

EVALUATION OF PERSONALITY CHARACTERISTICS ON EMPLOYEE PERFORMANCE: A STUDY IN PHARMACEUTICAL KNOWLEDGE PROCESS OUTSOURCING COMPANIES

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ABSTRACT

Aim

The paper examines the relationship between Personality Characteristics and Employee Performance. It also captures the perception of the employees for the effectiveness of considering personality types while recruiting an employee and during evaluation of employee performance.

Methodology

The study included 120 employees working at various levels of the three Knowledge Process Outsourcing Companies (KPO's- Evaluate, Evalueserve, Smart Analyst). Personality Characteristics was measured with the help of Five-Factor model and Job performance was assessed in the Task and Citizenship Performance with a structured questionnaire. Simple random sampling was used.

Findings

The study findings suggest a significant positive association between Personality Characteristics and Job performance. The Extraversion and Conscientiousness dimensions of personality were observed to have considerable influence on employee performance.

Implications

The findings of the present study would provide valuable insight for management to adopt various and effective practices to consider the management of employees having different personality characteristics in their workplace.

Originality/Value

The study tests the relationship between Personality Characteristics and Job performance in the market research industry. A significant positive relationship between some Personality Characteristics and Job performance has been established. To the best of the researchers' knowledge, this study is the first of its kind undertaken for this industry.

Limitations

The study was limited to KPO's in Gurugram only which may limit the generalizability of the results to the other

industries and geographical locations. The self-reported measures of the constructs were used which can lead to the natural or single-source bias that influences the results.

KEYWORDS: *Employee Performance, Personality Characteristics, Extraversion, Conscientiousness, Market Research, KPO*

INTRODUCTION:

Personality is a reflection of the behavior of an individual. It refers to individual differences in the pattern of thinking, feeling and behaving. If an individual is aware of other's personality, then they can better deal on both personal and professional fronts. Personality is considered the base for explaining human behavior. Inferences are drawn from personality measures that have been created by different forms of standardized testing techniques derived from an empirical and theoretical research background. Thus, personality can be defined as a synergistic combination of human characteristics and variables. Personality is a concept used to explain consistency and similarity in individuals. It is a pattern of activities, desires, and behaviors. What one feels, thinks, wants and actually does changes from situation to situation but a pattern emerges over time that may be used to describe and understand a person.

The aim of the personality research is to identify the consistencies and also the differences within and between individuals (what one feels, thinks, wants and actually does) and eventually to try to explain them. These traits are considered to be stable and steady throughout the work life of a person in a personality behavior model (**Denissen et al., 2011; Gerber et al., 2011**). Therefore, personality comprises of human characteristics that do not very quickly and can be used to predict one's short-term behavior.

The study of personality focuses on two broad areas: One focuses on understanding individual differences in Personality Characteristics. The other study understands how the various parts of a person come together as a whole. The blend of personality traits is also important in predicting success in various areas.

Personality is defined as a pattern of traits or characteristics that can influence behavior across time and situations (**Graziano & Eisenberg, 1997; Reimann & Zimbardo, 2011**). Personality is derived from the Latin term "Persona" which means (a) a mask worn by theater actors to represent their role and personality; (b) the authentic self, which includes one's intrinsic motivations, emotions, habits, and ideas (**Chan, 1996**).

In the literature, there are some personality theories which have been considered as the key theories; 1. Psychoanalytic theories; 2. Humanistic theories; 3. Biological theories; 4. Behavioural, Social learning, and Cognitive theories; 5. Trait theories.

Among all the above, trait theory is one of the most accepted and leading personality theory which captures the behavior related salient aspects of the psychology of an individual. For example, neuroticism includes behaviors associated with guilt, low self-esteem, depression, and anxiety etc. That makes it a unique trait. The key difference between types and traits is that where the type domain puts people into specific categories while as the trait domain considers each characteristic as a continuous scale that describes personality in terms of where the person is placed on the continuum. On this basis, an individual may be near the center on an intelligence scale, towards the low end of an anxiety measuring the scale and towards the high end of a dominance measuring the scale and similar for other traits that help gain an overall picture.

Performance can be defined as the specific results a person achieves as the efforts get converted into productivities. Job performance of the employees is considered one of the primary constructs that play a significant role in achieving organizational performance. It is considered as the most significant dependent variable in the organizational context and the most important concept in an industrial – organizational (I-O) psychology. Performance as a construct has often been confused with activities such as productivity and output over which employees do not have much control.

It is rather better to understand performance as the behavior that can be observed in employees while doing their jobs and are relevant to the goals of the organization (**Campbell, 1990**). He used eight-factor model to capture behaviour across all for exploring the dimensions of performance: Task specific behaviors/ proficiency, Non-task specific behavior/proficiency, Written and oral communication, Effort, Personal discipline, helping out the groups and colleagues, Supervision or leadership, and Managerial or administrative performance. It is essential to understand the factors that influence the job performance of employees in an organization as it is a crucial construct.

Contextual performance (extra-role) includes organizational activities that are voluntary i.e. they are not part of the job, and do not contribute directly to the technical processes in the organization. Contextual performance includes activities that do not formally part of the job, but can be considered as important for all jobs such as helping others, cooperating with team members and volunteers,. The positive contribution of task behaviors can be attributed to the reason that it helps the conversion of raw material into the final product and directly serve the organization core technical process and help improve the capability of production (**Motowildo et al., 1997**).

There is an overall consensus among researchers that both task performance and contextual performance are important to employees and the organization.

REVIEW OF LITERATURE

Personality Characteristics:

Super (1982) proposed A/B personalities. Type A personality is characterized by a high level of ambition and a strong will to attain the expected goal. Type B personality is just opposite to Type A personality. Type AB personality is a mix of Type A and Type B personalities. In other words, people with Type B personality may also have some traits of Type A personality.

Moulton (1999) proposed four types of personality, including “dominance”, “inducement”, “submission”, and “compliance”, or commonly known as DISC. D-type people are aggressive, demanding, adventurous, and active. They usually play the roles of reorganizers, project leaders, idea makers, and pioneers. I-type people are talkative, social, and good at communications. They love to be actors, optimists, idea makers, and advocates. S-type people are focused, prudent, stable, sure-footed, and organized. They usually play the roles of a stabilizer or a balancing power in an organization. C-type people are accurate, clear-minded, and seekers of perfection. They usually play the role of an internal controller. They are rule followers and critical of others’ performance.

Qasemi et al. (2015) examined the link between personalities of employees (Neuroticism, Extroversion, Agreeableness, Conscientiousness, Openness to experience) and their Professional ethics (responsibility, Competitiveness, honesty, respect to others, respect to values, justice, Sympathy to others, Loyalty) in Medical Sciences University of Bushehr. Findings show that there is a positive relationship between personality traits and Professional ethics.

Job Performance

According to **Porter and Lawler (1968)**, there are three types of performance. One is the measure of output rates, amount of sales over a given period of time, the production of a group of employees reporting to the manager, and so on. The second type of measure of performance involves ratings of individuals by someone other than the person whose performance is being considered. The third type of performance measures is self-appraisal and self-ratings. As a result, the adoption of self-appraisal and self-rating techniques are useful in encouraging employees to take an active role in setting his or her own goals.

Borman and Motowidlo (1993) identified two types of employee behavior that is necessary for organizational effectiveness: task performance and contextual performance. Task performance refers to behaviors that are directly involved in producing goods or service or activities that provide indirect support for the organization's core technical processes (**Borman and Motowidlo, 1997; Werner, 2000**). These behaviors directly related to the formal organization reward system. On the other hand, contextual performance is defined as individual efforts that are not directly related to their main task functions. However, these behaviors are important because they shape the organizational, social, and psychological contexts serving as the critical catalyst for task activities and processes (Werner, 2000).

Johnson & Meade (2010) used Multi-level modeling to understand how supervisor assigns overall job performance ratings. Results indicated a uniform relationship between task and overall performance ratings across supervisors but significant variability in the relationship between contextual and overall performance ratings. Employee and supervisor attributes were examined to explain this variability.

Personality Characteristics and Job Performance

Barrick and Mount (1991) conducted a study to investigate the relationship of five personality dimensions (extroversion, emotional stability, agreeableness, Conscientiousness and openness to experience) with three Job Performance criteria (job proficiency, training proficiency and personal data) for five occupational groups i.e. professionals, police, managers, sales and skilled/semi-skilled. The result indicated that the conscientiousness was found related for all Job Performance criteria among all the occupational groups. The extroversion was found a strong predictor for the occupation that involves social interaction (managers and sales). The factor of openness to experience and extroversion were also found as the strong predictor of training proficiency criteria across occupation.

Rothmann & Coetzer (2003) analyzed the relationship between personality dimensions and Job Performance. A cross-sectional survey design was used. The study population consisted of 159 employees of a pharmaceutical company. The NEO-Personality Inventory-Revised and Performance Appraisal Questionnaire was used as measuring instruments. The results showed that Emotional Stability, Extraversion, Openness to Experience and Conscientiousness were related to task performance and creativity. Three personality dimensions, namely Emotional Stability, Openness to Experience and Agreeableness, explained 28% of the variance in participants' management performance.

Halim & Zainal (2015) examined the direct role of personality traits as predictors of job performance and the indirect influence of achievement motivation as a mediating variable. Personality measurement tools were adapted from Cattell and achievement motivation from Cassidy and Lynn. Job performance indicator was obtained from annual job performance evaluations. All three personality traits were integrated into a model that predicts job performance and

achievement motivation. The model was tested using structural equation modeling (SEM) with a sample of 450 public administrator officers. Results of the model show that it has a goodness of fit and explains, achievement motivation is found fully mediate for the relationship between conscientiousness and agreeableness toward job performance. However, emotional stability directly influences job performance. All the predictors are found to contribute to 24% of the variance in job performance. The implication of the finding shows that emotional stability and achievement motivation can be the essential predictor in predicting job performance of future candidates followed by agreeableness and conscientiousness.

Out of all Personality Characteristics, Conscientiousness strongly correlates with overall job performance across occupations (Barrick et al., 2001; Hertz & Donovan, 2000; Ones & Viswesvaran, 2000; Salgado, 1997). Dunn, Mount, Barrick and Ones (1995) opined that emotional stability has been the second most important characteristic besides Conscientiousness that effect the employability of candidates. No significant relationship found between Openness and overall job performance (Barrick et al. ,2001). Past research has found no correlation between Agreeableness and overall job performance (Barrick and Mount (1991).

OBJECTIVES OF THE STUDY

- To study the personality characteristics of the employees included in the study.
- To explore the relationship between Personality Characteristics and Job Performance.
- To examine the impact of personality on the job performance of the employees.
- To analyze the difference across levels of job performance in the organization.

METHOD

This study is descriptive in nature. An attempt to determine the relationship between personality with the level of performance in the organizations will be done. 30 employees were selected to carry out the pilot study. The instrument was validated using these respondents' data. This helped in the rewording of questions based on the feedback received. Simple random sampling was used to select the employees from middle managerial level and lower managerial levels. The method used for collecting primary data is interview and questionnaire method. The secondary data collected for this study includes textbook reviews, journal reviews, internet reviews and dissertation reviews.

A sample of 120 respondents working at various levels of the three market research organizations (KPO's) - Evaluate, Evalueserve, Smart Analyst participated in the study. A structured questionnaire was used to measure all personality characteristics and job performance of employees.

Research Instruments

The data required for conducting this study will be collected using self-administered questionnaires. The questionnaire is divided into three parts.

Part I of the questionnaire relates to demographic variables of employees such as designation/level, age, gender and years of experience in the organization.

Part II is the 87 Likert scale items to assess personality characteristics and sub dimensions also.

Part III comprises of a 16 Likert scale item for measuring Employee Performance in terms of task and behavior aspects of the job. The ratings indicated the extent that each of the behaviors was a characteristic of the employee's behavior.

Statement 1-Statement 19- Extraversion

Statement 20-Statement 36- Neuroticism

Statement 37-Statement 56- Openness to Experience

Statement 57-Statement 70 – Agreeableness

Statement 71-Statement 87- Conscientiousness

Statement 1- Statement 8- Task Performance

Statement 9- Statement 16- Contextual Performance

DATA ANALYSIS

Various statistical analyses like descriptive analysis, correlation, and linear regression analysis were performed to arrive at the results. Statistical Package for Social Sciences (SPSS Version 20) was used to analyze the data.

The data was converted into standardized scores to make it normally distributed and then applied the tests such as t-test, ANOVA which have the basic assumption that data should be normally distributed.

The overall profile of the respondents was examined. Descriptive statistics such as means, standard deviations and reliabilities (Cronbach's alphas) for all the variables used in the study were used to describe the demographic profile.

Profile of Respondents

There were more female respondents than male respondents in this sample. There were 44 males (36.7%) as compared to 76 females (63.3%). Half of the respondents were married (50 %). Also in the sample, a large proportion of the respondents report that they have obtained a post-graduate degree (76.7%), while the remaining completed doctorate (13.3%) and graduation (10%). The sample consisted of a diverse mixture of respondents in terms of years of service with the organization with 36.7% & 30% (two highest frequency groups) having 5-10 years of service and 1-3 years of service respectively.

DEMOGRAPHICS

Table 1

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	44	36.7	36.7	36.7
	Female	76	63.3	63.3	100.0
	Total	120	100.0	100.0	

Department

		Frequency	Percent	Valid Percent	Cumulative Percent
	Finance	8	6.7	6.7	6.7
	marketing/sales	20	16.7	16.7	23.3
	HR	12	10.0	10.0	33.3
	Research and analytics	28	23.3	23.3	56.7
	any other	52	43.3	43.3	100.0
	Total	120	100.0	100.0	

Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
	Married	60	50.0	50.0	50.0
	Unmarried	60	50.0	50.0	100.0
	Total	120	100.0	100.0	

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
	Graduate	12	10.0	10.0	10.0
	Postgraduate	92	76.7	76.7	86.7
	Doctorate	16	13.3	13.3	100.0
	Total	120	100.0	100.0	

Service Years

		Frequency	Percent	Valid Percent	Cumulative Percent
	<1 year	24	20.0	20.0	20.0
	1-3	36	30.0	30.0	50.0
	3-5	12	10.0	10.0	60.0
	5-10	44	36.7	36.7	96.7
	>10 years	4	3.3	3.3	100.0
	Total	120	100.0	100.0	

RELIABILITY STATISTICS

Table 2

Extroversion

Cronbach's Alpha	N of Items
.852	19

Neuroticism

Cronbach's Alpha	N of Items
.804	17

Openness to Experience

Cronbach's Alpha	N of Items
.571	20

Agreeableness

Cronbach's Alpha	N of Items
.735	14

Conscientiousness

Cronbach's Alpha	N of Items
.752	17

Task Performance-Job Performance

Cronbach's Alpha	N of Items
.856	8

Contextual Performance -Job Performance

Cronbach's Alpha	N of Items
.821	8

According to Nunnally (1978), an alpha coefficient of 0.7 or higher is necessary for an research or survey to be considered reliable, this questionnaire can be therefore be regarded as reliable. Inter-item correlation matrix also did not display any significant correlation between the items.

Objective1- to Explore the Relationship between Personality Characteristics and Job Performance

H1: Personality Characteristics will have a significant impact on Job Performance.

H1a: Extroversion will have a positive impact on Job Performance.

H1b: Openness to experience will have a positive impact on Job Performance.

H1c: Conscientiousness will have a positive impact on Job Performance.

H1d: Agreeableness will have a positive impact on Job Performance.

H1e: Neuroticism will have a negative impact on Job Performance.

H₀1: No significant relationship exists between Personality Characteristics and Job Performance.

Table 3

	Total_Contextual/Citizenship Performance	Total_Job Performance	Total_Taskperformance
Total-Extraversion	.671**	.569**	.327*
	.000	.001	.039
Total_Neuroticism	-.227	-.184	-.092
	.113	.165	.314
Total_Openness To Experience	.088	.100	.098
	.322	.299	.304
Total_Agreeableness	.244	.364*	.452**
	.096	.024	.006
Total_Conscientiousness	.677**	.777**	.761**
	.000	.000	.000

Extraversion and Conscientiousness dimensions of personality were observed to be highly correlated to job performance i.e. task and citizenship and also overall job performance of an individual.

Table 4

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.843 ^a	.711	.650	4.580	2.074
a. Predictors: (Constant), TOTAL_CONSCIENTIOUSNESS, TOTAL_OPENNESS TO EXPERIENCE, TOTAL_NEUROTICISM, TOTAL_AGREEABLENESS, TOTAL-EXTRAVERSION					
b. Dependent Variable: TOTAL_JOB PERFORMANCE					

As can be seen from the table above, Predictor (Personality characteristics) explain almost 65% of the variation in the Criterion (Job performance). There must be other variables that have an influence also. One of the assumptions of regression is that the observations are independent. There is no autocorrelation (where subsequent observations are related), the Durbin-Watson statistic should be between 1.5 and 2.5. The Durbin-Watson statistic in the above model is 2.07 and therefore the data is not autocorrelated. In short, the regression model overall predicts Job performance significantly well.

Table 5

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1236.401	5	247.280	11.788	.000 ^b
	Residual	503.466	114	20.978		
	Total	1739.867	119			
a. Dependent Variable: TOTAL_JOB PERFORMANCE						
b. Predictors: (Constant), TOTAL_CONSCIENTIOUSNESS, TOTAL_OPENNESS TO EXPERIENCE, TOTAL_NEUROTICISM, TOTAL_AGREEABLENESS, TOTAL-EXTRAVERSION						
The p-value<.05 signifies that null hypothesis is rejected and it indicates that personality characteristics have a significant impact on job performance.						

Table 6

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-11.091	15.379		-.721	.478
	TOTAL-EXTRAVERSION	.257	.120	.296	2.135	.043
	TOTAL_NEUROTICISM	.154	.116	.163	1.332	.195
	TOTAL_OPENNESS TO EXPERIENCE	-.194	.149	-.156	-1.302	.205
	TOTAL_AGREEABLENESS	.306	.156	.233	1.957	.062
	TOTAL_CONSCIENTIOUSNESS	.744	.157	.647	4.724	.000
a. Dependent Variable: TOTAL_JOB PERFORMANCE						

Among the five personality characteristics, Extroversion, and Conscientiousness came out to have a significant impact on the job performance of an individual. Therefore, H1a and H1c stand accepted and H1b, H1d, and H1e stands rejected. Therefore, the final model in this case is:

$$\text{TOTAL_JOB PERFORMANCE} = -11.091 + .257 \text{ TOTAL-EXTRAVERSION} + .744 \text{ CONSCIENTIOUSNESS}$$

Objective 2-To study the effect of gender, marital status, education, department and work experience in Job performance.

H2: There will be a significant difference in Job performance among males and females.

H02: There will be no significant difference in Job performance among males and females

Table 7

		Levene's Test for Equality of Variances		T-Test for Equality of Means		
		F	Sig.	t	Df	Sig. (2-tailed)
TOTAL_JOB PERFORMANCE	Equal variances assumed	6.286	.018	-1.989	118	.057
	Equal variances not assumed			-1.748	53.357	.102

Independent samples t-test was performed for examining the difference between male and female employees for assessing job performance.

The Levene's Test for Equality of Variances runs an F test to determine the homogeneity of variance. The significance value of .018 tells that the difference is significant ($p < 0.05$), therefore equal variances are not assumed.

It can be concluded that significant difference exists between Job performances displayed by both genders the male and females. An alternate hypothesis is accepted at $t(118) = .018$, $p < 0.05$.

H3: There will be a significant difference in Job Performance among married and unmarried employees.

H03: There will be no significant difference in Job Performance among married and unmarried employees.

Table 8

		Levene's Test for Equality of Variances		T-Test for Equality of Means		
		F	Sig.	T	Df	Sig. (2-Tailed)
Total_Job Performance	Equal variances assumed	6.921	.014	.990	118	.331
	Equal variances not assumed			.990	59.367	.335

Independent samples t-test was performed for examining the difference between married and unmarried employees for assessing job performance.

The Levene's Test For Equality Of Variances runs an F test to determine the homogeneity of variance. The significance value of .014 tells that the difference is significant ($p < 0.05$), therefore equal variances are not assumed.

It can be concluded that significant difference exists between the married and unmarried employees with respect to Job performance. An alternate hypothesis is accepted $t(118) = .014$, $p < 0.05$.

H4: There will be a significant difference in Job performance among employees across different education levels.

H04: There will be no significant difference in Job performance among employees across different education levels.

Table 9

ANOVA					
Total Job Performance					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	151.287	2	75.643	1.286	.293
Within Groups	1588.580	117	58.836		
Total	1739.867	119			

One way Anova was performed to find differences if any, exists among the employees having different education levels. H_0 is accepted and it is concluded that no mean is significantly different from one another mean $F(2,117)=.293$, $p>0.05$. Since the differences were not significant, post-hoc test was not required to be performed.

H5: There will be a significant difference in Job performance among employees across different departments.

H05: There will be no significant difference in Job performance among employees across different departments.

Table 10

ANOVA					
Total Job Performance					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	181.451	4	45.363	.728	.581
Within Groups	1558.416	115	62.337		
Total	1739.867	119			

One way Anova was performed to find differences if any, exists among the employees of having different departments.. H_0 is accepted and it is concluded that no mean is significantly different from one another mean $F(4,115)=.581$, $p>0.05$. Since the differences were not significant, the post-hoc test was not required to be performed.

H6: There will be a significant difference in Job Performance among employees across different work experience groups.

H06: There will no significant difference in Job Performance among employees across different work experience groups.

Table 11

ANOVA					
Total Job Performance					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	396.878	4	99.219	1.847	.151
Within Groups	1342.989	115	53.720		
Total	1739.867	119			

One way Anova was performed to find differences if any, exists among the employees of having different work experience. H_0 is accepted and it is concluded that no mean is significantly different from one another mean $F(4,115)=.151$, $p>0.05$. Since the differences were not significant, the post-hoc test was not required to be performed.

CONCLUSIONS

This study emphasizes the importance of personality traits in job performance and also identifies various factors that have a significant effect on it. It also shows that there is a strong significant relationship between some of the personality traits of the employees (Extroversion and Conscientiousness) with job performance. It was observed that the job performance varied among the gender and also on the basis of the marital status of employees of observed departments in the organizations under study. The results of the regression analysis indicate that the independent variable identified to influence behavior does have a significant impact on the performance of the employees. The future scope of the study is quite wide from different perspectives. This study can be conducted at more levels of the organization, and increased sample to strengthen the model. In-depth analysis of the specific factors identified may be carried out which can give rise to individual effect of each factor on performance levels.

The major limitation of this study is that the study was limited to Knowledge Process Outsourcing Industry only and to a selected geographical area i.e. in Gurugram, which may limit the generalizability of the results to the other industries. A more diverse sample drawn from more companies or from the broader geographical regions would have facilitated a better understanding and generalizations of the findings.

IMPLICATIONS OF THE STUDY

The present study would possibly help managers and HR practitioners to pay attention to the personality traits that will help during recruitment and selection of employees. It also helps to identify motives that generate positive attitudes among organizational members by effective job performance. This study may also contribute to further research ideas in the field of personality and performance. Overall, the findings of the present study would provide valuable insight for management to adopt various and effective tools in their workplace.

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