# Factors Affecting Uzbekistan's Managerial Performance In Manufacturing Industry: Model Based On Gender Aspects

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# Abstract

**Purpose-***This research paper examines the determinants and motivational factors affecting the managerial performance in manufacturing industry of Uzbekistan based on male and female characteristics. Study provides the proof of causal relationship between factors (levels of motivation, employee involvement, physical exertion and behavioral cognition) affecting managerial performance of manufacturing industry.* 

**Design/methodology/approach-** To achieve the purpose, study uses Herzberg two factor theories to lens the approach of the study. Study is quantitative in nature and self made 5 likert scale questionnaire is proposed for collecting the primary data from the manufacturing industry of Uzbekistan. Study uses Slovin's formula to deduce the sample size and probability random sampling is proposed sampling.

**Findings-** As expected, factors such as motivation level, employee involvement, Physical exertion and behavioral cognition are predictors of the study expected to have correlation. Study intends to finds the factors that affects the managerial performance especially covers the aspects of gender.

**Social implications-** Factors highlighted in the study are gender based and provide the evidences that managers (male and female) have different capacities that impact decisions and performances in overall. Study will help reduce gender discrimination in work places and will help equality in distributive justice.

*Originality/value- This research in this locale has not been done before with same sampling and techniques. Keywords:* (motivation level, employee involvement, Physical exertion and behavioral cognition)

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# I. Introduction

Organizations invest significant time and money in their performance management systems, but the results are usually disappointing. For example, Deloitte analyzed its approach and discovered that it required two million staff hours to set performance goals, complete evaluation forms and conduct formal performance reviews each year. In addition to the cost in staff hours, the technology systems required to automate these processes and make performance data accessible can cost thousands of dollars a year. This expense might be justified if performance management activities helped improve employee engagement and performance; however, this is typically not the case. Common complaints include:

• **Employees** say they their organization's performance management system does not reward high performance, deal effectively with poor performers or motivate them to improve.

• **Managers** say that the process is too time-consuming and burdensome, taking them away from "real work."

• **Executives** do not believe that performance ratings are accurate reflections of performance, making it difficult to use these ratings as the basis of talent decisions.

Each performance measurement and managers' performance is subject to some predictors, study uses some factors that may affect the managerial performance on the basis of gender aspects; those factors are levels of motivation, employee involvement, physical exertion and behavioral cognition. Organizations can achieve their goals and objectives only through the combined efforts of their employees and it is the task of management to get work done. Employee performance management is fundamental to the effective operation of organizations. Performance management is an integral part of the employees and organizations relationship. It is essentially an integrating activity that permeates every fact of the operations of an organization (Laurir J. Mullines, Management and Organizational behavior 2016, 410.)

Study argues that there are different levels of motivation, employee involvement, physical exertion and behavioral cognition of a male manager and a female manager with different producing capacities. Study intends to correlate these predictors and find extent to what these traits of managers' influence the managerial and organizational performances. To improve employees' performance, managers use both financial and non-

financial rewards as means to motivate employees in the organization. Panagiotakopoulos (2013), and Lavelle, Gunnigle, and McDonnell (2016) argued that financial rewards and equality in the level of motivation are the key factors to improve employees performance in organizations. Manager in manufacturing industry have different workloads and capacities. Both female and male managers arguably have different influencing powers and motivational levels. For managers (male and female) behavioral cognition mental exercises are different that defines capacities and performances in intuiting environment. Numerous researches have been launching various procedures to assess employee's performance (Wong and Wong, and Prajogo 2017).

This comprises the involvement, Motivation and communication of individual towards the completed works which are in agreement with the job during a particular time period- in further words, the measurement classifications must have a few standard formations which can be relied upon. Management is an active part not just theoretical. It is about changing behavior and making things happen. It is about developing people, working with them, reaching objectives and achieving results (Laurie J. Mullines, Management and Organizational behavior 2007, 411.). Performance management is a ubiquitous term in today's business environment, being embedded in the body of knowledge of various disciplines and being used it at all organizational levels (Brudan, 2016).

With the evolution of the PMS concept, researchers have provided a set of multi-dimensional measures in the form of the balanced scorecard and the organizational factors that can be used to evaluate the PMS effectiveness (Tung et al., 2011; Baird et al., 2012; Ratnawat et al., 2013). As mentioned earlier, this paper aims at examining the factors that influence the effectiveness of PMS and will incorporate work used by Tung et al. (2011), Baird et al. (2012) and Hawke (2012) to fill the gap in the literature. However, few studies have examined the factors influencing the effectiveness of PMS (Lawler, 2003; Padovani, Yetano, Orelli, 2010; Biron, Farndale and Paauwe, 2011; Tung et al., 2011; Baird et al., 2012; Hawke, 2012). The factors that have emerged focuses on the multi-dimensional factors namely balanced scorecard (BSC) and organizational factors such as training, top management support, employee engagement, reward management, enterprise resource planning, culture and behavior.

# II. Background

Study will provide the manufacturing factory evidences of Tashkent capital city of Uzbekistan and managerial performance of selected companies from Tashkent manufacturing industry. Uzbekistan has a workforce of 15.5 million out of its 33 million populations (World Bank). Agriculture plays a major role in the economy; it accounts for 28.7% of GDP and employs 33.1% of the total workforce. Main agricultural products include cotton, vegetables, fruits, grain, and livestock. The country also produces silk and wool and is attempting to diversify its agriculture towards fruits and vegetables. Poland, Russia, and the Netherlands have strengthened agricultural relations with Uzbekistan.

The industry accounts for 28.4% of GDP and employs 30.3% of the total workforce (World Bank). Manufactured products included textiles, food processing, machine building, metallurgy, mining, hydrocarbon extraction, and chemicals. The country is also rich in coal, zinc, copper, tungsten, uranium, and silver. Russia began re-importing Turkmenistan gas in 2019, which is expected to affect Uzbekistan oil prices and demand.

The progress of governmental economic policy reforms has been cautious, but cumulatively Uzbekistan has shown respectable achievements. Its restrictive trade regime and generally interventionist policies continue to have a negative effect on the economy. Substantial structural reform is needed, particularly in these areas: improving the investment climate for foreign investors, strengthening the banking system, and freeing the agricultural sector from state control. Study will conceptualize the affects of the predictors, gender basis on managers performance on those companies mentioned in table 1. Selection criteria for selecting those companies are the status of the business and numbers of year from they are in business.

S/No:	Companies Names	Industry
1	Tashkent Aviation Production Association	Aerospace
2	Avialeasing	Delivery services
3	MAN Auto-Uzbekistan	Automobiles
4	Uzbekistan Airways	Air Line
5	<u>Uzbekneftegaz</u>	Oil and Gas

Table 1 list of companies working Tashkent 2020

# **III. Theories and Literature Basis**

A common empirical strategy in the literature is to estimate the correlation between the gender composition of boards and firms' financial performance (measured in both accounting and market value terms). Some studies in this vein find a strong positive relationship among Fortune 500 companies (McKinsey, 2007; Catalyst, 2007), among U.S. firms (Dezso and Ross, 2012; Khan and Vieito, 2013), or among public firms in a cross-country sample (Terjesen and others, 2015). On the other hand, studies focusing on other individual

countries do not find such association (Du Reitz and Henrekson, 2000, for Swedish firms and Lam and others, 2013, for Chinese firms). This article explains the Herzberg Two Factor Theory of Motivation in a practical way. After reading it, you understand the core of this effectiveness theory about motivating your employees. What is the Herzberg Two Factor Theory of Motivation? This theory, also called the Motivation-Hygiene Theory or the dual-factor theory, was penned by Frederick Herzberg in 1959. This American psychologist, who was very interested in people's motivation and job satisfaction, came up with the theory. He conducted his research by asking a group of people about their good and bad experiences at work. Main perspective of the study revolves around the predictors and impacts of these predictors as behavioral aspect impacting on the managers' performances on the basis of gender. Based on the long-term personal working experience with some of the organizations in Uzbekistan, the author has observed that majority of the managers use centralization in their management practices that leads to final decision made by managers only either female or male. Perhaps the culture of respect for seniors and obedience has affected the decision making style in organizations. This assumption can be sup-ported by Mujtaba and Kaifi (2008).

#### Literature and theories on Motivation:

Urichuck (2012) stated that motivated employee will increase the capability of the organization to achieve its mission, goals and objectives. It will also engage all to build a strong organizational culture. Also, motivated employees will feel as having a strategic partnership with the organization and their commitments and loyalty will increase from day to day (Anne, 2014). Also, Buttner and Moore (2017), based on their research about "Happy Employees Make Productive Employees" found that when employee attitudes improved by 5%, customer satisfaction jumped by 1.3%, and the revenue increased by 5%. So, motivated employees usually produce more than others and hence the customer satisfaction increases. On the other hand, Deci and Ryan (2016), definite that an organization whose employees have low motivation is completely vulnerable to both internal and external challenges because its employees are not going the extra mile to maintain the organization is about creating the environment where employees will be motivated and hence work with their full effort. So, organizations should motivate their employees to enhance competitive advantages and reach the firms vision and mission (Philip, Yu-Fang, Liang-Chih, 2007).

# Literature and theories on Employee Involvement/Engagement:

Johnson (2011) asserts that if applied correctly the engagement data can well act as a warning system for the organization, the study reports a negative correlation between the specific instances of work place deviations and levels of EE within the organization. Sweetman & Luthans 2010 defined from the psychological perspective, engagement is a state-like phenomenon which is portrayed as an affective-cognitive state-like condition. It is not a temporary state such as mood nor as relatively non-malleable as fixed characteristics such as personality traits.. It is deemed quite stable. Fernandez (2007) displays the dissimilarity between job satisfaction, the well-known construct in management, and engagement competing that employee satisfaction is not the same as employee engagement and since managers cannot depend on employee satisfaction to retain the best and the brightest; employee engagement becomes a critical concept. Towers Perrin (2007) investigated and reported that those organizations with more engaged employees subsequently increased their operating income by 19% and earnings per share (EPS) by 28% annually. Saks (2006) argues that organizational commitment additionally differs from engagement in this it refers to a person's perspective and attachment towards their organization, whilst it could be argued that engagement is not simply an attitude, it is the degree to that a personal is focused to their work and absorbed within the performance of their role. In addition, while OCB involves voluntary and informal behavior that can help co-workers and the organization, the focus of engagement is one's formal role performance rather than purely extra-role and voluntary behavior. The publication of the Conference Board of USA (2006) describes employee engagement as an intensified emotional association that an employee feels for his or her organization that influences him or her to utilize greater discretionary effort to his or her work. Mc. Bain (2006), According to him employee engagement is a modern concept, which defines employees' commitment, job satisfaction and involvement.

#### Literature and theories on Physical Exertion of Employees:

The present work environment comprises plenty of tasks involving a high degree of sedentary behavior, which develops and increases employees' health problems (Pronk, 2009). The leaders and managers of organizations are increasingly aware and concerned about the costs imposed by certain health conditions and subsequent reflection on performance (Diestel, Wegge and Schmidt, 2014 and Goetzel and Ozminkowski, 2008). Considering that there is a positive relationship between organizational performance (OP) and health care quality (Samadzadeh, 2013), the investment in employees' health is worth making. Enterprises engage in improving and strengthening their employees' health because it increases JS and their contribution to the

organization (Wu et al., 2017). Physical exercise programs constitute a means of enhancing the well-being of employees, as well as reducing the incidence of diseases associated with sedentary behavior (Anderson et al., 2009 and Sjøgaard et al., 2016). Offering such programs improves employee JS in the workplace (Der-Karabetian and Gebharbp, 1986; Diestel et al., 2014 and Dineen, Noe, Shaw, Duffy and Wiethoff, 2007) and increases employee performance, because JS plays an important role on the success of organizations (Samadzadeh, 2013). The main objective of this study is to test the moderating effect of physical exercise on: a) the relationship between JS and OP, and; b) the relationship between motivation and Organizational performance.

## Literature and theories on Behavioral Cognition of Employees:

Organizational cognition (OC) is an expression that has now been around for a few decades (e.g., Ilgen et al., 1994; Hodgkinson & Healey, 2008). The aim of this chapter is to explore the meanings ascribed to these two words. In so doing, it would then be possible to provide a framework to categories the existing theoretical approaches and compare them to the state-of-the-art in cognition research. Some of the inspiration for this chapter came from the first edition of this book (Cowley & ValléeTourangeau, 2013). As we see it, this second edition is a way to map progress on the previous publication and, at the same time, indicate viable directions for cognition research. We do believe there is scope to extend cognition research to social environments and organizations that clearly represent an essential part of when and where cognition occurs (Secchi & Neumann, 2016). Moreover, distributed and systemic views of cognition emphasize the interconnectedness of all parts of the cognitive process between internal, external, macro, meso, micro levels and why it is important to focus on social aspects (Hutchins, 1995, Vallée-Tourangeau & Cowley, 2013; Secchi & Cowley, 2016; Neumann & Cowley, 2016).

INPUT	PROCESS	OUTPUT
<ul> <li>Predictors of Managers' Performance:</li> <li>1. Motivational levels</li> <li>2. Employee involvement</li> <li>3. Physical Exertion</li> <li>4. Organizational Cognition</li> </ul>	Data Collection Questionnaire Use of SPSS Quantitative Analysis Documentary Analysis Interpretations of Results	Managers' Performance Model based on gender Aspects

Figure 1 Research Paradigm

# **Conceptual Framework**

Paper examines relationship of factors influencing the managers' performance in manufacturing industry of Tashkent: Those factors are level of motivation of employees that determines manager strategic planning for human resource, Employee involvement that determines the how much an employee is motivated by his manager in order to gain higher performance, Physical exertion means how much managers' themselves are involved in physical activities along with employees so that ultimately motivational needs of employee-managers relationship can be increased and behavioral cognition of managers that means for how long managers' have used the same strategies and when they adopted new ideas. All these are independent factors affecting the dependent factors like managers' performance as whole. All of this ultimately increases the organizational performance. Paper examines measurement of the managers' performance which is directly proportionate with the organizational performance, which is indicated in this conceptual framework.



Figure 2: Conceptual Framework

## **Research Hypotheses:**

 $H1_0$ . Motivation level doesn't affect the managers' performance based on gender differentiation in manufacturing industry of Uzbekistan?

H2<sub>0</sub>. Employee involvement doesn't affect the managers' performance based on gender differentiation in manufacturing industry of Uzbekistan?

H3<sub>0</sub>. Physical Exertion doesn't affect the managers' performance based on gender differentiation in manufacturing industry of Uzbekistan?

 $H4_0$ . Behavioral cognition doesn't affect the managers' performance based on gender differentiation in manufacturing industry of Uzbekistan?

## **Research Methodologies**

Study is based on quantitative data therefore a questionnaire is designed with and distributed amongst the participants of the study (Lower level managers, middle level managers and high level managers) for ratings. Further literature and studies are used as secondary data to determine the predictors and influence of predictors on independent variable. Econometric model is designed to understand the correlation between interdependent variables such as: Motivation level, Employee involvement, Physical exertion and behavioral cognition. Research design executes the stepwise determination of benefits. Statistical treatment is carried out in SPSS for analysis and interpretation. Descriptive statistics was used for enumerating the ratings in qualitative expression. Regression and correlations analysis was made for linear equation formation and correlation matrix. Hypotheses testing were made through t-test, p-test and kurtosis.

# **Data Collection & Sampling:**

Data is collected through questionnaire from sample size of 139participants from China. Sample size was acquired using Slovin's formula as the population was known. Lower level, middle level and higher level managers will be the population of the study. Out of 1200 respondents from the companies selected from stock exchange of Uzbekistan, 139 will be randomly selected. Online survey will be held for collecting Data from sampled population of participants due to covid-19 break through. Researcher administered 20 questionnaires to gather information from 20 participants to conduct a reliability test for pretest so that the questionnaire reliability and validation could be confirmed and data adequacy is assured. The survey was conducted via email (online).

S/No.		Categories	Numbers	Percentage
1	LLM		10	7.19%
2	MLM		30	21.58%
3	HLM		89	64.08%
	Total		139	100%
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Source: Survey Data @ 2020 Tashkent Manufacturing Market **Table 2** composition of Sample Likert scale ratings are mentioned in table 2 that provides qualitative expression of the rating of participants in descriptiveness. This section gives insights on questionnaire descriptive analysis. Slovin's formula was applied to sample the participant size from the population (known) size, producing 139 sampled participant of the study (see table 2). Participants were randomly selected once the sample size was established from manufacturing corporations of China. Participants were briefed about the study objectives and given orientation regarding questionnaire. 5 likert scale questionnaire from strongly disagree to strongly agree (from 5 to 1) were presented to participants.

S/No.	Scale	Categories
1	1 to 1.49	Strongly Disagree
2	1.50 to 2.49	Disagree
3	2.50 to 3.49	Neutral
4	3.50 to 4.49	Agree
5	4.49 to 5.0	Strongly Agree
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Table 3 Ratings of Participants

#### **Reliability analyses:**

Before collecting complete data from 384 participants', reliability test was conducted to authenticate the questionnaire. 20 recipients were selected from the sample and distributed the questionnaire for initial test, "Cronbach's Alpha" value for all 5 categories of the questionnaire surpassed .70 or 70% required percentage. Table 5 exhibits the values of Cronbach Alpha for Level of motivation, Employee involvement, Physical exertion and Behavioral cognition which implies that categorically all the values of reliability test surpassed required results, hence questionnaire proved reliable for further process.

S/No.	Variables	No.	Cronbach's Alpha	%
3	Level of motivation	20	.913	91.3%
4	Employee involvement	20	.904	90.4%
6	Physical exertion	20	.789	78.9%
8	Behavioral cognition	20	.904	90.4%
9	Overall	20	.872	87.2%
			TT.	

Table 3 Reliability Analysis Test

#### **Hypotheses Testing**

Null hypotheses were tested for *t*-values and *p*-values, in order to nullify the null hypotheses and accept study hypotheses. Independent sample test (2 tailed) applied for rejection of null hypotheses exhibited in table 6. Further Kurtosis test was applied for more confirmation of nullifying the null hypotheses in the study. Table 6 exhibits *t*-values and *p*-values of independent sample 2 tailed tests,  $t_c = 3.4081$ ,  $t_R = 2.39$ ,  $t_S = 2.67$  and  $t_E = 1.99$  all the values are greater than *t*-table values for degree of freedom @ 383. Values exhibited in table 4 imply that all null hypotheses of the study are rejected and study hypotheses are accepted. *P-values* exhibited in table 4 are less than .50 which implies model is significant different and fit for prediction.

S/No.	Factors	numbers	t-test statistic	P Value	t-table value
1	Level of motivation	6	3.4081	.012	> T table value
2	Employee involvement	7	2.3932	.000	> T table value
3	Physical exertion	7	2.6723	.013	> T table value
4	Behavioral cognition	5	1.9987	.023	> T table value

Table 4 Hypotheses Testing (Independent Sample Test)

Results of the independent sample test (2 tailed) establishes argument that model is fit and null hypotheses of the study are rejected, qualitative expression for this narration is that predictors of managerial performance on the basis of gender hypothesized in the study is correct and null hypotheses are rejected. Further table 7 exhibits the Kurtosis test values for hypotheses testing to ensure the results of *t*-value statistics and *p*-value statistics.

S/No.	Factors	Z value	Error	Z value/Error	Kurtosis Range
1	Level of motivation	2.567	.387	6.6330	Greater than +1.96
2	Employee involvement	1.897	.387	4.9018	Greater than +1.96
3	Physical exertion	12.786	.387	33.038	Greater than +1.96
4	Behavioral cognition	2.431	.387	6.2816	Greater than +1.96
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Table 5 Kurtosis (Normality Test) for Hypotheses Testing

#### **Descriptive Studies**

# **IV. Results And Interpretations**

Interpretation of mean ratings of the summary from the participant of the study (Lower to higher management) is covered in descriptive statistics section of the paper. Study used 5 likert scale ratings to record the ratings of the participant, sharing experienced based knowledge. Managerial performance and its evaluation is important for any organization, knowledge of the factors affecting the performance in overall. Problems come with opportunities and converting problems into opportunities is an art that can be influenced with Managers capacity and relationship with the employees. Organization tends to motivate the employees to achieve higher goals and regard the appraisals with the organizations. There are few predictors selected in this study that enumerate the importance of managerial performance in a firm. Descriptive study of the paper engages participants with ratings and concludes that most of the ratings are at strongly agree and suggest all the participants agree to the fact that these factors are important and significant for the managers' performance especially on the basis of gender like physical exertion is more associated with male managers whereas motivational level and involvement may be subject to female managers but overall these factors are significant.

#### Factors Executives Directors Managers Classification Mean Classification Mean Mean Classification Level of motivation 3.9 Α 3.2 А 3.1 А Employee involvement 4.4 S.A 4.1 S.A 3.7 Α 4.2 Physical exertion S.A 3.9 А 3.2 Α Behavioral cognition 3.3 Α 3.5 А 4.3 S.A

Table 6	comparison	of mean	ratings	and	classification

Table 6 exhibits value of mean ratings of managers, players and leaders (Participants) on Level of motivation, Employee involvement, Physical exertion and Behavioral cognition as the predictors influencing the managers' performance in manufacturing industry of Tashkent. Values of table 6 imply that all the participants are either agreed or strongly agreed with the statements of the questionnaire. In general level of motivation and employee involvement of employees is due to strong relationship of managers with employees that boost the performance. It was established that these predictos affect the attitude and behviors of employees and managers more over the cognition system of employees and managers that increases the performance.

#### **Regression Analysis**

The linear regression was developed to investigate how one or more independent variables influence a dependent variable (Hutchinson, 2011). More specifically, in a linear regression analysis, the result produces one intercept and one slope, based on the mean, which represents the best fit for variable X to predict variable Y. The regression line can be calculated by using the equation (Noon, 2003): This study uses Level of motivation, Employee involvement, Physical exertion and Behavioral cognition, as independent variable and managers' performance as dependent variables.

MODEL	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.999ª	.998	.998	.03304		
Table 7 Regression Model Summary						

Adjusted R square of the model is .998 that means .998 \* 100 = 99.8 %. It implies that one unit of change in predictors (Level of motivation, Employee involvement, Physical exertion and Behavioral cognition) will bring 99 % change in managers performances and organizational performances. It also implies that model is highly predictable to dependant variable. Predictor is constant with R-square 99 %. Corporation decision making capacity is effectively and efficiently increases to 99.8 %, affected by Level of motivation, Employee involvement, Physical exertion and Behavioral cognition.

	CHANGE STATISTICS					
MODEL	R Square change	F – Change	Df1	Df2	Sig. F Change	
1	.998	27779.207	2	137	.000	
Data source: survey data dated: October, 2020 <i>Table 8 Change statistics of model</i>						

Table 8 explains R-Change is the same in change statistics as was in the summary model table 8, with f (2, 137) = 27779.207, p = .000 model is significant and will bring change for sure as P < .05, it can be predict that model is significant and will bring changes in performances of managers in manufacturing industry of Tashkent

for sure with the changes in all the independent variables. It implies that % change in Level of motivation, Employee involvement; Physical exertion and Behavioral cognition will bring % change in managers' performance thus affecting performances.

	MODEL	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	60.644	2	30.322	27779.207	.012 <sup>b</sup>
1	Residual	.106	137	.001		
	Total	60.750	139			

Table 9 Analysis of variance for decision making of manufacturing industry

Table 9 implies the analysis of variance in model.  $\sum (Y_1-Y)^2 = 60.750$  for the mean difference square of predicted value of D.V and I.V and f (2, 137) =27779.207, *p*=.012, implies that model 1 of ANOVA is significantly fit to predict values and explain variation in factors. Qualitative expression for this variance implies that it can be predicted that Level of motivation, Employee involvement, Physical exertion and Behavioral cognition will affect the performances of managers and organizations.

MODEL		Unstand Coeffi	Unstandardized Coefficient		F	Sig
		в	Std. Error	Square	Ľ	Sig.
	(Constant)	.111	.044		2.536	.013
1	Level of motivation	1.362	.006	1.037	233.516	.000
1	Employee involvement	.403	.010	.172	38.731	.000
	Physical exertion	2.341	.013	.232	56.345	.012
	Behavioral cognition	1.123	.002	1.234	32.124	.000

Table 10 Regression analysis

@ p = .013, .000, .000, .012 and .000 all the values are less than .005 model is fit and significant to predict the effect of independent variable on dependent variable. With coefficients @ 1.362, .430, 2.341 and 1.123 values of Level of motivation, Employee involvement, Physical exertion and Behavioral cognition linear model of regression predicts the degree change in independent variable with coefficients will change the managers' performance subject to gender relevancy. Linear model exhibits the values that imply research hypotheses are true and factors impact the managers' performances.

$$PRF\_MGT = \alpha + \beta (L) + \beta (E) + \beta (P) + \beta (B) + e$$

Managers' performance function is linear in nature, with a constant change unit of .111 in managers' performance that changes with change in environment over the time. Change can be positive and negative subject to coefficient of Level of motivation, Employee involvement, Physical exertion and Behavioral cognition as predictors of managers' performance.

#### **Correlation Analysis**

Items	Description	С	R	S	Е
Factors of the study	Correlation Coefficient	1	.986**	1	.892**
	Sig. (2-tailed)		.000		.000
Managerial	Correlation Coefficient	.867**	1	.765**	1
Performance	Sig. (2-tailed)	.000		.000	
T-11-10 Demonstration of Management's Development					

 Table 10 Pearson Correlation of Managers' Performance

A correlation coefficient is a numerical measure of some type of correlation, meaning a statistical relationship between two variables. The variables may be two columns of a given data set of observations, often called a sample, or two components of a multivariate random variable with a known distribution. Linear function of predictors is directly related to managers' and organizational performance. Table 10 exhibits the Pearson correlation between predictors of managers' performance all the variables are positively correlated with each other. Table 10 implies that there is a positive correlation with strong bonding. Positive usage and change in predictors of the study will bring significant positive performance out from managers.

#### V. Conclusion:

Paper concludes that level of motivation, employee involvement; physical exertion and behavioral cognition are the predictors of the study. Paper investigated causal relationship of the predictors with the managers' performance in manufacturing industry of Tashkent. Study hypotheses are accepted and null

hypotheses of the study are rejected. T-test values, kurtosis and P-values are all significantly different to predict the model specifications. Descriptive statistics of the participants agree to the statements in the questionnaire explaining the qualitative expression of the participants to agreement of the study hypotheses. Regression function and correlation analysis provides insights on causal relationship and strong bonding of the predictors with managers' performance. Managerial performance in manufacturing industry on the basis of gender differentiation which itself is innovative and cognitive in Uzbekistan's societal and cultural norms. Being a male dominant society Uzbekistan's woman has lesser opportunities in managerial positions. Predictors are normally generalized on the basis of gender aspects of manager in the questionnaire highlighting both abilities of female managers' is related to the attitudinal relation with employees but still gender aspect in physical and mental expression are different for both.

#### **References:**

- Abbas, Q., & Yaqoob, S. (2009). Effect of leadership development on employee performance in Pakistan: Pakistan Economic and Social review, 47(2), 269-292.
- [2]. Ahmed, P. K., & Rafiq, M. (2003): Internal marketing issues and challenges. European Journal of Marketing, 37(9), 1177–1186.
- [3]. ALDamoe, F. M. (2015). Human resource management practices on organizational performance in Libya firm. Asian Social Science, 11(23), 51-58.
- [4]. Bu-Jarad, I. Y., Yusof, N., &Nikbin, D. (2010): A review paper on organizational culture and organizational performance: International Journal of Business and Social Science, 1(3), 26-46.
- [5]. Aguinis, H., &Kraiger, K. (2009): Benefits of training and development for individuals and teams, organizations, and society: Annual review of psychology, 60, 451-474.
- [6]. Kotrba, L. M., Gillespie, M. A., Schmidt, A. M., Smerek, R. E., Ritchie, S. A., & Denison, D. R. (2017). Do consistent corporate cultures have better business performance? Exploring the interaction effects: Human Relations, 65(2), 241-262
- [7]. Mostafa, A. M. S., & Gould-Williams, J. S. (2016): Testing the mediation effect of person-organization fit on the relationship between high performance HR practices and employee outcomes in the Egyptian public sector. The International Journal of Human Resource Management (ahead-of-print), 1-17
- [8]. Trotta, A, Cardamone, E, Cavallaro, G and Mauro, M (2016) "Applying the Balanced Scorecard approach in teaching hospitals: A literature review and conceptual framework", The International Journal of Health Planning and Management, Vol. 28, No. 2, pp. 181-201.
- [9]. Sayed, N (2013) "Ratify, reject or revise: Balanced Scorecard and universities", International Journal of Educational Management, Vol. 27, No. 3, pp. 203-220.
- [10]. Hobday, M. The project-based organization: An ideal form for managing complex products and systems? Res. Policy 2000, 29, 871–893. [CrossRef]
- [11]. Chandler, A.D. Organizational capabilities and the economic history of the industrial enterprise: J. Econ. Perspect. 1992, 6, 79–100. [CrossRef]
- [12]. Makadok, R. Toward a synthesis of the resource-based and dynamic-capability views of rent creation. Strateg.Manag. J. 2001, 22, 387–401. [CrossRef]
- [13]. Davies, A.; Brady, T. Organizational capabilities and learning in complex product systems: Towards repeatable solutions. Res. Policy 2000, 29, 931–953. [CrossRef]
- [14]. Jugdev, K.; Mathur, G.; Fung, T.S. Project management assets and their relationship with the project management capability of the firm: Int. J. Proj. Managers 2007, 25, 560–568. [CrossRef]
- [15]. Petit, Y. Project portfolios in dynamic environments: Organizing for uncertainty. Int. J. Proj. Managers 2012, 30,539–553: [CrossRef]
- [16]. Seotlela, R P J and Miruka, O (2014) "Implementation challenges of performance management system in the South African mining industry", Mediterranean Journal of Social Sciences, Vol. 5, No. 7, pp. 177-187.
- [17]. Shanks, G, Parr, A, Hu, B, Corbitt, T and Seddon, P (2018) Differences in Critical Success Factors in ERP Systems Implementation in Australia and China: A Cultural Analysis, Proceedings of the European Conference on Information Systems, Wienns, Austria, pp 32-42.
- [18]. Shatat, A (2015) "Critical success factors in Entreprise Resource Planning (ERP) system implementation: An explanatory study in Oman" The Electronic Journal of Information Systems Evaluation, Vol. 18, No 1, pp. 36-45.

Dilafruz Pulatova, et. al. "Factors Affecting Uzbekistan's Managerial Performance In Manufacturing Industry: Model Based On Gender Aspects." *IOSR Journal of Business and Management (IOSR-JBM)*, 22(11), 2020, pp. 43-51.

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