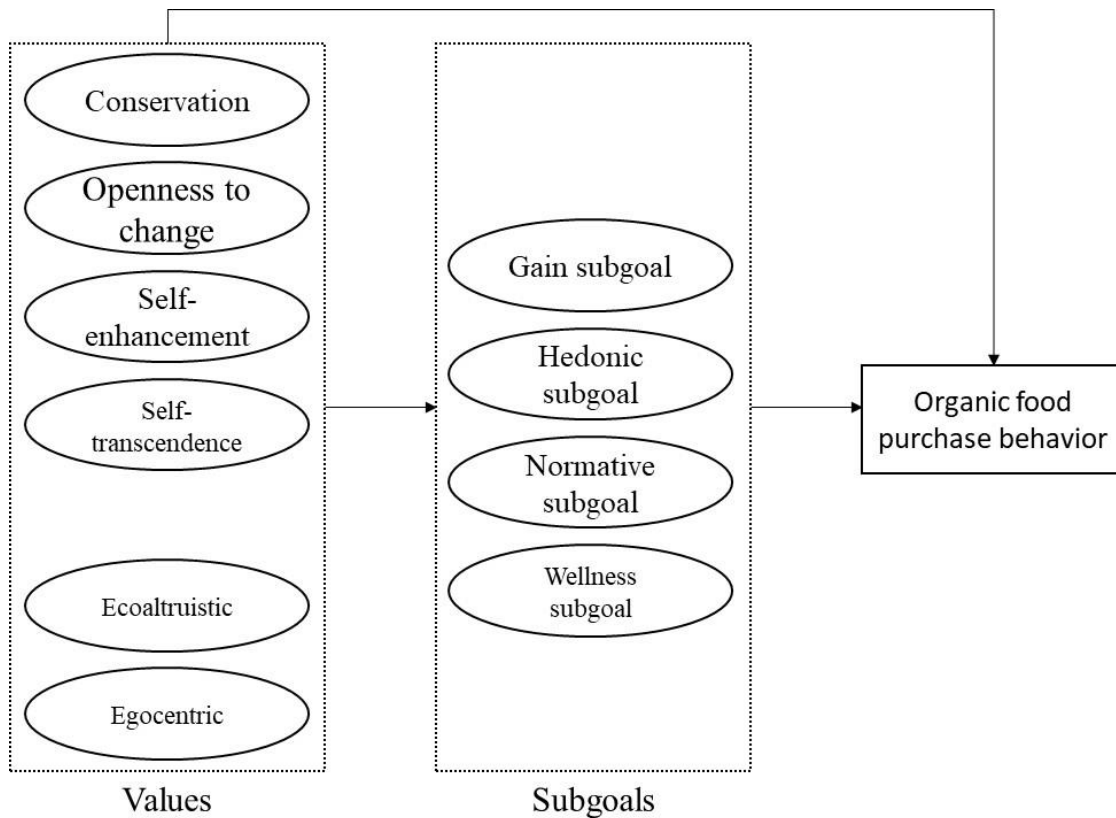


Figure 6: resumed theoretical model, without the hypothesis, illustrating the direct and indirect effects of values in organic food purchase behavior.

4.2. Method

In order to test the previously stated hypothesis and the proposed model, a quantitative research was conducted, in form of a survey. In total, 314 people participate in the research, being used 289 completed questionnaires, due to this being the number of respondents that were responsible for the purchase of food for their own homes.

Regarding the profile of the sample, 71.1% of them were female, 38.1% had complete higher education and an average age of 41 years, with a 14 years standard deviation, varying from 18 to 73 years old. 15.7% had an income between 9,981 and 12,974 Brazilian *Reais* (B.R.). Table 6 summarizes the sample sociodemographic profile.

Table 6

Sociodemographic data from study II's sample.

Variable	Types	Quantity
Gender	Male	28.9%
	Female	71.1%
Monthly income	Did not know, or did not responded	3.3%
	0 – 5998 B.R.	30.6%
	5999-12974 B.R.	33.7%
	12975 B.R. or above	32.4%
Schooling	Higher education	38.1%
	High school	2.8%
	Master's degree or PHD	24.3%
	MBA or specialization	33.9%

Note. B.R. = Brazilian Reais.

All the 289 interviewers responded a structured questionnaire, divided in six sections. The first section had one filter question, asking if the respondent was the person or one of the people responsible for the purchase of his house's food. If the response were negative, the questionnaire would end. If positive, the respondent would go further to section two.

Section two presented López and Cuervo-Arango (2008) scale of egocentric and ecoaltruistic values, with 17 items, in a 1 to 10 scale, that varied from “nothing important” to “very important”. The Brazilian version of the scale, developed and test by Pinheiro, Penãloza, Monteiro and Nascimento (2014) was used on this research.

Section three was the PVQ-57 questionnaire, presented and tested in Schwartz et al. (Schwartz et al., 2012) and translated to Brazil by Torres, Schwartz and Nascimento (2016). The scale counted with 57 items, three for each value illustrated in figure 4, varying from 1 (“this person looks nothing like me”) to 6 (“this person looks exactly like me”).

Section four presented a scale constructed to address the subgoals that people seek when purchasing food products. This instrument was built based on two factors from Barbopoulos and Johansson (2017) Consumer Motivation Scale: a quality factor for the hedonic subgoal, and a value for money factor for the gain subgoal; and two factors from Magnusson et al. (2003), namely: health for the wellness subgoal, and environment for the normative subgoal. All the items were measured in a Likert-like scale.

As both of the scales listed did not have a Portuguese version, they passed through the back-translation process (Brislin, 1970; Pasquali, 2010). The items were translated freely, then passed through the analysis of eight judges, who speak both English and Portuguese, and back-translated the items to English. The two English versions were compared, and the items passed, finally, through the theoretical validation, being classified as 100% correctly in their respective factors.

Section five had several questions regarding the respondent's frequency of organic food purchase behavior, both general and specific. The general question addressed the frequency of purchase of any kind of organic food by the individual; specific questions about fruits, vegetables, coffee, cereal, meat, eggs, milk and crackers were addressed in order to analyze the consumer profile of Brazilian population. The final section addressed SES questions, such as: age, gender, schooling and household monthly income.

All collected data was screened, and had normality checked through Shapiro Test (Hair, Black, Babin, Anderson, & Tatham, 2009), presenting multivariate normality for all variables. The Schwartz' PVQ instrument was later centralized, as instructed by Schwartz (2009).

This study used both exploratory and confirmatory factorial analysis: the EFA was used for the subgoals' scales proposed, in order to reinforce the theoretical discussion presented in study I and the creation of the wellness goal; and to reinforce the findings from the study of Pinheiro et al. (2014) related to the egoistic and ecoaltruistic values. The CFA was used to confirm the four higher value structure proposed by Schwartz et al. (2012).

Also, structural equation modelling (SEM) was conducted in order to analyze the proposed hypotheses of this study. All data analysis was conducted through R

Programming, using *lavaan*, *semPlot*, *mvnortest*, *psych* and *nFactors* packages. The results are presented next.

4.3. Results

In order to analyze the proposed hypothesis, first it was conducted an exploratory factor analysis for the subgoals proposed, and also for the egocentric and ecoaltruistic values. Starting with the values proposed by López and Cuervo-Arango (2008), this data presented a KMO=0.87, showing a goodness of fit for the factorial analysis (Hair et al., 2009).

Both parallel analysis and eigenvalues criteria showed a different structure in comparison with the original theory, defining four factors as an optimal solution. Based on this result, an exploratory factor analysis, with varimax rotation (indicated for correlated factors) (Figueiredo Filho & Silva Júnior, 2010), and four factors were extracted, as shown in table 7.

Table 7
Results from the exploratory factor analysis for the egocentric and ecoaltruistic values

	Factor 1	Factor 2	Factor 3	Factor 4
Union with nature	0.600			
Respecting the earth	0.847			
Helping and protecting the environment	0.804			
Preventing pollution	0.786			
Social power		0.755		
Wealth		0.605		
Authority		0.452		
Influence		0.666		
An exciting life			0.558	
A varied life			0.579	
Natural beauty			0.601	
Life enjoyment			0.468	
Equality				0.518
A world at peace				0.638

Social justice				0.663
Cronbach's alpha	0.85	0.73	0.69	0.68

Item 16 (“curiosity”) was excluded due to scores below to 0.45 (Hair et al., 2009). The previously two groups of values (egocentric and ecoaltruistic) were both divided in two groups each, with the item “natural beauty” migrating from the egoaltruistic to the egocentric values, probably due to a misunderstanding from the respondents, interpreting natural beauty as personal, original beauty.

With the exception already addressed of the “natural beauty” item, all the other ones maintained their place in the polarized egocentric-ecoaltruistic continuum, but each one of these poles were divided in two groups. Egocentric values were divided in two groups, one more social-oriented, with items like social power and wealth; and an individual-oriented group, with items related to individual impact, like beauty and excitement.

The same happened to the ecoaltruistic values, divided in two groups: an environment-oriented, centered in helping the environment; and a social-oriented one, concerned with peace and justice. Table 8 summarizes these findings.

Table 8

Factors' names and definitions

Egoaltruistic	Environment	Collective values, oriented to a high concern with the environment, its protection and maintenance.
	Social	Collective values, oriented towards social issues, like wars and social justice, equity and equality.
Egoistic	Individual	Individualistic values, oriented to how a person feels good about himself, in an individual level concern.
	Social	Individualistic values, oriented to how a person feels in a group of people, or how this person shows in that group.

In short, the exploratory factorial analysis showed that the two factor original form of the theory presented by López and Cuervo-Arango (2008) was not the best

configuration, bringing four factors instead of two. These four factors were used in the SEM analysis later in this paper.

Another exploratory factor analysis was conducted, this time with the four scales used to measure the four subgoals proposed in this paper: the value for money (gain goal) and product quality (hedonic goal) (Barbopoulos & Johansson, 2017), together with the environment protection (normative goal) and health concerns (wellness goal) (Magnusson et al., 2003) were analyzed as a single scale, in order to further interpretation.

The four scales together presented a KMO=0.82, accusing goodness of fit to the factorial analysis (Hair et al., 2009). Both parallel analysis and eigenvalues presented a four factors solution, so a factorial analysis was conducted, with a varimax rotation. Instead of forming the same factors proposed by the two papers originally, the factors designed in this research showed different configuration, as shown in table 9.

Table 9

Results for the exploratory factor analysis for the proposed subgoals

When I'm buying food products, it is important that it...	Factor 1	Factor 2	Factor 3	Factor 4
Was made in a way that does not generate environmental imbalance	0.707			
Improves my own or my family's health	0.624			
To be packaged in a way that does not harm the environment	0.772			
Gives myself a good conscience	0.689			
Avoids risks that may be associated with eating non-organic foods	0.526			
Is of consistent and high quality		0.638		
Is of first class		0.650		
Is well made		0.601		
Meets even the highest requirements and expectations		0.537		
Offers value for the money		0.517		
Is reasonably priced			0.603	

Is not too expensive				0.827
Is economical				0.740
Was produced without harming any animals				0.638
Was produced respecting the animals' welfare				0.921
Cronbach's alpha	0.87	0.78	0.78	0.85

Instead of four dimensions based on the proposed goals in study I, the items composed four factors that followed the three major goals proposed by Lindenberg and Steg (2007): a gain goal oriented for the price; a hedonic goal oriented for the product quality; and two normative goals: one oriented for animal welfare, and another one oriented for both environmental concern and health issues.

As stated by Lindenberg and Steg (2007), the normative goal groups subgoals related to what is the right thing to do. By this definition and the results showed in the factor analysis, the health issues related to the consumption of food might be linked with the normative goal, seen as the right thing to be done, individually and for the family.

From this point of view, it is possible to affirm that the three major goals presented by the Goal Framing Theory are enough to cover all the main motivators and barriers regarding the consumption of organic food. In relation to the gain and hedonic goals, all items behaved as expected, with the exception of the item “offers value for the money”, which may also be related to product quality.

The final analysis conducted in this study was the path analysis, through structural equation modelling, in a way to analyze the influence of the different kinds of values and of the subgoals studied in this research on the organic food purchase behavior.

The first SEM conducted showed several non-significant relationships among variables, so it was refined and reanalyzed. The results of the second round of SEM is shown in table 10. It is important to address that the normative goal related to animal welfare did not showed any significant relation to any other variable studied, being left out of the SEM analysis.

Table 10

Regression scores for the relations studied in the proposed theoretical model

Dependent variable	Independent variable	Std. Estimate	SD	z-value
Normative Goal				
R ² = 0.475	Egoaltruistic nature	0.496	0.06	6.194***
	Conservation	0.394	0.06	5.092***
	Self-enhancement	-0.170	0.07	-2.357**
Hedonic Goal				
R ² = 0.352	Egocentric social	0.281	0.03	3.144***
	Conservation	0.459	0.05	4.977***
Gain Goal				
R ² = 0.121	Egocentric individual	0.158	0.02	1.753**
	Conservation	0.298	0.03	3.337***
Organic purchase				
R ² = 0.121	Normative Goal	0.251	0.02	3.425***
	Gain Goal	-0.283	0.05	-3.522***

Note. **: p<0,05; ***: p<0,01. Chisquare = 1315.74***; df = 683; RMSEA = 0.067; GFI = 0.761; NNFI = 0.774; PGFI = 0.666.

Analysis of the SEM conducted show that, differently from the proposed theoretical model, there was no significant direct relations between value and organic food purchase behavior. Instead, they formed the proposed subgoals, which had significant relations with the studied behavior.

It is possible to observe in table 10 that the subgoals studied were formed by the values in different ways each. Egoaltruistic nature values, together with conservation (positive relations) and self-enhancement (negative relation), formed the normative goal related to environmental protection; the egocentric social and the conservation values (both positive relations) formed the hedonic goal related to product quality; and the egocentric individual and conservation values (also, both positive) formed the gain goal related to value for the money.

Regarding the organic food purchase behavior, the normative and the gain goal had relevant impact on the analysis of the phenomenon and behaved as expected: normative goal showed a positive impact, and the gain goal showed a negative impact.

Figure 7 shows the graphic path analysis of the SEM, and several other findings are discussed in the next section.

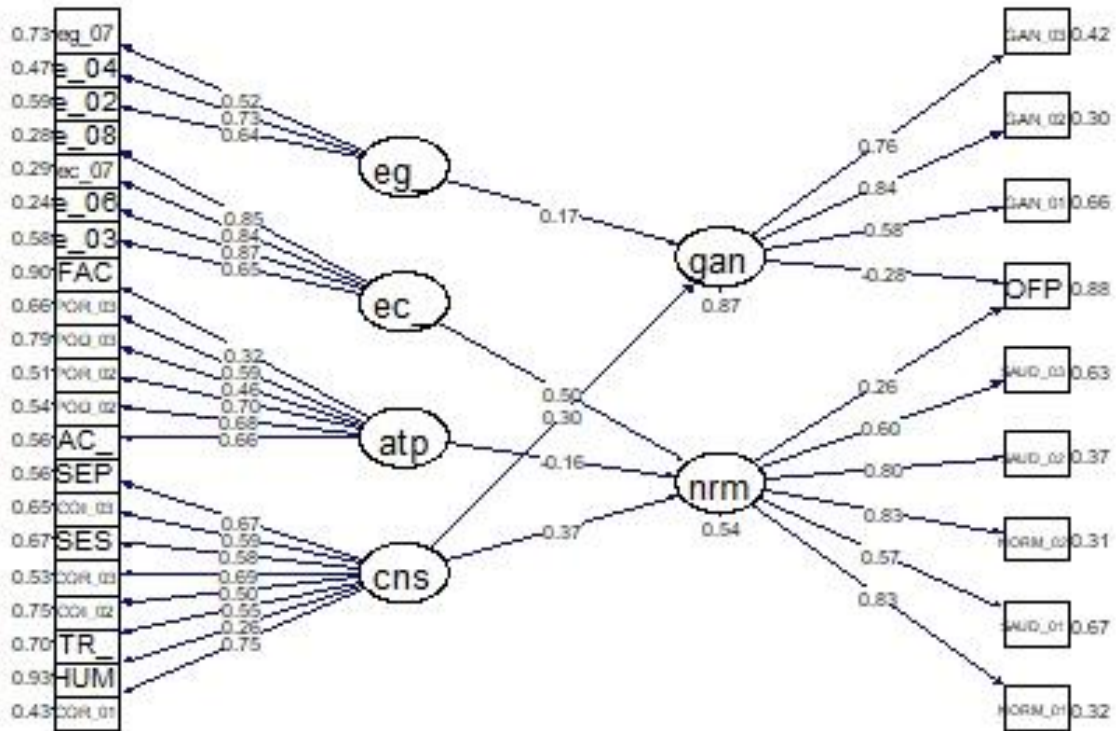


Figure 7: Results of the SEM conducted in study II. *Note:* eg_: egocentric individual values; ec_: egoaltruistic nature values; atp: self-enhancement values; cns: conservation values; gan: gain subgoal; nrm: normative subgoal; OFP: organic food purchase frequency.

4.4. Discussion

Several findings of this study went against the theory used to support it. Firstly, the exploratory factorial analysis conducted showed different results in comparison to the origin of the items.

The egocentric and ecoaltruistic values, created by López and Cuervo-Arango (2008) as a two factor scale, and reinforced in Brazilian context by Pinheiro et al. (2014), showed a four factor scale, dividing both original dimensions in two groups each: egocentric social and individual; ecoaltruistic nature and social. This change, although did not happened before in literature, might be new because of the lack of applications of the scale used, specially the Brazilian version. New applications might be important to analyze the structure of the given values.

Regarding the factorial analysis conducted to analyze the proposed subgoals, there were also several changes in the structure of the items. The environmental and wellness subgoals grouped together, forming one normative subgoal related to both environmental and health issues.

As stated before, this could have happened due to the normative goal being the “right thing to do” (Lindenberg & Steg, 2007), meaning that both environmental and health protection are keen behaviors to the population regarding the purchase of food. This finding has impact on the next studies of this work, as will be explained later.

Study II and several others (Hemmerling et al., 2015; Hughner et al., 2007; Magnusson et al., 2003; Shafie & Rennie, 2012) show that a one of the main reasons people start and keep buying organic food is because of their health and their families’. This kind of thinking might lead to the idea that the health administration is something everybody must be worried, turning it into a normative subgoal.

Regarding the SEM path analysis, the results showed that no value of any kind had a direct significant influence on the behavior. Instead, they showed an indirect influence, by effects on the studied subgoals. This result agrees with the idea that values are more deep than subgoals and goals in the human mind (Steg et al., 2014), and also backs Allen and Ng (1999) idea that values influence our attitudes and behavior in indirect routes.

In relation to the formation of the subgoals, the conservation values had a significant and positive effect on all of the subgoals. This is possible due to the types of values included in the conservation high value: conformity, security and tradition (Schwartz et al., 2012). Security is related to safety, which might affect positively the normative subgoal, related to health and food security; conformity is related to compliance and anxiety avoidance, being related to little risk, thus being related to the gain and hedonic goals and, consequently, its subgoals. The same happens with the tradition value.

The formation of the subgoals also showed expected results, like the positive effect of ecoaltruistic values on the normative subgoal (more specifically, the ecoaltruistic related to nature values), and the positive effect of egocentric values on the gain (individual) and hedonic (social) goals. Regarding the Schwartz’ et al. (Schwartz et al., 2012) human values, only one hypothesis was partially confirmed: the conservation

values showed a significant and positive influence on the normative goal, that englobed the theorized wellness goal. On the other hand, they had no direct effect on the organic purchase behavior, and the hedonism value had no effect on any subgoal formation.

The SEM also shows that the studied behavior, the purchase of organic food, was affected significantly by the normative and gain subgoals, positively and negatively, respectively. As the normative subgoal grouped both environmental protection and health issues, the main motivators in organic consumption (Hughner et al., 2007; Shafie & Rennie, 2012), it was expected to have a significant and positive relation. Table 11 shows a summary of the tested hypothesis of the study.

Table 11

The hypothesis of the study and its results

H1	Higher order human values have a significant impact on motivation aspects of food purchase.	Refuted.
H2	Conservation values have a significant and positive impact on organic food consumption.	Refuted
H3	Self-transcendence values have a significant and positive impact on organic food consumption.	Refuted
H4	Self-transcendence values have a significant and positive impact on normative related subgoals.	Refuted
H5	Conservation values have a significant and positive impact on wellness related subgoals.	Partially accepted
H6	Openness to change values have a significant and positive impact on organic food consumption.	Refuted
H7	Self-enhancement values have a significant and positive impact on gain related subgoals.	Refuted
H8	The hedonism value has a significant and positive impact on hedonic related subgoals.	Refuted
H9	Ecoaltruistic values have a significant and positive impact on normative related subgoals.	Accepted
H10	Egocentric values have a significant and positive impact on gain related subgoals.	Accepted
H11	Egocentric values have a significant and positive impact on hedonic related subgoals.	Accepted

H12	Egocentric values have a significant and positive impact on wellness related subgoals.	Refuted
H13	Normative goal and its subgoals have a significant and positive effect on the organic food consumption.	Accepted
H14	Gain goal and its subgoals have a significant and negative effect on the organic food consumption.	Accepted
H15	Hedonic subgoal “product quality” have a significant and positive impact on organic food consumption.	Refuted

Regarding the influence of human values on the organic food purchase and consumption, some studies addressed the issue and had different results. Lea and Worsley (2005) found a direct influence of nature-oriented values on the organic food consumption. Although the present study found the influence of nature-oriented aspects on the organic food consumption, the direct effect was not significant.

Yanfeng, Thøgersen, Ruan and Huang (2013) found that self-transcendence values moderate the relationship between attitudes toward organic food and perceived behavioral control with the behavioral intention. The present research did not find any relevant relationship between self-transcendence values and organic purchase, directly or indirectly.

Yadav (2016) results showed that both egoistic and altruistic values had positive relationship with organic food attitudes and purchase intentions. However, the author named health concerns and environmental concerns as values. In the present research, these concerns were looked upon as one subgoal, grouped in the normative goal. When Yadav’s variables are seen also as subgoals, the results are the similar to the present research.

Hughner et al. (2007), in their literature review, stated that altruistic values are related to organic food consumption. In the present research, the altruistic values, named as ecoaltruistic (López & Cuervo-Arango, 2008) had an indirect, yet significant impact on the behavior. In general, it is possible to affirm that, in the present research, values presented as significant to the formation of subgoals, consequently significant, yet indirectly, to the organic food purchase.

Finally, the effect of the normative and gain subgoals on the organic food purchase behavior was endorsed by Steg et al. (Steg et al., 2014) idea that pro-environmental and pro-social behaviors are expensive and boring, and that is the cause that gain and hedonic oriented people usually do not take them, or avoid it.

In the present study, this idea became clearer: the negative effect of the gain goal shows that people that are resource-oriented have a smaller probability to buy organic food, while normative-oriented people, by collective (environmental protection) or individualistic (health issues) motives, are more attracted to this product. The conclusions, as well the limitations and research agenda, are presented next.

4.5. Final Considerations

Study II had as objective to analyze the motivational aspect of organic food purchase, based on Steg et al. (Steg et al., 2014) proposed model, where values drive to subgoals and affect behavior. Results showed that values have no direct effect on the behavior itself, but have an indirect effect, mediated by the studied subgoals.

The study's objective was achieved, although main of the hypothesis were not supported and the theoretical structure suffered several changes. Study I proposed that the health issues should be treated as a fourth goal in the Goal Framing Theory, but study II results showed that this kind of goal and subgoal must be addressed as a normative goal. Future researches must address the topic, reinforcing or refuting this finding.

One main limitation of the study is related to the subgoals: as defended by the Goal Framing Theory (Lindenberg & Steg, 2007; Steg et al., 2014; Steg & Vlek, 2009), innumerable subgoals might exist that are related to a determined goal, and that influence behavior. In study II, four subgoals were selected as the main ones inside each major goal, but it is possible that different subgoals would have different results in the analysis. Future studies might address this limitation by testing different subgoals, such as willingness to seek for organic food (hedonic goal) and animal welfare (normative goal).

In general, study II shed a light in the understanding of the motivational structure regarding the organic food consumption, helping both social scientists and

marketers to understand their consumers in a better way. Studies III and IV use this knowledge in a marketing way, analyzing the effects of GFT-based marketing strategies on consumers' behavior. Study III uses Minton, Cornwell and Kahle (2016) understand of priming to analyze the effect of GFT-based messages on a simulated purchase environment, and study IV uses the normative goal duality (health-environment concerns) to analyze which reinforce is more important in eco-labelling an organic product. Next, study III is presented.

5. Study III: Marketing strategies based on Goal Framing: the usage of priming to influence organic purchases behavior

Following Steg et al. (2014) model to encourage pro-environmental behavior, study III addresses the situational aspect of the framework, with a marketing strategy named priming, or, as defined by Minton, Cornwell and Kahle (2016), independent stimulus. The main objective of this study is to analyze the effect of both motivational (analyzed and constructed on study II) and situational aspects on a simulated buying experience, focusing organic food.

Minton, Cornwell and Kahle (2016) define priming as the item used to manipulate an individual's behavior. As will be presented, several messages, created based on the three major goals from the Goal Framing Theory, were tested and its differences in consumers' behaviors addressed, together with study II subgoals' instrument.

Study III is divided in five sections. The theoretical background that discuss marketing strategies, its capability to change behavior and strategies to do so; the method used in the research; the results found; discussion and final considerations.

5.1. Theoretical background

As stated before, the development of the Goal Framing Theory created by Lindenberg and Steg (2007) resulted in a framework developed by Steg et al. (Steg et al., 2014), in which two major factors influence pro-environmental and pro-social behavior: motivational and situational factors.

Motivational factors are treated by Steg et al. (Steg et al., 2014) as intrinsic variables, such as values. In the present study, motivational factors are treated as the subgoals themselves, following the findings of study II that the normative, hedonic and gain tested subgoals were results from the factorial analysis conducted.

Following the properties of the goal achievement hierarchical structure (Bagozzi & Dholakia, 1999), major goals (normative, hedonic and gain) lead to minor subgoals, which are motivational factors that drive behavior. For example, a person that seek the

hedonic goal will address several subgoals, such as immediate pleasure and avoid stress. These subgoals will shape his/her behavior: the person will, e.g., take a private car other than the public transportation (Steg, 2003).

As it was showed in study II, values might shape this subgoals, as proposed by Steg et al. (Steg et al., 2014): egoaltruistic values are positively related to normative subgoals, and egocentric values linked with hedonic and gain subgoals, for example. The subgoals, on the other hand, had direct effect on the behavior itself.

Besides the motivational structure (values-subgoals), Steg et al. (Steg et al., 2014) also proposes that situational cues are able to shape individuals' goals and behavior in a given scenario. According to the authors, situational cues may "strengthen normative goals (and/or weaken hedonic and gain goals), [...], and thus promote pro-environmental actions" (Steg et al., 2014, p. 105).

In other words, situational cues can possibly change peoples' behavior, by changing their pursued goal in determined situation, whether by strengthen the normative goal or weakening the hedonic and gain goals (Steg et al., 2014). This line of thought drove to the study III question: how situational cues can change consumers' behavior and pursued goals toward the organic food consumption? To answer this question, situational cues were used as sustainability marketing strategies.

Sustainability marketing, also known as green marketing strategies can be defined as "marketing activities which attempt to reduce the negative social and environmental impacts of existing products and production systems, and which promote less damaging products and services" (Peattie, 2001, p. 129). In short, green marketing can be seen as marketing activities and strategies with a social and environmental concern (Chamorro, Rubio, & Miranda, 2009).

As stated by Nguyen, Nguyen, Nguyen, Lobo and Vu (2019), several activities might be considered sustainability marketing strategies, such as: eco-labelling, providing an environmental friendly shopping environment, selling various brands of green products and, finally, advertising and promoting green products using in-store promotional tools.

As organic food can be seen as a product with less impact (both social and environmental) in comparison to its substitute (conventional food) (IFOAM, 2005),

marketing strategies designed to drive consumers to consume organic food might be seen as sustainability marketing strategies. This includes advertising and promoting organic food as well.

As stated by Rana and Paul (2017) on their literature review, the effect of the situations on the purchase intention and purchase behavior of organic food is a point seen in literature, although by only one paper: Grimmer, Kilburn and Miles (2015) tested the moderating effect of situational of purchase in the intention-behavior gap of organic food purchase. Results showed that the moderating effect was significant, and that the situation is highly relevant in the organic food purchase context. However, the situational issues presented in the paper were not related to green marketing strategies, but questions related to the individuals' activities, like purchasing after work or distance to be driven to buy organic food. This shows the originality of the present research, using green marketing strategies as situational factors to influence organic food purchase behavior.

Given the objective of the study III to analyze the effect of green marketing strategies on the organic food purchase, the priming antecedent strategy was chosen. According to Lehman and Geller (2004), antecedent strategies are stimuli that precedes the behavior itself, announcing the positive or negative consequences of taking determined behavior. Following this definition, any kind of green marketing related to advertising might be considered an antecedent strategy, as its goal is to be read or seen before the behavior itself.

The present research opted for a specific antecedent strategy, defined by Minton, Cornwell and Kahle (2016) as priming. According to the authors, the priming strategies are related to the use of a stimulus in order to change or improve someone's behavior or increase their knowledge.

More specifically on Minton and colleagues' state of the art regarding the priming strategies, the present research, as presented latter, used a behavioral priming technique, focusing on change individuals' behavior toward organic food consumption (Breckler, 1984). More specifically, on the classification developed by Minton, Cornwell and Kahle (2016, p. 312), the behavioral goal priming was used, which focuses on the activation of a specific goal, "leading individuals to behave in ways consistent with goal attainment".

Papies and Hamstra (2010) highlight the importance for priming strategies to encourage specific goals, and this idea is related to the Goal Framing Theory: different priming messages, based on the three GFT goals, would encourage specific goals for the individual to endorse, changing their behavior towards the desired one, which, in this particular case, is the organic food purchase.

Offering organic food in a priming structure was already tested by Lu and Gursoy (2017), but in a restaurant menu context. In their research, perceived food quality, attitudes towards the restaurant and willingness to select were all affected by the message that classified a restaurant as organic seller, in comparison to another that had conventional food, negatively mediated by the range of price difference. No other study was found where this kind of strategy was used as influencer of organic food purchase.

Aligning the theory discussed above, the main objective of study III is to test the GFT, by analyzing the influence of motivational and situational factors (Steg et al., 2014). In order to do so in the organic food purchase context, the priming antecedent strategy was used as situational factor (Lehman & Geller, 2004; Minton, Cornwell & Kahle, 2016) and sustainability marketing strategy (Peattie, 2001), aiming to improve pro-social and pro-environmental behavior. Both motivational and situational issues were constructed based on the Goal Framing Theory, as it is explained next in the method section. To summarize the discussed themes, figure 8 shows the theoretical model of the present study.

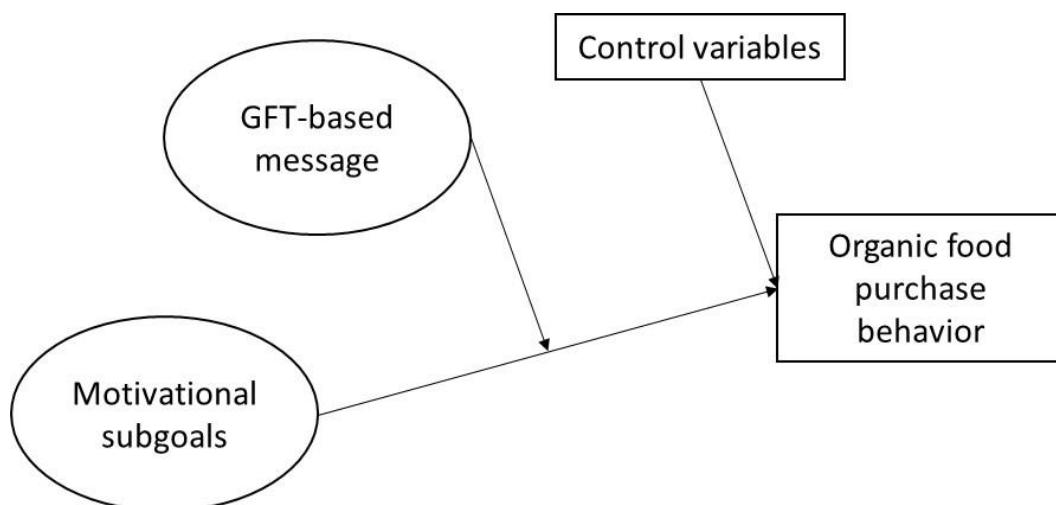


Figure 8: Theoretical model proposed to test the effect of motivational and situational factors in organic food purchase behavior.

5.2. Method

To test the proposed model, an experimental study was conducted (Cozby, 2003). The present research used a 3x4 matrix, between-subjects design. The experiment consisted of assigning an activity to the participant: buying products for a breakfast. Once the task was given to them, a virtual market appeared, together with the situational cue (independent variable, discussed below). The market had a total of eight products (namely: orange juice, coffee, milk, jelly, bread, honey, cheese and cake), in conventional and organic options, each product with its price.

The price of the conventional products was defined based on market research, by visiting four supermarkets in the city of Brasília, Brazil. The organic price was also observed, in order to calculate the average percentage difference between traditional and organic products. A 29% average increase was identified, being this the base used to calculate the price of organic food. Table 12 shows a summary of the products and its prices in both organic and conventional forms.

Table 12

Summary of products used and their prices in Brazilian Reais

Product	Volume/weight	Conventional price	Organic price
Orange Juice	300 ml	5.00	7.00
Coffee	250 g	11.00	14.00
Milk	1 L	6.00	8.00
Jelly	250 g	18.00	24.00
Bread	400 g	10.00	13.00
Honey	300 g	20.00	26.00
Cheese	250 g	14.00	18.00
Cake	200 g	11.00	14.00

The respondent activity consisted in buying products to a breakfast, with the total budget of 60 Brazilian Reais. This value was chosen due to pre-test processes, where the budget was firstly tested with 100 and 80 Reais, but the respondents thought it too much to the assigned quest. When the budget was reduced to 60 Reais, the

respondents were able to buy their desired products, but still with some budget constraints.

Before the market simulation, participants had to complete the instrument designed to define on which priory motivational goal category they belong. To do so, study II subgoals' instrument was used, based on Barbopoulos and Johansson (2017) and Magnusson et al. (2003). Three factors of the instrument were present: the normative goal (with environmental and health concern items); the hedonic goal (with product quality items); and the gain goal (with value for money items). The highest score in one of these three factors defined which priory motivational group the participant belonged to.

The market simulation also presented the situational cue: the primed messages. Three different messages were constructed, based also on the Goal Framing Theory major goals. The messages are summarized in table 13. They were presented as a supermarket banner, simulating a real online store, in order to be seen as a situational, marketing strategy from the market itself. Its objective was to assess people behavior change in a purchase simulated situation by stimulating consumers to think organic food were the best choice, with different GFT-based messages.

Table 13

Phrases showed in the situational messages

Major Goal	Message
Normative	Organic foods are the best for the environment and for your health.
Gain	Organic foods have the best cost-benefit ratio.
Hedonic	Organic foods have the best product quality.

Differently from the ideas of Steg et al. (Steg et al., 2014), where the authors defend that gain and hedonic goals must be weakened and the normative goal strengthen, in the present research the aim was to strengthen them all, but showing that the organic options were still the best option. By doing so, it was important to highlight the best cost-benefit of organic food, and also its best quality.

The GFT-based messages were assigned to the respondent in a random selection, based on the respondents' month of birth in four groups. Three months of the year for each message and three months for the control group. For example, people born in January, May and September received the gain goal-based message. This kind of random selection prevents possible biases due to other possible selections (Cozby, 2003).

Also, several control variables were collected, including organic food purchase frequency, and SES questions (i.e., age, monthly income, gender, number of people in the household, how many of those were children, and a question to identify if the respondent responsible for the food purchase in the household). These variables were used to analyze potential biases due to respondent profile, or the effect of SES variables in the dependent variable.

The dependent variable, organic food purchase behavior, was calculated in three ways: the number of organic foods in the consumer basket; the percentage of organic food in the consumer basket, based on all the products chosen; and the money spent just in organic food. These three dependent variables were chosen in order to overlap any kind of biases due to different price products, since there was a great variation (a 21 Brazilian Reais difference between the cheapest and the most expensive product). Table 14 summarizes the experiment design used.

Table 14

Experiment design used in study III

Subgoal group	Normative	Hedonic	Gain	Control
Normative	OFPB	OFPB	OFPB	OFPB
Hedonic	OFPB	OFPB	OFPB	OFPB
Gain	OFPB	OFPB	OFPB	OFPB

Note. OFPB: organic food purchase behavior.

The experiment resulted in a sample of 513 respondents, divided into the 12 proposed groups (a variation from 25 people in the Normative subgoal–Hedonic message group to 61 people in the Gain subgoal–Gain message). Regarding the sample

sociodemographic profile, the age varied from 18 to 66 years old ($M=37$; $SD=14.23$), 61.9% were female, and 84.9% had at least completed higher education. 40.7% of the respondents declared a monthly income greater than 9,981 Brazilian Reais.

Two main analysis were conducted. Several Kruskal-Wallis tests and factorial ANOVAs were conducted to test the effect of independent variables (motivational subgoal group and type of message, together with the control variables, such as SES variables and organic purchase frequency) in the dependent variable (measured by two variables separately: rate of organic food products in the subject's final basket; rate of money spent in organic in relation to the total of money spent on the final basket), since the Shapiro-Wilk test conducted did not show normality for both dependent variables (Field, 2013; Hair et al., 2009).

Also, a structured equation modelling was conducted, in order to analyze the effect of the independent variables in the dependent variables in a path analysis. As the dependent variables did not show normality distributions, the Weighted Least Squares (WLS) estimator was used, as it is the most robust choice for the *lavaan* package for R in this cases, especially in marketing studies (Andreassen, Lorentzen, & Olsson, 2006).

Finally, a confirmatory factorial analysis was conducted for the subgoal instrument translated and applied in Study II, in order to find additional validity evidences. The results are presented next. All analyses were conducted using the R Software, together with *lavaan*, *psych* and *lavaanPlot* packages.

5.3. Results

Firstly, the confirmatory factorial analysis for the subgoal instrument was conducted, in order to confirm validity evidences of the scale. All absolute indicators showed reasonable values, showing that the three factor model is suitable (Malhotra, Lopes, & Veiga, 2014). Also, all the items showed satisfactory charges and communalities, attesting that the three GFT-based factors solution have a goodness of fit, as shown in figure 9.

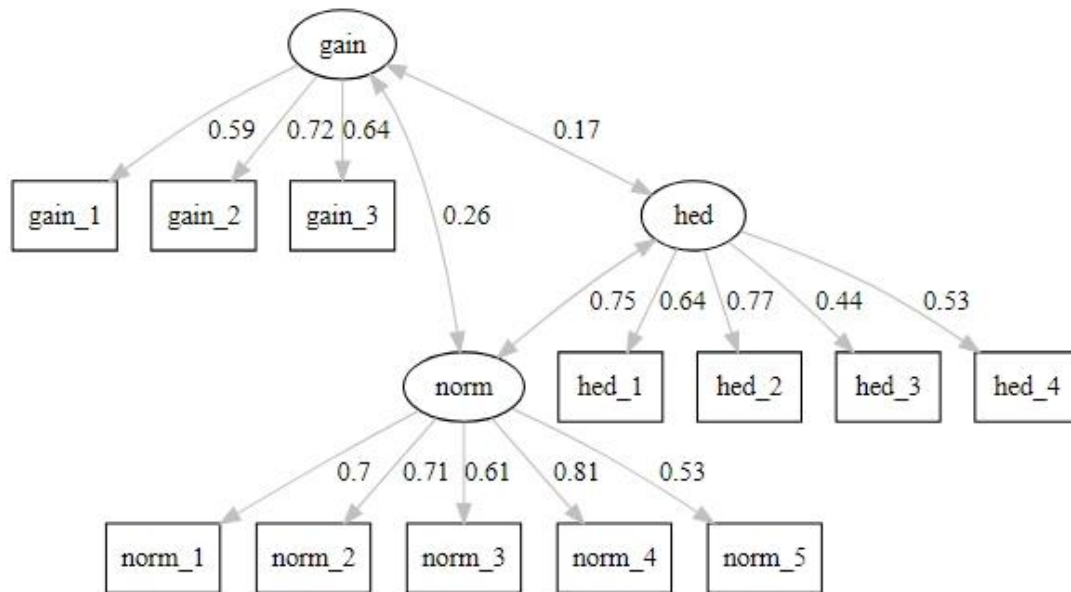


Figure 9: Results from the confirmatory factorial analysis for the Goal Framing Theory subgoals instrument. *Note.* Chisquare = 247.07***; df = 51; RMSEA = 0.08; GFI = 0.92; PGFI = 0.60; RMSR = 0.05.

As the GFT-based scale presents validity evidences, the Kruskal-Wallis test analysis was conducted, considering the motivational (subgoals pursued) and situational (GFT-based messages) variables influence on the organic food purchase behavior in the dependent variables.

The first tests were conducted using the rate of organic food products in the consumers' basket in relation to the total of products purchased as dependent variable. First round used the following control variables in the test individually: organic food purchase frequency, age, income, gender, number of people of the household, and number of children of the household.

Results showed that only one control variable had significant relationship with the dependent variable: the organic food purchase frequency. With this result in hands, both Kruskal-Wallis and post hoc tests (with Bonferroni's correction, following instructions by Field (2013) were conducted, now with three variables: motivational subgoal, situational messages and organic food purchase frequency. The results are shown in table 15 and figure 10.

Table 15

Results for the Kruskal-Wallis and post hoc tests conducted with the rate of organic food products in the basket as dependent variable.

Kruskal-Wallis test	K-W chi-squared	df	p-value
Motivation subgoal	17.843	2	0.0001
Situational message	2.8348	3	0.4178
Organic food purchase frequency	78.7	1	0.0000
Bonferroni post hoc analysis ($p < 0.05$)		z	p-value
Motivational subgoal	Gain - Normative	-4.083	0.0001
Organic food purchase frequency	Non-buyers - Buyers	-8.871	0.0000
Motivational:Situational message	Gain:Hed – Norm:Hed	-0.373	0.0001

Note. For the post hoc analyses, only the significant relations were listed.

As presented, the situational cues, the GFT-based messages, had no significant effect on the dependent variable. On the other hand, once treated like a control variable, the organic food purchase frequency, measured here as two groups (buyers and non-buyers) had a direct effect on the dependent variable. Regarding the motivational subgroups, the post hoc analysis shows that the normative subgoal group had a significant higher organic rate than the gain one.

Analyzing figure 10, especially the second graphic, it is possible to observe effects caused by the messages, even if they were not statistically significant. As pointed by the post hoc analysis, the hedonic-oriented message, that highlighted the quality of the organic products, had different effects on gain-oriented and normative-oriented consumers: as the gain-oriented consumers lowered their organic product rate, the normative ones increased theirs.

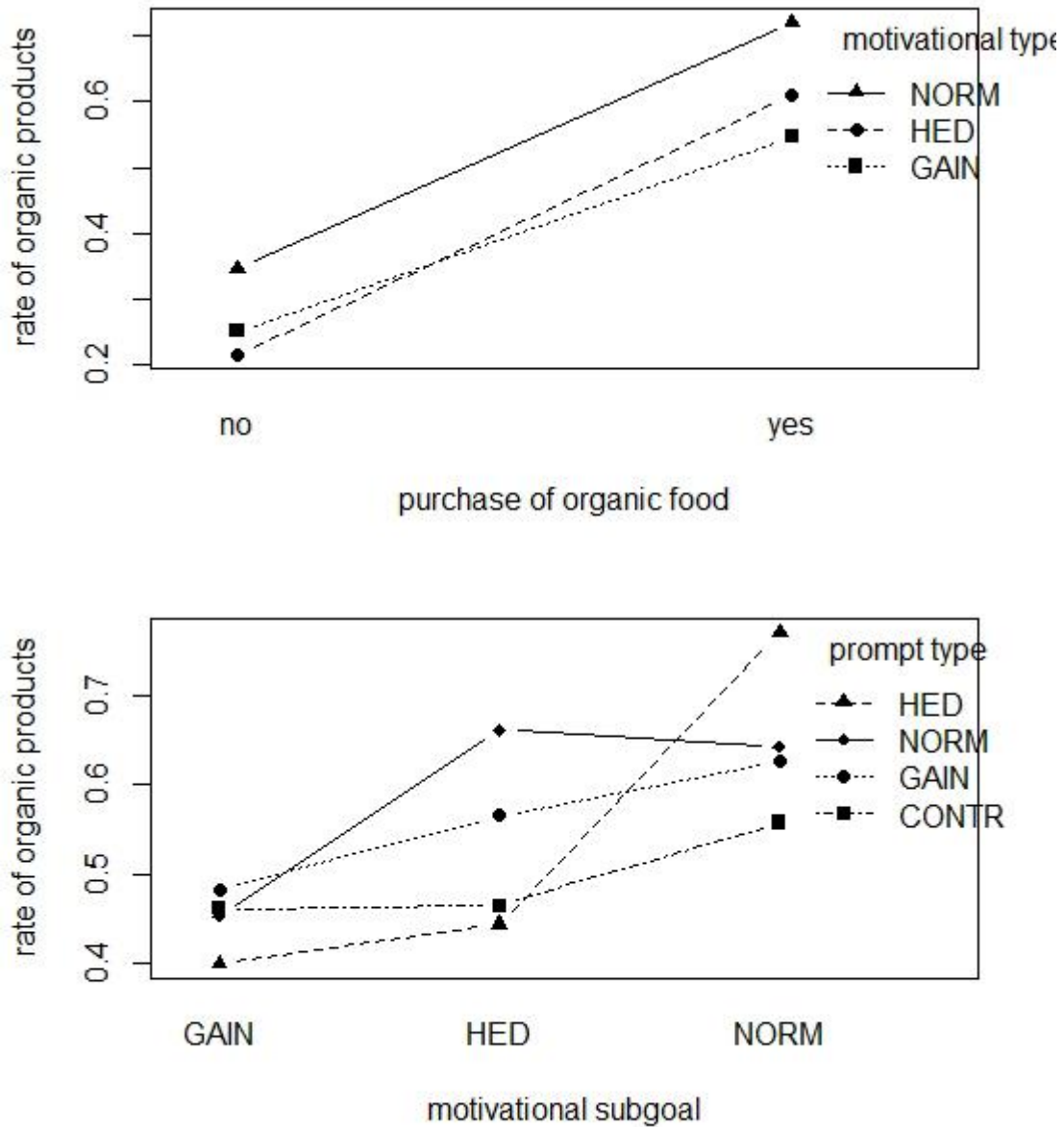


Figure 10: Graphical analysis of the significant differences found using the rate of organic food products in the basket as dependent variable.

Another graphical analysis is the amplitude of the three motivational subgoal groups: the gain-oriented consumers showed a small amplitude related to the messages they were exposed to, indicating that they had the smallest effect considering the situational variables. The normative and hedonic oriented consumers, on the other hand, had big variations, but not statistically significant.

Similar results were found when using average ticket rate of organic food in the basket, as showed in table 16 and figure 11. Again, the situational message had no

significant effect on the dependent variable, with the motivational subgoal and the purchase frequency of organic food being the only significant variables to have a significant effect.

Table 16

Results for the Kruskal-Wallis and post hoc tests conducted with the rate of organic food average ticket in the final basket as dependent variable.

Kruskal-Wallis test	K-W chi-squared	df	p-value
Motivation subgoal	15.492	2	0.0004
Situational message	2.672	3	0.4448
Organic food purchase frequency	79.365	1	0.0000

Bonferroni post hoc analysis (p<0.05)		z	p-value
Motivational subgoal	Gain - Normative	-3.800	0.0004
Organic food purchase frequency	Non-buyers - Buyers	-8.908	0.0000

Note. For the post hoc analysis, only the significant relations were listed.

The results found on the rate of organic food average ticket were very similar to the ones found with the previously dependent variable. Firstly, it is worth mentioning the differences between buyers and non-buyers: when analyzing the same motivational group, every difference was significant: normative-oriented consumers showed a 37.05% increase between buyers and non-buyers. Similar results were found with gain-oriented (31.88%) and hedonic-oriented (40.4%) consumers.

Again, the normative-oriented consumers showed a higher organic food purchase behavior in comparison to the gain-oriented ones, indicating that people more concerned with health and with the environment have a higher chance of purchasing organic food than those preoccupied with resource saving.

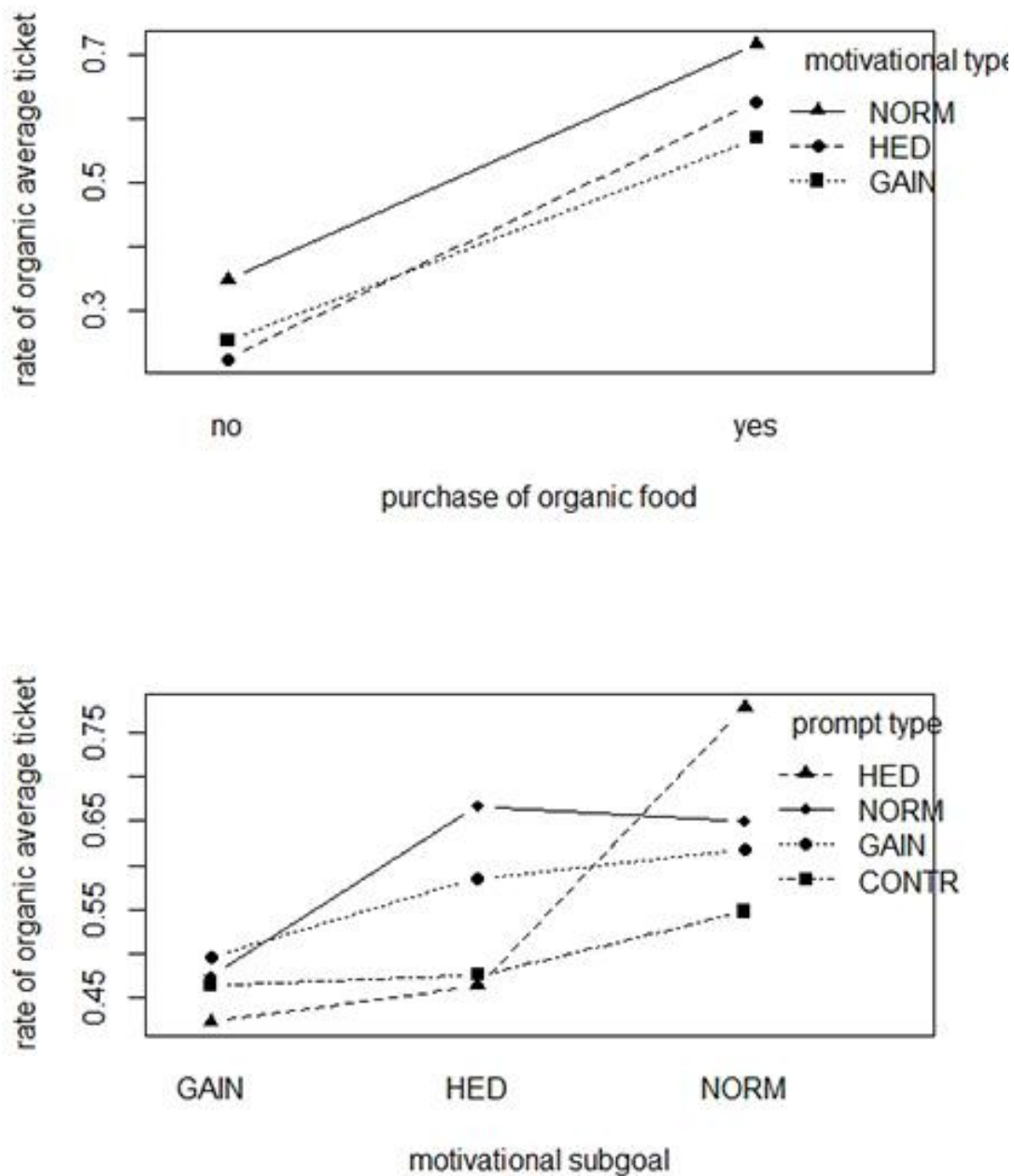


Figure 11: Graphical analysis of the significant differences found using the rate of organic food ticket average in the basket as dependent variable.

Analyzing figures 10 and 11, it is clear the situational messages used had no statistical effect, but presented changes in consumers' behaviors. Normative-oriented people, for example, had a 23.08% increase in the ticket average of organic food when exposed to a hedonic-oriented message, comparing with the control group. Finally, similar to the previously used dependent variable, the gain-oriented consumers had the

little amplitude in the graphic, indicating a smallest openness to change their behavior based on the messages they received.

As the significant variables could be quantified (using the subgoals scales and the dichotomous variable of purchase frequency), a structural equation model was designed using the three motivational groups and the purchase frequency variable, using the WLS estimator, considered best for non-normal distributions (Andreassen et al., 2006). The results can be seen in table 17 and figure 12.

Table 17

Regression scores for SEM conducted with the statistically significant variables

Dependent variable	Independent variable	Std. Estimate	SD	z-value
Rate of organic products				
R ² = 0.215	Normative subgoal	0.127	0.01	7.08***
	Gain subgoal	-0.059	0.01	-3.47***
	Organic food buyer	0.312	0.03	8.70***
Rate of organic ticket average				
R ² = 0.212	Normative subgoal	0.120	0.01	6.432***
	Gain subgoal	-0.052	0.01	-2.955***
	Organic food buyer	0.329	0.03	9.061***

Note. Estimator = WLS. ***: p<0,01. Chi-square = 143.187***; df = 39; RMSEA = 0.074; GFI = 0.962; NNFI = 0.900; PGFI = 0.568.

The SEM conducted showed that the normative subgoal had a positive and significant relation with both dependent variables, as the gain subgoal had a negative relation. In both cases, the hedonic subgoal had no significant effect. The organic food buying frequency had a positive and significant relation, already expect both based on literature and on the previous results.

In short, the marketing strategy, the GFT-based messages, used in the present study had no statistically significant effect on the purchase behavior. On the other hand, the motivational subgroups and the organic food purchase frequency had significant effects on both dependent variables. These issues are discussed in the next section.

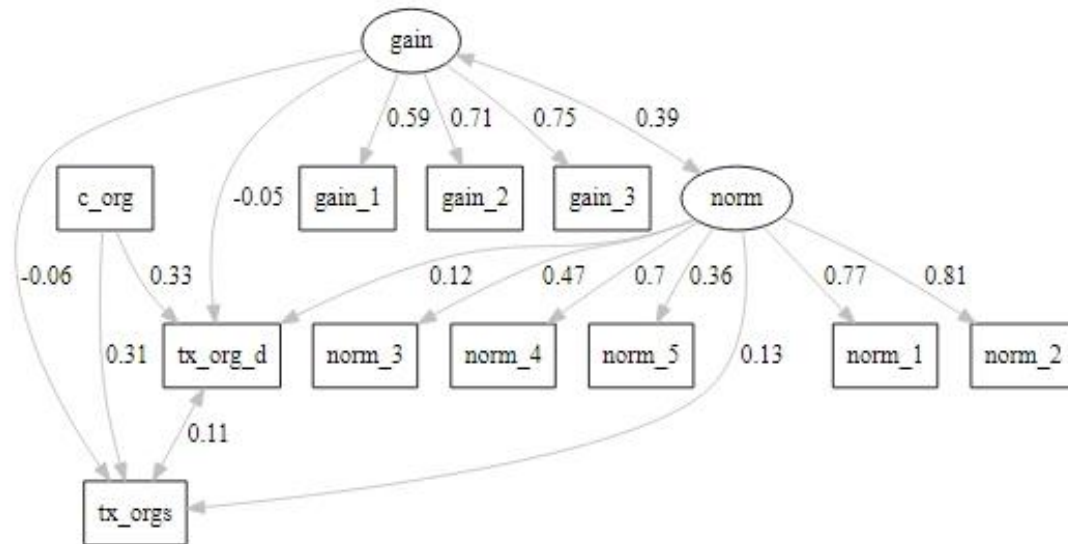


Figure 12: Graphical analysis of the SEM conducted. *Note.* c_org: organic food purchase frequency; tx_orgs: rate of organic food products in the final basket; tx_org_d: rate of organic ticket avarega in the final basket.

5.4. Discussion

Although the results showed that the situational factors, namely the primed messages based on the Goal Framing Theory, had no significant relation with the organic food purchase behavior, several other results might have important application, both in managerial as in theoretical progress.

As Steg et al. (2014) proposes, there are three ways to improve environmental friendly behavior: by decreasing the gain and hedonic goals in a determined situation, by increasing the normative goal, or by finding a way to make hedonic and gain goals to support normative ones. The present research used the last approach, by providing messages that did not intent do reduce the importance of gain and hedonic motivational goals, but tried to strengthen them towards a specific behavior.

The results showed that the GFT-based messages had no significant impact on the purchase behavior. Two main reasons might had led to this outcome: the inefficiency of the primed messages, or the inefficiency of the messages used.

Regarding the messages changing behavior towards social and environmental benefit, literature shows they have different effects depending on the demanded change. Olesen, Kattelman, Meendering and Stluka (2016), for example, studied exercise behavioral change, evaluating if primed message would make the individuals eat

healthier and practice more exercises. Results showed that no changes occurred in the behavior itself, but the informational level of the exposed group became higher than the control group. Similar results regarding the messages' ineffectiveness were found in other studies (Bidargaddi et al., 2018).

On the other hand, Buccoliero, Bellio, Mazzola and Solinas (2016), while studying the effectiveness of social marketing priming in influencing "text and drive" behavior, found that the messages had a significant impact, especially the usage of shocking advertising. Similar results were found by Mennicke, Kennedy, Gromer and Connor (2018), studying effective strategies to reduce violence by college men.

Analyzing the literature concerning primed messages, its results are inconclusive regarding its efficiency. In addition, no study was found where this kind of situational priming was tested in a simulated (or real) purchase situation. This means that, although in the present study no significant effect was identified, new studies might address the usage of priming, or similar strategies, like information providing (Lehman & Geller, 2004).

The fact that the behavior intended (i.e., organic food purchase) in the present study was budget-limited might have decreased the effectiveness of the strategy used, as people would think first in their economical restraints (Vohs, 2015). Although this kind of simulation represents a closer image of the reality, other types of priming or other strategies might be also tested.

While no significant statistical effects were found when analyzing the GFT-based messages, some effects were relevant. The effect of the hedonic-oriented message over the normative-oriented consumers was unexpected, given that it was originally designed to effect hedonic-oriented people. One possible explanation to this phenomenon is that normative-oriented people, already focused on buying organic food, receives a message about a bonus (or additional) attribute (quality) in their purchase, it made them spend more and buy more organic food.

A contrary effect was observed in gain-oriented consumers: when facing the hedonic-oriented messages, they showed smaller rates. It might be explained by their vision on higher quality: a bigger spent of resources (Casidy & Wymer, 2016). It means that, for gain-oriented consumers, the product quality would be translated in a higher spent of money, making them change their purchases.

This line of thinking led to relevant impacts on research agenda. As priming does not involve, at first and in this studies' method, actual rewards or punishments to the person that takes (or does not take) the behavior. Future research might address the usage of rewards and punishment together with the priming strategy, or, as cited by Foxall (1992), reinforcing and aversive stimulus.

The idea of using this kind of stimulus is reinforced by the results of the present study. Figures 10 and 11 show that the gain-oriented consumers had the smallest variations comparing all the messages presented. In other words, people more oriented to saving their resources showed minimum effect under the marketing strategy. This result induces to the thought that more active strategies, like discounts (Gottschalk & Leistner, 2013) or free giveaway strategies (Rong-Da, Yang, Chen, & Chung, 2017) are more effective than passive strategies.

Figures 10 and 11 also highlight other results. Although not statistically significant, the normative-oriented group showed more changes under the different messages (the three types of messages) comparing to the control group (no message at all). This might indicate that this group of consumers is more open to change its purchase behavior related to organic food purchase without rewards or expected consequences. This leads to Steg et al. (2014) idea that strengthening the normative goal is a more sustainable way to achieve pro-environmental behavior, since it does not depend on rewards. Based on this research's findings, it can be assumed that, for normative-oriented consumers, a hedonic message, such as higher product quality, might be more effective than other kinds of messages.

In short, although the priming marketing strategy showed no statistically significant differences, the results found showed consonance with literature about marketing strategies and the Goal Framing Theory ideals. As stated before, new studies regarding marketing strategies should be performed in order to broader the research agenda.

Finally, the subgoals motivational instrument served its purpose efficiently, by grouping consumers with the same concerns in three different groups: gain, hedonic and normative oriented individuals. This enables these groups to be analyzed separately. As expected, accordingly to Steg et al. (2014), gain and hedonic oriented people presented

a smaller means regarding the pro-environmental behavior in every purchase simulation in comparison to normative-oriented consumers, as shown figures 10 and 11.

These were expected results, since the normative goal, as analyzed in study II and confirmed in study III, englobed both health and environment concerns, and this two factors are the biggest motivators in organic food consumption (Hughner et al., 2007; Rana & Paul, 2017; Shafie & Rennie, 2012), while the gain goal grouped the value for money related questions, being the biggest barrier of this kind of behavior.

These relationships between organic food purchase behavior and the normative and gain oriented motivations can also be attested in the SEM conducted with the two independent variables and the three dependent ones, plus the monthly income. The analysis of the control variables showed that only the income had a significant effect on the purchase behavior, going accordingly to the literature (Aschemann-Witzel & Zielke, 2015; Hughner et al., 2007). Although the research was a simulated test, the real income of the respondents indicated a positive relation to the organic purchase behavior.

Also, it is worth mention that the gain-oriented people, besides presenting negative parameters to all the dependent variables, had the smallest one related to the average ticket of purchase. In other words, even when they pursued more organic products, they looked for cheaper ones, reinforcing the ideas of the Goal Framing Theory that this kind of person have high resource-administration concerns (Lindenberg & Steg, 2007). The final considerations, together with the research limitations and future agenda, are addressed in the next section.

5.5. Final Considerations

This study's main objective was to test the Goal Framing Theory as a source of marketing strategy, namely the priming approach, in the organic food market, and to analyze its effects in organic food purchase behavior. Besides this main objective, the study also aimed testing the conceptual framework of Steg et al. (2014), where motivational and situational factors have an impact on pro-environmental and pro-social behaviors.

In terms of results, no significant differences were found among the different types of GFT-based messages. These results lead to some future agenda, for instance the

usage of other kinds of GFT-based strategies, such as information (Lehman & Geller, 2004) or even penalty and reward strategies (Bolderdijk, Geller, & Lehman, 2012; Foxall, 1992).

Although the situational strategy selected in the present research did not present significant differences among each other, these results showed several similarities to what was expected on the Goal Framing Theory. The motivational factor studied (i.e., subgoals related to each major goal) showed themselves as a robust technique to classify consumers, identifying three distinct groups (normative, gain and hedonic consumers), as identified in both studies II and III.

Also, it is showed that the gain-oriented consumers showed less interest on organic food and the smallest variation among the situational factor groups. Thus, they were less impacted by messages that do not have practical rewards or punishments. At the same time, the normative motivational group, preoccupied with doing the right thing (Lindenberg & Steg, 2007), showed the highest willingness to buy organic food.

In short, although the results showed that the selected strategy did not had a significant impact on consumers' behavior, it showed that there are clearly different groups of consumers, divided by the major goals described in the GFT. This fact opens new research agenda, covering further studies on these groups, and the usage of new situational, GFT-based strategies, with practical penalties or rewards, testing the consumers' willingness to change his pursued goal on a given situation.

The research had a sampling limitation, as data was collected in a non-probabilistic strategy, resulting in a high concentrated sample, specially residents of the Distrito Federal, Brazil. Future research might address the usage of probabilistic sampling strategies, aiming to achieve more generalizable results.

In regarding to Goal Framing Theory as a base to marketing strategies, the present research showed results that open a vast research agenda, like new strategies and new approaches towards consumer behavior. Despite the lack of significance in the statistical analysis, it showed as a promising perspective, opening windows to future pro-environmental behaviors studies.

The next study focused on another aspect found in study II: the formation of the normative goal and its subgoals. Both health and environmental concerns were grouped

in this major goal, not being possible to analyze what is more important to consumers: individual (health) or collective (environment) aspects.

6. Study IV: The impact of individual and collective aspects of the normative goal in consumers' buying behavior

The results of the Study II showed that the normative major goal, associated with appropriateness and doing the right thing (Lindenberg & Steg, 2007), in the context of organic food purchase and consumption is related to both most important individual and collective motivators, health and environmental protection, respectively.

Although study III showed that the normative-oriented consumers have a higher willingness to purchase organic food, it is unclear if it is focused in the individual and familiar health, or in the environmental and collective welfare. As discussed by Schrank and Running (2016), both individualist (health issues, mostly) and collectivist (environmental and social protection) motivations are relevant in the discussion on why people purchase and consume organic food.

In order to complete the knowledge about the consumers' behavior in relation to organic food, the main objective of study IV is to analyze, though the usage of eco-labeling, the importance given by the consumers to individual and collective attributes of the product. In other words, the study highlights which subgoal within the normative major goal is more important in the studied context: the health concern or the environmental protection.

With this discussion in mind, study IV involves a discrete choice experiment, where a marketing strategy, eco-labeling, is tested with individual and collective attributes as variables, resulting in a utility equation where it is possible to analyze the relevance of these attributes (Amaya-Amaya, Ryan, & Gerard, 2008; McFadden, 1973). Next, the theoretical background section explores the eco-labeling strategy, together with the discrete choice experiment.

6.1. Theoretical background

As defended by Schrank and Running (2016), consumers do not express and behave in a whole rational way, as it is stated in the classic economic theories: the products have different meanings and impacts perceived differently by the consumers, and this questions make them think and act in different ways. The authors highlight the

organic market as an example: regular consumers “shape their choices from a broad set of cultural and social contexts” (Schrack & Running, 2016, p. 4).

This turns the organic food purchase and consumption into an economic behavior, but impacted by several issues, named in study I as motivators and barriers. Several researches distinguish two main groups of motivations: individualist and collectivist (Hughner et al., 2007; Kareklas et al., 2014; Schrack & Running, 2016; Shafie & Rennie, 2012). Individualist motivations involve health, security, avoidance of pesticides and chemical residues, superior taste, and social distinction, as collective motivations involve environmental protection, economic and political activism and community interests (Kareklas et al., 2014; Schrack & Running, 2016).

This duality in consumers’ motivators brings research questions: besides “what are the main motivators?”, questions like “are consumers individualistic or collectivist oriented in their organic food consumption?”, or “is this purchase behavior oriented both ways?”. As stated by Thøgersen (2011), organic food consumers are collectivist-driven in an attitudinal, values level, however, when justifying their purchase, they focus on private benefits in order to preserve a rational image.

Similar results were found by Doorn and Verhoef (2015), where biospheric values and health concerns both showed as great motivators of organic food consumption. In the study II of this dissertation, the egoaltruistic values oriented towards the environment also presented significant relation to the normative goal, and consequently to the organic food purchase behavior, together with conservation human values.

All these results show that both individual and collective motivators are important issues in the organic food market, however they do not identify which one is the most important, or most significant to the consumers in the buying situation. In terms of marketing management, identifying which of the motivators is more important to consumers when they are buying their food becomes a critical assignment.

This need to achieve the knowledge on what is important to consumers in their purchase moment drove to an increasingly number of studies that used products with labels attached, with qualifications such as “organic” or “green product” (Sörqvist et al., 2016), even without the knowledge of which message, or which content is more

important. However, no concrete results were found on which reinforce is more important, whether the individual or the collective one.

In the present study, the evaluation on which of these two kinds of reinforces (individual or collective) is more important in the organic food market is tested by the usage of eco-labeling strategy. Eco-labeling, according to Teisl, Roe and Hicks (2002), differs from conventional labeling as they differentiate products regarding its production patterns, not only the product itself. It means that eco-labels show the consumers how the product is manufactured, and if its production respected environmental and social issues, in addition to reduce information asymmetry between producers and consumers (Delmas & Lessem, 2015). Jonell, Crona, Brown, Rönnbäck and Troell (2016) also highlight the growth of the usage of eco-labels, especially in social and environmental friendly products.

Eco-labeling has been studied as a marketing strategy, but, as stated by Yenipazarli (2015), its knowledge is fragmented because of the presence of many labels with different meanings. In addition, the study of eco-labeling has a strong link with the study of premium prices and the consumers' willingness to pay (Carlson & Palmer, 2016), but it was not analyzed as a way to identify which type of eco-labeling is more relevant to the consumers themselves.

Several studies addressed the eco-labeling in the organic food market, since it is a relevant theme inside this market, both for its relation to premium prices (Carlson & Palmer, 2016; Hughner et al., 2007) and for the consumers' trust on it (Nuttavuthisit & Thøgersen, 2017; Shafie & Rennie, 2012; Soyez, Francis, & Smirnova, 2012). Liu, Yan and Zhou (2017) evaluated the effect of several types of eco-labeling (namely, eco-labels, geographical origin and brand) in consumers' behavior, through a choice experiment. Results showed that the eco-labels had the strongest parameters in the utility equation, highlighting the importance of the eco-labeling.

In another consumer choice experiment, Delmas and Lessem (2015) tested the effect of eco-labeling, region (representing quality) of production and brand on the wine market. General results showed that eco-labeled wines were favored by the consumers, but it was related to a low-quality wine, which made high income consumers prefer the high price of conventional wine from the best region.

In another study, Chen, Gao, Swisher, House and Zhao (2018) evaluated the importance given by consumers, through willingness to pay, for different environmental labels presented in strawberries, such as reduced impact on air quality, on soil quality, on water quality, the usage of less fertilizer and of less pesticide. Consumers showed high WTP for strawberries with less pesticide used, showing a special concern with this matter.

The results exposed above show that both collective and individual aspects are present in the consumers' choice behavior, especially in the food market. Whether its health or product quality, environmental or social concerns, this duality related to organic food consumption is shown to be relevant in the purchase context. Thus, the objective of this paper was to analyze which kind of eco-labeling is more important to consumers: environmental-oriented or individual-oriented label.

Kareklas et al. (2014) studied the individual-collective duality, and their model showed that both motivators groups had significant, positive relation to purchase intention: nutritional value and natural content as egoistic factors, and effect on environment and pro-environment lifestyle as altruistic factors. Similar results were found by Yadav (2016), which found both health and environmental concerns to be significant predictors of attitudes and purchase intentions.

Given the necessity to analyze which of this two factors are the most important in consumers' behavior in the food market, and the high usage of choice experiments to address eco-labeling studies in the same market, the present research aimed to find the utility function of consumers' concerns in organic food, as explained in the following section.

6.2. Method

In order to analyze the importance given by consumers to the individual and collective variables related to organic food choices, a choice experiment was conducted. This kind of study is widely used both in food researches, as the theoretical background stated, and in environmental economics studies (Liu et al., 2017).

The idea behind the choice experiment is to define a utility equation, which has parameters that show which attributes are important or significant in relation to the

studied behavior. Choice experiments are, by definition, an “attribute-based survey method for measuring benefits (utility)” (Amaya-Amaya et al., 2008, p. 13).

In the present study, the utility function is constructed based on the consumers’ preferences for coffee, based in their priorities and preferences due to several eco-labeling components. To achieve the research’s objective, two main attributes were defined: an individual, health-related certification; and a collective, environmental-related certification. Besides these two, the Brazilian organic food certification was also used, in one of the groups of respondents, to evaluate a better known certificate, and also the respondents’ willingness to pay for organic food certificated products.

In order to ensure consumers’ knowledge of the certifications used, their information and definition were shown before the choice experiment itself. Figure 13 shows the certifications used. Together with the three certifications, the forth controlled variable was the price. Four levels of coffee price were defined, based on their real market values in Brazilian Reais, as shown in table 18. Also, the utility equation is showed next.



Figure 13: Certifications used in the choice experiment. Note. (a) GMO Free, health-oriented; ABNT-environment, environmental-oriented; and the Brazilian Organic food certification. All the certifications were previously defined for the respondents.

Table 18

Definitions of the attributes and levels studied

Variable	Attribute	Levels
Health concern	GMO Free certification	Yes

		No
Environmental concern	ABNT environment certification	Yes
		No
Organic food preference	<i>Produto Orgânico Brasil</i> certification	Yes
		No
Price	Product price	R\$ 17.99
		R\$ 19.99
		R\$ 23.99
		R\$ 25.99

$$U = \beta_1 \times Ind + \beta_2 \times Col + \beta_3 \times Organic + \beta_4 \times Price \quad (1)$$

The questionnaire was designed with the *support.CEs* package in R, following the orientations provided by Aizaki (2012) on how to design a choice experiment. The final questionnaire was defined as a set of sixteen choices, varying the attributes in each choice. Together with the choice experiment itself, the final part of the instrument also asked SES questions, including: age, gender, schooling, monthly income. Also, two questions were added as control variables: if the respondent was responsible for the food purchase in the household, and if he/she was a coffee consumer. Figure 14 shows an example of a choice to be made by the respondents.



Figure 14: Example of a choice presented to the respondents, with them having to pick one of the two presented products, observing their certifications and their prices.

For data collection procedures, two groups of respondents were defined: one of them did not receive the organic food certification, in order to analyze their preferences only between health (GMO Free certification) and environment (ABNT environment certification) concerns. The other group received those two certifications and also the organic food certification. In total, 265 respondents participated in the research (Group I N=135; Group II N=130), both achieving the minimum sample of 125, based on the number of choices, tasks and attributes (Orme, 2006).

The general sample had an average age of 39.5 years old (SD=14.17), with ages varying from 18 to 72 years old; 41.8% of them were female, and 63.3% of the respondents reported pursuing high education degree. No control variable showed significant differences in the preferences responses, being left out of the utility equations showed in the results section next. Data was analyzed using the *support.CEs* and *survival* packages in R programming (Aizaki, 2012; Aizaki & Nishimura, 2008).

6.3. Results

According to the procedures listed by Aizaki and Nishimura (2008), the data base that contained the responses was translated to a usable matrix for the *survival* package, with the two groups of respondents being translated to a total of 8.480 response observations. The results showed next are based on this database.

Regarding the first group, that only received the two certifications related to health and collective issues, table 19 shows that both certifications are significant in the utility equation, indicating they both have a relevant importance to the consumers. However, it is possible to see that the individual certification presents a higher coefficient, indicating a higher importance to that attribute. In other words, the respondents had shown a higher importance given to individual protection rather than to environmental protection.

Table 19

Results for Group I with only two certification attributes tested

	coef	exp(coef)	se(coef)	z
Individual certification	0.620	1.858	0.064	9.571***
Environmental certification	0.557	1.745	0.066	8.432***
Price	-0.107	0.898	0.012	-8.747***

Likelihood ratio test = 128.5***; adjusted R² = 0.042; ***: p<0.01

The low adjusted Rho-squared indicates that the two attributes, plus the price, explained around 4% of the choice's variation. However, as the objective of the study is a comparison between attributes, the power of explanation of the model is not relevant. Table 22 also shows the significant parameter of price, negatively related to the choice, as expected. It is possible to assume that the price was the least important variable in the experiment, with the smallest coefficient.

The same results presented in table 19 can be seen in the analysis of the marginal willingness to pay (mwtp) for each attribute. As shown in table 20, the individual certification, related to health concerns, had a 11.34% higher value than the collective certification, related to environmental protection. It reinforces the idea that the respondents were more concerned with their own health and protection than they were with the environment. The 2.5% column indicates the minimum mwtp, as the 97.5% indicates the maximum mwtp for each attribute.

Table 20

Results for the analysis of the marginal willingness to pay for Group I with only two attributes tested

Attribute	mwtp	2.5%	97.5%
Individual certification	5.79	4.69	7.21
Environmental certification	5.20	4.11	6.54

In short, the group that received only the two attributes showed a higher importance given to individual aspects, with a higher parameter in the utility function equation and a higher marginal willingness to pay. The second group, however, showed different results when the organic certification was present. Table 21 shows the results for the utility equation of coffee choices for the second group.

The results show that the individual and the collective certifications had almost identical parameters, having a similar importance given by the consumers. In another way, the organic certification, which was defined as non-aggressive, respectful for humans, nature and culture, showed a higher parameter than the other attributes. The price was shown again as the least important attribute. The inclusion of the organic certification also increased the adjusted rho-squared value to 18.3%.

Table 21

Results for Group II with the three certification attributes tested

	coef	exp(coef)	se(coef)	z
Individual certification	0.821	2.273	0.071	11.55***
Environmental certification	0.830	0.229	0.072	11.49***
Organic certification	1.471	4.357	0.083	17.54***
Price	-0.190	0.826	0.015	-12.54***

Likelihood ratio test = 526.1***; adjusted R² = 0.183; ***: p<0.01

The same results might be identified in the analysis of the marginal willingness to pay for each attribute. The organic certification showed a higher value (79.5% higher than the individual certification, 77.4% higher than the collective certification) than the

other two attributes, as shown in table 22. The individual and the collective certifications, however, showed very similar values, with the collective certification being 1.1% higher.

Table 22

Results for the analysis of the marginal willingness to pay for Group II, with the three attributes tested

Attribute	mwtp	2.5%	97.5%
Individual certification	4.30	3.63	5.05
Environmental certification	4.35	3.70	5.13
Organic certification	7.72	6.67	9.05

In the analysis of the influence of control variables conducted, none of the used variables showed any significant influence on parameters differences or marginal willingness to pay for both groups of respondents. In short, in the presence of the organic food certification, the respondents gave less importance to the other attributes, probably due to the fact that the *Produto Orgânico Brasil* certification is the most known certification for this kind of product in the country (Organis, 2018). The results found are all discussed next.

6.4. Discussion

In general, it is possible to assume that, based on the results of the first group, with those who received only two attributes (health and environmental related certifications), that consumers showed a higher importance and a higher willingness to pay for the individual-oriented, health concerned, attribute.

Schrank and Running (2016), when studying the organic food market, concluded that the consumers are not driven only by individual or collective goals, but by a union of these two poles. However, it is possible to assume that one of those will be more important than the other, depending on the context, as stated by the Goal Framing

Theory (Lindenberg & Steg, 2007; Steg et al., 2014). In the present research, when studying the individualistic-collectivist duality in the consumers' behavior on coffee purchase, it was found that the individual aspect has slightly higher importance than the collective aspect.

Chen et al. (2018) found similar results, where the strawberries consumers showed a higher willingness to pay for products that used less pesticide because of its impact in their health. Individual aspects were also more important in the study of wine consumption, conducted by Delmas and Lessem (2015): quality aspects, measured by the origin of the product, were more important than ecologic attributes.

Study II showed that the normative goal related to organic food consumption could be divided in two defined subgoals: an individual, health related; and a collective, environmental related one. Giving the results showed in this paper, in the context of coffee purchase, it is possible to assume that the individualistic subgoal was more important than the collectivist one. It is possible to assume that marketing strategies that focus on this kind of situation might be more efficient if addressing this kind of subgoal rather than an environmental one.

It is relevant to address that this results might have been achieved because of Brazil's population cultural characteristics. Addressing the human values theory (Schwartz et al., 2012), Torres, Porto, Vargas and Fischer (2015), through a meta-analysis conducted with Brazil-based studies, found that, in most of the country, people endorsed more individualistic values (self-direction and achievement, for example) than collective, universalism values.

This result might explain why, on the Brazilian context, the individual-oriented certification presented was more important than the collective-oriented one. As literature defends, the effectiveness and the real effect of a marketing strategy is influenced by consumers' culture (Petersen, Kushwaha, & Kumar, 2015; Roth, 1995). In that way, new studies in different cultures might find different results.

The higher parameters of the three certifications in comparison to the price indicate that health and environmental concerns are more important than the expenditure of resources. This affirmation goes accordingly to the idea presented by Steg et al. (2014), that strengthening the normative goal and its subgoals might be a more interesting and sustainable way to achieve behavioral change. Consumers showed

themselves less impacted by price change, indicating a lower importance given to the gain goal.

It is also notable the marginal willingness to pay (mwtp) for each certification. In a study where the product analyzed had an average price of 21.99, the mwtp of the attributes varied from 4.30 to 7.72, indicating a high willingness to pay for these attributes in the product. As stated by Zhang, Sogn-Grundvåg, Asche, and Young (2018), consumers show a big predisposition to spend more money in eco-labeled products.

Another relevant result showed that the organic certification was more important to the consumers than the individual and collective certifications presented. Several reasons might explain these results. The first one is the definition of the certification, which includes questions related to health (no chemical or aggressive pesticides used) and to the environment (respect to nature), in addition to cultural questions. This definition makes organic certification more complete and attractive attribute than the others, leading to a higher importance given and a higher marginal willingness to pay for it.

Liu et al. (2017) also identified a higher importance given by consumers to the organic certification in comparison to the green label studied in the rice market in China. The paper results showed the organic certification was more important than quality issues (brand strength) and geographical origin, endorsing the present study and the idea that the consumers see the organic certification as a more important and more complete attribute.

The second reason might come from the fact that the certification used is the most known organic certification in Brazil (Organis, 2018). This explanation might lead to other research questions, like the importance of the knowledge about the purchase of organic food: when the product has a well-known and respectable certification, the consumers might be more attracted to it.

This line of thought also highlights the importance of information symmetry: it is important that consumers, retailers and producers have the same amount of information about the product and its production, so the trust level grows and, consequently, the market itself (Jiang, Gerasimova, Peng, & Sheng, 2019). As stated by Le and Nguyen (2018), the information given to all of the agents raises credibility,

which, in its turn, can make the whole society better-off. Lined up with study I, the information symmetry might also act as a counter action to the lack of knowledge and the lack of trust barriers, shortening the attitudinal-behavioral gap in relation to organic food consumption (Lindenberg & Steg, 2007; Nuttavuthisit & Thøgersen, 2017).

The present study helped both marketing management and marketing academic areas by the advances on consumer's understanding, and bringing to light questions related to the motivations behind the consumption in the food market. Although both individual and collective attributes showed significance in the analyzed purchase behavior, the individual-oriented certification showed itself as more attractive to the respondents, both in parameters measurement and marginal willingness to pay. The final considerations of the presented study are addressed next.

6.5. Final considerations

Study IV addressed the normative goal behind organic food consumption, as defined by studies II and III. In these past studies, it was identified that the normative goal presented subgoals related both to individual and collective aspects. In order to analyze which of those is more important in the Brazilian context, a choice experiment was conducted, presenting the respondents with individual and collective oriented attributes, in order to evaluate the most important in the purchase behavior.

The results showed similar results to the literature about the individualistic-collectivist duality and its impact in the organic food market: both of the aspects are significantly important (Hoffmann & Schlicht, 2013; Schrank & Running, 2016). Although, in the context (situational factor) presented in the present study, the individual attribute was more important both in utility parameters and marginal willingness to pay.

The conducted study, despite advancing the knowledge of the consumers in food market situations, also brings to light some agendas. The first one is related to the Goal Framing Theory itself. As defined by Lindenberg and Steg (2007) and Steg et al. (2014), the situation in which the individuals are inserted might change their pursued goals and, consequently, their behavior. Given this idea, it becomes important to test the attributes studied here in different contexts, such as other products, other price levels or

price differences between organic and conventional products, given price as the main barrier for organic food consumption (Hughner et al., 2007; Shafie & Rennie, 2012).

Another research agenda might address the usage of different subgoals, inside or outside the normative goal. As identified in study II, animal welfare can be addressed as a goal or a subgoal. Products that have animal related productions might have different or similar results in comparison to this paper, depending on the goals that the consumers try to achieve when consuming an animal-origin product.

Although the present study achieved more than the minimum sample size to conduct the statistical analysis, the sample was defined in a non-probabilistic sampling method. This reduces the generalizability of its results, opening agenda for new research that uses probabilistic sampling techniques, seeking to generalize and strengthen the results found.

In short, the present study helped both academics and marketing managers in the understanding of consumers and its preferences and behaviors toward food consumption and purchase. As stated by Steg et al. (2014), by strengthening the normative goal it is possible to achieve sustainable behavioral change toward pro-social and pro-environmental behavior. Thus, understanding the subgoals related to the normative goal and its importance to consumers becomes highly relevant in the proposal of social marketing strategies and public policies, implicating in a sharp market communication.

7. Conclusion

The present dissertation focused on how to change consumption behavior towards a more sustainable one, focusing on pro-environmental and pro-social changes through marketing strategies. With this view in mind, the main objective was to test the Goal Framing Theory, proposed by Lindenberg and Steg (2007) and Steg et al. (2014), as a source of marketing strategies that focused on changing consumers behavior toward organic food consumption, reducing the attitudinal-behavioral gap that stops people from taking a pro-social or pro-environmental action (Aschemann-Witzel & Aagaard, 2014; Žabkar & Hosta, 2013).

This main objective was divided in four studies, each one with its applications and results that helped both the academy and the marketing management in the understanding of food consumption behavior, especially organic foods. By analyzing the results through Steg et al. (2014) framework, it is possible to assume that the Goal Framing Theory showed itself as a relevant theory to analyze and explain consumption behavior, both in the motivational and situational aspects.

Analyzing the studies separately, it is possible to confirm that the three major goals proposed by Lindenberg and Steg (2007) were sufficient to address the motivators and the barriers of organic food consumption, despite of the adaptation proposed by study I, including a fourth goal. In an empirical analysis, through study II, it was possible to observe that health concerns belonged to the normative goal, being a “right decision” or “the right thing to be done” (Lindenberg & Steg, 2007, p. 120), instead of a separate motivation as foreseen in study I.

The results from study II brought bases to the subsequent studies: the usage of the subgoal motivational scale, and the creation of the normative messages based both on nature protection and health concerns together in study III; and the analysis of which one is more important in consumer choices: the individual or the collective concerns covered in study IV.

Regarding the statistical results from study III, it is possible to assume that the Goal Framing Theory was stronger in the explanation of motivational structures rather than the situational ones cued by the marketing strategies adopted, by clearly separating

the motivational groups. As discussed in study III, several reasons might have led to these results, opening numerous research agendas, like testing other marketing strategies based on Goal Framing Theory, or even new primed messages with different claims or in different markets.

In general, the present research has several impacts and contributions to both marketing academics and managers (public or private), since the study of these kind of strategies helps on the understanding of consumers' preferences and behaviors (Nuttavuthisit & Thøgersen, 2017). As stated by Lee (2016, p. 12), "a better understanding of organic food shoppers can provide organic food retailing professionals, organic food marketers, and organic food producers with information that will help them serve their consumers better".

Although the results represent the beginning towards the application of the Goal Framing Theory for marketing strategies, they also show a promising future for this practice, especially in the analysis of motivational hierarchical structures (values, subgoals, behavior, as structured in studies II and III). Although the situational marketing strategy proposed in study III (GFT-based primed messages) had no statistically significant differences among them, the results highlighted other implications in the organic food market, especially considering motivational and previous purchase behavior. Besides, several research agendas were discussed, in order to develop the knowledge and the implementation of the GFT as a marketing strategy guide.

As the consumers' interest for behaviors that do less harm to the environment and to other people rises across the globe, marketing might serve as a helpful hand in the communication between society and companies in order to narrow the gap between attitudes and actual behavior. Following this point of view, studying and developing marketing strategies oriented to sustainable consumption might be a relevant way to promote transformation in the present destructive consumption patterns.

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Appendix A – Formulated questionnaires

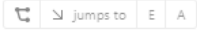
Study II


 Bem-vindo/a, e obrigado por participar de nossa pesquisa vinculada ao Programa de Pós-Graduação em Administração da Universidade de Brasília (PPGA-UnB). Pedimos que você seja completamente honesto/a nas suas respostas no questionário a seguir. Não há respostas certas ou erradas, portanto sinta-se inteiramente a vontade para dar sua opinião. Qualquer dúvida ou questionamento, favor entrar em contato com Bruno Saboya (brunosaboya@gmail.com). O preenchimento do questionário leva em torno de 8 a 10 minutos. Agradecemos novamente a sua participação.





 **1** Primeiramente, precisamos saber: você é o(a) responsável pelas compras de alimentos da sua residência?


- Sim
- Não





 **A** Ótimo! Vamos começar com alguns valores relacionados à vida do nosso cotidiano. Pedimos que você avalie cada uma das questões apresentadas, classificando-as de 1 - nada importante; a 10 - extremamente importante.





 **2** Igualdade

 **3** Poder social

 **4** Um mundo em paz





 5 Uma vida excitante

 6 União com a natureza


 7 Riquezas


 8 Beleza natural


 9 Uma vida variada

 10 Justiça social


 11 Autoridade


 12 Respeito pelo planeta


 13 Influência sobre outras pessoas


 14 Proteção ao meio ambiente


 15 Desfrutar da vida









 16 Evitar a poluição









 17 Curiosidade









 B A seguir, vamos apresentar algumas frases relacionadas à uma pessoa. Pedimos que você julgue cada uma das frases numa escala de 1 ("não se parece nada comigo") a 6 ("se parece muito comigo").









 18 É importante para esta pessoa formar suas visões de maneira independente.


 19 É importante para esta pessoa se entreter.


-  20 É importante para esta pessoa que as pessoas fracas e vulneráveis da sociedade sejam protegidas.
-  21 É importante para esta pessoa cuidar das pessoas das quais ela se sente próximo.
-  22 É importante para esta pessoa nunca violar as regras ou regulamentos.
-  23 É importante para esta pessoa que as pessoas que ela conhece tenham total confiança nele.
-  24 É importante para esta pessoa ser rica.
-  25 É importante para esta pessoa nunca irritar alguém.
-  26 É importante para esta pessoa desenvolver suas próprias opiniões.
-  27 É importante para esta pessoa ter poder para conseguir com que as pessoas façam o que ela quer.


-  28 É importante para esta pessoa planejar suas atividades de forma independente.
-  29 É importante para esta pessoa ter muito sucesso.
-  30 É importante para esta pessoa seguir os costumes da sua família ou os costumes de uma religião.
-  31 É importante para esta pessoa ouvir e compreender as pessoas que são diferentes dele.
-  32 É importante para esta pessoa que todas as pessoas no mundo tenham oportunidades iguais na vida.
-  33 É importante para esta pessoa ser humilde.
-  34 É importante para esta pessoa ser a pessoa que diz aos outros o que fazer.
-  35 É importante para esta pessoa obedecer todas as leis.


-  36 É importante para esta pessoa ter todos os tipos de experiências novas.
-  37 É importante para esta pessoa ter coisas caras que mostram a sua riqueza.
-  38 É importante para esta pessoa proteger o ambiente natural da destruição ou poluição.
-  39 É importante para esta pessoa aproveitar qualquer oportunidade de se divertir.
-  40 É importante para esta pessoa se preocupar com todas as necessidades das suas pessoas queridas.
-  41 É importante para esta pessoa nunca ser humilhada.
-  42 É importante para esta pessoa que seu país se proteja de todas as ameaças.
-  43 É importante para esta pessoa nunca deixar as outras pessoas com raiva.


-  44 É importante para esta pessoa evitar qualquer coisa perigosa.
-  45 É importante para esta pessoa que todos os seus amigos e família possam acreditar nela completamente.
-  46 É importante para esta pessoa ser livre para escolher por ela mesmo o que fazer.
-  47 É importante para esta pessoa aceitar as pessoas como elas são, mesmo quando ela discorda delas.
-  C Excelente. Vamos falar agora do seu consumo e da sua compra de alimentos. Pedimos que você classifique as afirmações de 1 ("nem um pouco importante") a 5 ("de extrema importância").
-  48 Quando eu compro alimentos, é importante que o produto que eu escolha seja de alta qualidade
-  49 Quando eu compro alimentos, é importante que o produto que eu escolha tenha um preço razoável
-  50 Quando eu compro alimentos, é importante que o produto que eu escolha tenha sido produzido de maneira que não gere desequilíbrio ambiental


 51 Quando eu compro alimentos, é importante que o produto que eu escolha melhore a minha saúde e a saúde da minha família


 52 Quando eu compro alimentos, é importante que o produto que eu escolha seja de alto nível

 53 Quando eu compro alimentos, é importante que o produto que eu escolha não seja muito caro








 54 Quando eu compro alimentos, é importante que o produto que eu escolha seja embalado de maneira que respeite o meio ambiente

 55 Quando eu compro alimentos, é importante que o produto que eu escolha me deixe com uma consciência tranquila

 56 Quando eu compro alimentos, é importante que o produto que eu escolha seja bem feito

 57 Quando eu compro alimentos, é importante que o produto que eu escolha seja econômico



-  58 Quando eu compro alimentos, é importante que o produto que eu escolha tenha sido produzido sem causar dor aos animais
-  59 Quando eu compro alimentos, é importante que o produto que eu escolha evite riscos que podem estar associados ao consumo de substâncias nocivas para mim e para minha família
-  60 Quando eu compro alimentos, é importante que o produto que eu escolha atinja meus maiores níveis de expectativa
-  61 Quando eu compro alimentos, é importante que o produto que eu escolha ofereça benefícios compatíveis com o valor pago
-  62 Quando eu compro alimentos, é importante que o produto que eu escolha tenha sido produzido respeitando os direitos dos animais
-  63 Quando eu compro alimentos, é importante que o produto que eu escolha reduza o risco de doenças para mim e para minha família
-  64 Quando eu compro alimentos, é importante que o produto que eu escolha não seja um desperdício de dinheiro

A seguir, são apresentados diversos tipos de alimentos. Pedimos que você descreva seus hábitos de compra com relação à compra da opção **orgânica** destes alimentos:

• *

✓ 65a

Frutas

- Nunca comprei, nem pensei em comprar
- Ainda não comprei, mas tenho considerado comprar
- Eu já comprei, mas não comprarei mais
- Eu compro algumas vezes por ano
- Eu compro uma ou duas vezes ao mês
- Eu compro semanalmente
- Eu compro várias vezes por semana

• *

✓ 65b

Verduras

- Nunca comprei, nem pensei em comprar
- Ainda não comprei, mas tenho considerado comprar
- Eu já comprei, mas não comprarei mais
- Eu compro algumas vezes por ano
- Eu compro uma ou duas vezes ao mês
- Eu compro semanalmente
- Eu compro várias vezes por semana

• *

✓ 65c

Legumes

- Nunca comprei, nem pensei em comprar
- Ainda não comprei, mas tenho considerado comprar
- Eu já comprei, mas não comprarei mais
- Eu compro algumas vezes por ano
- Eu compro uma ou duas vezes ao mês
- Eu compro semanalmente
- Eu compro várias vezes por semana

• *

✓ 65d

Café

- Nunca comprei, nem pensei em comprar
- Ainda não comprei, mas tenho considerado comprar
- Eu já comprei, mas não comprarei mais
- Eu compro algumas vezes por ano
- Eu compro uma ou duas vezes ao mês
- Eu compro semanalmente
- Eu compro várias vezes por semana

✓ 65e

Cereais

- Nunca comprei, nem pensei em comprar
- Ainda não comprei, mas tenho considerado comprar
- Eu já comprei, mas não comprarei mais
- Eu compro algumas vezes por ano
- Eu compro uma ou duas vezes ao mês
- Eu compro semanalmente
- Eu compro várias vezes por semana

✓ 65f

Carnes

- Nunca comprei, nem pensei em comprar
- Ainda não comprei, mas tenho considerado comprar
- Eu já comprei, mas não comprarei mais
- Eu compro algumas vezes por ano
- Eu compro uma ou duas vezes ao mês
- Eu compro semanalmente
- Eu compro várias vezes por semana

+

✓ 65g

Ovos

- Nunca comprei, nem pensei em comprar
- Ainda não comprei, mas tenho considerado comprar
- Eu já comprei, mas não comprarei mais
- Eu compro algumas vezes por ano
- Eu compro uma ou duas vezes ao mês
- Eu compro semanalmente
- Eu compro várias vezes por semana

• *

✓ 65h

Leite

- Nunca comprei, nem pensei em comprar
- Ainda não comprei, mas tenho considerado comprar
- Eu já comprei, mas não comprarei mais
- Eu compro algumas vezes por ano
- Eu compro uma ou duas vezes ao mês
- Eu compro semanalmente
- Eu compro várias vezes por semana

• *

✓ 65i

Biscoitos

- Nunca comprei, nem pensei em comprar
- Ainda não comprei, mas tenho considerado comprar
- Eu já comprei, mas não comprarei mais
- Eu compro algumas vezes por ano
- Eu compro uma ou duas vezes ao mês
- Eu compro semanalmente
- Eu compro várias vezes por semana

✓ 66

Se você compra alimentos orgânicos, por favor estime há quanto tempo você começou a comprá-los

- Há menos de 3 meses
- De 3 a 6 meses
- De 7 a 12 meses
- De 1 a 2 anos
- De 2 a 3 anos
- De 3 a 5 anos
- Há mais de 5 anos
- Não compro alimentos orgânicos

D Agradecemos novamente a sua participação em nossa pesquisa. Agora queremos saber um pouco mais sobre você. As respostas não são obrigatórias, e também não serão utilizadas de maneira individual, servindo apenas para as análises coletivas de dados.

67 Idade

68 Renda mensal

- R\$ 998,00 a R\$ 1.996,00
- R\$ 1.997,00 a R\$ 3.992,00
- R\$ 3.993,00 a R\$ 4.990,00
- R\$ 4.991,00 a R\$ 5.998,00
- R\$ 5.999,00 a R\$ 7.984,00
- R\$ 7.985,00 a R\$ 9.980,00
- R\$ 9.981,00 a R\$ 12.974,00
- R\$ 12.975,00 a R\$ 14.970,00

[> View all choices](#)

69 Sexo

- Masculino
- Feminino


70 Escolaridade


- Sem ensino formal
- Ensino básico
- Ensino fundamental
- Ensino médio
- Ensino superior
- Especialização lato sensu
- Mestrado
- Doutorado




[> View all choices](#)


E Terminamos! Obrigado por sua participação. Para enviar suas respostas, clique em "Continue" e "Submit" a seguir. Qualquer dúvida, favor contatar brunosaboya@gmail.com


Study III

 Bem-vindo/a, e obrigado por participar de nossa pesquisa vinculada ao Programa de Pós-Graduação em Administração da Universidade de Brasília ([PPGA-UnB](#)). Pedimos que você seja completamente honesto/a nas suas respostas no questionário a seguir. Não há respostas certas ou erradas, portanto sinta-se inteiramente a vontade para dar sua opinião. Qualquer dúvida ou questionamento, favor entrar em contato com Bruno [Saboya](#) (brunosaboya@gmail.com). O preenchimento do questionário leva em torno de 8 a 10 minutos. Agradecemos novamente a sua participação.




  





 **1** Primeiramente, precisamos saber: você é o (a) responsável pelas compras de alimentos da sua residência?

- Sim
- Não



 → jumps to 2



 **2** Vamos falar sobre o seu consumo, especialmente da sua compra de alimentos. Pedimos que você classifique as afirmações de 1 ("nem um pouco importante") a 5 ("de extrema importância").






 → comes from 1




  **2a** Quando eu compro alimentos, é importante que o produto que eu escolha seja embalado de maneira ambientalmente amigável

  **2b** Quando eu compro alimentos, é importante que o produto que eu escolha seja de alta qualidade

  **2c** Quando eu compro alimentos, é importante que o produto que eu escolha tenha um preço razoável

  **2d** Quando eu compro alimentos, é importante que o produto que eu escolha seja produzido de maneira que não influencie o equilíbrio natural

-  2e Quando eu compro alimentos, é importante que o produto que eu escolha seja de primeiro nível
- *  2f Quando eu compro alimentos, é importante que o produto que eu escolha não seja muito caro
- *  2g Quando eu compro alimentos, é importante que o produto que eu escolha melhore a minha saúde e de minha família
- *  2h Quando eu compro alimentos, é importante que o produto que eu escolha seja bem feito
- *  2i Quando eu compro alimentos, é importante que o produto que eu escolha me dê uma consciência tranquila

- *  2j Quando eu compro alimentos, é importante que o produto que eu escolha seja econômico
- *  2k Quando eu compro alimentos, é importante que o produto que eu escolha atinja os maiores níveis de expectativa
- *  2l Quando eu compro alimentos, é importante que o produto que eu escolha evite riscos que podem ser associados ao consumo de substância perigosas

▼ 3 Qual é o seu mês de aniversário?

- Janeiro
- Fevereiro
- Março
- Abril
- Maio
- Junho
- Julho
- Agosto
- > View all choices

A Agora, imagine que você está em uma loja virtual de um supermercado, com a seguinte mensagem abaixo, precisando comprar produtos para café da manhã. Seu orçamento é de 60 reais (R\$ 60,00).



→ comes from 3 ↘ jumps to 4

B Agora, imagine que você está em uma loja virtual de um supermercado, com a seguinte mensagem abaixo, precisando comprar produtos para café da manhã. Seu orçamento é de 60 reais (R\$ 60,00).



→ comes from 3 ↘ jumps to 4

C Agora, imagine que você está em uma loja virtual de um supermercado, com a seguinte mensagem abaixo, precisando comprar produtos para café da manhã. Seu orçamento é de 60 reais (R\$ 60,00).



→ comes from 3 ↘ jumps to 4

D Agora, imagine que você está em uma loja virtual de um supermercado, precisando comprar produtos para café da manhã. Seu orçamento é de 60 reais (R\$ 60,00).

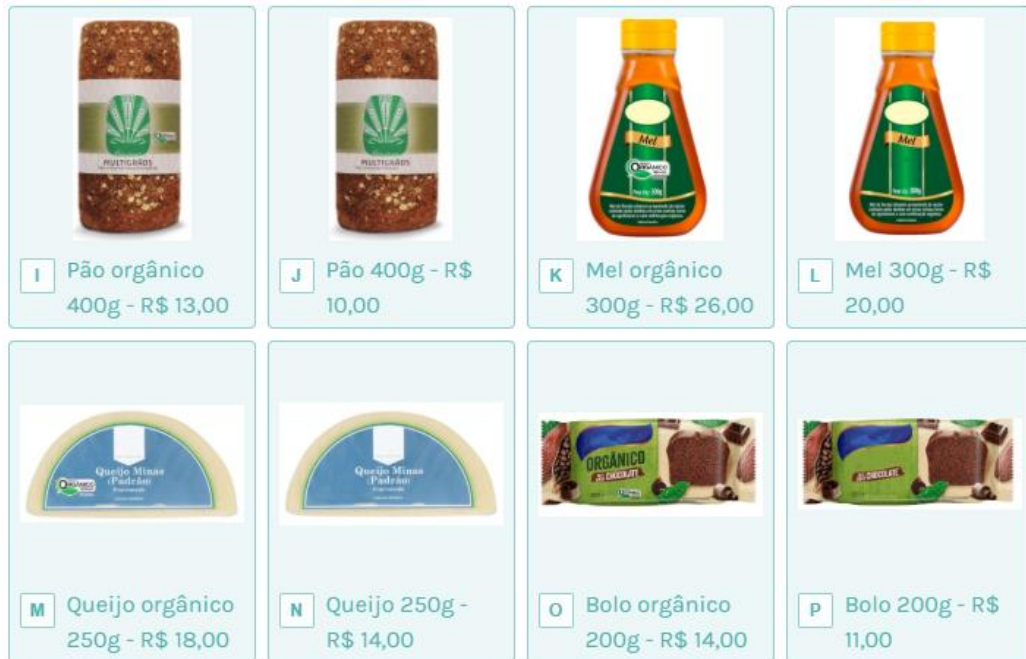
→ comes from 3 ↘ jumps to 4

4 → Boas compras!

Faça suas compras a vontade, caso passe do orçamento o questionário pedirá para você voltar à loja!

Choose as many as you like

 <p>A Suco de laranja orgânico 300ml - R\$ 7,00</p>	 <p>B Suco de laranja 300ml - R\$ 5,00</p>	 <p>C Café orgânico 250g - R\$ 14,00</p>	 <p>D Café 250g - R\$ 11,00</p>
 <p>E Leite orgânico 1L - R\$ 8,00</p>	 <p>F Leite 1L - R\$ 6,00</p>	 <p>G Geleia orgânica 250g - R\$ 24,00</p>	 <p>H Geleia 250g - R\$ 18,00</p>



5 → Seu gasto até aqui foi de 0 reais. Gostaria de confirmar a sua compra? Se preferir mudar ou acrescentar mais itens, clique na seta para cima, na parte de baixo do questionário. Se quiser encerrar suas compras, por favor clique em Confirmar abaixo.

A Confirmar

F Agradecemos suas respostas. Pedimos agora apenas que complete as questões abaixo sobre você:

→ comes from 5

6 Você compra alimentos orgânicos?

- Sim
- Não

↘ jumps to 7 8

7 Qual é a frequência que você compra alimentos orgânicos?

- Algumas vezes por ano
- Uma ou duas vezes ao mês
- Semanalmente
- Várias vezes por semana

→ comes from 6

8 Qual é a sua idade? (por favor, utilize apenas números)

☰ 9 Qual a sua UF de residência?

✓ 10 Qual é a sua renda familiar mensal?

- De R\$ 998,00 a R\$ 1.996,00
- De R\$ 1.997,00 a R\$ 3.992,00
- De R\$ 3.993,00 a R\$ 4.990,00
- De R\$ 4.991,00 a R\$ 5.998,00
- De R\$ 5.999,00 a R\$ 7.984,00
- De R\$ 7.985,00 a R\$ 9.980,00
- De R\$ 9.981,00 a R\$ 12.974,00
- De R\$ 12.975,00 a R\$ 14.970,00

> [View all choices](#)

✓ 11 Qual o seu sexo?

- Masculino
- Feminino

12 Quantas pessoas moram na sua residência, incluindo você? (por favor, utilize apenas números)

13 Quantas destas pessoas são menores de 12 anos (por favor, utilize apenas números)?

✓ 14 Escolaridade

- Sem ensino formal
- Ensino básico
- Ensino fundamental
- Ensino médio
- Ensino superior
- Especialização lato sensu
- Mestrado
- Doutorado

📄 G Terminamos! Obrigado por sua participação. Para enviar suas respostas, clique em "Continue" e "Submit" a seguir. Qualquer dúvida, favor contatar brunosaboya@gmail.com

Study IV

Bem-vindo/a, e obrigado por participar de nossa pesquisa vinculada ao Programa de Pós-Graduação em Administração da Universidade de Brasília (PPGA-UnB). Pedimos que você seja completamente honesto/a nas suas respostas no questionário a seguir. Não há respostas certas ou erradas, portanto sinta-se inteiramente a vontade para dar sua opinião. Qualquer dúvida ou questionamento, favor entrar em contato com Bruno Saboya (brunosaboya@gmail.com). O preenchimento do questionário leva em torno de 5 a 8 minutos. Agradecemos novamente a sua participação.



A Antes de começarmos, pedimos que leia com atenção a explicação dos seguintes selos que aparecerão na pesquisa: GMO Free, Qualidade ABNT Ambiental e Produto Orgânico.

B O selo GMO Free qualifica produtos sem a presença de organismos geneticamente modificados, o que representa uma melhor manutenção da **saúde e da segurança alimentar** das pessoas que consomem este produto.



C O selo Qualidade ABNT Ambiental objetiva a redução de **impactos negativos causados no meio ambiente** em todas as etapas do ciclo de vida do produto certificado.



D O selo Produto Orgânico qualifica o produto em questão como orgânico, ou seja, que respeita **não só todas as pessoas envolvidas em sua produção e em seu consumo, mas também a cultura e o meio ambiente** dos lugares que impacta.



E Dadas as explicações sobre os selos que são apresentados nesta pesquisa, apresentamos a seguir diversas situações de escolha entre dois pacotes de café com certificados diferentes. Pedimos que você observe com clareza cada uma das situações, e selecione o pacote de café que você achar mais interessante para você, ou para você comprar para outra pessoa próxima, **observando certificações e preços**.



a. Escolha 1 *



b. Escolha 2 *



c. Escolha 3 *



d. Escolha 4 *



e. Escolha 5 *



f. Escolha 6 *



g. Escolha 7 *



h. Escolha 8 *



i. Escolha 9 *



j. Escolha 10 *



k. Escolha 11 *



l. Escolha 12 *



m. Escolha 13 *



n. Escolha 14 *



o. Escolha 15 *



p. Escolha 16 *



“ F Terminamos! Gostaria agora de saber só mais algumas informações:

✓ 2 Você é responsável pela compra de alimentos da sua residência?

- Sim
- Não


✓ 3 Você consome/toma café?


- Sim
- Não

✓ 4 Você consome alimentos orgânicos?


- Sim
- Não

5 Qual é a sua idade? (por favor, utilize apenas números)


 6 Qual é a sua UF de residência?

 7 Qual é a sua renda familiar mensal?


- De R\$ 998,00 a R\$ 1.996,00
- De R\$ 1.997,00 a R\$ 3.992,00
- De R\$ 3.993,00 a R\$ 4.990,00
- De R\$ 4.991,00 a R\$ 5.998,00
- De R\$ 5.999,00 a R\$ 7.984,00
- De R\$ 7.985,00 a R\$ 9.980,00
- De R\$ 9.981,00 a R\$ 12.974,00
- De R\$ 12.975,00 a R\$ 14.970,00

 8 Qual é o seu sexo?

- Masculino
- Feminino

 9 E sua escolaridade?

- Sem ensino formal
- Ensino básico
- Ensino fundamental
- Ensino médio
- Ensino superior
- Especialização lato sensu
- Mestrado
- Doutorado

 A Agradecemos novamente a sua participação! Qualquer dúvida ou pedido pode ser enviado para brunosaboya@gmail.com.