



# The influence of time pressure on the intention to visit the destinations of Aracaju/SE and Salvador/BA

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**ABSTRACT:** The aim of this study is to evaluate the influence of time pressure on tourists or visitors interested in visiting the destinations of Aracaju/Sergipe (SE) and Salvador/Bahia (BA), when accessing information about tourist attractions. To achieve the proposed objective, a quantitative study was carried out using the experimental method, considering two situations. In Situation 1, the participants were asked to use TripAdvisor for five minutes, to look for information about attractions. In Situation 2, they were asked to access a specially developed and customized application, without any time limit. To carry out the experiment, a scale of "intention to visit the destination" was elaborated and validated, considering the motivational variables of the model proposed by Swarbrooke & Horner (2016) and Schwartz's (1994) theory of basic values. Two hundred fifteen interviews were conducted in the city of Aracaju and two hundred forty in the city of Salvador, considering a non-probabilistic sample. It was observed that for the participants in Aracaju, tourist attractions related to the Value Hedonism were influenced by time pressure. For the participants in Salvador, the variables that stood out were the Values Tradition and Security.

## Keywords:

Attractions;  
Behavior;  
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## INTRODUCTION

Tourism activity is the travel of individuals or groups of people for the purposes of leisure, relaxation, gastronomy, cultural, emotional, health, or to visit family, among other purposes. Deciding on a specific destination or trip often requires researching on what to do, where to eat, means of transport and accommodation. These decisions can demand high involvement, requiring a greater search for information and considerable time to carry out the research.

In view of these aspects, this study aims to evaluate the influence of time pressure on tourists or visitors interested in visiting the Brazilian destinations of Aracaju/SE and Salvador/BA when accessing information about tourist attractions. Time pressure relates to the perceived cost of lack of time to complete a given task related to the search for information about a product, service, attraction or tourist destination. In this case, the time available can be perceived as insufficient or limited (Thomas, Esper & Stank, 2010). When an individual is under time pressure, he or she may not be able to adequately control the processing of all the information, as a lack of information can impact on people's choices and preferences (Hahn, Lawson & Lee, 1992; Corso & Löbler, 2010).

Thus, understanding the factors that influence decision making in relation to a tourist destination will help companies and organizations meet the needs and expectations of consumers, generating satisfaction. Based on an analysis of this type, it is possible for the government, for example, to evaluate its tourism offer and how the city's services are being provided as a whole, determining which aspects require more investments, so that benefits can also be generated for the local community. Understanding the consumer behavior and interests of tourists and visitors enables better urban planning of destinations, allowing tourist attractions to become more competitive and attractive, with a clearer picture of the profile of these consumers, which is dynamic, and changes over time.

Studies that address the relationship between motivation, values, and time pressure are scarce in the literature on consumer behavior and tourism activity. The methodology used in this study can also be used for other destinations.

## LITERATURE REVIEW

### Tourism activity and tourism destinations:

Tourism activity has been growing and spreading in different forms, bringing cultural, economic and social benefits for various locations and tourism destinations. These localities, or geographical units, may be a

town or village, a city, a region, an island or a whole country (Lohmann & Panosso Neto, 2012). Wang and Pizam (2011) argue that a tourist destination refers to a geographical area that encompasses the existence of a tourist cluster where there are political boundaries. This cluster is a set of attractions, infrastructure, equipment, services and other administrative and organizational support sectors that aim, in a coordinated and organized way, to provide tourists or visitors with experiences that meet their desires, needs and interests (Wang & Pizam, 2011).

Therefore, the tourist experience should be promoted and favored in a coordinated and satisfactory way, maximizing the economic contribution of tourism and stimulating the desire to return (Wang & Pizam, 2011). The experience must be adapted to market trends, consumer preferences, and the different tourism profiles, and involves identifying the resource, transforming it, and offering it as an attraction (Ruiz, 2019).

In many cases, the available tourist information about a locality is not quite what the consumer is looking for, forcing them to carry out extensive research in order to customize the information according to their interests. This customization, according to Etgar (2008) and Jin, He and Song (2012), can be understood as a set of data on consumer preferences that enables companies and organizations to offer and adapt products and services that to better match consumers' needs and interests, benefiting these consumers as they search for information as part of their decision-making process.

### Decision making and consumers' motivations and values

Understanding consumers' needs and desires, as well as their expectations, motivations and values is part of studies on consumer behavior. Among the reasons for studying consumer behavior are that it promotes the development of adequate public policies, and creates more conscious consumers, who are more aware of their rights (Mowen & Minor, 2003). Solomon (2016) reports that the objective of studies in the field of consumer behavior is to research the processes involved when individuals or groups select, buy, use or discard products, services, ideas or experiences, in order to satisfy their needs and desires.

Understanding consumer behavior requires understanding their decision-making processes, seeking to identify and analyze the factors that influence this process, whether it relates to goods or services.

A notable model of consumption behavior and decision-making in tourism is that proposed by Swarbrooke and Horner (2016), who consider, in their structural framework, that tourists make decisions based on the variables motivation, perception, person-

ality/attitude, and also on socioeconomic and cultural influences, besides those from their peer groups and family members.

Regarding tourism activity, Swarbrooke and Horner (2016) indicate that the motivations are related to: cultural factors; the search for status; emotional aspects (e.g. nostalgia, adventure, escapism, etc.); personal factors (e.g. visiting friends, making new friends, etc.); physical factors (e.g. relaxation, health, etc.) and personal development (e.g. increasing knowledge, learning, etc.).

Regarding the parameter Motivation, Solomon (2016) and Blackwell, Miniard and Engel (2009) highlight the degree of involvement as a variable that affects motivation. According to these authors, involvement represents the degree to which an object or behavior is personally relevant to an individual, causing him or her to make an effort to satisfy his or her needs. In this sense, involvement is related to the level of concern or interest related to the purchasing process, initiated by the need to consider a specific purchase, the impact on the individual's income, and the perception of risk involved (Hawkins, Motherbaugh & Best, 2007).

Involvement is reflected in the level of motivation to process information about goods or services that consumers believe will help them solve certain problems or achieve certain goals (Solomon, 2016). According to Schiffman and Kanuk (2015), the theory is based on the premise that consumers are more likely to carefully evaluate a product or service when it is of high relevance to them.

Most tourism products or services can be considered as having high involvement (Swarbrooke & Horner, 2016), as they cannot be acquired or tested prior to purchase. However, depending on the consumer's profile, the level of insecurity during the purchase can be reduced when consumers have access to a wide range of tourist information, which can generate experiences before the actual consumption or visit to a certain destination takes place, for example.

Important values during the decision-making process are also related to consumer behavior. These represent the consumers' beliefs about life and acceptable behaviors, expressing the goals that motivate individuals, and how to achieve them (Blackwell, Miniard & Engel, 2009). Values, in this sense, can be considered as beliefs about the desirable final states or modes of conduct, going beyond specific situations.

Schwarz (1994) presents a universal set of values, proposing ten types (power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity and security) and the dominance of four sectors (openness to change, self-transcendence, conservation and self-enhancement).

The theoretical model of values, proposed by Schwartz (1994), provides a framework for this study. Human values are important constructs in the psychosocial

concepts considered central to predicting attitudes and behaviors, and for understanding phenomena of interest to the humanities and social sciences (Torres, Schwartz & Nascimento, 2016).

Therefore, related to the consumer's decision making process, the time pressure aspect may have an influence on the individuals' decision making process, including how consumers capture information about a tourism product or service.

### **Time pressure in decision making**

Time pressure is defined as the perceived cost of time scarcity. The individual feels this pressure when he or she perceives that the time available to complete the search for information is insufficient or limited, which can cause stress (Thomas, Esper & Stank, 2010).

According to Godinho, Prada and Garrido (2016), the consumer may feel a sense of urgency when deciding whether to purchase, in certain consumption situations, fearing that the item may become unavailable, or that a supplier may no longer be able to provide the item. This is also true of tourism activity, as a seat on a plane or a hotel room cannot be stored, for example. Thus, reservations for certain services, in tourism activity, are dependent on availability and time limits, sometimes presenting different pricing policies, according to the type of accommodation or flight fare class.

Debates about how time pressure influences consumer decision making are recurrent in marketing and in the literature on consumer behavior, as in the research conducted by Zur and Breznitz (1981), Betsch, Fiedler and Brinkmann (1998), Vance et al (2014), Prado and Fagundes (2019) and Skinner and Parrey (2019), for example, who emphasize how the existence of a time limit for making a purchase or consumption decision affects the decision making process. Skinner and Parrey (2019), using simulated scenarios of consumer behavior, found that many theories conclude that time pressure negatively affects the quality of the decision making, as time pressure leads individuals to restrict their information options to those readily available. In fact, being exposed to any amount of time pressure induced a state of panic and stress in the participants, impairing the purchasing decisions (Liu et al, 2019).

Prado and Fagundes (2019) also carried out an experiment to assess the effects of time pressure on individuals' decision making in relation to their academic future. The results of this research indicated that time pressure affects the evaluation of consumers who are cautious (those who place more importance on safety, responsibility and obligations) and promotional (those who seek personal growth, achievements and aspirations in life). Its greatest influence was on predictive consumers who, according to the authors, prefer predominantly stable situations where there is minimal

risk.

In a situation where there is time pressure, individuals are prevented from taking into account certain aspects that could influence their decision making process, therefore, the decision is arrived at more superficially (Prado & Fagundes, 2019; Liu et al, 2019) and, in many cases, impulsively. Also, when people have sufficient processing time to carefully consider their decision, their final decisions generally reflect their intentions to reinforce or affirm good standards of conduct (Liu et al, 2019).

Authors such as Hahn, Lawson and Lee (1992) describe that when under time pressure, the individual may not be able to maintain adequate control over the processing of all the required information, and a lack of information can affect people's choices and preferences (Corso & Löbler, 2010). According to Maule (1997), this happens when people have only a restricted time to make decisions; instead of considering all the information available, they tend to carry out their evaluations based on a small amount of information that they consider essential, or more important.

According to Pieters and Warlop (1999), consumers usually use at least three strategies to deal with time pressure: they speed up the acquisition of information; they filter part of the information available; and they change their information-gathering strategy, acquiring the information from more readily available sources. However, the more motivated the consumer is relation to the task to be performed, the greater their interest in seeking more extensive information (Pieters & Warlop, 1999). In most cases, such motivation results in the search for tourist information that, due to its complexity of relationships and tourism products involved, requires greater involvement of the individual, as they seek to find out more about the attractions of a destination. Thus, the tendency is that the more involved the individual is in the purchasing decision process, the greater their interest in seeking more information about the location.

Consumers' decisions are influenced by various factors, such as: how the options are described; the distinction made between the options of services or products available; the source of the information; the quantity and quality of the information; and the consumer's perception of the complexity of the decision making process, which can range from a high to a medium degree of involvement when it comes to deciding on a destination to visited during the consumers' leisure time.

## METHODOLOGY

This study uses quantitative research, carried out through the experimental method from a causal perspective. To achieve the objective proposed, the scale "intention to visit the destination" was developed. The

scale was then validated by eleven academics in the areas of tourism, administration and marketing, and through statistical tests (confirmatory factor analysis, CR index - Construct Reliability, Cronbach's Alpha, Convergent Validity - VE, and HTMT - Discriminant Validity), as no similar scales were found in the tourism and consumer behavior literature that would meet the analysis needs of this study.

Regarding time pressure, a systematic review was carried out in the Capes journals, searching on the keywords "Time Pressure and Decision Making", "Time Pressure and Tourism", "Time Pressure and Tourism Motivation", "Time Pressure and Destination" and "Time Pressure and Technology", with a cut-off time of five years. This literature review did not yield any studies directly related to the subject under study.

Using the same keywords, we searched on dissertations and theses in the databanks of grey literature of the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) and the Biblioteca Digital Brasileira de Teses e Dissertações (IBICT), but found no works related to the theme. It is therefore concluded that studies analyzing the relationship between time pressure and decision making linked to tourism activity are not common in the literature.

We therefore elaborated a scale, based on the six motivation variables of the model of Swarbrooke and Horner (2016) for tourism activity (cultural motivations, search for status, emotional, personal, physical and personal development aspects) and the ten variables of individual values proposed by Schwarz (1994) (power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity and security). In addition to the variables that make up the constructs Motivations and Values, some questions related to time pressure were also included.

Each question of the scale considered the variables Motivations and Values. For example, one of the questions was: "Do the tourist attractions of Aracaju/Salvador, when adjusted to my personal preferences, make me think of pleasure and fun, prompting my interest in visiting the destination?" and it was measured using the Phrase Completion scale, with answers ranging from 0 for totally agree, to 10 for totally disagree. The question related to time pressure was: "Does the amount of time accessing information about tourist attractions in Aracaju/Salvador, when adjusted to my personal preferences, influence my interest in visiting the destination?" and it was also measured using the Phrase Completion scale, from totally agree to totally disagree.

During the validation of the scale, the variables Cultural Motivation and Personal Development Motivation were not representative, therefore, these variables were excluded, as the Convergent Validity - VE and HTMT - Discriminant Validity indicators did not satisfy the sta-

tistical criteria. After removing these variables, the statistical criteria were met and were considered satisfactory, confirming the validity of the scale. The Cronbach's Alpha values for the constructs Motivation and Value were 0.15 and 0.901, respectively.

The experiment was carried out considering two situations. In situation 1, respondents from the cities of Aracaju and Salvador were given access to information about the attractions of the cities through the online app TripAdvisor, for 5 minutes. The respondents from Aracaju accessed the tourist attractions of the city of Salvador and vice versa. For situation 2, a tourism app called ITur was developed. The purpose of the app was to customize the attractions for tourists and visitors, considering their motivations, values and specifications of attractions of interest, without giving any time limit when accessing the information. In the app, tourists indicated their attractions of interests and based on these, the app offered customized options for both cities, based on the attractions listed in Google Places and TripAdvisor, and on interviews with residents, tourists, and the public and private sectors.

Thus, 215 interviews were conducted in Aracaju and 240 in Salvador, considering a non-probabilistic sample with tourists and visitors. For the research, individuals who presented an interest in traveling for leisure, and who may or may not have an interest in visiting the cities analyzed, were considered, while people who had lived in the location being researched were not. Thus, tourists and visitors to Salvador indicated their perceptions about Aracaju, and vice-versa. The data collection was carried out in the first few months of 2020. These periods are considered to be periods of greater tourist flows in the cities surveyed, bearing in mind that this research was carried out before the start of the COVID-19 pandemic.

TripAdvisor was chosen for situation 1 because it is one of the platforms most widely used by travelers to obtain tourist information, due to its guarantee of quality information about hotels, restaurants, tourist attractions, etc. (Ganzarolli, Noni & Baalen, 2017; Alexander, Blank & Hale, 2018). It serves an intermediary of the tourist service, between suppliers and travelers, where the value is generated for the user through the information presented by objective facts, aiming to contribute to the decision on whether to visit a tourist destination or purchase a tourist service.

The binary multiple logistic regression model was used for the data analysis, with the variable "time pressure" as the dependent variable, using measures of adjustment to the model (AUC, Sensitivity, Specificity, McFadden and Nagelkerke  $R^2$ ), considering the 4 remaining Motivation variables, after the validation of the scale and the 10 variables of the construct Value. The model was adjusted to ensure a possible simultaneous effect between the variables Motivation and Values, in relation to "time pressure", analyzing each of the variables

of these constructs but leaving the other variables controlled. Multiple regression was also performed in a crude and adjusted way. The constituent variables of the motivation and value constructs were considered in their entirety, presenting equal weights in their formation. It is notable that since this was an experiment with two different situations in relation to the stimuli, the regressions were performed separately for each of the situations, and for each of the cities studied.

For the analysis of these regressions, it is understood that for each unit variation in the phrase completion scale, in the developed scale, the odds of time pressure influencing the analyzed independent variables is presented as a percentage. Thus, regarding the Confidence Interval (CI), the closer to 1, the lower the association between the relationship of the dependent variable with the independent variable. And when the CI contains 1, this indicates zero relationship.

## RESULTS AND DISCUSSION

### Adjusted Logistic regression for the cities of Aracaju and Salvador

Logistic regression with adjustment measures was carried out seeking to verify the possible simultaneous effect between the variables of the construct Motivation and Values, and analyzing their possible relationship with time pressure. Each of the variables of these constructs was weighted, leaving the other variables constant.

The adjustment measures used were AUC (Area Under the Curve), Sensitivity, Specificity, McFadden's  $R^2$  and Nagelkerke's  $R^2$ . Thus, according to Table 1, the AUC for Aracaju was 0.864 in situation 1, and 0.861 in situation 2, while for Salvador the AUC was 0.748 in situation 1, and 0.878 in situation 2 (Table 2). Thus, in situations 1 and 2, it was found that the AUC measures indicated a good fit of the model.

Regarding the Sensitivity measure (SE), which predicts whether the model correctly measured whether time pressure in the search for information on tourist attractions influences the decision-making process, considering the variables of the constructs motivations and values, it was found out that for the participants in Aracaju, this measure was 0.995 in situation 1, and 0.974 in situation 2 (Table 1). For the participants in Salvador, this measure was 0.967 in situation 1 and 1,000 in situation 2 (Table 2). These data demonstrate that the model correctly showed (99% in situation 1 and 97% in situation 2) that the individuals interviewed in Aracaju indicated, with conviction, that the variables Motivation and Values are influenced by time pressure. The same occurred for the participants in Salvador; in situation 1, the measure was 96%, and in situation 2 it was 100%, which has high predictive power.

The Specificity measure (SP) indicates whether the model correctly predicted the fact that people do not perceive time pressure as an aspect that affects their decision making. As shown in Table 1, for the respondents in Aracaju, the measure was 0.342 (34%) in situation 1, and 0.227 (22%) in situation 2. For the participants in Salvador, the measure was 0.288 (28%) in situation 1 and 0.125 (12%) in situation 2 (Table 2). Even though the Specificity measure was 12% in situation 2, for the respondents in Salvador, this figure is compensated for by the 100% prediction that occurred in the Sensitivity measure. Thus, these indicators of the adjustment of the model reflect a consistent assessment of the interviewees' perceptions, which are adequate and have good predictive power.

Also regarding the measures of predictive quality, McFadden's  $R^2$  and Nagelkerke's  $R^2$  were verified. For the participants in Aracaju, McFadden's  $R^2$  measures were 0.300 in situation 1, and 0.317 in situation 2 (Table 1). For the participants in Salvador, these measures were 0.147 and 0.273, respectively (Table 2). Nagelkerke's  $R^2$  for the participants in Aracaju was 0.403 (situation 1) and 0.391 (situation 2), while for the participants in Salvador it was 0.226 (situation 1) and 0.323 (situation 2). When observing McFadden's  $R^2$  and Nagelkerke's  $R^2$  measures, a reasonable predictive quality of the model is verified. However, we emphasize the need to consider the combination of the five adjustment measures of the model, which indicate good agreement.

Power Table1: Adjusted Odds Ratio for the city of Aracaju in relation, to time pressure

Aracaju	Situation 1		Situation 2	
	AOR (95%CI)	p-value	AOR (95%CI)	p-value
Physic_Mot				
Emot_Mot	1.25 (1.03-1.51)	0.022		
Pers_Mot				
Stat_Mot				
Power_Val				
Achie_Val				
Hedo_Val	1.35 (1.13-1.51)	<0.001	1.40 (1.14-1.73)	0.002
Sti_Val				
SD_Val				
Univ_Val	1.46 (1.20-1.79)	<0.001		
Bene_Val			1.61 (1.29-2.03)	<0.001
Trad_Val				
Conf_Val				
Sec_Val				
Adjustment Measures				
AUC	0.864		0.861	

SE	0.995	0.974
SP	0.342	0.227
McFadden	0.300	0.317
Nagelkerke	0.403	0.391

Where: AOR – Adjusted Odds Ratio; 95% CI– 95% Confidence interval; AUC – Area Under the Curve; SE – Sensitivity; SP – Specificity. Physic\_Mot\_– Physical Motivation; Emot\_Mot – Emotional Motivation; Pers\_Mot – Personal Motivation; Stat\_Mot – Status Motivation; Power\_Val – Power Value; Achie\_Val – Achievement Value; Hedonism Value. Sti\_Val – Stimulation Value; SD\_Val – Self-direction Value; I Univ\_Val – Universalism Value. Bene\_Val – Benevolence Value; Trad\_Val – Tradition Value; Conf\_Val – Conformity Value. Sec\_Val– Security Value.

Source: Prepared by the authors, 2020

Power Table 2: Adjusted Odds Ratio for the city of Aracaju in relation, to time pressure

Salvador	Situation 1		Situation 2	
	AOR (95% CI)	p-value	AOR (95% CI)	p-value
Physic_Mot	0.83 (0.71-0.98)	0.024		
Emot_Mot				
Pers_Mot	1.14 (1.01-1.30)	0.037		
Stat_Mot				
Power_Val				
Achie_Val			1.61 (1.27-2.03)	<0.001
Hedo_Val				
Sti_Val				
SD_Val				
Univ_Val				
Bene_Val				
Trad_Val	1.31 (1.11-1.55)	0.001	1.37 (1.01-1.85)	0.040
Conf_Val				
Sec_Val	1.27 (1.08-1.49)	0.004	0.77 (0.60-0.99)	0.048
Adjustment Measures				
AUC	0.748		0.878	
SE	0.967		1.000	
SP	0.288		0.125	
McFadden	0.147		0.273	
Nagelkerke	0.226		0.323	

Where: AOR – Adjusted Odds Ratio; 95% CI– 95% Confidence interval; AUC – Area Under the Curve; SE – Sensitivity; SP – Specificity. Physic\_Mot\_– Physical Motivation; Emot\_Mot – Emotional Motivation; Pers\_Mot – Personal Motivation; Stat\_Mot – Status Motivation; Power\_Val – Power Value;

Achie\_Val – Achievement Value; Hedo\_Val– Hedonism Value. Sti\_Val – Stimulation Value; SD\_Val – Self-direction Value; I Univ\_Val – Universalism Value. Bene\_Val – Benevolence Value; Trad\_Val – Tradition Value; Conf\_Val – Conformity Value. Sec\_Val– Security Value.

Source: Prepared by the authors, 2020

With the adjustment measures of the regression model, taking time pressure as the dependent variable, and the 4 variables of the Motivation construct and the 10 variables of the Values construct as independent variables, it was found out that for the interviewees in Aracaju in situation 1, in which TripAdvisor was used, only the variables Emotional Motivation, Hedonism Value and Universalism Value were significant, indicating odds of 25%, 35% and 46%, respectively (Table 1). In other words, tourist attractions that relate to these individuals' behavioral variables are influenced by time pressure when accessing tourist information on TripAdvisor.

In situation 2, in which there was a customization of the tourist attractions and no time pressure, the significant variables were: Hedonism Value and Benevolence Value. The influence of time pressure on these variables indicated the following odds: Hedonism Value - 40% and Benevolence Value - 61% (Table 1).

Thus, it was found tourist attractions that are linked to Emotional Motivation (nostalgia, romance, adventure, escapism and spiritual fulfillment), Hedonism Value (Pleasure, and fun), Universalism Value (sense of social justice, equality and protection of the environment) and Benevolence Value (preservation of the welfare) need more time to search for tourist information, because for these consumers, these attractions may denote greater involvement, and the availability of technological aids whereby their profiles can be adapted on the app developed.

It was observed that the interviewees from Aracaju attributed great importance to the sense of social justice, equality and protection of the environment (Universalism Value), because attractions that are related to this behavior require more time accessing the information. For example, a tourist or visitor may be interested in finding out more about know places, associations or community groups that express traditional cultures, but having access to these communities or people requires, in some cases, prior contacts, permits etc., and all this requires more time searching for detailed information.

For the interviewees in Aracaju, besides the Universalism Value, the Hedonism Value is also evidenced in situations 1 and 2, regardless of the existence or absence of time pressure, as the variable was significant both in the search for information on TripAdvisor and for accessing tourist information in the app developed (ITur), indicating that there are attractions that require

the consumer to spend more time searching for information. The Hedonism Value includes a wide variety of attractions, such as beaches, museums, parks, galleries, etc. Authors such as Schiffman and Kanuk (2015) emphasize that when it comes to hedonic products, the correlation between subjective knowledge and involvement with the product is greater than it is for utility products.

Emotional Motivation was also significant, denoting a further search for information. Aspects related to nostalgia and romance usually generate greater consumer involvement, as they presuppose greater personal involvement. The Benevolence Value proved to be influenced by time pressure, though only in situation 2, in which there was no time pressure during the experiment. Even though there was no time pressure, this variable stood out as requiring more time to access tourist information about Salvador.

For the participants in Salvador, the significant variables in situation 1 were: Physical Motivation, Personal Motivation, Tradition Value and Security Value. In situation 2, the significant variables were: Realization Value, Tradition Value and Security Value (Table 2). The other behavioral variables of the constructs Motivation and Value were not influenced by time pressure, according to the data in Table 2, that is, only the variables mentioned exert influence on the intention to visit the destination when there is time pressure for accessing tourist information about the city of Aracaju. Tourist attractions, related to these behavioral variables, are affected by TripAdvisor in situation 1 and by the app developed (ITur) in situation 2.

In situation 1, the odds of Personal Motivation being influenced were: 14% for time pressure, 31% for the Tradition Value, and 27% for the Security Value. In situation 2, the odds were: 61% for Realization Value and 37% for Tradition Value, according to Table 2. In situation 1, the effect of time pressure on Personal Motivation indicates that attractions that allow visitors to make new friends, or that encourage greater contact with family members, require more information and, consequently, more research time.

The Tradition Value was significant in situations 1 and 2. According to Schwarz's theory (1994), it refers to the respect for the customs and ideas of traditional culture or religion; the Safety Value, related to social and individual stability, was also significant in situations 1 and 2. Parks with tourist facilities, malls, restaurants and cultural events are some of the attractions that can generate security for tourists and visitors.

A study conducted by Prado and Fagundes (2019) found that cautious consumers (those who are concerned with safety, responsibility and obligations) are more influenced by the time pressure than those seeking personal growth and life aspirations as a behavioral characteristic. This aspect may be related to the feeling



of risk perceived by the individuals who take the Tradition Value and the Security Value into consideration.

In situation 2, however, the intention to visit of the interviewees in Salvador was greatly influenced by the time pressure for the Achievement Value (61%), indicating that the representation of personal success and ambition requires time and involvement in the search for tourist information that meets their desires and interests.

The Confidence Intervals for Physical Motivation in situation 1 and the Safety Value in situation 2 were lower than 1, but they did not contain 1 in their intervals, which indicates an opposite effect of the time pressure. In these two cases, the time pressure was negative for these variables, that is, those surveyed in Salvador wanted to emphasize that these variables were not influenced by time pressure. This effect was for the Physical Motivation Value (17%) and for the Safety Value (23%) (Table 2). According to these participants, tourist attractions that include relaxation, sunbathing, exercise, social order, cleanliness, care and social stability do not require further searching for information, and the time pressure is not felt, which may indicate low involvement.

The above data are important, as it can be seen that the variable Hedonism Value was not mentioned by the interviewees in Salvador, while Physical Motivation, which includes relaxation and sunbathing, was strongly highlighted for not requiring more time searching for information. This result contradicts that found for the participants in Aracaju, for whom the variable Hedonism Value was significant in situations 1 and 2.

The Safety Value is also prominent, as it was significant in situations 1 and 2 for the participants in Salvador, but in opposite directions. In situation 1, the effect of the time on the search for information about tourist attractions was felt, but time was irrelevant in situation 2, where there was the customization of tourist attractions. This difference in perception may be related to the technological stimuli. In this case, the customization of tourist attractions may have presented sufficient information for these participants, causing them to feel secure, and not requiring further efforts to search for tourist information.

Tables 1 and 2 show that in both cities, time pressure when accessing tourist information had an influence on only a few variables of the constructs Motivation and Values. "Time pressure", meanwhile, was felt at a certain point of the experiment (situation 2) in which it did not occur, because in situation 2, there was no time limit to access the information in the app developed.

### **Gross and adjusted logistic regression for the cities of Aracaju and Salvador for the constructs Motivation and Values**

Considering "time pressure" as a dependent variable, a binary logistic multiple regression was performed with the construct Motivation as an independent variable, represented by 4 variables (Physical Motivation, Personal Motivation, Emotional Motivation, Status Motivation), and the construct Value, for its 10 variables (Power Value, Achievement Value, Hedonism Value, Stimulation Value, Self-direction Value, Universalism Value, Benevolence Value, Tradition Value, Conformity Value and Security Value). For each construct it was considered that its constituent variables present equal weights.

For the interviewees in Aracaju, the constructs were observed independently in the gross regression analysis, and it was found that for each unit added to the Phrase Completion scale, the construct Motivation showed an increase of 74% in situation 1 and 71% in situation 2. This aspect means that the interviewees in Aracaju realized that time pressure influenced their motivations. For the construct Value, also for those interviewed in Aracaju, it presented odds of 119% in situation 1 and 135% in situation 2, which shows significant influence of time pressure on the construct, and is indicative that individual values have greater influence on the intention to visit destination, as they are more influenced by time pressure.

For the construct Motivation, the respondents in Salvador presented odds of 26% in situation 1 and 35% in situation 2. The construct Value had odds of 65% in situation 1 and 85% in situation 2 (Table 3). These results indicate that the percentages were more relevant to the construct Value, regardless of the situation, compared to the construct Motivation. This aspect also occurred for the interviewees in Aracaju, reinforcing the prominence and influence of this construct at a behavioral level.

When the model was adjusted, only the construct Value was significant for the participants in both capitals, with 95% in situation 1 and 121% in situation 2, in Aracaju, and 88% and 11%, respectively, in Salvador. The lack of significance of the construct Motivation was due to the fact that it had value 1 in its Confidence Interval (CI), indicating total absence of relationship. Thus, the Value construct is strongly influenced by time pressure, resulting in the need for further search for information. This result corroborates the frequency in which the variables of this construct were present during the regressions performed, having time pressure as a dependent variable.



Table 3: Adjusted Odds Ratio for the cities of Aracaju and Salvador, in relation to time pressure for the constructs

<b>Aracaju</b>		
	Situation 1	Situation 2
	OR (95% CI)	OR (95% CI)
<b>Gross</b>		
Motivation	1.74 (1.39-2.17)	1.71 (1.31-2.23)
Value	2.19 (1.67-2.85)	2.35 (1.68-3.28)
<b>Adjusted</b>		
Motivation	1.18 (0.87-1.59)	1.11 (0.75-1.63)
Value	1.95 (1.39-2.73)	2.21 (1.47-3.32)
Adjustment measures		
AUC	0.842	0.854
SE	0.995	0.984
SP	0.263	0.182
McFadden	0.238	0.256
Nagelkerke	0.328	0.322
<b>Salvador</b>		
	Situation 1	Situation 2
	OR (95% CI)	OR (95% CI)
<b>Gross</b>		
Motivation	1.26 (1.03-1.55)	1.35 (1.04-1.75)
Value	1.65 (1.31-2.06)	1.85 (1.35-2.54)
<b>Adjusted</b>		
Motivation	0.88 (0.66-1.16)	0.85 (0.59-1.24)
Value	1.80 (1.33-2.42)	2.11 (1.36-3.26)
Adjustment measures		
AUC	0.737	0.794
SE	1.000	1.000
SP	0.097	0.063
McFadden	0.119	0.148
Nagelkerke	0.163	0,180

Where: OR – Odds Ratios; 95% CI – 95% Confidence interval; AUC – Area Under the Curve; SE – Sensitivity; SP – Specificity.

Source: Prepared by the authors, 2020

Table 3 shows that there is no significant difference between the odds ratios when situations 1 and 2 are compared, for both cities. The difference occurred when comparing the odds ratios between the cities, not between the situations, because when analyzing the cities, we see higher odds ratios for the constructs. Thus, the time pressure appears to have exerted more influence on the intention of the interviewees in Aracaju, regardless of the situation, compared to those in Salvador. These data suggest that the interviewees in Salvador do not require as much information about the tourist attractions of Aracaju, because they have already decided to visit that destination, and already have enough information, or perhaps have low involvement.

Considering the AUC, Sensitivity, Specificity and McFadden's  $R^2$  and Nagelkerke  $R^2$  adjustment measures as a set, the results were within the expected parameters for goodness of fit of the model, indicating that the data adequately measured the perception of the interviewees.

## CONCLUSIONS

Among the main results of the multiple logistic regression that considered the 4 motivations and the 10 values as dependent variables, the influence of time pressure on the Hedonism Value for the interviewees in Aracaju was evident. Whether or not the tourist attractions were customized, time pressure influenced this variable, requiring more time to search for information and showing higher level of involvement among those surveyed.

For the interviewees in Salvador, the most evident variables were the Tradition Value and the Security Value, for both situations, showing that the participants felt the time pressure with or without the customization of the tourist attractions. Therefore, traditional elements that involve respect and the local customs, as well as religion, require more time to search for information, which can be done using technology and customization.

Considering the Physical Motivation in situation 1 and the Security Value in situation 2 for the interviewees in Salvador, it is notable that for these behavioral variables, the respondents emphasized that they were not influenced by the time pressure and that attractions that are related to these behaviors do not require further search for information. This may be because these interviewees do not need technological stimuli to search for information about the city of Aracaju, whether customized or not.

Regarding the gross and adjusted logistic regressions with the constructs Motivation and Value as independent variables, the results indicate that the interviewees in Aracaju were more influenced by time pressure

when accessing tourist information, regardless of the situation, compared with those in Salvador.

Comparing the results of situations 1 and 2, situation 1 being the one in which TripAdvisor was consulted and situation 2 the one with the customization of tourist attraction, it is clear that regardless of whether or not there was customization, time pressure did not show significant differences between these situations. Thus, time pressure influenced some of the variables, even in the part of the experiment that there was no time limit to search for information about tourist attractions.

In terms of contributions of this study, it gives a better understanding of the consumption behavior of individuals in relation to decision-making by tourists and visitors when considering, in the customization of the tourism offer, the constructs Motivation and Values and their respective variables that are influenced by time pressure.

The presence of the effect of time pressure could be seen in the tourist destinations analyzed and that, despite being close to each other, and both coastal locations, yet time pressure influenced the individuals in different ways in their decision-making. Thus, it is important to determine whether time pressure, mediated by motivational and value variables, influences other tourist destinations. The methodology used here can be replicated in other contexts in order to observe different behavioral characteristics.

The limitations of this study are its use of a non-probability sample, although Peter (1979) explains that for any type of analysis, including multivariate analysis, there should be at least 10 cases per item measured; or, in the case of studies with a large number of items, at least 5 individuals per item, an aspect that is also emphasized by Hair et al. Furthermore, it is evidenced that future studies can perform more detailed analyses seeking to verify the relationship between time pressure and the use of information technology.

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