

## **A sight about the consumption of cachaça of alembic: personal values under the perspective of the mean-end chain**

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# **A SIGHT ABOUT THE CONSUMPTION OF CACHAÇA OF ALEMBIC: PERSONAL VALUES UNDER THE PERSPECTIVE OF THE MEAN-END CHAIN**

## **1 INTRODUCTION**

Increasingly, research on alembic cachaça has been stimulated by the growing social appreciation of debates focused on elements of popular culture in Brazil. Agribusiness is one of the main export sectors in the country, boosting the production of cachaça and its internationalization process (Silva et al., 2005). The changes that have gone through the market alembic producing cachaça, such as production legislation, inspection of alembics, increased exports, growth in the number of brands and others, influence the pattern of consumers of this drink. The profile of the marginalized consumer has changed, starting to be represented by people with higher income and who are looking for high quality drinks (Silva et al., 2005; Silva, 2009), no longer being represented by the consumer looking for a drink and low cost and low quality.

In view of these new perspectives in the market, the present work used as an object of study the consumption of alembic cachaça due to its importance for the Brazilian market. There are currently around 30,000 cachaça producers in Brazil, employing 600,000 people directly or indirectly. Currently, cachaça is the 3rd most consumed distillate in the world, containing 87% of the share of distilled beverage sales in Brazil (Expo Cachaça, 2019). Moreover, rum moves to significantly economy (US \$ 15,612,053.00 in 2018), exporting to over 60 countries (MAPA, 2018).

However, according to Silva (2009) cachaça is still very much associated with an inferior drink, carrying prejudices about the marginalization of consumers since the times of slavery in Brazil. There is a strong contrast in the productive sector of the drink, in which producers are immersed in a scenario of informality and rustic methods, as well as surrounded by technology and social distinction of consumption (Paiva, 2017). It is possible to perceive a search for the enhancement of the product's image, related to regional factors and differentiation strategies from other distilled beverages (Chalita, 2008). The cachaça legislation has also been influencing beverage consumption behavior, since regularization forces investment in quality and standardization (Carneiro, 2007), breaking the image of low-quality products.

Considering this panorama of consumption of alembic cachaça, the present work proposed the knowledge of the personal values of consumers of alembic cachaça. According to Schwartz and Bilsky (1987, p. 551) "a value is an individual concept of a guiding principle that expresses interests related to motivational domains and evaluated on a scale of importance". One of the theories capable of clarifying the relationship between products and personal values is that presented by Gutman (1982), called the means-end chain, which explains how a product can be a means to reach a final state of being. Basically, this theoretical perspective seeks the motivations of people to purchase a certain good or service (Grunert, 2010).

From the observation of the strong relationship between alembic cachaça and aspects of national culture, its historical link with the country's development and its appreciation for Brazilians, it appears that the product has a strong involvement with national customs, enabling the search for personal values involved in the consumption of the drink. In view of this, the following research problem is proposed for the present study: what are the personal

values that motivate the consumption of alembic cachaça? The following is a review of the literature on the theories that supported the research.

## 2 LITERATURE REVIEW

According to Gutman (1982), the means-end chain is a model that seeks to explain how a product or service leads to reaching final states of being, as, for example, a certain food (means) can lead to a state of satiety (end) in the consumer. According to Grunert (2010), the means-end chain theory deals with one of the most fundamental aspects of consumer behavior: it looks for people's motivations to buy a certain product. These motivations, attitudes, behaviors and decision-making processes are analyzed based on the consumer's cognitive structure approaches (Vilas Boas, 2005), with the ability to link the utilitarian characteristics of the products to the subjects' personal values (Reynolds & Rochon, 1991).

The theory shows that consumers buy products based on what they can do for them, and not for what they are (Hofstede et al., 1998; Levy, 1959), based on the expectation value theory. Consumer choice actions produce information that is able to guide which products these consumers want or not (Gutman, 1982). The knowledge of the product is organized hierarchically, at different levels of abstraction, based on its attributes, consequences of its use and personal values of the consumers themselves (Reynolds et al., 1995).

The attributes confer physical characteristics of the products themselves. The consequences are the personal interpretations given to the attributes. And the values are the final states that represent the behavioral guides (Reynolds & Rochon, 1991). A greater detail on the levels of the means-end structure can be classified as: the attributes divided between concrete and abstract, the consequences in functional and psychosocial, and the values separated in instrumental and terminal (Reynolds & Gutman, 1988; Walker & Olson, 1991). This relationship between values, consequences and attributes is the fundamental structure related by the means-end chain. The concept of the theory then shows that the most fundamental personal values give meaning to the choices of the most superficial attributes of the products consumed (Phillips & Reynolds, 2009).

The theory of the means-end chain is adequate to assimilate the psychological, cognitive and social structure of individuals as a function of consumption (Reynolds & Rochon, 1991), and one of the tools found in the literature that is able to extract from consumers this complex of relationships between attributes, consequences and values is laddering. This in-depth interview technique investigates the connections between means and ends based on the search for the reasons for the choice of certain brands and products by consumers. After conducting interviews with a representative sample of people, a hierarchical value map, consequences and attributes is created (Gutman, 1997; Reynolds & Rochon, 1991) capable of summarizing the entire structure of the process of choosing individuals.

For the study of consumption behavior, values are an important analytical tool for playing an important role of cognitive representation about needs and desires (Grube et al., 1994). According to Schwartz et al. (2012), values are capable of characterize cultural groups, societies and individuals, as well as explaining the motivational basis of attitudes and behaviors. There are only a small number of terminal values that guide individuals, which are central to decision making. Instrumental values are means to reach terminal values, with a greater number of conduct modes (Grube et al., 1994; Rokeach & Regan, 1980).

For Schwartz and Bilsky (1987), values are cognitive representations of three types of human needs: biological, demands for social interactions, and group well-being. After extensive research (e.g., Schwartz, 2006, 2012, 2017; Schwartz et al., 2012) it was possible to create a circle with a continuum with 19 personal values. Within the motivational circular of

values, the closer one value is to the other, in any direction, the greater the similarity between its basic motivations. And the more distant, the greater the antagonism. The structure can be summarized in two orthogonal dimensions: self-improvement and self-transcendence, which differentiate values between interests geared to the well-being of others and geared to self-interests; and openness to change and conservatism, which contrast values of independent action and new experiences, and resistance to change (Schwartz, 2017).

Taking into account that personal values are guidelines for consumption, it is extremely important to know which values are salient in determining the products that will be consumed by individuals. This theoretical basis supports the present work, since values are final states of consumers' desire.

### 3 METHOD

The work is qualitative and descriptive, and was carried out in 5 cities in the state of Minas Gerais, Brazil: Belo Horizonte, Lavras, Uberaba, Uberlândia and Varginha. The cities were chosen due to the tradition of cachaça consumption existing in them, in addition to taking into account the presence of confraternities and events aimed at the consumption of cachaça.

The research phenomenon includes the consumption of alembic cachaça. The cachaça comprises the drink produced in Brazil from sugar cane with alcohol content between 38% and 48% in volume, at 20°C according to Decree n° 6871/09 (Brasil, 2009). The drink can be divided into two categories according to their forms of production: industrial and alembic. In the first, the process is carried out under technical control, with the distillation operation carried out on stainless steel columns, with a large production volume. In the production of alembics, the volume extracted is of low scale, with distillation in copper alembics and most of the time carried out by family companies, with a strong influence of regionality (Coutinho, 2001).

As a way of delimiting the respondents who fit the survey, the following were observed: the average price of the drink paid by the consumer, since it has a higher price than industrial cachaça (Silva, 2009); the origin of the brands most consumed by the respondent, since the alembic cachaça differs from the industrial cachaça through its manufacturing process (Coutinho, 2001); and by the affirmation of correspondents in preferring alembic cachaças. This information was collected from a previous questionnaire to determine the consumers who fit the outlined design.

Considering that there is no more updated source in the literature than that of Silva (2009) for the average values of industrial and alembic cachaça, the values were updated with the inflation variation provided by the Central Bank of Brazil (2019) between 2009 and 2019 for the application of the questionnaire. In addition to checking the consumption of alembic cachaça, the questionnaire applied to consumers is also intended to measure the level of involvement with the drink, since Schwartz's theory of personal values (2017) states that the relationship between values, attributes and consequences are more easily identified when the interviewee has a strong relationship with the product. For this, an adaptation of the questionnaire by Bearden et al. (2011) on the level of consumer involvement with products was carried out. The snowball method was used to reach new research subjects, which, according to Sierra (1998), comprises access to respondents through natural social networks.

A total of 47 interviews were conducted with consumers of alembic cachaça. The demographic data of the consumers who participated in the survey were collected together with the cachaça involvement questionnaire. They were tabulated and their percentages calculated and are shown in Table 1. It can be noted that most respondents identify with the

male gender, are within the age group of 46 to 60 years, with an income of more than 10 and up to 15 minimum wages, with higher education and divorced. These data allow us to trace the profile of the sample of consumers analyzed.

**Table 1**  
*Demographic data of respondents*

Gender	Male (74%)	Female (26%)
Age group	18 to 30 (13%)	31 to 45 (32%)
	46 to 60 (49%)	More than 60 (6%)
Salary income range (in minimum wage)	From 1 to 5 (11%)	From 5 to 10 (15%)
	More than 10 until 15 (40%)	More than 15 (34%)
Education level	Elementary school (6%)	High school (26%)
	University education (53%)	Postgraduate studies (15%)
Marital status	Not married (19%)	Married (32%)
	Divorced (43%)	Widower (6%)

The work used laddering as an in-depth interview technique (Reynolds & Gutman, 1988), since it sought to structure the hierarchical value map involved in the consumption of alembic cachaça. In the analysis stage of the interviews, content analysis was performed, which according to Bardin (2016) is a set of systematic procedures for analyzing the communications, to obtain inferences of knowledge of these messages. The raw material of the interviews does not allow the extraction of clear trends, justifying the need for a detailed observation in search of the senses (Vilas Boas, 2005).

The present work was based on the means-end chain theory (Gutman, 1982) to list the categories of attributes (concrete and abstract), consequences (functional and psychological) and values (instrumental and terminal), so then be realized the construction of individual ladders. The personal values used in the research are based on Schwartz (2017). First, a reading was performed to encode these elements, and then this list was analyzed again in order to group categories that were interpreted as synonymous. The first categorization provided a total of 93 categories. Based on that, an analysis of the categories created for the agglutination of those that were similar was carried out. With that, the present work resulted in 37 categories.

The criteria for nomenclature of the LCA categories took into account that the present work aims to bring contributions to the literature and the cachaça producer market, doing this clearly in order to facilitate the understanding of the dominant chains of consumers' cognitive structure. Difficulties were found mainly regarding the difference between concrete and abstract attributes due to the fact that it is a food product, where most of the characteristics end up being considered abstract according to the traditional categorization of Reynolds and Gutman (1988).

The present work differentiated the concrete and abstract attributes according to the ability of the producers to control the characteristics observed in the product, that is, it divided them between attributes that depend exclusively on the producer and attributes that depend on other factors. This guarantees the market the ability to connect the consequences of consumption, which are perceived only after purchase or consumption, with the attributes that can be controlled before purchase, in order to better position the cachaça. The delimitation occurred as follows:

- **Concrete attributes:** observed by the consumer prior to the purchase of alembic cachaça, these attributes can be directly controlled by the producer, being subject to measurement and choice;

- **Abstract attributes:** these attributes were also observed prior to the purchase of cachaça, however, they are not subject to direct control by the producer, with other variables such as consumer market, distribution chain and others;
- **Functional consequences:** after consumption, the functional consequences were those that are possible to be identified generically for all consumers of alembic cachaça, not varying according to opinions and preferences;
- **Psychological consequences:** also observed after consumption, but vary among consumers, since psychological preferences and personal factors are taken into account;
- **Instrumental values:** preferential behavior modes to reach the terminal value, no longer being exclusively related to the consumption of alembic cachaça, being covered for other fields of life of the interviewees;
- **Terminal values:** representation of the preferences of consumers' final states of existence. It is the broadest category in the sense of covering different areas of life and guiding decision-making. The nomenclature used respected the translation used in the research of Schwartz et al. (2012, p. 57).

Based on this, the codes were grouped and named according to Table 2.

**Table 2**

*Attribute codes, consequences and values related to the alembic cachaça consumers*

	<b>Concrete attribute</b>		<b>Instrumental value</b>
1	Alcohol content	20	I value the contact with my friends and family
2	Package	21	I always try to increase my knowledge
3	Price	22	I care about my image
4	Origin of manufacture	23	I worry about my health
5	Certification	24	I seek justice in my attitudes
6	Cachaça's physical aspect	25	I care about social and environmental sustainability
7	Cachaça's aging and rest	26	I seek experiences that bring me well-being
	<b>Abstract attribute</b>		<b>Terminal value</b>
8	Brand reputation in the market	27	Hedonism
9	Perception of handmade products	28	Face
	<b>Functional consequence</b>	29	Personal security
10	Perceived acidity in the tasting	30	Benevolence – charity
11	Perceived notes in the tasting	31	Benevolence – dependability
12	Not having health problems	32	Universalism – nature
13	Do not spend values above the market average for a cachaça	33	Satisfaction
14	Perception that the product was produced within the quality standards established by the standard and market conduct	34	Conformity – rules
	<b>Psychological consequence</b>	35	Tradition
15	Pleasure to consume the cachaça	36	Incentive
16	Taste and harmonize the cachaça	37	Universalism – Affection
17	Get together with friends and family		
18	Feeling of drink valorization		
19	Recall memories		

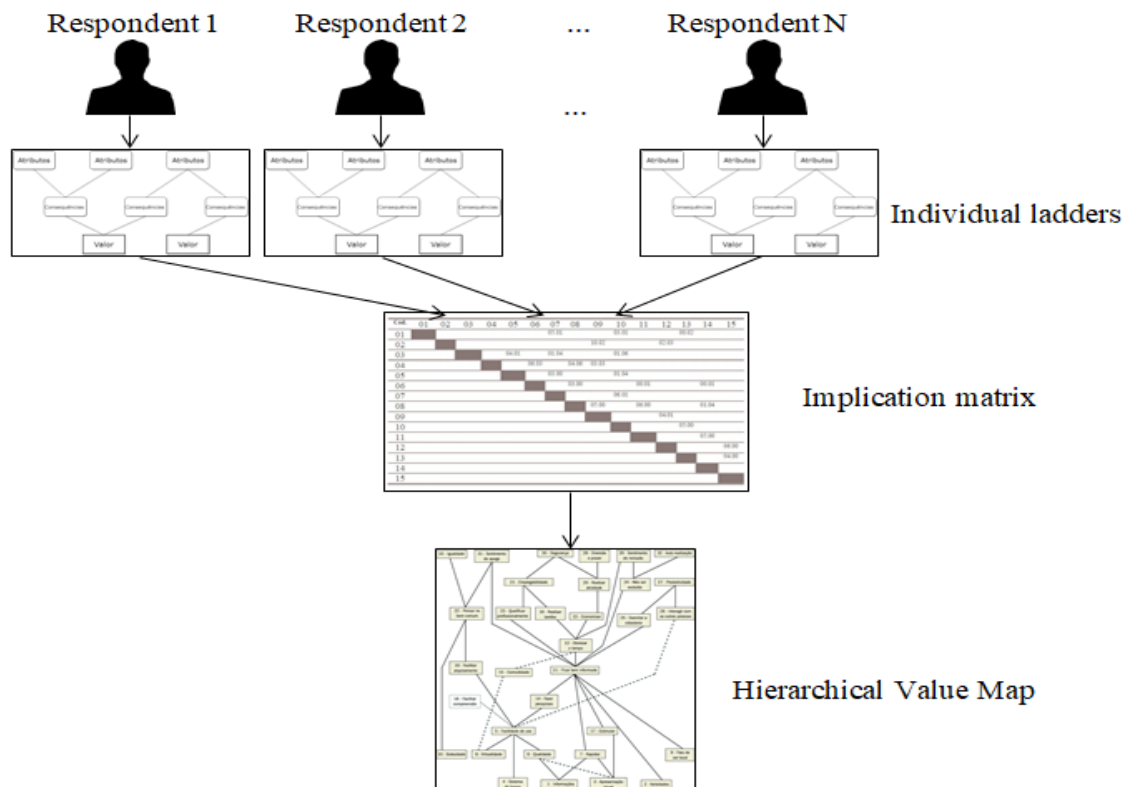
The survey of the categories of attributes, consequences and values led to the construction of individual ladders, which in turn enabled the construction of the implication matrix, which is capable of quantifying the number of relationships between these categories, whether direct or indirect. Based on the implication matrix, the Hierarchical Value Map

(HVM) was created, which is the graphic representation of the generalized relations of the categories

From the description of the ACV codes, the interviews were reread to assemble the individual ladders. In this stage, LadderUX software was used. A total of 180 ladders were found divided among the 47 interviews. The ladders generated 806 direct calls and 1,491 indirect calls, totaling 2,297 calls. In order for the hierarchical value map to be relevant according to the information collected through the interviews, a cutoff point must be established, which means the minimum number of connections between two categories for this to be on the map. According to Reynolds and Gutman (1988), the HVM must contain around two thirds of all the connections in the implication matrix. The cut-off point adopted was 6, covering 64.34% of the connections found.

Figure 1 presents the synthesis of data collection and analysis for the construction of the HVM. In the next topic, the results are analyzed.

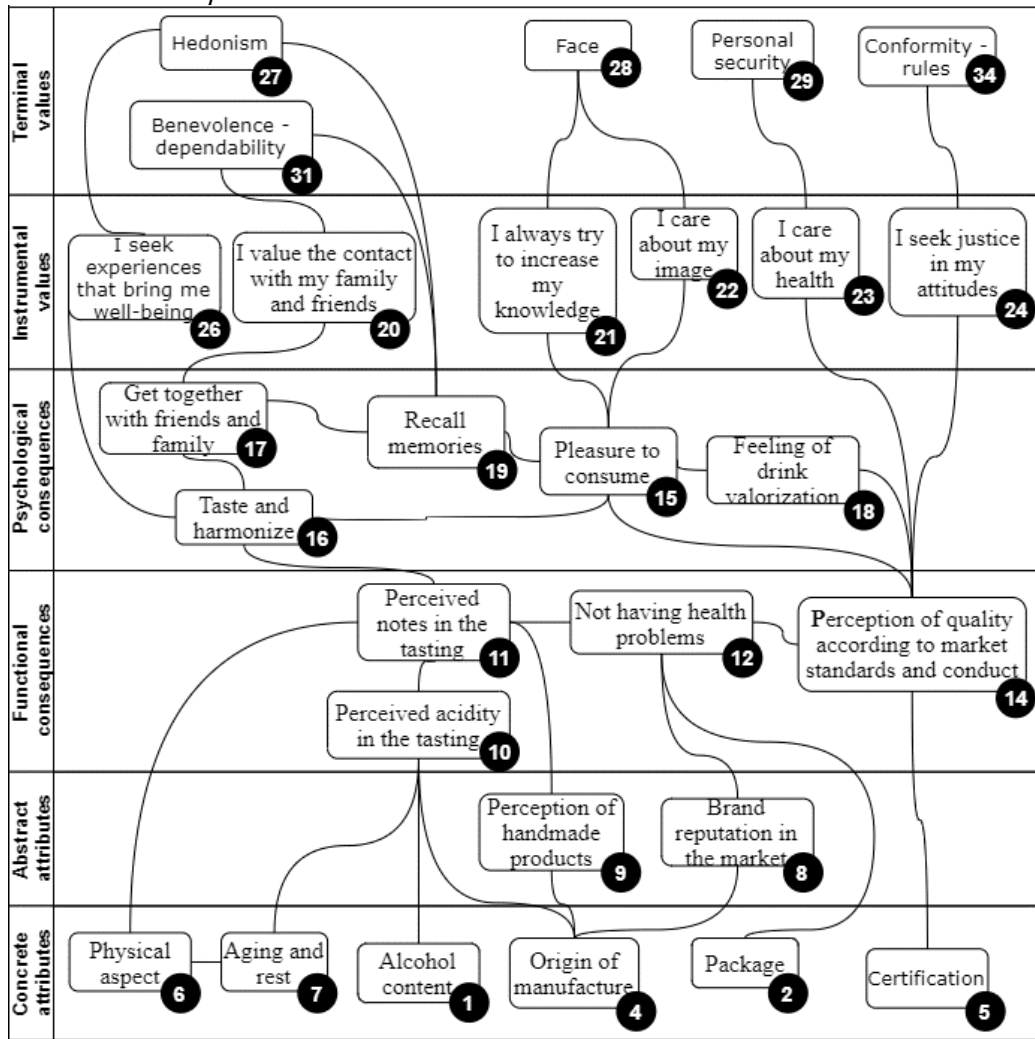
**Figure 1**  
*Laddering graphical summary*



#### 4 FINDINGS

The elaboration of the hierarchical value map makes it possible to identify the chains that best represent the perceptions of consumers surveyed. As can be seen in Figure 2, the hierarchical value map in the present work contains 6 concrete attributes, 2 abstract attributes, 4 functional consequences, 5 psychological consequences, 6 instrumental values and 5 terminal values.

**Figure 2**  
Hierarchical value map



Starting from the analysis of the concrete attributes, which initiate most of the individual ladders, it can be noted that attribute 7 (aging and rest of cachaça) presented a connection with concrete attribute 6 (physical aspects of cachaça). This connection is justified by the fact that consumers observe the color of cachaça from the time of maturation in wooden barrels, as can be seen in the example below:

Why do you associate cachaça... There is already a personal opinion... That cachaça is that product that you take from a bottle, hopscotch, little clear, a light gold color, do you understand? I associate that. And this wood brings a lot of that. There's no way... We're talking, of course, but I'll show you these examples. You will look and you will see the difference in color of two cachaças made the same in different woods. In fact, I'll be even more specific: three different woods. This one is much darker. What is the characteristic of such a cachaça? It is cachaça aged in oak barrels [...] I mean, when I look at a cachaça like this balm, it pleases my look. Then, when I smell it, I like it. It's personal, my personal opinion, of course the others are good. They are good, yes, but my personal opinion, that of balm, it is... It seems that it is that characteristic product of cachaça... Little clear, the light, soft cachaça. – Interviewee 39



Ah I think it's the smell, the color. I think the color is very beautiful. A cachaça well made in oak has a very beautiful color. The flavor is also very striking. But of course, I like amburana very much. The jatoba is also a delight. – Interviewee 31

As can be seen from the passages of respondents 31 and 39, there is an association of the physical aspects of cachaça that are appreciated by the interviewees, with the rest time and the type of wood used in the process. It was also possible to observe that consumers show feelings of distrust in the act of purchasing when the drink has different physical characteristics from those that they expect to be related to the wood advertised on the cachaça label. This finding becomes important for producers since the alembic cachaça can vary in physical aspects between harvests, thus impacting the sale of the product.

The other link of attribute 7 occurs with consequence 10 (perceived acidity in the tasting). This is because most of the interviewees who pointed out this connection believe that the aging of the alembic cachaça in wooden casks removes the strong alcoholic taste of the cachaça, and consequently reduces its acidity and the sensation of “burning” when consumed. The same justification explains the link between attribute 1 (alcohol content of cachaça) and consequence 10. This can be seen in the passage below:

I can't tell you why this preference, but like that... and the white cachaça also has some good ones, but you feel the alcohol a lot, that feeling in your nose. The cachaça, which has just left the alembic, was stored and capped. Not the cachaça... I will return to the theme there, it will be a little redundant, but it has no balance. Its compounds... it doesn't just have alcohol, it has extra alcohol and several other compounds. You just stamped it, even it... some producers even have the practice of storing it in a stainless-steel tank. It will not have a wood character, but it will have a more balanced cachaça. Others do not. You feel it a lot in column cachaça. You take a 51 and you smell that alcohol. Alembic too, so you take the alembic and you taste that alcohol. He just distilled it and poured it. The compounds did not balance. And alcohol, as it is more volatile, will stay there wanting to evaporate, you will feel it stronger in the cachaça. So, the consumer ends up avoiding it a lot. So, in general the person looks for an aged cachaça that knows that it will be balanced that it will not taste strong alcohol, you cannot put it close to the nose and feel that desire to take the glass. Just like having a soft drink, a beer or another product. – Interviewee 9

For me, what happens with Brazilian cachaça, there is a lot of good cachaça. But commercial cachaça is not very good for me. So, I don't like commercial cachaça, I like a more handmade cachaça. There's a lot of difference. In terms of acidity. Because the alcoholic content the guy can control. Now her acidity, I think, in my understanding, is just the wood to remove. – Interviewee 35

The sense of smell also works well for you to feel the wood that the cachaça has aged [...] The cachaça the more, so, they speak... And we prove it, right? That the cachaça the older it is aged, it becomes better, because it loses that strong alcohol characteristic, there. So... We see it in cachaça. – Interviewee 42

It is possible to perceive through the passages, the consumers' preference for drinks with less typical alcoholic taste and with a greater flavor coming from the aging of the wood. This predilection was not unanimous in the interviews, but they represent the majority and justify the connections between categories 7 and 10, and 1 and 10.

Another set of notable connections are those originating from the concrete attribute 4 (origin of manufacture), which implies both abstract attributes 9 and 8 (perception of handmade product and brand reputation in the market, respectively). This stems from the fact that the consumers who indicated these connections believe that a region with a tradition in the production of cachaça has a greater capacity to produce a drink without the use of industrial tools for large-scale production. Consequently, consumers believe that this drink is

produced according to parameters that they called artisanal, of higher quality. This quality justifies the connection of attribute 4 with attribute 10, which guarantees a brand valued by consumers in the market. Below is an example of passages from the interviews:

I usually look at the region where it is manufactured. I usually choose cachaças from the very interior, because that makes me believe that it is a long way from industrial methods. I think the fact that cachaça is artisanal requires greater attention from the producer. So, the guy dedicates himself more in terms of quality, flavor, especially for cachaças, which will be the first time I will try it. – Interviewee 36

Even by region. She doesn't have that need to say "it's a specific manufacturer", why? Because if there is a good guy and a competitor comes, he will automatically worry, saying "I am close to so-and-so and I can't do the same thing, but I have to get close to survive in the market". So, I think so, right! Because if a bad guy makes it, he won't survive. He may have 6 months to 1 year in the market, but then he'll be gone, gone. Because not always a good *cachaceiro*, manufacturer, if he wants to survive in the market then he has to do quality. – Interviewee 1

Thus, it is possible to see that respondents tend to rely more on drinks from certain regions. These relate the producing region with brands with good reputation in the market, therefore they believe that the alembics located in these regions produce good quality drinks according to the market standard.

It is also worth noting that attributes such as the package (2) and the production certification of cachaça (5) are related to the consequences of not having health problems (12) and perception of quality (14), respectively. Such factors as package with information about the production process, origin and presence of the seal of the Ministry of Agriculture, Agriculture and Supply bring security to the consumer when making choices of unknown products, according to the notes of the interviews in this work, increasing the level confidence in the product. One of the justifications given by the interviewees explaining these links is related to the fact that the filling of the drink in bottles of some materials can change the composition of the product, and consequently bring consequences for the consumer. Therefore, the proper package and the presence of the production registration stamp bring to the consumer a feeling of guarantee of a product suitable for consumption.

Moving on to the abstract attributes, it can be noted that the perception of handmade product (9) implies only the perceived notes in the tasting (11) during the consumption of cachaça. Consumers who pointed out this consequence justify that products produced within rustic and artisanal processes have better flavor. The brand's reputation in the market (8) brings a feeling of security to consumers when consuming the drink, since this attribute is linked to the belief of not having health problems (12). The example below illustrates this connection:

I look at provenance first thing. Who is the producer, where is she from and I usually look at her composition on the label. Exactly to know if it is a quality cachaça. If it's alembic, if it's quality. What a process. I, for example, am not so knowledgeable, I have been to alembics, I have already attended, but not so much. And as I am a connoisseur, it is not... I could be an expert, but it is not my interest to keep taking courses, to stay... not yet. For me at that moment it would not add so much. So that's more. Know the origin to know if the cachaça was made with the same quality, exactly for maintenance for my quality of life and health. – Interviewee 29

First of all, I look at the producer a lot, because it is from there that you will have the first impression. You already have an indication, a quality indicator. I think that the producer is the first thing that anyone who understands, even if minimally, cachaça will look [...] because my palate is grateful and my liver. Because you

imagine consuming pure ethyl alcohol. Go... with your liver. It's simple. – Interviewee 27

The functional consequences showed a more connected pat' between them, as can be seen in the HVM. Starting from consequence 10 (perceived acidity in the tasting), the direct link to consequence 11 (perceived notes in the tasting) is due to consumers believing that less strong or less acidic drinks are more palatable and with a greater perception of taste notes. In this way, the respondents connect drinks with more wood or sugar cane flavor to less health consequences (consequence 12), since the belief that drinks with a strong alcohol flavor lead to health problems. And all these connections fall on the last functional consequence number 14 (perception of quality according to market standards and conduct), due to the fact that drinks with less alcoholic flavor, more taste notes and that are less harmful to health are made within the standards of established by the market, according to the respondents. It can be noted in this way that the perception of product quality at the time of tasting starts from a less acidic flavor and with less alcoholic flavor, as well as in the presence of notes from the aging process or the cachaça flavor itself.

Analyzing the links of the functional consequences onwards, it can be perceived initially that the consequence 14 (perception of quality) derives two connections for the instrumental values 23 and 24 (I care about my health and I seek justice in my attitudes). The link with the value of seeking justice is explained by the fact that consumers are distressed due to the fact that they are drinking some beverage that is not within the expected quality standards and that can bring harm to health. Values 23 and 24 are respectively linked to terminal values 29 and 34 (personal security and conformity – rules). It is noteworthy to note that both values 29 and 34 are in the conservatism quadrant of the circular motivational continuum by Schwartz et al. (2012). Therefore, this group of chains indicated on the map are related to conservative aspects about personal and social focus, in which consumers try not to have health problems from the perception of quality brought by attributes such as aging, physical aspects, alcohol content, package, certification and origin of manufacture. Some of these attributes also include the perception of handmade products and the enhancement of the brand's reputation. In some passages it was possible to perceive the insecurity of consumers in appreciating cachaças that do not contain these specific attributes, in view of the consequences that can be brought not only to their health, but to society in general, due to the consequences for public health by non-conformity of production rules by producers.

Another important point to be observed in the connections derived from consequence 14 (perception of quality) are those that lead to psychological consequences 15, related to the pleasure to consume alembic cachaça, and 18, about the feeling of drink valorization, which returns to connect with the consequence 15. This by the way unfolds in several important paths. The first is related to the act of slowly tasting the drink and harmonizing with food (16). This psychological consequence tells about the appreciation process of the various taste notes perceived in the drink, as well as the ritual of drinking cachaça from alembic, as can be seen in the following passages:

I drink the *pinga* more to enjoy, it is not for that... because I like it with a good taste. There must always be a snack, a barbecue. So I like a *pinga* to enjoy. One dose I take it sipping and I appreciate it. So if it doesn't give you pleasure I prefer not to consume it. [...] it is a moment that we sometimes have at leisure. You have a leisure, you are there to do what you like. To distract, to relax. So always accompanied by good things. – Interviewee 33

Because of the pleasure when taking. You drink a bad cachaça and you don't want to put the second in the glass. I tie cachaça a lot to the food that is being served. You look at a crackling, I don't know if your mouth fills with water from the crackling or

the desire to drink cachaça together with it. Then linked to a more typical Minas Gerais food, more greasy, heavier, cachaça attracts. So I think that for that reason, her taste cannot be too strong because then it competes with what you are eating together. It breaks the harmony. – Interviewee 17

I am not fond of eating, drinking, consuming in large quantities. I prefer to consume less and enjoy the moment, the taste, let it run in your mouth, that you can extract, mark it with the flavor so that you increase your sensory capacity. I prefer that you consume a lot of a certain product. Cachaça is good at this, because you arouse your sensory ability well, let it expand in your mouth. It seems that you are fragmenting the flavor. And this is striking. I like it. – Interviewee 6

Consequence 16 (tasting and harmonizing cachaça) leads to instrumental value number 26 (I seek experiences that bring me well-being), which is directly related to the terminal value 27, which gives the hedonism value in the circular motivational continuum of Schwartz et al. (2012). This value is in the middle of the continuum focused on personal focus, divided between the quadrants of openness to change and self-improvement. This shows that even the characteristics of alembic cachaça that bring consumers a feeling of security, provide them with feelings of well-being in moments of pleasure. It is also worth noting that consequence 11 (aging of cachaça) was indirectly linked to the psychological consequence 16. This shows that aspects related to the increase in the perceived value of the drink also influence the pleasure of the interviewed consumers.

Consequence 16 (tasting and harmonizing cachaça) is linked to the psychological consequence of getting together with family and friends (psychological consequence 17). This chain goes through the psychological consequence of recalling memories (psychological consequence 19), going to the instrumental value of valuing contact with friends and family (instrumental value 20), and ending in the terminal value of benevolence – dependability (terminal value 31). This value, within the circular motivational continuum of Schwartz et al. (2012) is in the self-transcendence quadrant and deals with the need to connect with groups in which the consumer feels accepted when respecting the rules contained in these. This shows that the act of consuming cachaça is directly related to moments of fraternization and reconciliation between groups of friends and family. Many consumers justify this fact on account of not drinking cachaça alone, as can be seen in the passages below:

In fact, all of our friends know that we like them. Also because they see it here and the (name) is for them and everything. And most are also fond of cachaça. And we have this thing of serving cachaça when we receive it and when we go to the friends' house. – Interviewee 15

At a party and at friends' houses. I'm going to someone's place, they are going to have dinner, *feijoada*, everything. Always has a quality cachaça. My friends like it too. So, as I told you, we made a ham, I bought a quarter of piggy, I made it at home and I called a friend. He said "a quarter of piggy deserves a cachaça, do you have cachaça?", Then I said I was without it and he took a very good one. We had a cachaça before. Sometimes I go to his place and we take it too. Usually at a party, at dinner, we usually drink a cachaça. – Interviewee 16

That's why I think that today, cachaça, it has been growing in the market. It is a growing product because it... It is pleasant today that you drink cachaça today, right? In a meeting, in a meeting with friends there... So, in a meeting with these friends, always... I mean... It doesn't mean they never introduced me, there always was... I liked it, and I started to be one appreciator. [...] As I told you before, I think cachaça is like wine, right? It brings people together. So when we are there, you end up, sometimes breaking even some paradigms, right? Breaking some inhibitions, some things that we start to get more outgoing. You laugh more, you play more... You feel happier. – Interviewee 44

A last group of dominant chains present in the HVM is one that goes through the psychological consequence 15 (pleasure in consuming alembic cachaça) and links with instrumental values 21 (I always try to increase my knowledge) and 22 (I care about my image). Both values then lead to the terminal value of prestige, contained in the part of personal focus and divided between the quadrants of conservatism and self-improvement. Such chain shows that the consumption of cachaça has taken on a social status valued by consumers, where the act of drinking represents valuation of one's own image and person. The following passages exemplify this:

I see a much higher level of evolution for the elite of purchasing power. The class with the highest purchasing power who appreciates a well-crafted product. A well-crafted product. So, for example, the right snack. A friend arrives at my house, you will serve the cachaça, you will not fill the glass. It has a whole ritual, a minimum etiquette that you will be tasting. Normally you don't drink a glass of cachaça at once, you will appreciate it, you will taste it, you will taste it, you will feel it there. You will try to discover taste, a purity, a level of burning, burning or not. You swallow and it doesn't burn you. Then it became a little more chic. In the past, cachaça was of a very low social class, which was the same *pinga*. Not today, today Minas Gerais has excelled in this aspect of making social classes at a higher level available. And there comes a whole charm. I believe there is a lot of that. – Interviewee 34

When observing the personal values identified by the interviewed consumers and who had a number of relationships higher than the cutoff point to enter the HVM, it is clear that the conservatism quadrant of Schwartz's motivational continuum (2012) stands out for the amount of values contained in the map. Therefore, characteristics of the drink that bring security to consumers, maintenance of customs and relationship with the act of drinking between family and friends are important to be valued in the production process. In the next topic, the conclusions of the work are presented.

## 5 CONCLUSIONS

By the present work, in view of the objective of identifying, from the perspective of the means-end chain theory, the motivations of the consumer of alembic cachaça of the analysis of personal values, it was possible to observe several contributions to the literature. The research managed to achieve its objective in analyzing an object of study, consumption of alembic cachaça, not yet observed under the lens of the means-end chain theory.

To survey the information analyzed, 47 interviews were conducted in 5 cities in the state of Minas Gerais using the laddering in-depth interview technique, which establishes the connection between product attributes, consequences for consumers and their personal values. Despite finding works in the literature with more than 40 categories of attributes, consequences and values (e.g., Barrena-Figueroa & Garcia-Lopez-De-Meneses, 2012; Castro et al., 2019; Kitsawad & Guinard, 2014; Tleis et al., 2019; Vilas Boas et al., 2006), the present study found a total of 37 codes. It was possible to notice a large number of connections between the categories, which at first brought difficulties to the analysis of the cognitive structure of consumers. However, the large number of connections allowed the possibility of using the cutoff point 6 to filter the chains present in the HVM.

The attributes observed in the interviews are mainly related to aspects related to the production process of alembic cachaça, since the drink has great plurality in its forms of production, as can be noticed by the interviews. According to the analyzes carried out, consumers add factors of aging of the drink in wooden barrels to the quality of the product. The aging procedure of the drink has consequences on the physical aspects of the drink,

which serve as analytical measures for consumers if the cachaça meets the desired consumption pattern. Other highly valued attributes were also the origin and perception of handmade products. Consumers related these to aspects related to food security, since they were afraid to drink cachaça that is not produced in certain regions of the country or that have characteristics of industrial production, because they believe that these can cause damage to health. This information may prove to be important in directing the installation of new alembics.

Research on the consumption of alembic cachaça revealed that there are many myths and customs impregnated in consumer behavior, especially with regard to the measure of the perceived quality standard. There were several interviews in which the respondents pointed out different ways of observing what they called quality, for example, the formation of bubbles in the drink when shaking, formation of arches, density and color of cachaça. The lack of knowledge about ways of measuring the quality of cachaça can hinder consumption and the supply chain, but at the same time it creates an image about the peculiar, different and special drink cachaça, related to the profile of each consumer in a personal way.

It is worth noting that despite several concrete attributes that received the attribution of quality marker, the attribute production record of cachaça from the inspection agencies did not obtain a large number of relationships in the interviews as an important attribute to analyze the quality of the same, even containing the minimum number of relations required to enter the HVM. This shows the importance of the producer market to make consumers aware of how the registration serves as a measure of analysis that cachaça fits into the minimum production sanitary procedures for consumption.

Among the consequences, it was possible to notice a tapering of the dominant chains present in the HVM, mainly in the functional consequences. From the psychological consequences, the chains start to branch again. With this it is possible to perceive the separation in different groups of chains that lead to the identified personal values. Basically, from this level onwards, the psychological consequences separated into those aimed at personal image, others aimed at pleasure and socializing with family and friends, and those consequences aimed at consumer security.

The chain of connections that lead to values aimed at self-image shows that the view on cachaça has been modified in recent years, beginning to present drink status of more elite classes, as has already been found in works in the literature (e.g., Paiva, 2017). In addition, it is of great importance for the producer market to know the relationship that consumers make of the ritual of drinking with hedonistic moments of getting together with family and friends. Such factors can be significant in advancing the process already underway to change the paradigm of cachaça as a drink aimed at marginalized and chemical dependent people.

Dias (2014) portrayed the consumption of cachaça as part of Brazil's cultural heritage and the formation of national identity, which becomes an appeal of artisanal cachaças to reach consumers from different social groups. In addition to its importance to the national economy, cachaça represents a symbol of Brazilian culture. Its appreciation supersedes a history of prejudice and devaluation of the drink due to imported drinks. Braga (2015) points to the existing opportunity in the use of cachaça as a tourist attraction in places where its production is widespread, dealing with regional aspects for product valorization.

It was possible to identify 5 personal values in the HVM that are part of the circular motivational continuum of Schwartz et al., (2012): face, benevolence – dependability, hedonism, personal security and conformity – rules. These values can be understood as the ends for which the consumers intend to reach when consuming the alembic cachaça with the due attributes raised.

Since research on consumer behavior is capable of generating theoretical and practical contributions (Kirmani, 2009) due to the need to understand the meanings given to consumption and the aspects that guide consumer choices, this paper presents notes that can serve the basis for the development of products within the cachaça sector. In a direct way, the survey of the preferences of the attributes of the interviewed consumers can serve as a guide of what characteristics consumers expect to find in the drink. The consequences explain the most direct reasons why these consumers prefer such characteristics. The personal values are within more abstract motives, often not being perceived by consumers. However, the consequences and values sought in the consumption of alembic cachaça are important in the communication of the brand and its positioning, contributing to the elaboration of more effective advertising campaigns. The knowledge of personal values is also capable of corroborating the segmentation of the consumer market, since these aspects are capable of creating groups of consumers with similar profiles, as shown by Vilas Boas (2005).

The research has limitations regarding the area in which it was delimited for the selection of respondents. Five cities in the state of Minas Gerais were chosen. It is proposed as future research the extrapolation of this number of cities within the state, as well as the application in other states of Brazil for knowledge of different motivations for the consumption of alembic cachaça. In addition, the present research was classified as qualitative and descriptive. It is suggested for researchers interested in studying the behavior of consumers of alembic cachaça to apply methodologies that quantify in a quantitative way the relationships found in this research, to complement the current research.

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