Journal of Business and Economics, ISSN 2155-7950, USA
May 2021, Volume 12, No. 5, pp. 481-492
DOI: 10.15341/jbe(2155-7950)/05.12.2021/002
© Academic Star Publishing Company, 2021
http://www.academicstar.us

Relevance of Visual Aspects in the User's Choices

César Augusto Tibúrcio Silva, Silva Brandão André Luiz, Thais Mota Crabbi
(University of Brasília, Brazil)

Abstract: In the last few years, the concepts related to finance have been questioned, for example, the rationality of the economic agents. Studies in this field questioned the evidence that economic rationality. Non-cognitive factors can influence decisions made, considering only the cost-benefit. Studies showed that the non-rational side of the human being influences most decisions. The study applied questionnaires to observe 180 college students' reactions with a few attributes considered requirements for the intuitive judgment process. Using only photographs of candidates, the participants were able to properly separate the ones elected from the others in the requirements of competency, intelligence, honesty, trustworthiness, charisma, and sympathy. Besides that, in three cases, the participants used the anchor effect on the grade given.

Key words: visual aspects; behavioral finance; concision process

JEL codes: G41, M41, D72

1. Introduction

In the past, accounting was associated with bookkeeping. Over the years, the accounting function, and consequently, the accountant role expanded. Today accountants support managers, CEOs, governments, enterprises in general, besides other users in the decision process through the accounting statements and reports. Thus, it is possible to say that there is a strong link between accounting and decision processes. The introduction of new information will generate a reaction by the user.

The study of the relationship between information and decision is fundamental to understanding the accounting function. However, the decision process can be affected by how the information is exhibited. Hartono (2004, Lima, 2007), for example, claims that the way that accounting information is evidenced can have an impact on stock prices, which shows that stockholders are sensitive to how accounting information is displayed. In modern studies of decision, the way information is presented, and its respective influence on human behavior receives the denomination of formulation effect (Lima, 2007).

However, this position contradicts a common perception in the accounting field: the prevalence of the true and fair view. Although the "true and fair view" refers to privilege, on the disclosure of a fact, the economic aspects and not the legal aspect, the term-end up getting a broader connotation. Under this rule, what is essential to accounting is the essence of the presentation of information. In this sense, the user would be highly rational and

César Augusto Tibúrcio Silva, Ph.D. in Accounting, University of Brasília; research areas: behavioral economics and valuation. E-mail: cesaraugustotiburciosilva@gmail.com.
Silva Brandão André Luiz, BA in Accounting. E-mail: brandao.andre5@gmail.com.
Thais Mota Crabbi, Master of Accounting, University of Brasilia; research areas: behavioral economics. E-mail: thaiscrabbi@gmail.com.

would not be vulnerable to cognition errors.

From this concept of economic rationality, the basic premise of the modern financial theory, it could be inferred that people use available information to make the best decision. On the other hand, in practice, it is not only rationality that determines human behavior. Other elements, such as visual data, sensory, emotive, intuitive, and instinctive, can influence people's conduct. This fact can be observed daily, for example, in a vehicle purchase, choosing a partner, or hiring a new company manager.

This study delves into the behavioral finance field and, consequently, into behavioral accounting. The study's primary objective in behavioral finance/accounting is considering human behavior in the decisions. The accounting information can be presented in many ways, such as accounting reports and management reports (charts, images, audit opinions), interviews with executives, institutional videos, and stock prices (to companies with opened capital). Therefore, how the firm shows the accounting information to the public can interfere in the stakeholders' decision-making process, like the future investor or the bank manager, that can authorize a loan application based only on the client's accounting information. The way the firm presented accounting information can interfere in the decision-making process, influencing the beliefs. According to Lima (2007), investor's beliefs represent a critical component in the process of alternative evaluations.

The technical aspects of the accounting numbers and the impact on the users of this information get strong attention from regulators, professionals, and researchers. However, linguistic and visual media are as crucial to the communication of relevant questions as numbers themselves. The narratives started to constitute a meaningful part of regulatory and voluntary financial reports. Therefore, the visual aspects are similarly significant in accounting communication (Davison, 2013).

This article is part of a research line that examines non-rational factors in the decision-making process with accounting information. In this sense, the presented research corresponds to the first step, analyzing the decision's exterior elements. An option in this study was to Investigate the visual aspects, based on the studies of Todorov, Mandisodza, Goren, and Hall (2005) and Graham, Harvey, and Purin (2016). Both studies discuss the influence of visual factors related to people in the decision-making process. The research reproduces, with adaptations, the research of Todorov et al. (2005), that analyzed if the visual aspects are important in individuals' choices in electoral environments.

With the ideas exposed here — investigation of non-rational factors in the decision moment — this study has the objective to determine if the visual aspects influence electoral candidates' choice. Although the objective does not show a direct relationship with accounting, it is essential to highlight social science. Accounting has an interest in investigating factors that influence decisions. Among these factors, there is a true and fair view. The form would be linked with the visual aspect, while the requirements of evaluating the electoral candidates used for the study and described further up would be the essence. In this sense, the research of Hsieh et al. (2019) is symptomatic. The authors showed that in companies that the financial executives have a less "trustworthy" appearance, higher audit fees are paid than companies with executives with a visual aspect considered to be more "trustworthy".

The tests performed and presented below demonstrate that the participants could adequately separate the elected candidates from the non-elected, using only photographs. These results indicate that visual aspects can be critical to people's daily decisions, including financial and economic decisions and public managers elected in Brazil.

This article's structure is as follows: introduction; theoretical reference; methodology; analysis of results; and the conclusion, which will try to answer this article's objective.

2. Theoretical Reference

People quickly attribute specific characteristics to faces, like if the person is trustworthy, competent, and sympathetic. Since the beginning of the 20th century, psychologists know that a consensus exists to assign social and personality characteristics to someone's facial appearance (Todorov, Olivola, Dotsch, and Mende Siedleski, 2015). Even kids of 3 to 4 years old, show a meaningful level of consensus in the social attributions of faces, consistent with what has been found in adults (Cogsdill, Todorov, Spelke, and Banaji, 2014). To Kahneman (2003), facial impressions are natural evaluations related to someone's perception than to his thinking.

According to Todorov et al. (2015), there are beliefs that the face is a window to a person's true nature in every ancient culture. Although the variation of those beliefs over the years and divergences between cultures, everyone assumes that a direct match exists between facial appearance and personality. To the authors, decision-making is so fast that people can judge another person's visual aspects in a facial exposition of only 34 milliseconds.

Although there is an old saying alerting to "not judge a book by its cover", often the opinion formation about others' characteristics is taken from statistic samples and quick to appear; in other words, the first impression stays. The widespread use of social media and the growing popularity of the internet means that appearances are increasingly the first clue we get about someone else (for example: through posted pictures on social networks), often long before you know them (Olivola & Todorov, 2010).

An intriguing economic theme about visual aspects and decision-making indicates a "beauty award" in which workers who appear to be more attractive earn more than workers with below-average appearances. This result suggests that the perception based on facial attributes is meaningful in financial decision making (Graham, Harvey, & Puri, 2016).

Good-looking people can also be a strong influence on the voter's choice. For example, Olivola and Todorov (2010) showed that people are more likely to vote for political candidates who have facial features that make them look competent. Through various experiments, Ahler et al. (2017) found that the availability of additional information about the candidate cannot alter judgment previously established through visual appearance. For the authors, this discovery raises concerns about voter competence and public managers' quality that are being elected.

Visual symbols have long been a central component of political communication, and its importance increased as television became the dominant source of political information. Politicians understand the meaning of visuals and work with intensity to build useful images while emitting powerful signals. In short, visual images play a central role in building political images (Schill, 2012).

The present research was based on the article by Todorov et al. (2005). The authors conducted an experiment that consisted of showing whether appearance was a relevant factor in decision making. The study was designed with 40 participants. They showed pictures of candidate faces from which participants would have to judge whether they were competent. According to Todorov et al. (2005), rapid automatic inferences about competence, based solely on the facial appearance of political candidates, without any prior knowledge, can predict the outcome of elections of the Congress of the United States of America (USA).

Competence can be considered one of the most critical attributes that people consider when evaluating a politician. If voters evaluate political candidates who appear to be competent, inferences about such an attribute from facial appearance could influence their voting decisions (Todorov et al., 2005).

In the research of Todorov et al. (2005), to test this hypothesis, they asked the "naïve" participants to rate Senate and House candidates' candidates in seven areas: competency, intelligence, leadership, honesty, trustworthiness, charm, and sympathy. The study presented the participant's black and white photos of the winners' faces and losers of the elections for one second. If any participant recognized the candidate, he or she was immediately taken out of the research. All results were derived solely from observations of the face without any prior knowledge of the candidate.

A competent appearance can also be an essential factor in choosing a company's Chief Executive Officer (CEO). According to Graham, Harvey, and Puri (2016), from the trial of nearly 2000 participants, the CEOs appear to be more competent than the other company executives. The larger the company size, the more competent the CEO appears to be. Besides that, a competent appearance is positively related to the executive salary.

Several other studies have shown the relevance of appearance in different situations. The studies of Wilson and Eckel (2006), Sanchez-Pages and Turiegano (2010), and Andreoni and Petric (2005) used experimental research. Wilson and Eckel (2006), using a game with controlled information, found that appearance may be attractive at a first step, although it does not ensure better salaries in the future. When a good-looking person does not correspond to the expectations, there is a punishment in the experiment performed. Through an experiment, Andreoni and Petric (2005) found a beauty bonus, even though the good-looking people's contribution is within the group average. However, the prize disappeared when the researchers reported individual contributions. Due to the high expectations of good-looking people, the expectations did not materialize with the contribution's information, and there is a "beauty punishment". Overall, Andreoni and Petric's (2005) research participants expected more social behavior from the good-looking people. Sanchez-Pages and Turiegano (2010) used the known prisoner dilemma and found out that symmetric faces are more competitive, less corporate, and more selfish.

Another research study was performed in real situations as Price (2008), Sachsida et al. (2004), and Cipriani and Zago investigated. Price (2008) verified people's reactions to a fundraiser campaign for a third sector entity. The author encountered that blonde women who had requested donations collected 70% more than the brunettes. Price (2008) also found out that blonde female collectors more influenced Caucasian donors than non-Caucasian donors.

Sachsida et al. (2004) conducted field research in Brasília — Brazil's shopping malls. The results suggest that good looking women receive a beauty bonus corresponding to 9% of the salary. The authors encountered that this difference is related to productivity and not to discrimination. Cipriani and Zago (2005) also found this association between beauty and salary in their study about the appearance effect on exam grades.

The work of Arunachalam and Shah (2010) investigated the effect of appearance on the sex market. Using data from prostitutes from Ecuador and Mexico, countries where prostitution is legal, the authors tried to see if the beauty bonus would be extreme in this profession. They concluded that the bonus exists. A more attractive professional earns 10% to 15% more per hour. However, the authors argue that this award might be overrated by studies so far since when control variables are used, this bonus is reduced by half. In line with Arunachalam e Shah (2010), Doran (2008) also believes that the beauty bonus might not be robust when control variables are considered.

The effects of beauty have also been found in other domains. For example, beautiful is associate with happiness (Hamermesh & Abrevaya, 2012), succeed in soliciting charitable donations (Landry, List, Price & Rupp, 2006) and increase their companies' revenues (Pfann, Bosman, Biddle & Hamer, 2000). The search found that beautiful to do better on TV shows (Belot, Bhaskar, & Van De Vem, 2012) and are less likely to become criminals (Mocan & Tekin, 2010).

Studies such as those by King and Leigh (2009) and Lens and Lawson (2011), as the one from Todorov et al. (2005), analyzed the effect of good looks in the political arena. King and Leigh (2009) used data from Australia, where voting is compulsory. In that country, the best looking candidates are more likely to be elected, which is more significant in men. Lenz and Lawson (2011) were more specific about this: they researched the effect of appearance and the television on the choice of candidates of the United States. The focus of the author's work was people with little political information. Lez and Lawson (2011) used photographs in their research and found the beauty bonus.

For Olivola, Tingley, and Todorov (2018), the democratic method's usefulness is fundamentally constrained by the quality of voters' decision-making process to elect their candidates. The authors analyzed how facial stereotypes influence the decision making of the US voter. Using data from electoral polls in the United States, the authors showed that Republican voters are more likely to vote on a candidate who has a more stereotypical Republican-looking face, even if the candidate is a Democrat. On the other hand, the voting decisions of Democrats are not related to political facial stereotypes. The authors also showed a greater likelihood that both Republican and Democrats vote for conservative-looking candidates.

Although facial information may be significant in the judgment of attributes, it does not quickly reveal which attribute of facial features (such as the curvature of the mouth and the distance between the eyes) is decisive in decision making. This difficulty is still compounded by the fact that some features may not have labels. Still, both observers and experimenters may not be aware of these characteristics' effects on social perception (Dotsch & Todorov, 2012).

By making social assignments from faces, people are doing a lot with little information. This fact may be irrelevant in some situations (for example, judging that the employee did not sleep at night because he looks tired). However, it can be in others (for example, deciding that the neighbor is untrustworthy only by the distance between his eyes). When these assignments may have more severe consequences, the correct course of action is to consult other more useful and non-facial information (Todorov et al., 2015).

Recently, research by Hsieh et al. (2019) used machine language to classify thousands of photographs of corporate finance executives. After this, the authors related a measure of face reliability with the payment to audit companies. The authors found that the lower the reliability of faces, the higher the audit firm's charge, ceteris paribus. Thus, the auditors take into consideration the facial expression of the executives of the companies where they will audit, and companies with executives who have less reliable expressions that could bring more problems are penalized in the amounts charged for the audit work.

3. Empirical Strategy

We did this research by applying questionnaires. We select such a research instrument for its ease of application and its advantages that are quick information acquisition from many people simultaneously. There is no need for lengthy training of the people who will apply for the questionnaire. Thus, we can expand the

application's geographical area, and there are greater ease and speed for data tabulation, among other factors.

The questionnaire, for this research, was constituted of three parts. The first part included the presentation, the reason for its completion, the instructions, and the participant's cooperation. The second part collected information from the respondent: age and gender. The lack of other information about the participant was an option to facilitate the questionnaire's completion. Finally, the third part was presented, which provided spaces filled with a slideshow's aid. These slides contained photographs of the candidates for state deputies of the 2018 Brazilian election. Each slide was shown approximately for three seconds; after this period, we projected a blank slide to allow the participant to complete the questionnaire. After participants viewed the photograph, we asked a score from one to five, five being the maximum score. The attributes were: a) Competence; b) Intelligence; c) Honesty; d) Trustworthiness; e) Charisma; and f) Sympathy. These requirements, when cited in the following text, are in italics. The attributes being assessed were: a) Competence; b) Intelligence; c) Honesty; d) Trustworthiness; e) Charisma; and f) Sympathy. These requirements, when cited in the following text, are in italics.

In short, that for each photograph, the participant should give six scores. After all, participants evaluated one candidate, a new photograph was displayed, restarting the process. The number of photographs totaled ten, representing sixty scores per participant. Finally, we asked each participant to choose one of the candidates they would vote for in an election.

During the application of the questionnaires, some students were late. Because of that, there were some blank answers. We decided that the questionnaires would still be considered for this study because the number of cases was relatively small. It is worth mentioning that one participant expressed, verbally, during the application of the questionnaire. In writing, in the physical questionnaire itself, he did not believe in the research. According to the student, a single photo would not support interpretations about the items in question. Regardless, the student answered the questionnaire.

We chose the Brazilian state of Santa Catarina to select the photos that would compose the research. We chose this state to prevent students from recognizing the candidates' photographs. After choosing the state, we selected the five most voted and elected candidates, and the five least voted. When choosing candidates less voted, we not considered candidates with zero votes, as this performance may be related to an external factor, such as the application's withdrawal. The candidates' names and origins were not communicated to participants to avoid the primacy effect or other biases. We decided to build two types of questionnaires, where the only difference was the order of presentation of the photographs. We decided on this order randomly.

We took the candidates' photos from the Superior Electoral Court (www.tse.jus.br). Candidates submitted the photos as a requirement for the application. Because there was no standard rule regarding the positioning of the individual and coloration of the photo, candidates were free to forward the photograph of their choice. Thus, some chose to highlight only their face in a black and white photo. Others chose to show the face, trunk, and have a color image. There was no manipulation in the photos, preserving the color and magnitudes to avoid the researcher's bias.

We conducted this research with students from the University of Brasilia in the first semester of 2019. Previously, we conducted another survey with a slightly altered questionnaire in the judgments. The sampling was for convenience and the sampling used is non-probabilistic. A priori, we considered that this sample would not affect the results. However, this may not have occurred with the item Intelligence.

In the elaboration of this hypothesis test, several statistical instruments were used, according to variable type: correlation between variables, frequency tables, and the different test of average. Based on the Central Limit

Theorem, a sample larger than thirty elements, retrieved from a population with a mean μ and a standard deviation σ, its sample distribution will tend towards a normal distribution. Levin and Fox (2000) say that the higher the sample's number, the more it will approach the normal distribution. Thus, the T-Student distribution, according to Levin and Fox (2000), is necessary because the standard error used is supported by sample data rather than the total population.

Since the assigned scores were between zero and five, we calculated the simple arithmetic mean to verify each candidate's average grade or each item. We considered a two-way significance of 5% on statistical tests. In the presentation of the results, we decided to indicate the mean, the standard deviation, and the number of observations, in that order, in square brackets.

4. Results

The sample consisted of 180 participants, 82 of whom were female or 45.6%. The mean age was 21.97 years, with a minimum of 18 and a maximum of 54 years. Overall, both age and gender did not affect most results. When this occurred, we highlighted the result below.

Table 1 Descriptive Statistics of Elected and Non-elected Candidates

Candidate	N	Mean	Median	Standard Deviation	Interval	Minimum	Maximum
1	179	3.9395	4.0000	0.65502	3.33	1.67	5.00
2	178	2.3509	2.3333	0.69744	3.33	1.00	4.33
3	180	2.7652	2.7500	0.81235	4.00	1.00	5.00
4	180	2.8505	3.0000	0.74319	4.00	1.00	5.00
5	180	3.6230	3.6667	0.70437	3.83	1.17	5.00
6	180	3.4741	3.5000	0.73230	3.50	1.50	5.00
7	180	2.6870	2.6667	0.67698	3.17	1.00	4.17
8	180	3.6014	3.6667	0.75627	3.67	1.33	5.00
9	180	2.9079	3.0000	0.66495	4.00	1.00	5.00
10	180	3.7653	3.8333	0.70549	3.67	1.33	5.00

The participants gave a mean score, standard deviation, and N, in that order, of [3.1984; 0.42181; 180]. The Competence variable was the one with the highest score among the participants [3.415; 0.59833; 179], followed by intelligence [3.3911; 0.55712; 179], trustworthiness [3.1912; 0.49053; 180], sympathy [3,0934; 0.47299; 180], charisma [3.0738; 0.46394; 180] and honesty [3.0377; 0.59098; 180]. Overall, the scores given were highly correlated, all significant at 0.01, among the six requirements, indicating that a good grade given to a candidate in one attribute will also be repeated in another attribute. It is possible to say that this is a sign that the answers hold a certain coherence. The answers' reliability statistics indicated a Cronbach's alpha of 0.874, considered adequate for a questionnaire.

After we tabulated the results, we calculated the attributes' grades to the elected candidates and the non-elected. If all candidates' average grade was 3.1984, the elected candidates received a higher grade [3.5432; 0.49542; 179] compared to grades attributed to the non-elected [2.8571; 0.47929; 171]. The difference between mean tests showed that these values are significantly different, with a student statistic value of 18.032. Thus, it is possible to state that the participants were able, based only on the visual information, to identify the candidates

who received the most votes from those who did not receive an expressive vote.

Table 2 Descriptive Statistics of Elected and Non-elected Candidates

		Candidates									
Atribute	Estatísticas descritivas	1	2	3	4	5	6	7	8	9	10
Competence	N	178	177	179	179	178	179	178	179	179	179
	Mean	3.66	2.81	3.09	3.37	3.71	3.47	3.35	3.65	3.37	3.66
	Standard Deviation	1.079	0.968	1.255	1.116	1.021	0.996	0.988	1.007	0.959	0.984
Intelligence	N	178	176	179	179	178	179	178	179	178	179
	Mean	3.61	2.97	2.86	3.25	3.64	3.49	3.52	3.55	3.39	3.62
	Standard Deviation	1.010	1.005	1.004	1.021	0.905	0.938	0.998	0.955	0.975	0.989
Honesty	N	178	177	180	180	178	179	179	180	178	179
	Mean	3.37	2.53	3.40	3.47	2.82	2.65	2.76	3.23	2.61	3.55
	Standard Deviation	0.972	1.045	1.132	1.054	0.981	1.158	1.083	1.103	0.957	1.028
Trustworthiness	N	179	176	180	180	180	180	179	180	179	180
	Mean	4.21	2.23	2.47	2.36	3.94	3.72	2.90	3.68	2.82	3.58
	Standard Deviation	0.948	1.024	1.225	0.989	1.018	1.115	1.137	0.978	1.099	0.980
Charisma	N	179	176	178	178	180	179	178	180	179	180
	Mean	4.41	1.79	2.31	2.30	3.82	3.75	1.89	3.71	2.65	4.05
	Standard Deviation	0.833	0.983	1.135	1.013	1.015	1.025	0.942	0.967	0.980	0.993
Sympathy	N	179	177	179	180	179	179	178	180	179	178
	Mean	4.40	1.77	2.47	2.36	3.78	3.77	1.76	3.81	2.66	4.15
	Standard Deviation	0.883	1.042	1.219	1.056	1.129	1.085	0.883	1.014	0.994	0.959

It is important to note that the sample contained five elected and five non-elected candidates. Among those who received the highest score from participants, four were effectively elected. One of the non-elected candidates received the third-highest average score in all [3.6230; 0.70437; 180], while an elected candidate got the sixth-highest grade [2.9079; 0.66495; 180]. It is important to note this individual who received the third-best vote had higher grades in a type of questionnaire [3.8813; 0.55512; 80] than in another [3.4163; 0.744438; 100]. We explained this difference because this candidate is in position 5 of presenting the photos, right after a candidate with the downvote, in the questionnaire who got better grades. This result is probably due to an anchor effect in the vote. As highlighted, his photograph was first shown in another type of questionnaire, obtaining a lower grade. The average scores were statistically different, with one of the cases where we noted the results' anchor effect.

The elected candidate that did not receive a high score from the participants deserve a highlight as well, as mentioned before. This candidate received bad grades in honesty [2.6124; 0.9574; 178], trustworthiness [2.8156; 1.0988; 179], charisma [2.6480; 0.9796; 179] and sympathy [2,6648; 0.9941; 179]. In the photograph shown of this individual, despite appearing smiling, his arms were crossed, an attitude perceived as distancing (defensiveness), a barrier to interaction and rejection in scientific research (Argyle, 1988; Gillies, & Ballin, 2003).

When the items and the list of elected candidates were analyzed separately, it is possible to notice that the two characteristics where the grades did not reflect the election correspond to honesty and intelligence. In these

two questions, two individuals were not elected among the five with the highest scores. It is possible to justify the results of the living environment of the participants. Regarding honesty, we remembered that this issue had been highlighted in conversations and the Brazilian media agenda due to the corruption scandals in recent years. A survey by the National Confederation of Industry carried out in recent years has pointed out corruption as one of the country's main problems (CNI, 2018). The item intelligence probably presented this highlight because the participants were students.

Although each item can statistically separate the elected from those who were not elected, it is possible to highlight another interesting finding in the research. In all cases, the difference of the means was significant: values for t-statistic were above six, and significance at 0.0000, as shown in table 1. However, the item honesty was the one where the average of the elected [3.0892; 0.70187; 176] became closer to the non-elected [2.9966; 0.63659; 176]. In this case, the t-statistic was 1.913, sig of 0.057. The reasons presented in the above paragraph help explain why the two groups' scores were not distant.

Table 3 Testing Paired Samples

Attribute	Mean Difference	Standard Deviation	t statistic	Sign bi-caudal
Competence	0.30000	0.65816	6.013	0.000
Intelligence	0.28200	0.59057	6.317	0.000
Honesty	0.09261	0.04842	1.913	0.057
Trustworthiness	0.81829	0.73634	14.701	0.000
Charisma	1.29480	0.72355	23.537	0.000
Sympathy	1.32629	0.78584	22.326	0.000
Total	0.69284	0.50243	18.032	0.000

An analysis was carried out for each candidate and for each criterion seeking to verify whether some variable showed significance in the assigned scores. A candidate, a young woman in a well-produced photograph that received the nomination of candidate 1 (see Appendix 2, questionnaire A), had a higher average score among female participants than in the male gender ([4.0761; 0.56951; 81] versus [3.8196; 0.70122; 97], in this order), mean significance of 0.01. Another candidate, called candidate five here, had a difference in the scores given between the two types of questionnaires, as previously mentioned. The position of a photograph in the questionnaire also influenced another candidate, called candidate 10. His grades were better when he was positioned in the end [3.8865; 0.68542; 80], when compared to the questionnaire where his photograph appeared in eighth [3,6667; 0.70968; 100], right after the young candidate 1, the best voted (significance of the mean difference of 0.038). This result shows, candidate 10 had scores affected by an anchor effect; in this case, candidate 1's scores.

It was possible to observe that the younger participants valued intelligence more in their score. Indeed, the correlation between these two variables (age and grade for intelligence) was negative and significant (-0.196 at 1%).

We also found that the average score for sympathy was different between the two types of questionnaires [2.9987; 0.47234; 100] [3.2118; 0.4492; 80]; the mean difference test presented a significance of 0.002. Analyzing each candidate's results, we observed that two showed differences in this item's means. For this research, the first of these was called candidate 5, previously mentioned, which received the third-highest score total. The second candidate was the immediately following candidate, probably in an anchor effect.

We asked each participant to indicate one of the individuals among the candidates whom they would vote for in an election. Among the 179 participants, 93 scored people who were elected. This result was a surprise since this corresponds to a little more than half of the sample. Analyzing the answer that we obtained, it is possible to notice that 56 participants indicated candidate 5, who received the third highest sample grade. He was the most remembered individual, despite not being the best voted.

5. Additional Considerations

We based this research on the experiment by Todorov et al. (2005), where inferences based on appearance are made about competence and other attributes. Like the authors cited, the survey also found that it is possible to predict whether a candidate is elected or not based on the candidate's photograph. This is consistent with many surveys that have highlighted the relevance of facial attributes in people's choices. We cited these studies in item 2 of this work.

The investigation found that facial influence and predictive ability, from facial attributes, can be generalized to any age or gender. Also, grades assigned maintained similarity, expressed in the high correlation between the participants' assigned values. This is important to highlight since attributes, such as intelligence, should probably not be inferred based on a portrait of a person's face.

Thus, visual images play an essential role in decisions, as highlighted by Schill (2012) and Graham, Harvey, and Puri (2016). One aspect found in the research is that there is an anchor effect on the decision. The grade received by a candidate can be leveraged if the previous portrait made available is of a "less attractive" candidate. This is also consistent with the results found in the various studies on anchoring.

Part of the grade awarded was influenced by the environment where the research was applied. Therefore, we can consider the visual effect of reservations. Among the items considered, honesty and intelligence correspond to those that the environmental aspect was present in the results. First, we applied the study when the theme was considered relevant by the Brazilian population. In the second case, it is essential to remember that we applied the study at a university, where intelligence must be considered fundamental.

6. Conclusions

The present research aimed to verify if the visual aspects influence the choice of candidates for election. With the participation of 180 participants, we found that the candidates for the state deputy of the state of Santa Catarina who received the higher grades in the analyzed items (competence, intelligence, honesty, trustworthiness, charisma, and sympathy) were also the ones who received the highest number of votes in the 2018 election. Therefore, the survey participants could properly separate candidates elected from the non-elected only by the candidate's photo.

Among the research limitations, there is an aspect that we not considered, and that may have affected the results. Candidates' photographs are placed at the court's address by the candidates themselves. A candidate who has a better campaign structure may have better photography resources or hire a professional photographer for the campaign's photos. Thus, it may be that the visual aspect observed in the research results from greater financial power, which leads to better photography, and it also allows the candidate to get more votes. This aspect we not considered in the research, but the authors understand that it may be a relevant point for a future investigation.

The accounting science has undergone several transformations over the years, and its reflexes are increasingly felt in society. There is a change in a structured accounting style. In the past, the debits and credits are the most important. Now, accounting substantially technological. We concentrate on information transmitted at an unimaginable speed around the world. In this sense, the user, who becomes the link with more significant influence over management, raises severe discussions about the future of accounting science.

As an integral part of the accounting transformation process, this research showed that visual aspects are also components of change. Therefore, through its fast and irrational processing and, supported by the immeasurable access to information and technology, the user may be able to make trivial decisions, relevant or even catastrophic, only through their visual assignments.

References

Ahler D. J., Citrin J., Dougal M. C. and Lenz G. S. (2017). "Face value? Experimental evidence that candidate appearance influences electoral choice", *Political Behavior*, Vol. 39, No. 1, pp. 77-102.

Andreoni J. and Petric R. (2008). "Beauty, gender and stereotypes: Evidence from laboratory experiments", *Journal of Economic Psychology*, Vol. 29, No.1, pp. 73-93.

Argyle M. (1988). *Bodily Communication* (2nd ed.), London: Routledge.

Arunachalam R. and Shah M. (2010). "The prostitute allure: Examining returns to beauty, productivity and discrimination", working paper.

Belot M., Bhaskar V. and Van de Vern J. (2012). "Beauty and the sources of discrimination", *Journal of Human Resources*, Vol. 47, pp. 851-872.

Cipriani G. and Zago A. (2005). "Productivity or discrimination?-beauty and the exams. Beauty and the exams", University of Verona Department of Economics, Working Paper 18.

CNI (2018). "Retratos da sociedade brasileira", Ano 7. Brasília: CNI. No. 41, acesso em 23/06/2019, available online at: http://www.portaldaindustria.com.br/estatisticas/rsb-41-problemas-e-prioridades-para-2018.

Cogsdill E. J, Todorov A.T., Spelke E. S. and Banaji M. R. (2014). "Inferring character from faces: A developmental study", *Psychol*, Vol. 25, pp. 1132-1139.

Davison J. (2013). "Visual perspectives", in: *The Routledge Companion to Accounting Communication*, Routledge, pp. 72-89.

Doran, K. (2008). "Is there less to beauty than meets the eye?", unpublished preliminary work, University of Notre Dame.

Dotsch R. and Todorov A. (2012). "Reverse correlating social face perception", *Social Psychological and Personality Science*, Vol. 3 No. 5, pp. 562-571.

Gillies M. and Ballin D. (2003). "A model of interpersonal attitude and posture generation", *International Workshop on Intelligent Virtual Agents*, Springer, Berlin, Heidelberg, pp. 88-92.

Graham J. R., Harvey C. R. and Puri M. (2016). "A corporate beauty contest", *Management Science*, Vol. 63 No. 9, pp. 3044-3056.

Kahneman D. (2003). "A perspective on judgment and choice: Mapping bounded rationality", *American Psychologist*, Vol. 58, pp. 697-720.

King A. and Leigh A. (2009). "Beautiful politicians", *Kyklos*, Vol. 62, No. 4, pp. 579-593.

Landry C. E., List J. A., Price M. K. and Rupp N. G. (2006). "Toward an understanding of the economics of charity: Evidence from a field experiment", *Quarterly Journal of Economics*, Vol. 121, pp. 747-782.

Lenz G. S. and Lawson C. (2011). "Looking the part: Television leads less informed citizens to vote based on candidates' appearance", *American Journal of Political Science*, Vol. 55, No. 3, pp. 574-589.

Levin J. and Fox J. A. (2000). *Elementary Statitics in Social Research* (8ª ed.).

Lima D. H. S. (2007). "Efeito Formulação e Contabilidade: Uma Análise da Influência da Forma de Apresentação de Demonstrativos e Relatórios Contábeis sobre o Processo Decisório de Usuários de Informações Contábeis", Dissertação de Mestrado, Programa Multiinstitucional e Inter-regional de Pós-Graduação em Ciências Contábeis da UnB, UFPB, UFPE e UFRN.

Mocan N. and Tekin E. (2010). "Ugly criminals", *Review of Economics and Statistics*, Vol. 92, pp. 15-30.

Olivola C.Y., Tingley D. and Todorov A. (2018). "Republican voters prefer candidates who have conservative-looking faces: New evidence from exit polls", *Political Psychology*, Vol. 39, No. 5, pp. 1157-1171.

Olivola C. Y. and Todorov A. (2010). "Elected in 100 milliseconds: Appearance-based trait inferences and voting", *Journal of Nonverbal Behavior*, Vol. 34, No. 2, pp. 83-110.

Pfann G. A., Bosman C. M., Biddle J. E. and Hamermesh D. S. (2000). "Business success and business beauty capital", *Economic Letters*, Vol. 67, pp. 201-207.

Price M. K. (2008). "Fund-raising success and a solicitor's beauty capital: Do blondes raise more funds?", *Economics Letters*, Vol. 100, No. 3, pp. 351-354.

Sachsida A., Dornelles A. C. and Mesquita C. W. (2003). "Beauty and the labor market-study one specific occupation", available at SSRN 505742.

Sanchez-Pages S. and Turiegano E. (2010). "Testosterone, facial symmetry and cooperation in the prisoner's dilemma", *Physiology & Behavior*, Vol. 99, No. 3, pp. 355-361.

Schill D. (2012). "The visual image and the political image: A review of visual communication research in the field of political communication", *Review of Communication*, Vol. 12, No. 2, pp. 118-142.

Todorov A., Mandisodza A. N., Goren A. and Hall C. C. (2005). "Inferences of competence from faces predict election outcomes", *Science*, Vol. 308, No. 5728, pp. 1623-1626.

Todorov A., Olivola C. Y., Dotsch R. and Mende-Siedlecki P. (2015). "Social attributions from faces: Determinants, consequences, accuracy, and functional significance", *Annual review of psychology*, Vol. 66, pp. 519-545.

Wilson R. K. and Eckel C. C. (2006). "Judging a book by its cover: Beauty and expectations in the trust game", *Political Research Quarterly*, Vol. 59, No. 2, pp. 189-202.