



# The Impact of Personality Types of Tax officials on Tax Identification and Collection

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**Abstract:** This research aimed to investigate the effect of personality types of tax officials on tax identification and collection in Chaharmahal and Bakhtiari Province. During the contemporary era, the tax system in Iran has taken effective steps in pursuit of the policy of tax conversion as the main important revenue source for the government. In spite of effective efforts in this regard, the Iranian tax system has faced with several challenges and damages that should be addressed. In this research, the effects of personality types of tax officials on tax identification and collection in the Tax Administration Office of Chaharmahal and Bakhtiari Province in 2017. The results of this research showed that personality types are significantly related to the tax collection and are in direct relation with regard to the positive beta coefficient ( $\beta$ ). Therefore, it can be concluded that the kind of personality types of tax officials is related to the recognition, collection, and non-collection of taxes.

**Keywords:** Tax, Tax identification and Collection, Personality Types.

## INTRODUCTION

Taxes are considered as one of the main revenue sources for the government. The rapid, low cost and stable collection of revenues has led many countries to take this approach as their main and stable revenues. Iranian tax system in the contemporary era has also taken steps in implementing the policy and converting taxes as the main revenue source of the government. However, Iranian tax system has several challenges and damages that should be addressed (Nazari, 2013). Non-compliance of taxpayers or their inadequate compliance are other challenges and damages of Iranian tax system. Many factors are involved in creating these damages, such as the lack of attention by legislators and policy makers to the necessity of codifying a coherent law and the elimination of legal objections, ineffective and inefficient criminal policy, the lack of appropriate infrastructure for preventing tax evasion in the form of tax non-compliance, disturbances of tax culture, and the existence of economic challenges (Nazari, 2013).

## Research Method

Rationalism is the approach of research and is based on logic and thought. This research in terms of purpose is applied and it is a descriptive correlational study. Due to the use of qualitative information as well as

quantitative data, this research is qualitative and quantitative, and since two types of cross-sectional and longitudinal data are used, the method of research is combined. In this research, data collection is carried out in two general stages. In the first stage, the library method is used and in the second stage, the field method is applied. For analyzing the data, descriptive and inferential statistics are used. The statistical population is all employees of the General Tax Administration of Chaharmahal and Bakhtiari Province in 2017, and among them, the agents who directly deal with clients and taxpayers and play a role in the recognition and collection of taxes are investigated. In the present research, using Cochran formula to provide and complete the required information, a sample of employees of Chaharmahal and Bakhtirari Province General Tax Administration in 2017, which was about 100 employees, is selected based on the availability of the sample.

### **Hypothesis Test Models**

First model:

Gender of tax officials has a positive and significant effect on tax identification.

Native tax officials have a positive and significant effect on tax identification.

Personality types of tax officials have a positive and significant effect on tax identification.

$$Ln(y^{\wedge}) = \ln \left( \frac{tax\ identification}{1 - tax\ identification} \right) = \alpha + \beta_1 Gender + \beta_2 Native + \beta_3 style$$

Second model:

Native tax officials has a positive and significant effect on tax collection.

Gender of tax officials has a positive and significant effect on tax collection.

Personality types of tax officials have a positive and significant effect on tax collection.

$$Ln(y^{\wedge}) = \ln \left( \frac{tax\ collection}{1 - tax\ collection} \right) = \alpha + \beta_1 Native + \beta_2 Gender + \beta_3 style$$

### **Research Hypotheses:**

The first main hypothesis: Personality type of tax officials has a positive and significant effect on tax identification.

The second main hypothesis: Personality type of tax officials has a positive and significant effect on tax collection.

The first sub-hypothesis: Gender of tax officials has a positive and significant effect on tax identification.

The second sub-hypothesis: Gender of tax officials has a positive and significant effect on tax collection.

The third sub-hypothesis: Native tax officials has a positive and significant effect on tax identification.

The fourth sub-hypothesis: Native tax officials have a positive and significant effect on tax collection.

### **Literature Review**

Bayer et al. (2017) investigated the "role of corporate governance on the impact of tax avoidance on financial constraints". Their results indicated that the firms with stronger corporate governance have lower tax evasion, and in firms with weaker governance, there is more tax avoidance.

Goo et al. (2016) investigated the impact of tax avoidance on the cost of corporate owners' equity. Their results showed that there is a significant negative relationship between tax avoidance and cost of corporate owners' equity.

Chen et al. (2014) investigated the relationship between tax avoidance and corporate value and also the impact of information transparency on their relationship. Using multivariable regression models, the results showed that there is a significant negative relationship between tax avoidance and corporate value.

Edwards et al. (2013) reviewed the impact of external financial constraints on companies' aggressive tax planning. They showed that when a company has a limited access to external financial resources, it tends to aggressive tax planning.

Bartolini et al. (2012) in a study entitled "local and central tax audit", examined whether tax audits should be conducted at the local level or at the governmental level? They indicated that the tax enforcement may follow a different pattern from tax assessment, when the data analysis is important.

Lim (2011) investigated the impact of institutional ownership on tax evasion and cost of debt. He showed that there is a negative relationship between tax evasion and debt costs, which confirms the perspective of exchange theory.

Joffre et al. (2011) examined the effect of the five-factor personality model on the ability of auditors to assess the risk of fraud and determine the possibility of fraud, and found that none of the personality factors have an effect on the ability of auditors to assess fraud risk and their ability to determine the possibility of fraud.

Malekiyan et al. (2017) examined the effect of tax audit on the relationship between declared, diagnostic and deterministic taxes. Their results showed that tax auditing has no impact on the relationship between declared and diagnostic taxes as well as the relationship between declared and deterministic taxes in companies with tax auditing.

Salehi et al. (2013) studied the impact of tax culture factors on tax compliance among taxpayers. All the assumptions were tested at the level of 0.95 and they were significant. In addition, among the factors and characteristics of tax culture, justice and organization function with the average of 3.95 had the highest impact on tax compliance, honesty and responsibility sense of taxpayers with the average of 3.17 were in the second place, and the willingness to pay taxes with the average of 3.14 was placed in the third place and compared to two other variables had the lowest impact on tax compliance.

Zamani et al. (2013) investigated the factors related to tax compliance from the perspective of tax officials and taxpayers. The results of this research showed that there is a significant relationship between the research variables and the tax compliance from the perspective of both tax officials and taxpayers.

Mirmohammadi et al. (2011) investigated the impact of effective factors on the enhancement of taxpayer compliance (juridical persons) from the perspective of tax officials of Tehran (case study: Iranian National Tax Admission Organization (Tehran). Findings of this research include the awareness of taxpayers about tax regulations, related tasks, applying tax crimes against the correct use of tax revenues, which its declaration for taxpayers will have a positive effect on the tax compliance of taxpayers.

Abdi et al. (2009) studies the limitations and problems of tax experts in auditing the tax records in Zanjan Tax Administration. The results showed that by controlling the study space and removing the main constraints, which are the weakest cycle of are organization, the extra released capacity can be used in other operating areas of organization to improve its operational capability.

## Research Findings

Descriptive statistics of the research indicators are presented in Table 1.

**Table1.** Descriptive Statistics

| The highest value | The lowest value | Mean  | Mode  | Median | Numbers | Variables          |
|-------------------|------------------|-------|-------|--------|---------|--------------------|
| 210               | 5                | 66.78 | 10.88 | 2.13   | 70      | Personality type   |
| 5                 | 1                | 2.2   | 2     | 2      | 70      | Neuroticism        |
| 5                 | 1                | 2.8   | 1     | 2.5    | 70      | Extraversion       |
| 5                 | 1                | 3     | 1     | 2      | 70      | Flexibility        |
| 5                 | 1                | 1.5   | 1     | 1      | 70      | Agreement          |
| 5                 | 1                | 2     | 2     | 2      | 70      | Conscientiousness  |
| 2                 | 1                | -     | 1     | 1      | 70      | Native             |
| 2                 | 1                | -     | 2     | 2      | 70      | Gender             |
| 1                 | 0                | -     | 1     | 0      | 70      | Tax identification |
| 1                 | 0                | -     | 1     | 0      | 70      | Tax collection     |

### Statistical Tests related to the Effect of Each Predictor Variable on the Dependent Variable

The next Table with the title of variable in the equation, beside the presenting of a summary of the role of each variable in the model, also shows which variables remain in the model after applying the logistic regression. This Table is the most important table in the interpretation of the results related to the significance and the effect of each independent variable on the dependent variable. Wald test is used to determine the significance of each independent variable. The test statistical significance is found on the error factor column.

With regard to these results, we found that the personality type with the probability of 0.08, gender with the probability of 0.01, native with the probability of 0.000, were significantly involved in the predicting.

Beta coefficients are used to estimate the occurrence probability in the equation, but not as a direct interference. Here, the variation in the log probabilities for native variable is 0.744, which indicates an increase in the log probabilities for increasing of native (since the beta value is positive). However, this method is often not the most direct way to understand the results. The probability ratio is shown with the odds ratio, and it determines their confidence level (95% confidence level for odds ratio). This value indicates the rate of change in probability ratio for an increase in a unit of the independent variable. For example, for the native variable, an increase in a native unit will increase the probability ratio by 7.213. It means that the probability of tax identification with the native variable is 7.213 times larger than the probability of non-native. Values less than 1.000 indicate the reduced probability ratio for a unit of change in an independent variable. In this research, by considering the general statistical Table of variables, it can be argued that the entered dependent variable to the regression analysis is capable of predicting the change of dependent variables, and its predicting ability at the error level of lower than 0.5 is significant.

First Model:

$$Ln(y^{\wedge}) = \ln\left(\frac{\text{tax identification}}{1 - \text{tax identification}}\right) = \alpha + \beta 1 \text{ Gender} + \beta 2 \text{ Native} + \beta 3 \text{ style}$$

Personality type of tax officials has a positive and significant effect on tax identification.

Gender of tax officials has a positive and significant effect on tax identification.

Native tax officials have a positive and significant effect on tax identification.

**Table 2.** General Statistical Test of Variables

| 95% coefficient |      | Odds ratio | Significance | Freedom degree | Wald  | Standard error | Regression coefficient |                  |
|-----------------|------|------------|--------------|----------------|-------|----------------|------------------------|------------------|
| 8.09            | 1.3  | 0.33       | 0.08         | 1              | 7.077 | 0.543          | 0.904                  | Personality type |
| 0.47            | 0.07 | 11.1       | 000          | 1              | 0.791 | 0.424          | 0.736                  | Native           |
|                 |      | 0.00       | 0.003        | 1              | 0.000 | 99.687         | 73.626                 | percentage       |

Regarding the variable of personality type, we see a significant effect on tax identification. According to the results of the Table, it can be found that these effects are positive and by increasing the effect of personality type, the probability of tax identification increases. The odds ratio of this variable is 0.33, but the beta coefficient shows that this effect is positive, i.e. with the increase in the effect of the personality type, the probability of tax detection increases.

Nativeis another variable that affects tax identification. That is, by increasing the native effect, the probability of tax identification will increase, and conversely, with the reduction of being native, the probability of non-recognition of taxes will increase.

In the Nativevariables, considering that their odds ratios are higher than one, and their coefficient is positive, so the effects of this variable are also positive. That is to say, with the increase of native variable, the probability of tax collection increases, and on the contrary, with the decrease of native variable, the probability of non-collection of taxes will increase.

### Ineffective Variable

The following table indicates the variables that have no significant effect on the dependent variable changes at each stage of the analysis; thus, they are excluded from the model. In addition, in this table, the total score of statistics is also calculated for each stage and it examines the null hypothesis that any variable not included in the equation has a beta coefficient (0). That is, it does not have any impact on the variation of tax collection variable. In this research, the significance level of the gender variable is greater than 0.05, so it does not have a significant effect on tax collection. In addition, the total value of this variable in the eighth stage is equal to 0.106.

**Table 3.** Ineffective Variables

| Error level | Freedom degree | score |                    |                       |
|-------------|----------------|-------|--------------------|-----------------------|
| 0.386       | 1              | 0.752 | Gender             | 8 <sup>th</sup> stage |
| 0.106       | 1              | 0.490 | General statistics |                       |

### Second Model:

Native tax officials have a positive and significant effect on tax collection.

Gender of tax officials has a positive and significant effect on tax collection.

Personality type of tax officials has a positive and significant effect on tax collection.

$$\ln(y^{\wedge}) = \ln\left(\frac{\text{tax collection}}{1 - \text{tax collection}}\right) = \alpha + \beta_1 \text{Native} + \beta_2 \text{Gender} + \beta_3 \text{style}$$

**Table 4.** General Statistical Test of Variables

| 95% coefficient |     | Odds ratio | significance | Freedom degree | wald   | Standard error | Regression coefficient |                  |
|-----------------|-----|------------|--------------|----------------|--------|----------------|------------------------|------------------|
| 5.51            | 1.3 | 20.7       | 0.005        | 1              | 7.711  | 0.360          | 1.000                  | Personality type |
| 6.29            | 1.5 | 3.12       | 0.001        | 1              | 10.189 | 0.357          | 0.140                  | Gender           |
|                 |     | 0.00       | 0.003        | 1              | 0.000  | 99.687         | -73.626                | Percentage       |

Regarding the variable of personality type, the significant effect of this variable on tax collection is obvious. Based on the results of the table, we see that these effects are positive and with an increase in the effect of personality type, the probability of tax collection increases. The odds ratio of this variable is equal to (0), but the beta coefficient shows that this effect is positive, i.e. by increasing the effect of personality type, the probability of tax collection will increase.

Gender is another variable that influences the tax collection. Its effect is positive which means that by increasing the effect of gender, the probability of tax collection increases, and conversely, by decreasing the number of men, the probability of non-collection tax will increase.

Regarding the Nativevariable, since their odds ratios are higher than one and the coefficient is positive, the effects of this variable are also positive. Namely, by increasing the native variable, the probability of tax collection increases while by decreasing the native variable, the probability of non-collection taxes will increase.

### Analysis of Research Hypotheses

In this section, using the Wald test, the status of accounting information systems was examined

Hypothesis 1: The personality type of tax officials has a positive and significant effect on tax identification.

**Table 5:** The Results of the Wald Test in Investigating the Effect of Personality Type of Tax Officials on Tax Identification

| component        | Respondents   | Beta coefficient | Coefficient of regression effect | Wald test | Significance level |
|------------------|---------------|------------------|----------------------------------|-----------|--------------------|
| Personality Type | Tax officials | 0.334            | 0.904                            | 7.077     | 0.008              |

Considering that there were several questions in this dimension, according to the Wald test in 95% confidence level, the significance value is obtained lower than 5%. Since in the questionnaire, the mean scores of less than three indicates the effect of personality type on those who stated the tax collection, we observed that the error coefficient is lower than 0.05, and it showed that the personality type has a significant relationship with the tax collection, also, given the positive beta coefficient, the relationship is in direct way. Therefore, it can be concluded that the tax officials have stated the personality type and the personality type is considered desirable as one of the main characteristics of tax collection from the perspective of tax officials. Hence, the existence of personality type affects tax identification. The positive values of the coefficient effect of regression show the increased probability ratio for a unit of change in the independent variable. In other words, from the perspective of tax officials, the probability of tax collection with regard the personality type is 1.202 times higher than the probability without personality type. Therefore, the probability of tax collection with the personality type is 1.204 times higher than the probability of being without personality type.

Hypothesis 2: the personality type of tax officials has a positive and significant effect on tax collection.

**Table 6:** The Results of Wald Test in the Study of Personality Type of Tax Officials on Tax Collection

| component        | respondents   | Odds ratios | Coefficient of regression effect | Wald test | Significance level |
|------------------|---------------|-------------|----------------------------------|-----------|--------------------|
| Personality type | Tax officials | 7.213       | 0.744                            | 11.653    | 0.001              |

Since there were several questions in this dimension, and according to the Wald test at the 95% confidence level, the significance value was obtained less than 5%, and it showed that the personality type has a meaningful relationship with the tax collection, and with regard the positive beta coefficient, the relationship is in direct way. Therefore, it can be concluded that the personality type is considered desirable by tax officials as one of the main characters of tax identification. Finally, the probability of tax collection from the perspective of tax officials in the personality type is 0.744 higher than the probability without personality type.

Hypothesis 3: Gender of tax officials has a positive and significant effect on tax identification.

**Table 7:** The Results of Wald Test in the Study of Gender Dimension of Tax Officials on Tax Identification

| component | respondents   | Odds ratios | Regression effect coefficient | Wald test | Significance level |
|-----------|---------------|-------------|-------------------------------|-----------|--------------------|
| Gender    | Tax officials | 11.176      | 0.736                         | 16.791    | 0.000              |

Generally, it can be concluded that the tax officials have stated the gender dimension, and gender as an important feature of tax identification is desirable for the tax officials.

Hypothesis 4: The gender of tax officials has a positive and significant effect on tax collection.

It can be concluded that the tax officials have stated the tax collection, and gender as an important feature of tax collection from the view of studied tax officials is desirable. Therefore, the gender is directly related to the tax collection, and the probability of the occurrence of tax collection with regard to gender is 1.000 times higher than this probability when there was no gender perspective.

**Table 8:** The Results of Wald Test on the Study of Tax Officials Gender on Tax Collection

| Component | Respondents   | Odds ratios | Regression effect coefficient | Wald test | Significance level |
|-----------|---------------|-------------|-------------------------------|-----------|--------------------|
| Gender    | Tax officials | 20.720      | 1.0                           | 7.711     | 0.005              |

Hypothesis 5: Native tax officials have a positive and significant effect on tax identification.

**Table 9:** The Results of Wald Test in the Study of the Effect of Native Tax Officials on Tax Identification

| Component | Respondents   | Odds ratios | Regression effect coefficient | Wald test | Significance level |
|-----------|---------------|-------------|-------------------------------|-----------|--------------------|
| Native    | Tax officials | 3.580       | 0.431                         | 11.995    | 0.000              |

Native has a direct relationship with the tax identification, and the probability of the occurrence of tax identification with regard to the native component is 1.000 times higher than when this probability was absent from the perspective of tax officials.

Hypothesis 6: Native tax officials have a positive and significant effect on tax collection.

**Table 10:** The Results of the Wald Test in Examining the Effect of Native Tax Officials on Tax Identification

| Component | Respondents   | Odds ratios | Regression effect coefficient | Wald test | Significance level |
|-----------|---------------|-------------|-------------------------------|-----------|--------------------|
| Native    | Tax officials | 2.180       | 0.451                         | 10.95     | 0.002              |

Native component is considered desirable as one of the main features of tax collection by tax official. Therefore, there is a direct relationship between the native component and tax collection, and the occurrence probability of tax collection with regard to the native component is 0.451 times higher than the probability of being absent from the perspective of tax officials.

**Table 11:** The Results of Hypotheses

| Hypothesis   | Result    |
|--|-----------|
| Hypothesis 1: The personality type of tax officials has a positive and significant effect on tax identification. | Confirmed |
| Hypothesis 2: the personality type of tax officials has a positive and significant effect on tax collection.     | Confirmed |
| Hypothesis 3: Gender of tax officials has a positive and significant effect on tax identification.               | Confirmed |
| Hypothesis 4: The gender of tax officials has a positive and significant effect on tax collection.               | Confirmed |
| Hypothesis 5: Native tax officials have a positive and significant effect on tax identification.                 | Confirmed |
| Hypothesis 6: Native tax officials have a positive and significant effect on tax collection.                     | Confirmed |

## Discussion and Conclusion

Considering that the personality type, as one of the main characteristics of tax collection, is desirable from the perspective of the studied tax officials, i.e. the existence of personality type affects tax identification. In other words, the probability of tax collection with the personality type of tax officials is 1.204 times higher than that probability in the absence of personality style. The results of this hypothesis are in consistent with the study of Moradi (2014) and Willie (2015) in Indonesia. Therefore, for reasons such as more fear, lower self-confidence, decisiveness, mobility and kindness, sociability, person-centered, optimism, and other related reasons, it can be said that the personality type of the individuals has an impact on the tax identification. Regarding the positive beta coefficient, there is a direct relationship between the personality type of tax officials and tax collection. therefore, it can be concluded that the personality type, as an important feature of tax collection, from the perspective of the studied tax officials is desirable. Finally, the probability of collecting taxes with the interest from the tax officials' perspective is 0.744 times higher than the probability without personality type. Tax collection depends on some factors, such as individual motives, the attitude of tax collection officials and their personality type. As a result, for reasons such as more fear, lower self-confidence, decisiveness, mobility and kindness, sociability, person-centered, optimism, and other related reasons, it can be concluded that the personality type influences the tax collection.

The impact of gender of tax officials in tax identification as an important feature of tax identification is considered desirable from the perspective of tax officials. Tax collection depends on some factors, such as individual motives, the attitude of tax collection officials and their personality types. As a result, due to the appointed gender roles and different socialization, the gender of tax officials affects tax identification. In addition, the gender of tax officials has a positive and significant effect on tax collection and it has a direct relationship with tax collection, and the probability of tax collection with regard to gender is 1.000 times higher than this probability in the absence of gender perspective. Therefore, due to the appointed gender roles and different socialization, it can be concluded that the gender of tax officials affects the tax collection.

Native tax officials have also a positive significant effect on tax identification. Namely, native tax officials with regard to their understanding of the society and taxpayers can accurately identify the tax. Therefore, by increasing the native tax officials, the tax identification is done more accurately, so there is a direct relationship between native tax officials and tax identification. In addition, native tax officials have a positive and significant effect on tax collection. With regard to the dominance of native tax officials in their area and the accurate knowledge of the taxpayers, they can have a greater impact on tax collection. As a result, the native component has a direct relationship with the tax collection, and the probability of tax collection with native component is 0.451 times higher than the probability of being absent from the perspective of native tax officials. Therefore, using native human capital and paying attention to their ability has many benefits due to their good commitment and their sense of belonging to the homeland; also, even native human resources have more efficacy, compassion and commitment, which has become a duty under article 47, 6<sup>th</sup> 5-year law, and if an organization recruits its labors from outside, it is violated the law, which is valid to the tax officials involved in tax collection. The results of this study are in consistent with the research by Bassum et al. (2017) in Spain.

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