Investigating the effect of organizational culture dimensions on financial performance: In a case study of pharmaceutical companies listed on the Tehran stock exchange

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Abstract---Organizational culture is the force that have people to act and has a strong and penetrating effect on all components of the organization, hence the recognition of organizational culture to create an innovative organization and benefit from the creativity of the staff is important. The purpose of this research is to determine the effect of organizational culture on financial performance. The method used in the current study was surveyed, and we used Cameron & Quinn questionnaire (2006), to measure the organizational culture variable as an independent variable, and from the functional data of the accepted pharmaceutical companies in Tehran Stock Exchange in 2014, to measure the financial performance variable as a dependent variable. The software used in this research included Excel and SPSS, so that in Excel, necessary calculations, and in SPSS the data analysis were done. Also, Regression has been used to investigate the direct effect of the research variables. Based on the standard coefficient and the significance level obtained, there is not any significant relationship between variables. The results of statistical analysis indicate that there is no significant relationship between studied cultures and financial performance.
Keywords---Culture, financial performance, organizational culture, performance.

Introduction

Culture is a combination of values, meanings and norms. While some cultural appearances are observable at the moment, understanding the culture of a group needs a long time accompaniment. Markets in different countries are affected by various factors, and culture is one of the most important factors. The Advancement of successful international marketing, Depends on the full understanding of the differences which exists in different countries of the world and their different cultures. Culture is a complex whole from wisdom, beliefs, art, ethics, customs and any capabilities and habits of individuals as a member of a community which affects a person’s consuming behavior. The whole complex means that a system’s culture is interdependent by some components which makes it difficult to know.

The organizational culture is the force that obliges people in the organization to act and has a strong and penetrating influence on all components of the organization, hence the recognition of organizational culture is important to create an innovative organization and benefit from the creativity of the staff. By studying organizational culture, the success or failure of the organization could be identified. On the other hand, since the organizational culture has an important influence an organization’s people’s behavior, and includes complex part of values, and these values will affect the attitude and, ultimately, the behavior of individuals in the workplace, it Can be an important factor in organizational control.

The impact of organizational culture on the performance of the organization is a subject that has received much attention in recent decades. Organizational culture strengthens the organization’s performance in a case it is strong and has specific characteristics or attributes, specific values, beliefs and common patterns of behavior. Strong and coherent organizational culture, Which all members are widely involved in, is known as the driving force behind the success of American companies. Despite such a claim, little research investigated the issue with a careful attention and quantitative study. From the perspective of the principles of epistemology, The topic of the relationship between organizational culture and organizational performance, for paradigms, in functionalism paradigm, Among the views, In the view of the organization's culture, in terms of schools of culture, it is in the functional approach, and in terms of the schools of culture in the

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* Barney, 1986  
† Haniffa and Cooke, 2002, Kwok and Tadesse, 2006  
‡ Zahra, 1991, Kwok and Tadesse, 2006  
§ Landes et al., 2000, Kwok and Tadesse, 2006  
** Tsakumis, 2007, Toporowski, 2009
functionalism school††. The common theme of the topics mentioned is that, if common norms and Values that are in the deep layers of organizational culture are understood, they can be managed at high levels of the organization and lead to the organization’s desirable performance‡‡.

To be aware of the problem, it should be noted that in many organizations, executives have tried to take financial performance very seriously to prevent crisis which can undermine the company’s value and credibility. Especially in the presence of the global financial crisis, many are trying to implement more relevant processes. Here is the need for cultural implementation that reduces damage from the incident. The Financial performance which is not influenced by the selection of individual values and cultural and social norms, is rarely seen in business history§§.

Performance is one of the basic concepts in management, because many management tasks are based on it. In other words, the success of organizations can be seen in the mirror of their performance***. Today in a competitive atmosphere, businesses are trying to flourish by making sustainable competitive advantage through enhancing organizational performance and adapting themselves to the changes Hence, most studies on organizational performance are based on financial performance†††. In the meantime, the pharmaceutical industry is one of the important industries, in which We can examine the variables mentioned here.

Therefore, this study tries to measure the dimensions of organizational culture from the perspective of managers and secondly to examine the effect of organizational culture dimensions on the financial performance of pharmaceutical companies listed on the stock exchange.

**Research methodology**

1. This study examines the effect of organizational culture from the perspective of managers on the financial performance of pharmaceutical companies on the Tehran Stock Exchange. The dimensions of organizational culture are considered as an independent variable and financial performance (return on assets) as a related variable. . . Based on this model, four hypotheses are presented that are tested in this research:


2. Team culture affects the financial performance of pharmaceutical companies on the Tehran Stock Exchange.

†† Toporowski, 2009
‡‡ Toporowski, 2009
§§ Toporowski, 2009, Kwok and Tadesse, 2006
*** Huallachain, 1994
††† Mulherin et al., 1991, Yafeh and Yosha, 2001


In the conceptual model of research, the dimensions of organizational culture act as an independent variable that includes four dimensions of team-oriented, developmental, central and results-oriented, and the financial performance of pharmaceutical companies acts as a dependent variable. In this study, performance data of pharmaceutical companies in 2014 were used to evaluate financial performance (return on assets).

2. The current study, in terms of purpose is survey research because in the first step, Provides a clear understanding of the dimensions of organizational culture in the statistical community. In the second stage, it examines the financial performance of pharmaceutical companies listed on the Tehran Stock Exchange. The research design in this research is descriptive-correlation and regression. It is descriptive because it provides a picture of the current situation and correlation because it aims to examine the effect of the independent variable on the dependent variable. Therefore, regression was used to examine the direct effect of research variables, which was analyzed using SPSS software. Therefore, in this study, the Cameron and Quinn questionnaire was used to measure the organizational culture variable as an independent variable. To measure the financial performance variable as a dependent variable, the performance data of pharmaceutical companies listed on the Tehran Stock Exchange were used.

This study from the point of view of the applied purpose and collecting information, is descriptive and correlational research.

Population and statistical sample

The statistical population of the study is pharmaceutical companies listed on the Tehran Stock Exchange, which based on the information obtained constitute 23 companies listed on the Tehran Stock Exchange. Data collection was performed and collected from all members of the statistical community.

Library and Internet studies

The data and information thus obtained are of a secondary type. It means that they have already been produced and gained through reviewing books, journals, dissertations, and other documentation available in specialized libraries. Regarding the subject literature due to the scarcity of library resources on the subject of research, Internet resources and internationally recognized scientific databases have been used more. This adds up to the importance and updated information.

2006
2014
Questionnaire

Since the present study considers the aspect of organizational culture from the CEO’s point of view, the Cameron Quinn questionnaire was used to measure organizational culture. This questionnaire includes demographic information section, culture section (includes four sections for studying individualistic, team oriented, result oriented and developmental cultures). Therefore, 23 questionnaires were collected from managers of pharmaceutical companies.

Reliability of the Measurement Tool

Trustworthiness, which uses words such as reliability, stability, and credibility and its English equivalent is Reliability, is one of the characteristics of measuring instruments (questionnaire or interview or other tests of social sciences). The above concept deals with how much does the measurement tool under the same conditions gets the same results. To measure Reliability the Cronbach’s alpha was used. Cronbach’s alpha method is another method for calculating reliability using the Cronbach formula. This method is used to calculate the internal consistency of measuring instruments such as questionnaires or tests that measure different characteristics. In such tools, the answer to each question can be given different numerical values. To calculate the Cronbach’s alpha coefficient, the variance of scores of each sub-questionnaire and the total variance must be calculated. To calculate the Cronbach’s alpha coefficient, we must first determine the variance of the scores of each sub-questionnaire and the total variance. Then the value of alpha coefficient is calculated using the formula. Cronbach’s alpha coefficient calculated in this study is 0.8, which shows the reliability of the questionnaire.

Measure validity, (validity) of measuring instrument

The concept of validity responds to this question how much does the measuring tool measure the desired attribute. Without the knowledge of the validity of the measuring instrument, the accuracy of the data obtained can not be guaranteed. The measuring instrument may be valid for measuring a particular feature. However, it has no credit for measuring the same trait in another community. Using Cameron Quinn’s valid organizational culture questionnaire, this questionnaire has content validity.

Analysis method

In this research, using SPSS software, various methods of descriptive and inferential statistics have been used to analyze the data and test the hypotheses. In descriptive statistics, The researcher actually describes the characteristics of the sample for study by collecting and collecting little information from the samples. Using inferential statistics, the sample results are generalized to the whole statistical community and research without it has no scientific validity. In the next step, to reject or accept the hypotheses, the test of equations of two

**** Hauck and Steinkamp, 1964
coefficients of one regression, the classical test was used and the results were reported. In this study, tolerance statistics were used to examine the coherence between variables and Watson camera test was used to examine the serial uncertainty of regression residues.

In general, descriptive statistics were analyzed to evaluate the characteristics of the respondents and the statistical population. Correlation coefficient test was used to determine the type and intensity of the relationship between variables. Regression test was also used to investigate the effect of independent variable on dependent variables.

**Results**

Demographic characteristics of respondents and statistical population

In this part of statistical analysis, we analyze the distribution of statistical samples in terms of variables such as gender, marital status, age, level of education and work experience of managers of companies listed on the Tehran Stock Exchange.

Frequency distribution of respondents based on marriage

Respondents were divided into two groups based on marriage, and the results show that all respondents are male and married, and all respondents also express their marital status. (figure 1).

Frequency distribution of respondents based on education

Respondents were divided into six groups based on their level of education. The results of the statistical study of the questionnaires showed that 21.73% (five people) had a master's degree and the rest (18 people) had a doctorate degree. Or higher (Figure 2).

Frequency distribution of respondents based on work experience

Respondents were divided into five categories based on their managerial background. Analysis of the results of the management history of pharmaceutical companies shows that 4.34% less than five years, 4.34% five to ten years, 8.68% ten to fifteen years, 13.04%, fifteen to twenty years and the rest have more than twenty years of management history (Figure 3).

**Inferential analysis of data**

After analyzing the descriptive data, inferential data analysis is used to test the research hypotheses. We first checked the normality of the data.

According to Figure 4 and its compatibility, the normality of the data is confirmed. The histogram drawn on the regression model confirms the assumption that the data are normal. Therefore, the estimated linear regression model is acceptable.
1. Testing the first hypothesis

Regression test was used to analyze the data. To test this hypothesis, the regression model (1) was fitted:

\[ ROA_{t+1} = \alpha + \beta_1 ROA^{AB}_t + \beta_2 ROA^{IND}_t + \epsilon \]

To test this hypothesis, the "test of two equations of multiple linear regression" was used. Model summary table is a summary of the model. This table shows the values of \( R \) and \( R^2 \). The value of \( R \) is equal to 0.147, which indicates the correlation between the two variables, i.e., the intensity of the correlation between the two variables. The value of \( R^2 \) also indicates how much of the dependent variable can be explained by the independent variable. As shown in the table below, the value of the \( R^2 \) coefficient calculated in all linear models is that the development culture has no effect on the return on assets of pharmaceutical companies. The set value of \( R^2 \) indicates that in none of the companies, culture is recognized as an effective factor in the rate of return on assets. Therefore, the first hypothesis regarding the effect of development-oriented culture on the return on assets of pharmaceutical companies has been rejected.

Table 2 also shows the one-way analysis of variance related to the effect of development-oriented culture on the return on assets of pharmaceutical companies. Accordingly, the linearity of this relation is rejected with respect to the calculated \( p \)-value.

The standardized or beta regression coefficient of this test is -147, which indicates the effect of the independent variable on the dependent (Table 3).

2. Testing the second hypothesis

Table 4 also shows the value of the coefficient \( R^2 \) in all calculated linear models. Accordingly, team-based culture has no effect on the return on assets of pharmaceutical companies. The specified \( R^2 \) value indicates that in any company, team-oriented culture is not recognized as an effective factor. Therefore, the second hypothesis about the effect of team-based culture on the return on assets of pharmaceutical companies is also rejected.

Table 5 shows the one-way analysis of variance related to the effect of team-oriented culture on the return on assets of pharmaceutical companies, based on which the linearity of this relationship is rejected according to the calculated \( p \)-value.

The standardized regression coefficient or beta of this test is equal to 0.237, which indicates the effect of the independent variable on the dependent (Table 6).

3. Testing the third hypothesis

Table 7 also shows the value of the \( R^2 \) coefficient in linear patterns of culture based on the return on assets of pharmaceutical companies. Based on the
results, there is no significant relationship between result-oriented cultures on the return on investment of pharmaceutical companies. The calculated R2 value indicates that in none of the companies, result-oriented culture is recognized as an effective factor. Therefore, the third hypothesis regarding the effect of result-based culture on the return on assets of pharmaceutical companies was rejected.

As shown in Table 8, one-way analysis of variance of result-based culture indicates that there is no linear relationship between result-oriented culture and the return on assets of pharmaceutical companies, which is also calculated on the basis of p-value.

The standardized or beta regression coefficient of this test is 0.044, which indicates the effect of the independent variable on the dependent (Table 9).

4. Testing the fourth hypothesis

Table 10 shows that the value of R2 coefficients in culture-based models is linear to the rate of return on assets of pharmaceutical companies. Accordingly, there is no significant relationship between hierarchical culture and return on assets of pharmaceutical companies. The specified R2 value indicates that in none of the companies, culture-based culture is recognized as an effective factor. Therefore, the fourth hypothesis related to the effect of hierarchical culture on the return on assets of pharmaceutical companies was rejected.

One-way analysis of variance related to the effect of hierarchical culture shows the absence of a linear relationship between this culture and the return on assets of pharmaceutical companies, which is also calculated based on p-value (Table 11).

The standardized regression coefficient or beta of this test is equal to / 131. Which represents the effect of the independent variable on the dependent.

Reliability of the questionnaire criteria

<table>
<thead>
<tr>
<th>Questionnaire sections</th>
<th>Cronbach's alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criterion 1</td>
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</tr>
<tr>
<td>Criterion 2</td>
<td>0.80</td>
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<tr>
<td>Criterion 3</td>
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<td>Criterion 4</td>
<td>0.79</td>
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<td>Criterion 5</td>
<td>0.76</td>
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<tr>
<td>Criterion 6</td>
<td>0.80</td>
</tr>
<tr>
<td>Total questionnaire</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Discussion and conclusion

The results of this study show that there is no significant relationship between different organizational cultures and financial performance of companies. These results can be discussed with coherent and inconsistent research as follows.
Gordon and Thompson, in Eleven Insurance Companies, The Impact of Cultural Power,

Compatibility between respondents as well as compatibility with financial performance, asset growth index, is measured and evaluated in a five-year period after measuring organizational culture. In this research, a strong culture and adaptability are associated with the future performance of the company.

Kotter and Heskett†††† have done research in this area. In one study, they surveyed 207 companies from 22 different industries in the United States over a ten-year period using the three indicators of average net income, annual increase, return on investment and stock price increase. Their results showed that there is a positive and moderate relationship between financial performance indicators and the strength of organizational culture. In the second study, Cutter and Hasket‡‡‡‡, 22 companies from the above companies with high and low financial performance were examined. Environment, market competitors and technology disrupt the company's performance. In their third study, companies with high and low financial performance differed in terms of the importance of superior leadership for managers, value for customers, shareholders and employees.

In summary, the second study by Kotter and Heskett§§§§ on the impact of organizational culture on financial performance is discarded. In Davidson’s study, two dimensions of culture are examined, indicating that the unit performs better than the team. ***** It also rejected all conformity assumptions except Koene††††† Paperwork, showing that in 50 chain stores consisting of 450 department stores in the Netherlands at the store level there is a correlation between five variables of organizational culture variables and performance variables such as gross profit percentage. Variable costs, discontinuities, etc.

In Denison & Mishra’s‡‡‡‡‡ research, the correlation between the four characteristics of Denison’s model organizational culture and return on assets was not significant in 220 companies, but the results were different for the top 24 companies. They stated that mission characteristics and adaptation have the strongest correlation with performance.

Davidson §§§ In 16 sections of the South African Investment Bank, Davidson used the Denison model to measure organizational culture and the ratio of financial analysis to financial performance. In this study, effective tax rates, ratio of operating expenses to operating income, ratio of net income after deducting profit and operating income tax and ratio of net profit to operating income for 2001 and 2002 have been used. After deducting operating income and income

†††† 1992
‡‡‡‡ 1992
§§§§ 1992
***** Naser Mirsepasi, 2002
‡‡‡‡‡ 1996
‡‡‡‡ 1995
§§§§§ 2003
tax, there was a positive and significant correlation between team building and the ratio of operating expenses to operating and a negative correlation between team building and net income after deducting operating income and income tax, which indicates better individual performance. Is. Towards team performance

Lee and Yu argue that the strengths of the index of cultural exchange, innovation, support for teamwork, human-centeredness and commitment with return on assets in manufacturing companies and the annual growth of premiums in insurance companies are a number of companies in Singapore. it is related.

According to joiner, among the cultural characteristics related to the national culture, the increasing concentration and formalism with the performance of company managers and their stress reduction in the level of 100 chemical and weaving companies in Greece have been correlated.

Kessapidou and Varsakelis surveyed 478 multinational corporations in Greece, and the effect of the cultural dimension of individualism on the companies’ average three-year profit is shown.

yesil and kay in their research on the impact of organizational culture on the performance of developing countries found that organizational culture using SPSS and corporate regression analysis in Turkey has no effect on financial performance.

Ghanavati and Samadi, a study on the impact of market orientation and organizational culture on the performance of small and medium companies operating in Tehran province has been conducted. To do this, they used cross-sectional surveys, structural equation modeling and sampling methods from small and medium-sized company managers. Findings show that market orientation is partly due to organizational culture and both have a positive but insignificant effect on the financial performance of companies.

Gazi University, Ankara, The purpose of this study is to identify the relationships between organizational culture, identity and image in the regional office of a pharmaceutical company. Three different surveys, each focusing on different dimensions, are conducted with all 10 regional office managers, 30 employees and 85 clients. None of the core values of the company, which are respect for people, patient focus, honesty in company operations and transparency, are reflected as an organizational image.
Fakhar Shahzad*, GuoYi Xiu, Muhammad Shahbaz‡‡‡‡‡‡‡‡‡‡, The results show that the performance of organizational innovation is supported and influenced by organizational culture. Flexibility / Support for organizational change and climate are relatively important factors for creative performance and innovation. This study focuses on the cultural impact of innovation performance in a specific industry where measurable performance is critical to competitive survival: the software industry. Understanding this relationship, especially in the field of developing economics, is crucial due to the state of the software industry in rapid technological innovation and economic development of the country.

Bassem E. Maamari§§§§§§§, Cross-sectional data from 40 service companies show interesting results that highlight the interrelationships between these three variables. Findings indicate that managers should create a concept based on this concept in providing more training and developing staff skills in addition to organizational culture of acceptance, adaptation and diversity.

Waheed Ali Umrani********, Investigating the relationship between corporate entrepreneurship (CE), organizational culture (OC) and business performance (BP). In addition, this study attempts to address the modulatory effect of OC on the CE-BP relationship. Data were collected from middle managers of five major Pakistani banks. A two-step approach was used to model the structural equations. Using confirmatory factor analysis, the fit of the measurement model was determined. The importance of the theoretical relationship was assessed using a structural model. The results support a hypothetical direct and modified relationship.

Adriana Madya Marampa††††††††, Analysis of the impact of organizational culture, employee commitment, on employee performance. The study was conducted on MNC employees. The research method uses multiple regression method. The results of this study show that organizational culture has a direct impact on organizational performance. Organizational commitment significantly to organizational performance.

Chia-ming liu‡‡‡‡‡‡‡‡, Investigating the relationship between service innovation, organizational culture and organizational performance for the biochemical industry. All subjects expressed positive and optimistic views about the impact of service innovation, organizational culture and organizational performance. From the perspective of organizational culture, innovative culture is more effective than the other two types of culture, including bureaucratic culture and supportive culture. Implementing organizational culture and service innovation has a positive effect on the establishment of a company’s organizational performance. This means that a company that values the implementation of organizational culture and service innovation, can better culture its core competencies and
further increase its organizational performance. Organizational culture has a significant intervention effect on the impact of service innovation on organizational performance. This phenomenon also confirmed the positive impact of service innovation on improving organizational performance. There is an inseparable relationship between these three people.

Elona Cera§§§§§§§§, Four factors of organizational culture, work environment, training and development and management were examined in the study. A sample of 162 local government employees was surveyed for this study. Statistical tests such as Cronbach’s alpha, KMO and Bartlett, factor analysis, correlation and regression were used to achieve the results. This study shows that variables such as: work environment, training-development and management are important factors determining the performance of the organization. At the same time, organizational culture is not positively correlated with organizational performance.

Adiputra and Sujana******** Its purpose is to analyze the effect of inappropriate MCS and LPD culture on LPD financial performance. The results show that only a hierarchical culture is applied and is consistent with MSS practices that affect the financial performance of the LPD. This study shows that strengthening internal organizational factors / LPD has a significant role in orienting for all people in the organization. This supports LPD operations, especially LPD financial performance. In general, according to the results of the present study, there is no significant relationship between development-oriented culture and financial performance of pharmaceutical companies. Analysis of the results shows that there is no significant relationship between team culture and corporate financial performance. Also, the results of correlation and regression tests show that there is no significant relationship between result-oriented and result-oriented cultures with the financial performance of these companies.

The limitations of the study

One of the most important aspects of any research is access to statistical information. There are problems in this area that have made it impossible to access research services such as books, journals, statistics and databases. Part of these problems is due to the lack of research services, and on the other hand, the culture of lying leads to private and confidential information about these cases, and as a result, individuals and institutions refuse to transfer their findings and information to researchers. The results of this research are related to pharmaceutical companies, so it is necessary to be careful in generalizing the results to other companies with different technologies.

Acknowledgements

Declaration of Conflicting Interest

The Authors declares that there is no conflict of interest.

§§§§§§§§ 2020
******* 2021
Funding

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References


Tables:

**Table 1**
Results from statistical analysis of data of the first hypothesis

<table>
<thead>
<tr>
<th>The correlation coefficient</th>
<th>The coefficient of determination</th>
<th>Adjusted coefficient of determination</th>
<th>Standard deviation</th>
<th>Watson Camera</th>
</tr>
</thead>
<tbody>
<tr>
<td>.147</td>
<td>.021</td>
<td>.025</td>
<td>.015</td>
<td>1.5</td>
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**Table 2**
Results from analysis of the variance of the data of the first hypothesis

<table>
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<tr>
<th></th>
<th>sum of squares</th>
<th>Degrees of freedom</th>
<th>Mean Square</th>
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<th>Significance level</th>
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<td>regression</td>
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<td>.009</td>
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<tr>
<td>Total</td>
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<td></td>
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</table>

**Table 3**
Results from linear regression of data of the first hypothesis

<table>
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<th></th>
<th>Non-standard</th>
<th>Standardized</th>
<th>The statistics</th>
<th>Significance level</th>
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</thead>
<tbody>
<tr>
<td>The first hypothesis</td>
<td>Standardized</td>
<td>regression coefficient B</td>
<td>The statistics</td>
<td>Significance level</td>
</tr>
<tr>
<td>(Constant)</td>
<td>.450</td>
<td>.353</td>
<td>1.274</td>
<td>.217</td>
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**Table 4**
Results from statistical analysis of data related to the second hypothesis

<table>
<thead>
<tr>
<th>The correlation coefficient</th>
<th>The coefficient of determination</th>
<th>Adjusted coefficient of determination</th>
<th>Standard deviation</th>
<th>Watson Camera</th>
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<tbody>
<tr>
<td>.237</td>
<td>.056</td>
<td>.011</td>
<td>.014</td>
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### Table 5
The results of analysis of the variance of the data of the second hypothesis

<table>
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<th>Mean Square</th>
<th>The statistics</th>
<th>Significance level</th>
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</thead>
<tbody>
<tr>
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<td>.025</td>
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<td>.276</td>
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<td>.020</td>
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<tr>
<td>Total</td>
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<td>22</td>
<td></td>
<td></td>
<td></td>
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</table>

### Table 6
Results from linear regression of data from the second hypothesis

<table>
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<tr>
<th>Source</th>
<th>Non-standard regression coefficient B</th>
<th>Standard deviation</th>
<th>Standardized regression coefficient</th>
<th>Beta</th>
<th>The statistics T</th>
<th>Significance Level</th>
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<tbody>
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<td>.014</td>
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<td>.276</td>
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<tr>
<td>(Constant)</td>
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<td>.300</td>
<td>- .410</td>
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### Table 7
Results from statistical analysis of data related to the third hypothesis

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<th>Source</th>
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<th>Adjusted coefficient of determination</th>
<th>Standard deviation</th>
<th>Watson Camera</th>
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<tr>
<td>The correlation coefficient</td>
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<td>.002</td>
<td>.046</td>
<td>.009</td>
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### Table 8
Results from analysis of the variance of the third hypothesis data

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<th>Mean Square</th>
<th>The statistics F</th>
<th>Significance level</th>
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<td>.001</td>
<td>.041</td>
<td>.841</td>
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<tr>
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<td>.021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>total</td>
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</table>
Table 9
The results of linear regression of the data of the third hypothesis

<table>
<thead>
<tr>
<th>The third hypothesis</th>
<th>Non standard</th>
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<th>The statistics</th>
<th>Significance level</th>
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<tr>
<td>(Constant)</td>
<td>.161</td>
<td>.250</td>
<td>.643</td>
<td>.527</td>
</tr>
</tbody>
</table>

Table 10
Results from statistical analysis of data related to the fourth hypothesis

<table>
<thead>
<tr>
<th>The correlation coefficient</th>
<th>Coefficient of determination</th>
<th>Adjusted coefficient of determination</th>
<th>Standard deviation</th>
<th>Watson camera</th>
</tr>
</thead>
<tbody>
<tr>
<td>.131</td>
<td>.017</td>
<td>.030</td>
<td>.012</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Table 11
Results from analysis of the variance of the data of the fourth hypothesis

<table>
<thead>
<tr>
<th></th>
<th>Sum squares</th>
<th>Degree of freedom</th>
<th>Mean Square</th>
<th>The statistics</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>regression</td>
<td>.007</td>
<td>1</td>
<td>.007</td>
<td>.364</td>
<td>.553</td>
</tr>
<tr>
<td>Left over</td>
<td>.432</td>
<td>21</td>
<td>.021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>total</td>
<td>.440</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 12
Results from linear regression of data of the fourth hypothesis

<table>
<thead>
<tr>
<th>The fourth hypothesis</th>
<th>Non standard</th>
<th>Standardized</th>
<th>The statistics</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.419</td>
<td>.346</td>
<td>1.210</td>
<td>.240</td>
</tr>
<tr>
<td></td>
<td>-.007</td>
<td>.012</td>
<td>-.131</td>
<td>-.603</td>
</tr>
<tr>
<td></td>
<td>-.603</td>
<td>1.553</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figures:

Figure 1: Frequency distribution by marriage

Figure 2: Frequency distribution based on education

Figure 3: Frequency distribution based on work experience
Figure 4: A histogram plotted on the regression model