
THE INFLUENCE OF PERSONAL AND ORGANIZATIONAL AREAS IN THE PRICE DECISION FROM THE PERSPECTIVE OF RISK TOLERANCE

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ABSTRACT

The objective of the study was to identify the influence of the personal and organizational areas in the price decision under the perspective of risk tolerance in light of the Prospect Theory proposed by Kahneman and Tversky in 1979. The analysis in the organizational area is carried out in relation to the definition of the price and in the personal area in the perception of fairness in the formation of the price. Therefore, an experiment was carried out under laboratory conditions, applied virtually to 174 students of lato sensu specialization from the Administration and Accounting courses offered by the Federal University of Uberlândia. The participants were randomly assigned to two groups representing the personal and organizational areas, which make pricing decisions. Data were statistically analyzed using logistic regression and the results indicate that the area in which the decision was taken does not affect the individual's risk tolerance, differing from the results found in other studies in the area. Furthermore, it was possible to conclude that some demographic variables influence the manager in the decision regarding price definition and also the consumer (personal area) in the perception of fairness in price formation. The findings are consistent with the Prospect Theory, which defends that individuals take risks to avoid a loss and avoid risks in situations that can obtain a gain. The study results contribute to the presentation of empirical evidence on risk tolerance, complementing the literature in the scientific world and for organizations and society, demonstrating which demographic characteristics can affect the risk tolerance of the customer and the manager in price decisions.

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Keywords: Prospect Theory. Decision making. Risk aversion. Price. Availability heuristic.

A INFLUÊNCIA DOS CAMPOS PESSOAL E ORGANIZACIONAL NA DECISÃO DO PREÇO SOB A PERSPECTIVA DE TOLERÂNCIA AO RISCO

RESUMO

O objetivo do estudo foi identificar a influência dos campos pessoal e organizacional na decisão do preço sob a perspectiva de tolerância ao risco à luz da Teoria do Prospecto proposta por Kahneman e Tversky em 1979. A análise no campo organizacional é realizada em relação a definição do preço e no campo pessoal na percepção de justiça na formação do preço. Para tanto, foi realizado um experimento em condições de laboratório aplicado de forma virtual para 174 estudantes de especialização lato sensu dos cursos de Administração e Contabilidade oferecidos pela Universidade Federal de Uberlândia. Os participantes foram direcionados aleatoriamente para dois grupos representando os campos pessoal e organizacional, os quais tomam decisões acerca do preço. Os dados foram analisados estatisticamente por meio de regressão logística e os resultados indicam que o campo em que a decisão foi tomada não afeta a tolerância ao risco do indivíduo, diferenciando-se o resultado dos demais encontrados em outros estudos da área. Além disso, foi possível concluir que algumas variáveis demográficas influenciam o gestor na decisão referente a definição do preço e também o consumidor (campo pessoal) na percepção de justiça na formação do preço. Os achados condizem com a Teoria do Prospecto, a qual defende que os indivíduos se arriscam para evitar uma perda e evitam riscos em situações que podem obter um ganho. Os resultados do estudo contribuem com a apresentação de evidências empíricas sobre a tolerância ao risco, complementando a literatura no meio científico e para as organizações e a sociedade demonstrando quais características demográficas podem afetar a tolerância ao risco do cliente e do gestor nas decisões sobre o preço de venda.

Palavras-Chave: Teoria do Prospecto. Tomada de decisão. Aversão ao risco. Preço. Heurística da Disponibilidade.

1 INTRODUÇÃO

For many years, man was considered to be entirely rational and capable of analyzing all available options and then making his choices (March & Simon, 1975). However, this idea began to be challenged by Bernoulli (1738/1954), Simon (1947) and Tversky and Kahneman (1974), in addition to other researchers in the behavioral sciences who defend the Theory of Behavioral Finance pointing out that not all markets are efficient and agents are not so rational, as individuals can be influenced by other factors, such as their beliefs and experiences. Thus, the decision cannot be considered as entirely rational (Oliveira & Krauter, 2015).

Decisions can be made in the personal area when the person decides for his personal life, as well as in the organizational area when he decides for the organization. It is important to emphasize that, in the organizational area, the manager makes the decision representing the group, which may affect business performance. The manager may have autonomy for decisions depending on the company size and also on the characteristics of the organizational structure used, such decisions may be centralized or decentralized, involving hierarchical levels, decision time and willingness to risk. (Atkinson et al., 2011). During the decision-making process, it is common for people to use mental shortcuts to simplify decision making, and these mental shortcuts are called heuristics by Tversky and Kahneman (1974). However, such heuristics can result in an incorrect decision due to the thought deviations that result from them.

Furthermore, when the human being makes a decision, he is subject to the risk arising from the choice, as the decision maker knows the existing options, but cannot accurately predict their outcome or effect (Swerts, 2001). Then, there is risk aversion, so that risk-averse people prefer a certain situation to a risky one. Geetha and Selvakumar (2016) and March (2010) add that risk aversion can vary according to demographic, psychological, financial and behavioral factors and, therefore, each person has a different aversion to risk.

In 1979, Kahneman and Tversky (1979) boosted research on Behavioral Finance, proposing the Prospect Theory. These authors argue that people tend to take a risky position to avoid losses and risks in gain situations, with different perspectives for gains and losses.

The literature presents studies that address decisions in the personal area, however, few studies are identified on the risk in decisions made involving third parties (Andersson et al., 2014). Harvey et al. (2006) point out that it is difficult to verify a person's ability to measure risks that would be acceptable to a third person. Thus, some people decide for others, using the assumption that they would take the same risk as them, while others tend to use neutrality.

Therefore, a gap was identified in studies that relate risk tolerance in the light of Prospect Theory regarding pricing in the organization (in the organizational area) and consumer decisions (personal area) in relation to price, making it is relevant to carry out further research. The determination of the sales price is related to the result and organizational performance, with the risk present in the pricing decision, as the price is capable of determining sales performance and customer loyalty (Varotto & Gonçalves, 2012).

Thus, the proposed research question is: What is the influence of the personal and organizational areas on the price decision from the perspective of risk tolerance? The general objective is to identify the influence of the personal and organizational areas on the price decision from the perspective of risk tolerance in the light of the Prospect Theory proposed by Kahneman and Tversky in 1979. The analysis in the organizational area is carried out in relation to the price definition and in the personal area in the justice perception in the price formation. It is important to emphasize that, for this study, the personal area considers the manager's characteristics as a consumer in the face of risk in a product acquisition and the organizational area involves the professional behavior used for pricing in the business environment.

The study uses the Prospect Theory as a basis in order to analyze the decisions taken from the perspective of risk tolerance. Fagundes (2019) addresses that there are few studies in Brazil regarding the individuals' behavior in decision making. The author analyzed the influence of the decision area on managers' risk tolerance, the study helped in the choice and definition of the variables investigated in this research. It is noticed that in behavioral finance, there is behavioral accounting, which considers individual psychological preferences and psychological limitations that result from the limited rationality of individuals in management accounting (Fagundes, 2019).

Thus, the present study becomes relevant, as it aims to understand the decision-making process on the price and the factors that can influence it, involving risk tolerance. It differs from other studies by proposing the analysis of risk tolerance and the pricing process, in addition to the analysis inclusion of the availability heuristic in relation to price decisions in order to improve organizational performance and gains in the personal area.

2 THEORETICAL REFERENCE

The theoretical framework presents, firstly, the determination of the price involving consumer choices and the decision-making process. Next, the concepts and characteristics of heuristics and behavioral biases are demonstrated and, finally, Prospect Theory is highlighted.

2.1 Price determination: consumer choices and the decision-making process

Price can be one of the determinants when the consumer makes the choice of the product or service. So, the price has great importance in the company's participation in the market, as well as in its profitability (Rosadas & Macedo, 2004). A product with its price formed incorrectly can bring great risks to the company, including affecting its continuity, as the price needs to be sufficient to cover the company's needs and, at the same time, be attractive to customers (Reis & Santana, 2012).

The individual makes decisions all the time and, according to some estimates, an average of 35,000 decisions are made a day, some of which are made consciously, but most are made subconsciously (Sollish, 2016). According to Securato (2012), decision making is influenced by previous experiences, information and observations. Thus, people are subject to making decisions with different levels of responsibility, and the result can affect families, co-workers, employment or even the nation (Securato, 2012).

As mentioned earlier, decisions can be made in the personal and organizational areas. In the personal area, day-to-day situations are decided, such as whether or not to buy a certain object, to travel or not, to change jobs, among others. According to Fagundes (2019), decisions made in the personal area will have consequences not only for the individual, but can also affect those around them. In the organizational environment, managers are subject to making decisions that can represent the success or failure of a project, as well as affect business performance (Securato, 2012). Decisions made in the organizational area

may have consequences for the organization and not just for the individual (Fagundes, 2019).

Kahneman (2012) points out that individuals have two mechanisms for decision making: The intuitive, also known as 'system 1', is responsible for automatic, quick decisions, without the perception of voluntary control, generating patterns of complex ideas. The rational, or known as 'system 2', is responsible for slow, laborious and deliberate decisions, which require choice and concentration, and only he can build thoughts in orderly series, in addition to being responsible for self-control. Decisions made in 'systems 1' and '2' are not exclusive or fixed, since, at some point, the decision can be made in 'system 1' and, at another time, the same decision can be made in 'system 2', depends on the frequency and complexity of the decision, when a decision is made more automatically, system 1 is used. This work focuses on decisions made in 'system 1', since, in this system, there is a more evident presence of heuristics and biases (Kahneman, 2012).

The decision-making process is not entirely logical, as there are frequent deviations in behavior. Thus, it is necessary to know the heuristics and cognitive biases that can influence decision-making (Kahneman & Tversky, 1979). Kahneman (2012) presents three heuristics: representativeness, availability and anchoring, each of which has its own biases, which will be discussed below.

2.2 Behavioral heuristics and biases

Heuristics reduce time and effort in decision-making, acting as adaptive cognitive mechanisms that consist of mental shortcuts in the decision-making process, and care must be taken so that they do not result in erroneous decisions (Lima Filho et al., 2010)

Bazerman (2004) emphasizes that it is important to know heuristics in order to use them correctly, as they provide efficient means of solving complex problems, resulting, in most cases, in good decisions.

The three heuristics identified by Tversky and Kahneman (1974) are: representativeness, availability and anchoring. Representativeness assesses whether an object "A" resembles an object or group "B". The anchoring heuristic occurs when people make estimates, using an initial numerical value as a reference. (Tversky & Kahneman, 1974).

Finally, we have the availability heuristic, which is used when people assess the probability of an event based on the ease of their recall (Tversky & Kahneman, 1974). Based on this heuristic, the individual assumes that his memories are true representations of other events outside memory (Bazerman, 2004). For this work, the analysis in relation to the availability heuristic was chosen, as it is important in decision making, as it reinforces that more frequent events are more remembered than less frequent events. The study of the availability heuristic is justified, due to the analysis proposed for the present study in relation to price. It is possible to verify, through it and its biases, if memories of previous prices can influence the purchase, if the person tends to look for a product in the places where he usually finds it or if he checks the prices beforehand, and also if people underestimate or overestimate the probability of two events occurring at the same time, based on their recall, such as high price and good quality.

According to Tversky and Kahneman (1974), the biases of the availability heuristic are: (i) Ease of recall: The person judges the chance of an event to happen based on their memories, such as witnessing a house fire, the individual will think that the probability of such events happening is more common than those he learned through the news in the newspaper. (ii) Retrievability: People tend to look for something in the places they remember existing, as an example the fact that the individual wants to buy clothes and, in this case, he searches in his memory for the place that may exist, as he recalls, more clothing stores close together, his tendency being to go there. (iii) Assumed Associations: It happens when we underestimate or overestimate the probability of two events happening at the same time based on our recall. As an example, one can cite the fact that the individual knows many marijuana users who are delinquent and, therefore, when asked whether marijuana is related to delinquency, this individual will probably assume this.

Thus, it is necessary to be careful with the deviations that may be caused by heuristics, even if there is a time gain in decision making. In order to overcome this problem, it is recommended to establish priorities, obtain relevant information, be careful in decision making and be aware of the heuristics, biases and the possible influence that these can exert on the decision-making process (Fernandes, Dantas & Macedo, 2011).

2.3 Prospect Theory and Risk Tolerance

The Prospect Theory was proposed by Kahneman and Tversky (1979) and its central idea is that, in risk situations, the decision is a choice between risk aversion and risk tolerance (Cardoso, Riccio & Lopes, 2008). So, people tend to risk more to avoid a loss and, in win-prone situations, they avoid taking risks (Kahneman & Tversky, 1979).

Bolton and Ockenfels (2010) argue that there is no difference in risk aversion when a person decides for their personal life or when they decide for third parties, for example, for the organization. However, most studies show that there are differences in risk aversion in these situations (Eriksen & Kvaloy, 2009; Schultz et al., 2018). In loss situations, when deciding for third parties, the person has less risk aversion, that is, he takes more risks to avoid a loss than when deciding for himself and, therefore, the decision for third parties is closer to rationality. (Andersson, et al., 2014). Thus, the following research hypothesis arises that will be tested in this study:

H1A: For the gain propensity, individuals tend to risk less when deciding on price in the organizational area than when making decisions in the personal area.

H1B: To avoid a loss, individuals tend to take more risks in the decision of price in the organizational area than when making decisions in the personal area.

Decisions made intuitively (system 1) are subject to a greater presence of heuristics and biases, as they are made quickly and without in-depth analysis. When making decisions in the rational format (system 2), the person analyzes the decision more deeply and tends to be less influenced by heuristics. Therefore, she makes analytical decisions, verifying the possible risks inherent to this decision, and

thus may have greater risk tolerance (Kahneman, 2012). On this basis, we have the following research hypothesis:

H2: Regardless of the area (personal or organizational), the greater the individual's risk tolerance, the smaller the effect of the availability heuristic on pricing decisions.

Risk is present in the decision-making process, whether in decisions in the personal area (decisions related to the individual's personal life) or organizational (decisions related to the company in which the individual works). According to Geetha and Selvakumar (2016), people have different risk tolerances, with some being more willing to take risks and others more averse or less tolerant of them. Such tolerance can be influenced by demographic, psychological, financial and behavioral factors.

So, Ross, Nora and Milani (2015) analyzed the risk aversion of professionals in the financial sector, demonstrating the results of the study that male respondents are more prone to risk and that the longer the time of professional activity or greater the number of dependents, the greater the risk aversion, that is, such individuals are less willing to take risks. Shepherd et al. (2015) also argues that the greater the experience, the greater the risk tolerance. Male risk propensity is also evidenced by the authors Meier-Pesti and Goetze (2005), Montinari and Rancan (2013) and Brooks et al. (2018).

Fagundes (2019) analyzed the influence of the decision area on managers' risk tolerance. As a result of the study, it was possible to conclude that: managers are less tolerant of risk in situations that involve gains than in those that involve losses; the older the age, the more risk tolerant the manager is; females are less risk tolerant than males; in relation to marital status, singles are more risk tolerant and, when they marry, they become less risk tolerant; the higher the level of education, the greater the risk tolerance. As can be seen, the demographic characteristics of the individual may affect risk tolerance, thus proposing the following hypothesis:

H3: The managers' demographic characteristics affect their decision on pricing at the personal (buying decision) and organizational (selling decision) scope, considering risk tolerance in the face of price decisions.

Oliveira and Krauter (2015) found in their study that students and professionals prefer a certain gain to a greater and uncertain gain, being more tolerant of risk in loss situations. The study conclusion was that, even with professional experience and academic training, people make decisions in a non-rational way, as this result is demonstrated in Grable and Joo's research (2004). However, Nogueira (2009) and Fagundes (2019) argue that individuals with higher education are less risk tolerant. Another variable that influences risk aversion is marital status, with single individuals taking more risks (Hallahan et al., 2004; Yao et al., 2011).

3 METHODOLOGICAL PROCEDURES

This study aims to identify the decision effects of the personal and organizational areas on the pricing process, purchase decision and risk tolerance. Therefore, an experiment was carried out, which aims to study the influence of a given independent variable on a dependent variable (GIL, 2006), having used the authentic experiment, which presents randomness in the assignment of participants to the control group or to the experimental group, being considered a more reliable experiment method (Walliman, 2011).

Regarding the application environment, this research is characterized as an experiment under laboratory conditions, since it sought to follow the same procedures as a laboratory experiment, but with virtual application (Aguiar, 2017).

3.1 Sample selection and data collection

The study population is made up of 628 students of *latu sensu* specialization courses offered by the Federal University of Uberlândia in business areas (Administration and Accounting). The sample is the survey respondents, which is classified as non-probabilistic and determined by convenience, composed by 174 respondents who agreed to participate in the survey.

The choice is justified because they are students of *latu sensu* courses in management area who, normally, are or were inserted in the job market, that is, they participate or participated in the decision-making process of organizations and, thus, share characteristics inherent to company managers. In addition to it, advanced-level accounting students can be suitable replacements for decision-making accounting professionals (Mortensen, Fisher & Wines, 2012).

To validate the questionnaire, a pre-test of the instrument was carried out with 20 *strictu sensu* graduate students, who did not later participate in the research, in order to verify its comprehensibility and ensure that it was possible to assess what was desired by the research. through that instrument. Participants answered the questionnaire and sent suggestions about its format and content.

After review and conclusion, the questionnaire was made available to the research participants on Google Forms, and the questionnaire link was sent to the University Support Foundation of the Federal University of Uberlândia (FAU), which is responsible for managing postgraduate courses. *latu sensu* graduation from UFU, and FAU, in turn, sent the link to students enrolled and graduates in MBA courses in the areas of Administration and Accounting, data were collected from 10/30/2020 to 12/15/ 2020.

Data collection for the experiment was carried out through two models of questionnaires, one model involving decisions related to the personal area and the other, questions for the organizational area. For data collection, subjects were randomly assigned to control or experimental groups. Thus, the individual answered only one questionnaire (from the personal or organizational area). This choice was made so that the participant did not make comparisons between the answers in the personal area and the answers in the organizational area. Furthermore, to avoid bias in the result, the questionnaires were prepared homogeneously, thus, they are similar in terms of content.

For the organization of the questionnaire, the alternative answers of the authors Kahneman and Tversky (1979) and Fagundes (2019) were kept, adapting only the scenario of the question and the answer in order to insert them into the object of study of this research. It is important to mention that the research project was submitted to the ethics committee and was duly approved.

The questions were of the closed type, presenting two alternatives, concentrating, in the first block, the alternative "A", which is the riskiest option, and the alternative "B", which is the safest option, inferring that the most risk-averse people choose alternative "B". The questions were adapted in order to create a scenario with the presence of risk, price and decision so that, through the same context, it was possible to formulate the question in the personal and organizational areas. Therefore, question 1 of the control group corresponds to question 1 of the experimental group, with the main difference being the area to be investigated, that is, personal or organizational.

In the second block, the questions that address the availability heuristic were distributed as follows: eight questions seek to assess the effect of the three biases of the availability heuristic, so that questions one and two of the block assess the ease of remembering bias; questions three and four assess recoverability bias; and questions five to eight assess the bias of the assumed associations. In the third block, the sociodemographic data of the participant are collected.

3.2 Experimental design and Data Analysis Techniques

The experimental design used in this research is the experiment under laboratory conditions "between-participants" with a control group and an experimental group without pre- and post-test. The "between-participants" design aims to understand differences in behavior between different groups with only one independent variable (Aguar, 2017).

For the experiment to be considered valid, there are several principles that must be considered by the researcher in order to reduce threats and increase its internal and external validity (Leary, 2001). Internal validity represents the extent to which ideas about cause and effect among the variables studied are supported in the study. On the other hand, external validity shows the extent to which the findings can be generalized to other populations and environments (Walliman, 2011). Based on Gall, Gall, Borg (2007), for the proposed experimental design, threats related to the internal and external validity of the experiment were raised and control negotiations were carried out in order to achieve the expected validity.

In order to meet the requirements of an experiment, this research foresees the manipulation of the independent variable "decision area" with the purpose of verifying if, when the individual decides on personal matters (personal area) or on professional matters (organizational area), there is an impact on the dependent variable in the first block, "risk tolerance in the face of price decisions", and in the second block, "the influence of biases on price decisions". In the questions in block 1, alternative B is the lowest risk option, that is, an alternative chosen by risk-averse people. In block 2, alternative B is the one that has the influence of the analyzed bias.

In the personal area, day-to-day situations are decided, such as whether or not to buy a certain object, change jobs, move to another city, among others. According to Fagundes (2019), decisions made in the personal area will have consequences not only for the individual, but can also affect those around them. Thus, the personal area is considered as a control group, since it is the area in which people naturally make decisions at all times. The variable manipulation is done through the organizational area, which is the treatment/intervention.

For data analysis, first, descriptive statistics were used in order to describe the profile of the participants, classifying them according to sociodemographic data, as well as descriptive statistics of the questions presented in the instrument to explore the findings. To verify the independent variable effect on the probability of the participant having greater or lesser aversion to risk, the logistic regression model was adjusted. The variable was coded as follows: 1 for the riskiest option; and 0 for the most secure option. To verify whether the proposed model fits the data well, the Hosmer and Lemeshow test was used and, to assess the degree of significance of each coefficient of the logistic regression equation, Wald statistic was used (Corrar et al. , 2007). Table 1 presents the variables used in the regression test:

Chart 1

Logistic regression variables

Dependent variable	Independent variables
Risk Tolerance	Decision Area; Age; Sex; Marital status; Degree of Instruction; Period that you worked as a manager; Approximate income range; Brand; Guarantee; Availability Heuristics.

Source: Prepared by the authors.

It is important to emphasize that the demographic variables chosen for the study were based on previous studies indicated in the literature review. It is recommended for future research to investigate other characteristics that may influence risk tolerance.

Table 2 demonstrates the hypotheses tested in the present study, considering the selected variables.

Chart 2

Research hypotheses

Hypothesis
H_{1A} : For the gain propensity, individuals tend to risk less when deciding on price in the organizational area than when making decisions in the personal area..
H_{1B} : To avoid a loss, individuals tend to risk more when making a price decision in the organizational area than when making decisions in the personal area..
H₂ : Regardless of the area, the greater the participant's risk tolerance, the smaller the effect of the availability heuristic on price decisions..
H₃ : The managers' demographic characteristics affect their decision on pricing at the personal (buying decision) and organizational (selling decision) scopes, considering risk tolerance about price decisions.

Source: Prepared by the authors

In the next topic, the analysis and discussion of the research results are presented, considering the proposed hypotheses.

4 ANALYSIS AND DISCUSSION OF RESULTS

First, the sample participating in the research is described, which was composed by 174 respondents, with 87 responses for each area. Most participants (79.88%) are from 20 to 40 years old. Regarding gender, 53.45% of respondents are female and the rest are male. In addition to it, it was found that 46.55% of respondents are single and 39.08% are married.

As for academic qualification, 78.16% have complete specialization. In addition to it, 54.6% of the respondents stated that they currently work in a position related to business management and 56.9% of the respondents have already worked with business management during their careers. Regarding income, most respondents (58.61%) receive from R\$2,091.00 to R\$7,315.00.

4.1 Risk Tolerance Analysis

In relation to risk tolerance, a first analysis was carried out in order to verify the respondents' behavior at the decision making time. Thus, we sought to identify whether the respondents were more or less tolerant of risk when making a decision (gain or loss) in relation to price in the personal and organizational areas. Table 1 presents the findings regarding the risk tolerance of the respondents.

Table 1
Risk tolerance

Perspective	Decision	Personal area		Organizational area	
		More tolerant	Less tolerant	More tolerant	Less tolerant
Gain	1	34,20%	65,80%	46,70%	53,30%
Guarantee	2	76,30%	23,70%	40,00%	60,00%
Gain	3	47,40%	52,60%	18,70%	81,30%
Brand	4	3,90%	96,10%	13,30%	86,70%
Brand and price	5	21,10%	78,90%	22,70%	77,30%
Brand and warranty	6	26,30%	73,70%	30,70%	69,30%
Gain	7	64,50%	35,50%	58,70%	41,30%
Gain	8	35,50%	64,50%	52,00%	48,00%
Competitor	9	39,50%	60,50%	11,90%	88,10%
Competitor	10	9,20%	90,80%	10,70%	89,30%
Loss	11	30,30%	69,70%	25,30%	74,70%
Loss	12	72,40%	27,60%	60,00%	40,00%
Loss	13	63,20%	36,80%	65,30%	34,70%
Loss	14	59,20%	40,80%	45,30%	54,70%
Loss	15	36,80%	63,20%	62,70%	37,30%
Loss	16	43,40%	56,60%	40,00%	60,00%

Source: Research data.

In the personal and organizational areas, individuals were more tolerant of risk in loss situations and less tolerant of risk in gain situations. This statement is supported by Prospect Theory, which argues that individuals take more risks to

avoid having a loss and, in situations that may have a gain, prefer to avoid risks (Kahneman & Tversky, 1979).

4.1.1 Influence Analysis of personal and organizational areas on risk tolerance

In the analysis with an earnings perspective, it was evaluated whether the decision area variable ('Area') has an effect on the risk aversion of the manager and the consumer, that is, it was verified whether the individual has a different risk aversion when deciding for his personal life and when you decide for the organization. Table 2 illustrates the results identified.

Table 2

Result of logistic regression on the decision area ('Area') in gain situations.

Coefficients	Estimated	Standard error	Z Statistic	OR	Value-p	Pseudo R ²	Hosmer & Lemeshow
Intercept	0,542	0,222	2,436	---	0,015 *		
Area	-0,380	0,309	-1,229	0,684	0,219	0,010	1,000

Source: Research data.

The result of the logistic regression demonstrates that the variable 'Area' is not significant in a situation of gains, that is, it does not affect risk aversion. This result is compatible with those found by Bolton and Ockenfels (2010), but differs from Eriksen and Kvaloy's findings (2009), by Andersson et al. (2014) and by Schultz et al. (2018). In these authors', the variable 'Area' was significant and, for these authors, if the individual turns to his personal life or to the organization, he is subject to a different aversion to risk.

This finding goes against the day-to-day logic, where it is naturally concluded that the person will risk less when using the organization's money (financial resources), in a gain situation. And it will take more risks to avoid losses of the organization's money, since it does not belong directly to it, and it does not want third parties to be harmed by its decision (Fagundes, 2019).

Therefore, for the present study, hypothesis H1A: "For the earning propensity, individuals tend to risk less when deciding on price in the organizational area than when making decisions in the personal area" was rejected at a significance level of 10%.

Continuing with the statistical analysis of the data, it was evaluated whether individuals tend to risk more in the decision of the price in the organizational area than when making decisions in the personal area in loss situations. As in a gain situation, the results showed that the variable 'Area' is not significant (Table 3)

Table 3

Result of logistic regression on the decision area ('Area') in loss situations.

Coefficients	Estimates	Standard error	Statistic Z	OR	Value-p	Pseudo R ²	Hosmer & Lemeshow
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Intercept	-0,396	0,219	-1,811	---	0,070		
Area	-0,297	0,316	-0,942	0,74 3	0,346	0,007	1,000

Source: Research data.

It was found that the hypothesis H1B: "In order to avoid a loss, individuals tend to risk more when deciding on the price in the organizational area than when making decisions in the personal area" was rejected at a significance level of 10%, that is, in loss situations, the fact that the individual making a decision for his personal life or for the organization does not affect his aversion to risk. Thus, it was found that the individual deciding with their own financial resources (personal) or with the organization's resources is willing to take the same risks. In the next topic, the personal area will be analyzed.

4.1.2 Personal area in a win-loss situation

Statistical tests were performed to verify the effect of the competitor, the brand, the price and the guarantee on the risk aversion of the individual in his personal life in loss situations and gain. Table 4 presents the results of the logistic regression.

Table 4
Result of logistic regression in gain situations and loss in the personal area.

Coefficients	Estimate d	Standard error	Statistic Z	OR	Value- p	Pseudo R ²	VIF	Hosmer & Lemesho w
Intercept	-1,696	1,262	-1,344	---	0,179		---	
Competitor B	-0,178	0,488	-0,366	0,837	0,715		4,974	
Competitor 2B	-0,223	0,767	-0,291	0,800	0,771		5,210	
Warranty B	0,522	0,534	0,977	1,686	0,329	0,073	4,694	0,801
Brand B	0,647	1,252	0,517	1,910	0,605		7,389	
Brand_PriceB	0,331	0,647	0,512	1,393	0,609		5,983	
Brand_Warranty B	0,774	0,563	1,375	2,168	0,169		5,360	

Source: Research data.

The results showed that, when the consumer decides whether to buy a product, the variables competitor, brand, price and guarantee do not affect their aversion to risk

4.1.3 Personal area in a gain situation

In this analysis, it was evaluated whether the demographic characteristics of individuals have an effect on risk aversion in personal life decisions, with the prospect of gains.

The findings indicate, at a significance level of 10%, that the variable 'sex' (D2) is significant, that is, considering personal decisions, women are 253.3% more

averse to risk than men in gain situations, indicating that men take more risks in this situation. This result corroborates the findings of studies carried out by Meier-Pesti and Goetze (2005), by Montinari and Rancan (2013), by Andersson et al. (2014), by Geetha and Selvakumar (2016) and by Brooks et al. (2018), who identified that women are more risk averse than men.

Thus, the findings of this study showed that, if the target audience for selling products is women, it is necessary to know that, when purchasing a product, they will be more risk averse in order to obtain gains, while men are will risk more. Thus, if the marketing of an unknown product, the organization is suggested to analyze the determination of the price so that it is attractive to women.

The results also indicated that the variable 'level of education' (D4) was significant. Individuals with a specialization, master's or doctorate are 243.1% more averse to risk in gain situations when deciding for their personal life than those with a lower level of education. This result converges with those found by Nogueira (2009) and Fagundes (2019), who add that individuals with higher education are less risk tolerant, but differs from those found by the authors Grable and Joo (2004) and Geetha and Selvakumar (2016).), who argue that individuals with higher education are more tolerant of risk. This result is justified due to the fact that people with more education analyze their decisions more deeply and, therefore, use system 2 for decision, because, according to Kahneman (2012), they are less risk-averse, slower and more laborious decisions.

Thus, if the target audience of the product is individuals with higher education, the manager must review the price so that it is inviting to this audience, with the other variables not having been significant.

4.1.4 Personal area at a loss

In this section, it was evaluated whether the demographic characteristics of individuals have an effect on the willingness to take risks in personal life decisions with the prospect of losses, with the results obtained being presented in Table 5, below:

Table 5

Result of logistic regression in loss situations in the personal area

Coefficients	Estimates	Standard error	Statistic z	OR	Value p	Pseudo R ²	VIF	Hosmer and Lem.
Intercept	-0,455	0,711	-0,640		0,522			
D1B	0,265	0,615	0,430	1,303	0,667		5,401	
D2B	1,068	0,549	1,947	2,909	0,052		6,542	
D3B	-0,214	0,552	-0,387	0,808	0,699	0,117	6,156	0,323
D4B	-0,158	0,646	-0,244	0,854	0,807		5,449	
D5B	-1,112	0,553	-2,013	0,329	0,044 *		6,641	
D7B	-0,137	0,520	-0,264	0,872	0,792		5,547	

Source: Research data.

At a significance level of 10%, as well as in perspectives of gains, the variable 'sex' (D2) was significant, that is, in loss situations, women are 190.9%

more averse to risk than men in taking decision making in relation to price, opting for decisions for personal life. In gain situations, men risk more than women in personal life decisions. The results are consistent with those found in studies by Meier-Pesti and Goetze (2005), Montinari and Rancan (2013), Andersson et al. (2014), Geetha and Selvakumar (2016) and Brooks et al. (2018), who identified that women are more risk averse than men in loss situations.

This result indicates that male consumers take more risks when purchasing a product than female consumers to avoid a possible loss. Thus, if the target audience is men, the manager should keep in mind that, when faced with a new product with potential benefits, men will not pay much attention to its price at the time of acquisition.

According to the results obtained, in general, it is possible to partially accept the hypothesis "H3: The demographic characteristics of managers affect their decision on pricing in the personal (purchase decision) and organizational (sale decision) scopes, considering the risk tolerance in the face of price decisions", since, in the organizational area, in a situation of gain, the variable 'marital status' was significant. In terms of losses, the variables 'age', 'marital status', and 'period that worked as a manager' were significant.

In the personal area, for gain situations, the following variables were significant, at a significance level of 10%: 'sex' and 'educational level'. Regarding the perspective of losses, the variable 'sex' was significant. In the next topic, the organizational area will be analyzed.

4.1.5 Organizational area in a win-lose situation

In order to assess the effects of competitor, brand, price and guarantee on the individual's willingness to risk, a logistic regression model was adjusted. Thus, the dependent variable 'Avesso1' was created, which considered the individual as averse when opting for alternative 'B' in a quantity greater than 5 in the questions about gain and loss, with a total of 10 questions. Table 6 presents the regression results.

Table 6
Result of logistic regression in gain situations and loss in the organizational area

Coefficients	Estimate	Standard error	Statistic Z	OR	Value-p	Pseudo R ²	VIF	Hosmer & Lemeshow
Intercept	-0,311	0,916	-0,340	---	0,734		---	
Competitor B	-0,203	0,874	-0,232	0,817	0,817		6,761	
Competitor 2B	0,522	0,892	0,585	1,685	0,559		7,042	
Warranty B	0,361	0,466	0,775	1,435	0,438	0,075	4,609	0,969
Brand B	-0,378	0,705	-0,536	0,686	0,592		5,830	
Brand_PriceB	1,091	0,662	1,648	2,977	0,099		6,507	
Brand_Warrant yB	-1,016	0,583	-1,743	0,362	0,081		6,454	

Source: Research data.

The logistic regression results indicated that only the variables 'brand_price' and 'brand_warranty' were significant, with question 5 evaluating the brand with the price. The question concerns whether the manager prefers to sell cell phone A, with its brand new and little known in the market, for the value of R\$ 1,200.00, or cell phone B, with its brand well known in the market, for the value of R\$ \$1,500.00. This variable was significant, that is, the brand, with the price, influences the risk aversion on the part of the manager. Thus, individuals who chose to sell cellphone B from a better-known brand for R\$1,500.00 are 197.7% more averse than those who chose to sell cellphone A from a lesser-known brand for R\$1,200.00. The new, lesser-known brand product with a lower price could perhaps provide more sales because the price is lower and, being risk averse, the manager could miss this opportunity.

Question 6 evaluated brand with warranty, asking whether the manager prefers to sell refrigerator A, as its brand is new and little known in the market, with a two-year warranty, or refrigerator B, because it is a well-known brand in the market. and with a one year warranty. This variable was also significant, that is, it affects risk tolerance. In this way, more risk-averse individuals will offer a product of a better known brand with less guarantee, trusting that brand and being able to lose higher profit margins with the new brand that has greater guarantee. Thus, the chance of aversion in relation to refrigerator B is 63.8% lower than in relation to refrigerator A.

Therefore, it is possible to notice that, when deciding for the organization, the manager can be influenced by the Prospect Theory and act in a risk-averse way, offering consumers the products of the best known brands, even with a higher price, or with a higher price. shorter warranty period. As a result, it can harm the sale of new brands that, perhaps, even provide a higher profit margin.

4.1.6 Organizational area in a gain situation

Additionally, we analyzed whether the demographic characteristics (age – D1, sex – D2, marital status – D3, level of education – D4, period of work as a manager – D5 and approximate income range – D6) of individuals have any effect on their risk tolerance in gain situations with regard to the organizational area. In this case, for the dependent variable, the variable 'Aversoganho' was created, with the individual considered as averse to gain when choosing alternative 'B' in a quantity greater than 2 in the 4 questions that deal with gain. The data obtained are presented in Table 7, below:

Table 7

Result of logistic regression in gain situations in the organizational area

Coefficients	Estimates	Standard error	Statistic Z	OR	Value p	Pseudo R ²	VIF	Hosmer and Lem.
intercept	-0,566	1,055	-0,536		0,592			
D1B	-0,003	0,636	-0,004	0,997	0,997		5,527	
D2B	0,578	0,494	1,171	1,782	0,242		5,214	
D3B	0,839	0,504	-1,664	2,314	0,096	0,180	5,440	0,892
D4B	1,027	0,904	1,136	2,792	0,256		5,258	
D5B	1,013	0,617	1,641	2,753	0,101		8,039	
D6B	0,277	0,619	0,448	1,320	0,654		8,201	

D7B	-0,395	0,565	-0,699	0,674	0,484	6,458
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Source: Research data.

From the data obtained, it is possible to conclude that, at a significance level of 10%, the variable 'marital status' (D3) is significant, so non-single individuals are 131.4% more risk averse than single individuals in organizational area decisions for gain situations. This result is consistent with the findings of the studies by Hallahan et al. (2004), by Yao et al. (2011) and Geetha and Selvakumar (2016).

Thus, the findings of this study indicate that single managers risk more than non-single managers when pricing a product, setting a price higher than what the market would absorb in order to obtain a gain. This result can be justified by the responsibility that the non-single manager has at home with his family, recognizing that the decision he makes for the organization can reflect on his personal life and, consequently, on his family's financial life and, therefore, he prefers to avoid risks. The other variables were not significant.

4.1.7 Organizational area in a loss situation

Subsequently, it was evaluated whether the demographic characteristics of individuals have an effect on risk aversion in decisions for organizational life with a perspective of losses, with the variables age, marital status and period of work as a manager being significant at a significance level of 10 %.

Therefore, the findings indicate that the younger manager, in order to avoid a loss, can take more risks, pricing a product with a wrong price; on the other hand, the older manager may avoid taking risks in pricing a product to avoid a loss. The results show the desire of the younger ones to want to stand out and conquer their space in the organization and, for that, they need to take more risks. On the other hand, older people already have a greater fear of losing their job, given the concern due to their age and the difficulty of finding a job.

As in the situation of earnings, the variable 'marital status' (D3) was significant, with non-single individuals being 192.5% more risk averse than single individuals in situations with the prospect of loss when they decide for the organization in which they work. This result was found for gain situations and converges to the results found by the authors Hallahan et al. (2004), Yao et al. (2011) and Geetha and Selvakumar (2016).

Thus, the findings of the study reinforce that single managers take more risks and non-single managers prefer to avoid risk situations in the organizational area, perhaps because of their experience with financial decisions in family situations.

It was also found that people who worked as business managers (D5) for more than 3 years are 68.4% less risk averse, that is, they take more risks than those who have less than 3 years of experience. experience when deciding for the organization in situations where there may be a loss. Such findings indicate

that experience in management positions can influence risk decisions, since the more experience, the greater the risk tolerance. These results corroborate the findings of Shepherd et al. (2015) and de Ross et al. (2015).

It is important to emphasize that the findings of the study point to organizations that managers with more experience may take more risks in pricing a product in order to avoid sales losses, while managers with less experience will be more guarded when pricing, avoiding taking risks. at a price that could result in lost sales and/or reduced profitability.

4.1.8 Closing of risk tolerance results

According to the results exposed above, Table 3 was prepared, which demonstrates which variables were significant:

Chart 3

Description of logistic regression variables in gain situations in the personal area

Variable	C.O gain and loss	C.O gain	C.O loss	C.P gain and loss	C.P gain	C.P loss
Competitor	No	N/A	N/A	No	N/A	N/A
Competitor 2	No	N/A	N/A	No	N/A	N/A
Guarantee	No	N/A	N/A	No	N/A	N/A
Brand	No	N/A	N/A	No	N/A	N/A
Brand_Price	Yes	N/A	N/A	No	N/A	N/A
Brand_Warranty	Yes	N/A	N/A	No	N/A	N/A
Age	N/A	No	Yes	N/A	No	No
Gender	N/A	No	No	N/A	Yes	Yes
Marital status	N/A	Yes	Yes	N/A	No	No
education level	N/A	No	No	N/A	Yes	No
Period you worked as a manager	N/A	No	Yes	N/A	No	No
Income	N/A	No	No	N/A	No	No

Source: Research data.

In the first line, the letters C.O were used for 'organizational area' and C.P for 'personal area'. Regarding significance, significant variables received the word 'Yes' on the board and non-significant variables received 'No'. For the column that does not apply to that variable, the letters 'N/A' were used in the table. In Table 4, below, the variables that influence the manager in risk aversion in relation to the price are presented.

Chart 4

Variables that influence the manager

Variable	Less risk averse (takes more risks)	More risk averse (takes less risk)
Age	Younger risk more	Older people take less risks
Marital status	Singles take more risks	Non-singles risk less
Period you worked as a manager	Managers with more than three years of management experience take more risks	Managers with less than three years of management experience take less risk

Brand_Price	Less risk-averse managers prefer to sell the lesser-known brand product at a lower price	More risk-averse managers prefer to sell the best-known brand product, albeit at a higher price, which can make it difficult to sell
Brand_Warranty	Less risk-averse managers prefer to sell the lesser-known brand product with greater guarantee	More risk-averse managers prefer to sell the product with a well-known brand, even if the warranty period is shorter

Source: Research data.

The variables that influence the consumer when taking a risk in purchasing a product are: 'Gender' and 'Level of education', as shown in Table 5, below:

Chart 5

Variables that influence the consumer

Variable	Less risk averse (takes more risks)	More risk averse (takes less risk)
Gender	Male customers take more risks	Female customers take less risk
Education level	Clients with only higher education risk more	Clients with only higher education risk more

Source: Research data.

Such results make it possible for the manager, when offering a new product to a female audience, to be aware that women are more risk averse than men, who may be more resistant to higher prices, comparing them with those of competitors. On the other hand, men will take more risks when buying a product and, if they identify a potential benefit, they may not be as influenced by price as women are.

Consumers with a higher level of education are also more risk averse. Thus, if this is the target audience, it is important that prices are inviting to arouse consumer interest. In addition, customers who are also managers are more risk averse at the time of purchase. Thus, for this target audience (professional course, for example), it is important that the price is attractive.

As for the manager, it is important to know the characteristics that can influence him to be more risk averse or not. With the findings of this research, it is possible to confirm that single managers take more risks when pricing a product (thus, it is necessary to be careful not to set a price higher than what the market absorbs), while married managers are more risk averse and can price at a lower price than the market is willing to absorb.

Age can also influence the manager in pricing, as the younger manager takes more risks when pricing a product. Thus, he can price a product with a price higher than what the market is willing to pay, while the older one avoids risks, being able to price with a value lower than what the market would pay.

Furthermore, managers with more than 3 years of experience take more risks than those with less than 3 years of experience. Thus, the greater the experience, the more risk-tolerant the manager is, so it is necessary to be careful not to price with a value greater than that which the market would absorb.

In a situation where the manager will sell two products of different brands with the same specifications, if he is risk averse, he will prefer to sell the well-known

brand product for a higher price, which may be more difficult than selling the branded product. lesser known for a lower price.

In addition, if risk averse, the manager will prefer to sell a product with a known brand and with a lower guarantee than selling a product of an unknown brand with a greater guarantee.

4.2 Availability heuristic

In order to assess the influence of the availability heuristic and its biases in decision making in relation to price in the personal and organizational areas, eight questions were presented, being the same for both groups of research participants (personal and organizational). Individuals who chose alternative B were influenced by the bias proposed in the question.

Questions 1 and 2 assessed the ease of recall bias, while questions 3 and 4 assessed the recall bias. Questions 5 and 7 serve as a guide for the assumed association. Therefore, question 5 should be analyzed with question 6 and question 7 with question 8. If the participant marks alternative A in question 5, the tendency is for him to choose B in question 6. For the association assumption is met, the same goes for questions 7 and 8.

Continuing the statistical analysis in order to verify whether, regardless of the area, the participant's risk tolerance has an effect on the presence of the availability heuristic in their price decisions, logistic regression was performed only with the variables 'Averso1', having been the individual considered as risk averse when choosing alternative B in more than 8 questions out of a total of 16 questions, and 'Dispon1', which classified the individual as influenced by the availability heuristic if he chose alternative B in more than three questions, out of a total of six. The model results are presented in Table 8, below:

Table 8
Result of logistic regression to evaluate the availability heuristic

Coefficients	Estimated	Standard error	Statistic Z	OR	Value-p	Pseudo R ²	Hosmer & Lemeshow
Intercept	0,642	0,226	2,846	---	0,004		1,000
Available1	0,927	0,363	2,556	2,52 6	0,011	0,057	

Source: Research data.

Through the data above, it is possible to conclude that the variable 'Dispon1' is significant at a significance level of 10% and, thus, hypothesis H2: "Regardless of the area, the greater the risk tolerance of the participant, the smaller the effect the availability heuristic in price decisions", was rejected, that is, the greater the risk tolerance of the participant, the greater the effect of the availability heuristic in price decisions, since the participant takes more risks and may not analyze deeply into the available options.

When the individual has greater risk tolerance, the individual takes more risks and can decide using system 1, that is, a decision in a more automatic and faster

way. Decisions made in System 1 are more likely to be influenced by heuristics and their biases (Kahneman, 2012).

Additionally, the effect of risk tolerance on the heuristic by question and by bias was individually verified, in which case the biases ease of recall and presupposed associations were significant.

The result demonstrates that the ease of recall bias is significant, that is, the greater the risk aversion, the greater the effect of this bias for the individual. Thus, a person who is risk averse will disregard, based on his last experience, the reputation that the store already has in the market.

The bias of the assumed associations was significant and directly proportional, that is, the greater the individual's aversion to risk, the greater the effect of this bias for this situation. Thus, more risk-averse individuals, such as women, will be more impacted by the presupposed association bias at the time of making a purchase.

Additionally, it was also tested whether the demographic variables have an effect on the presence of the availability heuristic in price decisions, with none of the variables being significant at the 10% significance level, that is, these variables had no effect on the heuristic availability in pricing decisions.

The findings show that the manager or consumer may resort to the use of the availability heuristic and its biases involuntarily. It is important for the manager to know that the consumer can be influenced by the ease of remembering bias, keeping in his memory the last image he had of the store and disregarding his previous experiences and the store's reputation. Individuals who are more risk averse, such as women, are more prone to this bias.

It is also common for consumers to make assumed associations, and the greater the risk aversion of the individual, the greater the assumed association. Thus, more risk-averse individuals will be more impacted at the time of their purchases. The manager should be aware that risk-averse individuals will think that a luxury store sells at a higher price than others, relating their experience with other luxury stores that practiced high prices.

5 FINAL CONSIDERATIONS

The differential of this research was to relate, in a single study, risk tolerance in the light of Prospect Theory, in relation to price, in two areas (personal and organizational), and the analysis of the availability heuristic.

The results of this work indicate that the decision taken for personal life or for the organization does not affect the individual's risk tolerance, that is, the behaviors tested and verified in the personal area tend to be repeated in the organizational area, unlike what was found in the researched literature. Prospect Theory argues that people risk more to avoid a loss and risk less in situations where they may have a gain. This statement was confirmed through the results of this study.

In addition to it, this study investigated the demographic characteristics of individuals that have an effect on their risk tolerance. Thus, the variables that affect the manager when setting the price of a product, being more or less risk averse, are: 'age', 'marital status', and 'has he worked as a 'manager'. As for the

consumer to take the risk of buying a product, the variables that influence him are: 'sex' and 'level of education'.

One of the important and even inconsistent findings in the literature is the fact that the area in which the decision is made does not interfere with their aversion to risk. This indicates that the behaviors already tested and verified in the personal area tend to be repeated in the organizational area. In other words, deciding with your money or that of others, deciding alone or as a collegiate does not affect your preferences. After all, one of the great contributions of a study of this nature is precisely this point. In the extrapolation of the results found for its use in the real world, since this is a science that "feeds" or has as a laboratory, precisely the observation of the "real world".

It was also verified whether the variables 'Competitor', 'Brand_Price', 'Warranty', 'Brand', and 'Brand_Warranty' influence the risk aversion of the individual. It was found that none of these variables affect the risk aversion of the consumer and that only the variables 'Brand_Price' and 'Brand_Guarantee' affect the manager's risk aversion.

In addition to it, less risk-averse managers prefer to sell the lesser-known brand product at a lower price and more risk-averse managers prefer to sell the better-known brand product at a higher price. Furthermore, less risk-averse managers prefer to sell the product with a lesser-known brand and with a greater guarantee, while more risk-averse managers prefer to sell the product with a better-known brand, albeit with a lower guarantee.

It was also identified that, for the availability heuristic, the greater the risk tolerance of the participant, the greater the effect of the heuristic on price decisions. Thus, biases were significant for this study: ease of recall and assumed associations, and the risk tolerance of the individual may be affected in the presence of these biases, since the most risk-averse individual is more subject to such biases. Demographic variables had no effect on the presence of the availability and risk tolerance heuristic.

Therefore, the findings of this study contribute to expand knowledge about risk tolerance in conjunction with price, the availability heuristic and analysis in the personal and organizational areas. In addition, the findings indicate the direction of the behavior of the manager and consumer when selling or purchasing a product based on its price. In this way, based on their characteristics, based on the results of this study, the manager can verify the involuntary direction of their pricing actions, being able to avoid possible biases, as well as being able to know the characteristics of their target audience that influence them at the moment of purchasing a product and using such characteristics consciously in order to increase the company's profitability. The practical contribution of the present study is reinforced with regard to the use of results by managers (organizations) considering an experiment carried out with problem situations that involve personal and/or organizational decisions.

It is important to report the study limitations, in relation to the sample size and the public studied, not exhausting the topic with the results found. Thus, future studies are recommended that use other audiences or, even, the replica of this work. It is also possible to add other variables, as well as verify the behavior in relation to the representativeness and anchoring heuristics and their biases. It is suggested, for future research, to verify if, with samples with different

characteristics to those used in this study, the area remains without influencing the risk aversion of the individual, because, if confirmed by further studies, it is possible to extrapolate new findings from the personal to the organizational area. It is also suggested to verify if, when the individual decides in a group, the behavior is different, as well as to use other methods of analysis and to compare the results obtained with this study.

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