This research seeks to verify if the previous experience and education level of the mayor of a municipality are related to the approval or disapproval of the annual reports judged by the Tribunal de Contas do Rio Grande do Norte (TCE/RN). It was also verified the following aspects: age, political party and gender. It was used data from the period of 2009 to 2012 of 161 municipalities of the brazilian state Rio Grande do Norte. The personal characteristics of the mayors were collected through the website of the Tribunal Superior Eleitoral (TSE); the results of the judgement of the annual reports on the TCE/RN website; and the previous experience by crossing information from the TSE, TCE/RN and their respective municipalities websites. In the years 2009, 2010, 2011 and 2012, it was collected 159, 161, 151 and 108 observations, respectively, with a total of 579 observations regarding the judgement of the annual reports by the TCE/RN. The data gathered for this research was organized on Microsoft Excel 2016 ®. By comparing the score ? calculated through the number of approved reports - which each mayor acquired with their characteristics demonstrated that the TCE/RN has a greater predisposition to approve the accounts of a female candidates with higher level of education, that is young and belongs to a right-wing party. Previous experience as a mayor proved irrelevant for the approval of the annual reports.
JUDGMENT OF THE ANNUAL REPORT OF THE MAYORS UNDER THE PERSPECTIVE OF HUMAN CAPITAL THEORY

ABSTRACT
This research seeks to verify if the previous experience and education level of the mayor of a municipality are related to the approval or disapproval of the annual reports judged by the Tribunal de Contas do Rio Grande do Norte (TCE/RN). It was also verified the following aspects: age, political party and gender. It was used data from the period of 2009 to 2012 of 161 municipalities of the brazilian state Rio Grande do Norte. The personal characteristics of the mayors were collected through the website of the Tribunal Superior Eleitoral (TSE); the results of the judgement of the annual reports on the TCE/RN website; and the previous experience by crossing information from the TSE, TCE/RN and their respective municipalities websites. In the years 2009, 2010, 2011 and 2012, it was collected 159, 161, 151 and 108 observations, respectively, with a total of 579 observations regarding the judgement of the annual reports by the TCE/RN. The data gathered for this research was organized on Microsoft Excel 2016 ®. By comparing the score – calculated through the number of approved reports - which each mayor acquired with their characteristics demonstrated that the TCE/RN has a greater predisposition to approve the accounts of a female candidates with higher level of education, that is young and belongs to a right-wing party. Previous experience as a mayor proved irrelevant for the approval of the annual reports.

Keywords: Mayor. Accountability. Education Level. Previous Experience. Human Capital Theory.

1. INTRODUCTION
1.1 Contextualization Of The Research Problem

The Brazilian Constitution supports the existence of the Audit Courts as entities to support the Legislative in its constitutional function that’s less known by society: fiscalization. Therefore, it is incumbent upon the Audit Courts to supervise the actions of the entities of the direct and indirect Public Administration in its financial, accounting, budgetary, operational and patrimonial nature regarding the principles of legality, legitimacy, economicity, application of subsidies and resignation of revenues.

Thus, one of the competencies attributed to the Courts is to issue a prior opinion on the Annual Reports of the Mayors on the Municipalities that they have jurisdiction, attesting its regularity regarding the applicable legislation and legal principles.

Of course, because of the complexity in the analysis and judgment of the Mayors’ accounts, which involves the administration of billions of reais annually, the opinions of the Courts, in their strictly technical character, are influenced by a number of variables.

The study of these and other variables enhanced the interest of researchers (Lopes, Ribeiro Filho, Pederneiras, & Silva, 2008; Pereira, 2010; Amorim, Diniz, Lima, & Amorim, 2016; Macieira, 2016) due to a considerable number of annual reports rejected by the Audit Courts. Considering that all public administrators should value the principles of legality and supremacy of the public interest over the private, pillars of the Brazilian public administration, the number of rejected annual reports should be minimal.

Macieira (2016, p.3), when analyzing the opinions of the Tribunal de Contas de São Paulo, points out that "most municipalities still have unfavorable opinions". Rossi (2015) notes that 52.95% of the municipalities of São Paulo state had their accounts rejected by the Court when referring to the fiscal year of 2012, a negative record.
al. (2016) notes that 33.43% of the accounts analyzed by the Tribunal de Contas da Paraíba received adverse opinions when considering the years 2009, 2010 and 2011.

Although the studies that were cited sought to investigate which variables influence the judgement of the Audit Courts, this paper did not find any researches that analyzed how the Mayor's characteristics are related with the approval or disapproval of the accounts in the light of the Human Capital Theory.

In this context, the present study seeks to answer the following question: how the characteristics of the mayor are related to the approval or disapproval of the annual reports judged by the Audit Courts?

The general objective of the research is to verify how the characteristics of the mayor of a municipality are related with the approval or disapproval of the annual reports judged by the Audit Courts.

The study is justified by the purpose of providing information to the voter about what characteristics of a mayor would signal a greater predisposition to have the reports approved - which would consequently mean better municipal management.

These characteristics were tested, to mention some examples, on their relation with the collection of property taxes and social expenses (Avellaneda, 2009); revenue collection from state and federal transfers (Avellaneda, 2012); collection property taxes (Petrovsky & Avellaneda, 2014); supply of electricity and running water to the population (Avellaneda, 2015); and the amount of public debt, general expenses and taxes collection (Freier & Thomasius, 2016). The present paper focused on verifying the relationship between some characteristics and a score developed by the authors based on the TCE/RN opinions.

In addition, previous researches have shown that voters tend to seek informational shortcuts to make their electoral decisions (Bartels, 1996; Conover & Feldman, 1982, 1989; Goodman & Murray, 2007). The citizen tend to research various characteristics on the candidate, so they can choose the one that will best manage the public resources for their city - for example, if an applicant has a certain education level, whether he is a religious person or if he is experienced in public management.

The expectation is that the more information can be attributed to a particular candidate, the better the citizen's ability of choice. For Mechtel (2014), the characteristics of the candidates are functioning as informational shortcuts, influencing the electoral results. Therefore, understanding what characteristics are desirable may help voters to make more conscious choices in the electoral process, aiming at better management of the municipality.

2 THEORETICAL REFERENCE

2.1 Human Capital Theory

The Human Capital Theory had its beginning around the year 1950, with the end of World War II, in which Schultz (1973) sought to show that developing countries such as Japan who had their economy and population damaged managed to rebuild their economies in a shorter period due to their high human capital.

For Schultz (1973), although it is obvious that people acquire useful skills and knowledge throughout life, it is not obvious that these skills and this knowledge is a form of human capital. Society did not yet see that the investments made in the individual himself is a way to increase this capital.

One of the central points of the theory is that human capital is something deliberately produced by the investment made in the individual from the formal education and training and that the productivity of the individual is a consequence of greater or lesser amount of human capital that this individual possesses (Arapiraca, 1982). Therefore, the owners of
the human capital are the workers themselves. They can not separate themselves from their skills and the more knowledge they acquire, the better their productivity in the workplace (Kelniar, Lopes, & Pontili, 2013).

For the nomenclature capital, Schultz (1973) explains that is labeled as capital because it is a source of future satisfactions and of future income, or both. He goes on to claim that it is human because it becomes part of the man. Because of that, human capital is not a negotiable asset that is acquirable in the market.

According to Ferreira (1986), economic capital, from the latin capitale, is any economic good which may be used in the production of other goods or services. Human capital fits in the author’s definition, since a person has the necessary knowledge to produce any goods and/or services, so it is just a different type of capital.

One of the similarities between the traditional economic capital and the human capital that Schultz (1973) theorized is that both are subject to obsolescence and should undergo constant maintenance. Thus, the need for the individual to always have his/her knowledge renewed and updated. The author says that every day people are investing heavily in them as human assets and that such investments are influencing the economic growth. When Schultz (1973) mentions that increases in national production are linked to investment in human capital, education is automatically valued as an element of investment and important in the nation's development process.

For Becker (1962), there are many forms of investment in humans, which include education, on-the-job training, medical care, vitamin consumption, and economic informations. All these forms are considered investing in human capital. They differ in the expected return on each of these investments, but all improve the physical and mental abilities of people and thus increase the prospects for real income.

The on-the-job training described by Becker (1962) is a process that increases the future productivity and differs from school training because that training is made in the workplace and not in an education institution.

### 2.2 Previous Studies

The following studies looked at how certain characteristics of the mayors - for example, educational level, previous job experience, age - are related to municipal management indexes.

Avellaneda (2008) evaluated if the qualifications and previous experience of the mayors influence the municipal performance in the area of education and if there is a relation with the population effectively enrolled in schools. Data was gathered about 40 Colombian municipalities in a six-year period. The results suggested that the qualifications of the mayors and their previous experience in past mandates influences positively the performance of the municipal education. The higher the educational background of the mayor, the greater the municipal coverage in education. The more educated the mayor is, the more he/she recognizes the benefits that a good education brings to the community. Thus, the educated mayor supports, encourages, and implements programs that increase school enrollment.

Avellaneda (2012) explored the effect on decision-making in city hall problems in three aspects: relevance, context and constraints. The study also tests the effect that a mayor's education level and experience in the decision environment may have. These effects were tested with 120 mayors representing 12 Latin American countries. The mayors received a
hypothetical municipal problem in which their decision was to deal with the problem on their own or to delegate the expenditure to a private agency.

The results showed that the participant mayors who do not have a college degree are more propense to delegate spending to a private agency to manage the problem when it is related to education, and not infrastructure, as opposed to when mayors have a university degree. The mayors may view education as a less relevant issue because it is regarded as an invisible good, while infrastructure tends to be a more relevant issue because it is seen as a more visible and tangible good. Thus suggesting that the mayors can get more political benefits to deal directly with the infrastructure than with education needs.

Modes (2012) investigated whether the educational level and previous occupation of the mayors affected in some way the expenditures made by the municipalities. Data from the 1996, 2000, 2004 and 2008 elections were used. The results suggested that mayors who have already held political office on average spend less (1.8% to 2.0%) than mayors with some other experience. Career politicians tend to spend less on urban planning and health and more on transportation and administration than professionals with other training. The data also indicates that the level of education of mayors has no effect on the level of expenditure.

Freier and Thomasius (2016) verified the importance of the qualification of the politicians, in terms of education and experience, for the fiscal results and their electoral success. The study was carried out in 2031 German municipalities between 1984 and 2009. The results showed that mayors with previous experience have a tendency to reduce the level of local public debt, reduce total municipal expenditures and lower local taxes. In contrast, the level of education of the mayor has no significant effects on the overall fiscal performance of the municipality, but both education and experience show importance in the electoral success of candidates to the city.

3 METHODOLOGICAL PROCEDURES
3.1 Data Collection

For this research, it was gathered data of the 167 municipalities of Rio Grande do Norte for the years of 2009 to 2012. The data collection was conducted in September and October of 2017.

Information on the city mayors of the municipalities of the Rio Grande do Norte state and its personal characteristics were acquired through the TSE website. It was selected the information related to the 2008 election and extracted the following information from the elected mayors: name, education, gender, date of birth and party to which he/she was aligned with.

In order to verify the annual reports approved and disapproved by the TCE/RN, it was necessary to consult the opinions issued by the Court available on its website. On the years of 2009, 2010, 2011 and 2012, it was gathered 159, 161, 151 and 108, observations, respectively, for a total of 579 observations.

The small number of observations was due to the lack of data from municipalities whose opinion had not yet been completed during the data collection period, besides excluding municipalities that had more than one mayor during the mandate - for reasons of death, resignation, etc.

Data on the previous experience of mayors were acquired through the crossing of information obtained by the TSE website, in the dissemination of candidacies and electoral accounts, through the TCE/RN website and through each city hall’s website.
The information acquired for the accomplishment of this research was organized on Microsoft Excel 2016®. Table 1 summarizes the information about the data used in the research.

<table>
<thead>
<tr>
<th>Data</th>
<th>Source</th>
<th>Assumption</th>
<th>Search-reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic education</td>
<td>TSE website</td>
<td>The higher the education level, the greater the number of approved opinions.</td>
<td>Avellaneda (2015)</td>
</tr>
<tr>
<td>Previous Experience</td>
<td>Website of the TSE, TCE/RN and the respective City Halls</td>
<td>Mayor with previous mandate as a mayor has a greater number of approved opinions.</td>
<td>Avellaneda (2009)</td>
</tr>
<tr>
<td>Age</td>
<td>TSE website</td>
<td>Older candidate tend to have a greater approval of opinions.</td>
<td>Avellaneda and Gomes (2014)</td>
</tr>
<tr>
<td>Sex</td>
<td>TSE website</td>
<td>There is no defined assumption in the literature.</td>
<td>Modes (2012)</td>
</tr>
<tr>
<td>Political party</td>
<td>TSE website</td>
<td>There is no defined assumption defined in the literature.</td>
<td>Avellaneda and Gomes (2014), Carreirão (2006)</td>
</tr>
</tbody>
</table>

Source: Elaborated by the authors.

3.2 Elaboration of the Opinions’ Score

The score was elaborated by the authors with the intention to use it as a parameter to compare mayors, based on the characteristics listed in Table 1. It should be noted that there is three different ways that the TCE/RN can judge the annual reports: favorable opinion; favorable opinion with reservations; and an unfavorable opinion.

For each type of opinion, this paper arbitrated a score that a mayor could obtain in a given year. The refereed score for each opinion was: 1 point - if the opinion was favorable; 0.5 point - if the opinion is favorable with reservations; and 0 point - if the opinion is unfavorable.

Therefore, considering that the present study analyzed four years (the period between 2009 and 2012), there is a possibility, for example, that a mayor scores 0 point (in case he obtains unfavorable opinions in every year) and another mayor obtains 4 points (if he obtains 4 favorable opinions).

It should be clarified that in cases where the TCE/RN had not concluded the opinion for a certain municipality in any of the years of the analysis, the solution adopted was to use the average of the other opinions for the year absent.

Exemplifying: suppose that the municipality of Angicos had favorable opinions with reservations in 2009 and 2010, but without concluded opinions for 2011 and 2012. Therefore, by the applied methodology, the mayor would score 1 point (0.5 point in 2009 added to 0.5 point in 2010). As the average is 0.5 points per year, this value would be repeated in the years without completed opinions, and the mayor would get 2 points in the period (from 2009 to 2010), which is the value adopted for this survey.

4 DATA ANALYSIS
4.1 Descriptive Statistics

The results of the prior opinions issued in the 2009-2012 period by the TCE/RN are summarized in Graph 1:
Graph 1:
Previous Opinion of the TCE/RN on the Annual Reports of the Municipalities

![Bar Graph]

Source: Research Data.

It is noted that in 2012 the observations were more than 50% of unfavorable opinions, which is a significantly different from the previous years.

As for the political parties, according to the TSE, Brazil has 35. In the mandate of 2009-2012 the mayors of Rio Grande do Norte were affiliated to thirteen different parties.

The party with more members is the Brazilian Socialism (PSB) with 42 members, followed by the Party of the Brazilian Democratic Movement (PMDB) with 38. The Party of the Republic (PR), the Democrats (DEM) and the Progressive Party (PP) had 17, 16 and 15 participants respectively. The Labor Democratic Party (PDT) and the Brazilian Labor Party (PTB) both had 7 members, followed by the National Mobilization Party (PMN) with 6. The Workers’ Party (PT) and the Brazilian Social Democracy Party (PSDB) both had 4 members, followed by the Popular Socialist Party (PPS) with 3. The Humanist Solidarity Party (PHS) and the Green Party (PV) both had only one member.

Based on Avellaneda and Gomes (2014), in the classification of political parties as right or left-wing, most mayors (60.25%) belong to right-wing parties.

As far as education level is concerned, almost half the mayors (47.20%) have a major, 13 (8.07%) have incomplete university education, 45 (27.95%) have completed the high school only, 6 (3.73%) have not finished high school, 12 (7.45%) have completed basic education, 7 (4.35%) have incomplete basic education and only 2 (1.24%) are only able to read and write.

Custódio (2016) evidenced in her research that Brazilians at the time of voting have preference for male candidates. In the 2008 elections, the citizens of Rio Grande do Norte confirmed this preference, electing 83% (133 mayors) male representatives.

Some mayors had other experiences as politicians in the past, but for this study a mayor was considered to have past experience only if he/she was a mayor previously, which 54% of them had.

As for the age of elected mayors, only four municipalities have young mayors up to 30 years old. 17 of them are between 31 and 40 years old. Most mayors are between 40 and 60 years old for a total of 125 mayors. 61 mayors are between 41 and 50 years old and 64 are between 51 and 60 years old. 14 are between 61 and 70 years old and only 1 is over 71 years old.
4.2 Results

Analyzing the relationship between the education level of the mayors and the opinions’ score found for each municipality by the TCE/RN judgement on annual reports, the Graph 2 was elaborated.

Graph 2: Score versus Education level

Source: Research Data

The graph shows a predisposition to growth, as the trend line demonstrates ascension, indicating that the higher the education level, the higher the score tends to be. Markers with darker tones indicates the concentration of two or more markers.

To provide another way to visualize the data, the education level was segregated arbitrarily in two groups: mayors that have completed high school or lower; and mayors that have incomplete or complete college education.

Table 2: Score versus Education

<table>
<thead>
<tr>
<th>Education</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School or Lower</td>
<td>1.44</td>
</tr>
<tr>
<td>College Education</td>
<td>1.67</td>
</tr>
</tbody>
</table>

Source: Research Data

The average scores of the municipalities whose mayors have college education is higher, 1.67, in relation to those who only have completed high school or lower, which is 1.44. This result corroborates the findings of Freier and Thomasius (2016), pointing to a tendency for mayors with a higher level of academic education to demonstrate better results in public administration.

The assumption made regarding the age of the municipal leaders was that older mayors are more likely to have their annual reports approved by the TCE/RN. However, the trend line in Graph 3 shows the reverse.

Graph 3:
Score versus Age

Source: Research Data

The trend line shows that younger mayors have a tendency to obtain a higher approval score. To demonstrate this result, age was grouped into two categories, which are: mayors that are 20 to 50 years old; and mayors that are 51 to 80 years old.

Table 3:
Score versus Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between 20 and 50 years</td>
<td>1.63</td>
</tr>
<tr>
<td>Between 51 and 80 years</td>
<td>1.51</td>
</tr>
</tbody>
</table>

Source: Research Data

The average score of the mayor that are up to 50 years old is higher than of those over 51, 1.63 and 1.51, respectively.

Table 4 shows the results obtained by comparing the scores obtained by the ideology of the political parties:

Table 4:
Score versus Political party

<table>
<thead>
<tr>
<th>Ideology</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right-wing party</td>
<td>1.64</td>
</tr>
<tr>
<td>Left-wing party</td>
<td>1.46</td>
</tr>
</tbody>
</table>

Source: Research Data

This result suggests a predisposition of the right-wing parties to get higher scores than the left-wing parties.

The results referring to the previous experience were organized in Table 5.

Table 5:
Score versus Previous Experience

<table>
<thead>
<tr>
<th>Previous experience</th>
<th>Average Score</th>
</tr>
</thead>
</table>

Source: Research Data
Without experience | 1.57  
With experience   | 1.56  

Source: Research Data

The average scores of the mayor that have prior experience is virtually the same as those that do not have, 1.56 and 1.57 respectively. For Freier and Thomasius (2016) mayors with previous experience tend to have better fiscal results. According to Petrovsky and Avellaneda (2014), the experience of the mayor in the sector is positively associated with the overall amount of tax collected and, according to Modes (2012), previous experience has a positive influence on public policies. The results of these researches demonstrate that previous experience of political leaders has a positive influence on the administration and management of the public resources, which was not observed in this paper.

Table 6 shows the scores obtained by the mayors segregating them by gender.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>1.77</td>
</tr>
<tr>
<td>Male</td>
<td>1.53</td>
</tr>
</tbody>
</table>

Source: Research Data

Women had a higher average score than men, which implicates that female mayors on the State of Rio Grande do Norte have a higher predisposition of having their annual reports judged favorable by the TCE/RN.

According to the results found in this research, in relation to the data collected from previous opinions issued by the TCE/RN, the ideal candidate that the voter should choose for a better management of the municipality would be a female mayor, with college education, linked to a right-wing party and aged between 21 and 50 years old. Previous experience would not be relevant to the choice.

5 FINAL CONSIDERATIONS

This paper aimed to verify whether the previous experience and education level of the mayor of a municipality is related with the approval or disapproval of the annual reports judged by the TCE/RN. It was analysed whether the age, political party and the gender also are related.

It was found that the relationship between education and management is positive, since the opinions’ score versus the education level indicated that the higher the academic education, the better the score was. About the age, there is a predisposition for younger mayors to have greater opinions’ scores. As for the political party, the right-wing parties achieved higher scores than the left-wing ones. In the gender category, the women obtained an average of scores better than that of men. Previous experience was found to be irrelevant.

Some of the results evidenced demand particular attention, such as previous experience and political party. The literature on previous experience indicates that there is a predisposition of experienced managers to show better performances. The fact that the present paper has captured the indifference of this characteristic, at least in relation to the analysis of the opinions by the TCE/RN, points to new researches on the subject to understand the phenomenon. As for the political party, the work showed greater approval for mayors affiliated to right-wing parties, which may indicate a bias of the Court's advisors, a point of
frequent criticism in the literature due to their political nominations, suggesting further studies on the subject.

For future research, it is suggested: applying this same methodology, but with a larger period of analysis and number of variables - such as the occupation of the mayor, religion - and expand the sample to the municipalities of other states.

REFERENCES


