An Empirical Study on the Role of Psychological Evaluations in Recruitment

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ABSTRACT

In the vast growing world recruitment process has become more complex in nature, as the organizations of today's world not only require the candidates who are skilled but they need the candidates who possess the emotional quotient as well as the spiritual quotient in them. Using psychological evaluations in recruitment can help the recruiters to find the right fit for the intended job profile. There are several sensitive job profiles in which psychological evaluations are used, but a very few of them are incorporated according to the job profile. This study was conducted on 103 respondents where convenience sampling and the snowball sampling methods were used and according to the job designations, the characteristics using the big five model were evaluated. The results of the study collaborated with the initial motive behind the study, where most of the job designations matched with the personality they had. The findings suggested the highest level of characteristic in the respondents as the consciousness, where the respondents were careful before making any decision. The future aspect of the study could include the time bounded questionnaire filling and the group could be controlled because the extraneous variables play an important role in the questionnaire filling.

INTRODUCTION

We all are aware of the terms such as skills, qualifications; age group etc., while going for the requirements, but the term psychological evaluation has been seldom used when recruitment is mentioned. The answer to the question why psychological evaluations should be conducted lies in the fact that one must be of sound mind while working in any organization.

Psychological evaluations help the employer to tap into the skills and qualities of the individual, which goes beyond the resume.

Psychological evaluations come in the play while interviewing the said candidates. Every organization is bound by its organizational goals which are the reason of its being. It is necessary to hire the employees who can aid in meeting the goals of the organization while improving their professional as well as personal lives. These evaluations help in ensuring that the employees that are being hired, are fit for the job. The research poses the answer to the problem of effective recruitment in the organizations, where hiring the right person with the right qualities is as important as hiring the person who is both emotionally stable as well as mentally stable. The significance of the study relates to the future implications of accessing the behavioural and the emotional quotient of the employees and how they fit into the organizational culture. The research here is limited to the uncontrolled group of respondents where the factors of time, age and experiences are not taken into consideration, the research can be further extended to the time constraint research.

REVIEW OF LITERATURE

The study by Schmitt, N. (2014), focuses on the predictors such as personality and cognitive ability of employees and their relation to effective work performance. This study also came to an analysis that the big five constructs when used in combination of personalities, produce more magnitude of validity when compared to the individual constructs. While the big five constructs are widely accepted, some also argue that these big five constructs are too broad to represent a person's personality. The personality traits alone cannot be considered as the basis for work performance, the nature of the job also plays a vital role in deciding the output of the work performance.

The study by Barrick, M. R., & Mount, M. K. (1991), McDougal (1932) described personality in five distinguishable factors namely, character, intellect, temperament, temper and disposition. Considering the job roles where frequent interaction with customers or individuals are required, we often prefer two personality dimensions, agreeableness and extra-version, these can be considered as valid predictors in performance criteria for job roles such as marketing and sales, but for occupations such as unskilled worker or engineers these predictors may not be considered while evaluating their performance criteria. In conclusion five factor analyses has a very promising scope in performance of work especially in sub fields like performance appraisal, selection of the personnel and development and training of the employees.

According to Cabrera, M. A. M., & Nguyen, N. T. (2001) there are two ways situation judgement tests can be classified and divided into item responses and item stem. The situation to the respondent is considered to be the item stem where the item responses are the list of possible responses which the respondent is presented with for the purpose of evaluation. Various tests are conducted and the respondents are asked to find the best solution to the situation. These tests can evaluate best candidates with the good interpersonal skills and this would help the employer to find the best suited employee for the job.

The study by Tett, R. P., Jackson, D. N., & Rothstein, M. (1991), talks about the effectiveness of the personality tests as predictors of job performance. They mention that the candidates can perform well for the particular job role when selected according to the personality traits. These tests enhance the recruitment procedure of the selection of the candidates.

The research paper of Janetius, S. T., Varma, P., & Shilpa, S. (2019), covers the concept of psychological evaluations limitations as the tests used for evaluating the psychological traits or state of the candidate's mind can be easily manipulated. It is quite difficult to know about the inner intentions of the candidates from the interview alone. Even though there is a great care taken in creating these tests social desirability tends to affect these tests and allows the candidates to manipulate it.

The paper by Balcioğlu, Y. S., & Artar, M. (2024), covers the role artificial intelligence plays in the recruitment process, it has incorporated an analytical hierarchy process (ahp), which serves as an decision making tool for the recruitment process. It also covers some important points that organization need to note before applying the artificial intelligence process in the recruitment.

According to Cascio, W. F., & Aguinis, H. (2024), in the book applied psychology in the talent management, there are several instances where the author has mentioned the part of optimizing the staffing in the organizations, the book also mentions about the perceptions of the recruitment staff when using social media as a reference for employment decisions.

RATIONALE OF THE STUDY

Specific job titles/roles require specific personality, behavioural traits, level of functioning and level of spiritual quotient. There is certain personality traits best suited for the job. The factor of time also possesses a question on the effectiveness of the personality test. The psychological evaluations not only help in evaluating the best person for the job, but also help in bridging the gap

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between the necessary skills required for the job and the skills the employee possess. There are several instances where the employees are unable to perform even after repeated training and development, in such cases these evaluations help in accessing the reason. Also, as this study is conducted throughout various job roles, there is also a probability of the job role's influence on the psychological tests.

OBJECTIVES OF THE STUDY

The objective behind the study is to develop an analysis between the psychological evaluations and the recruitment process.

HYPOTHESIS DEVELOPMENT

A hypothesis was formed where H_0 = there is no relationship between job roles and psychological traits. H_a = there is relationship between job roles and psychological traits.

METHODOLOGY

a. Research Design

There are various types of methodology where the study could be a combination of one or more methods. The methods used in this study are:

i. Quantitative methodology

This study comprises of measuring of the facts which are objective in nature. In this type of research reliability is the most important factor, where the data collected from the respondents shouldn't be biased and wrong. Deductive reasoning and analysis are required to study this methodology.

ii. Descriptive methodology

This study also comprises of descriptive methodology where the personality characteristics of the respondents' data will be assessed using psychological evaluations.

b. Variables to be used

There are five types of variables which include independent variables, dependent variables, controlled variables, extraneous variables, and confounding variables.

The variables used in this study

i. Dependent variables

Recruitment is dependent variable, where the psychological evaluations will have the impact on recruitment of employees.

ii. Independent variables

Psychological evaluations are the independent variable in the study where the personality traits will allow the employee to get hired for the particular job role.

iii. Confounding variables

Job experience of the respondents is the confounding variable, because the more experience the employer and employee have the more his/her personality changes.

iv. Extraneous variable

Age of the respondents can come under the extraneous variable, because age, experience, job role, and time to attempt these tests, doesn't have a direct impact on the recruitment and psychology of the respondents, but over the time experiences may impose an indirect impact on these variables.

c. Sample design

The sample design used in the study is as follows:

1. Non-Probability Sampling

i. Convenience

This sample is taken from the population which is convenient for the researcher. This sampling has been used in this study where the survey was conducted in a controlled group which was known to the researcher.

ii. Snowball sampling

This method involves a population survey taken from acquaintances and their acquaintances. The questionnaire was further circulated to the researcher's acquaintances and their acquaintances.

d. Tools for data collection

i. Primary data

Primary data is collected from the Google forms circulated among the sample groups and the questionnaires are multiple-choice in nature. Hundred and three responses were collected for this research.

ii. Secondary data

Secondary data is collected from the websites such as Google scholar, research gate.in. Additionally previous research articles have been studied to gain a perspective for the study. Moreover, various authors of the books such as Robbins, Ronald Jay Cohen were referred.

e. Tools for data analysis

A hypothesis was formed and chi square test was applied on the data from the respondents and using Microsoft excel a result was generated and conclusions were drawn from it.

f. Analysis and interpretation of the result (Chi- square analysis)

A sample questionnaire was created by using the reference of the Big five model, where the individual's personality could be assessed using the answers provided by them. A total of one hundred and three individuals filled the form and the results were interpreted using percentage analysis. If the person selects number on the linear scale of five points, then the person possesses that personality trait according to the question. A hypothesis was formed where H0= there is no relationship between job roles and psychological traits. Ha= there is relationship between job roles and psychological traits.

The observed table of the big five personality traits

Job	Conscien	Agreeable	Neurotici	Extraversio	Openness	Total
role/Person	tiousness	ness	sm	n	to	
ality trait					experience	
Unemploye	204	95	36	58	29	422
d						
Manager	138	72	25	30	24	289
HR	94	38	25	21	12	190
Marketing	42	23	3	8	6	82
Retired	7	6	1	1	0	15
Teacher	37	21	3	14	6	81
Freelancer	36	26	9	18	11	100
Consultant	33	19	7	8	3	70
Director	7	3	1	1	1	13
Technical	55	25	13	13	5	111
Total	653	328	123	172	97	2746

This is generated using the questionnaire, where the answers by the respondents were formulated in the table. In the linear scale of 5, the answers were broken down to three factors, 1-2, 3, 4-5, and accordingly trait was assigned, in the true-false questions, to factors decided the personality trait, i.e. true and false.

Next the expected values tables was calculated using the formula.

E= (Row total * Column total) / Grand total

The level of significance is taken as 0.05 by the Microsoft excel software.

Job	Conscientiou	Agreeableness	Neuroticism	Extraversio	Openness to
Role/personalit	sness			n	experience
y trait					
Unemployed	100.3517844	50.40640932	18.9024035	26.43262928	14.90677349
Manager	68.72432629	34.52002913	12.94501092	18.1019665	10.20866715
HR	45.18208303	22.69482884	8.510560816	11.90094683	6.711580481
Marketing	19.49963583	9.794610342	3.672978878	5.136198106	2.896576839
Retired	3.567006555	1.791697014	0.67188638	0.939548434	0.529861617
Teacher	19.2618354	9.675163875	3.628186453	5.073561544	2.861252731

Freelancer	23.7800437	11.94464676	4.479242535	6.263656227	3.532410779
Consultant	23.7800437	8.361252731	3.135469774	4.384559359	2.472687546
Director	16.64603059	1.552804079	0.582301529	0.81427531	0.459213401
Technical	26.39584851	13.2585579	4.971959213	6.952658412	3.920975965

The expected values table is as follows:

After the calculation of the expected values table, the chi-square values are created:

$$\chi^2 = \sum (O_i - E_i)^2 / E_i$$

O= observed values

E= expected values

The table is given below:

$(O-E)^2/E$ table

Job	Conscientious	Agreeablen	Neuroticism	Extraversio	Openness to
role/Persona	ness	ess		n	experience
lity trait					
Unemployed	107.0529304	39.45110069	15.46511301	37.69957516	13.3240794
Manager	69.83144436	40.69371468	11.22615983	7.820321691	18.63131189
HR	52.74632902	10.32165811	31.94872941	6.956821985	4.167033546
Marketing	25.96286371	17.8039054	0.123306065	1.596776666	3.325040505
Retired	3.304015233	9.884379941	0.160233264	0.003889519	0.529861617
Teacher	16.33502088	13.25578718	0.108764592	15.70520094	3.44315422
Freelancer	6.279523026	16.539037	4.562657169	21.99063297	15.78663758
Consultant	3.574745078	13.53660116	4.763112051	2.9812371	0.112451905
Director	5.589675307	1.348770308	0.299624857	0.042361177	0.636850198
Technical	30.99720331	10.39792288	12.96258398	5.259907522	0.296939557
Total	321.6737503	173.2328774	81.62028422	100.0567247	60.25336042

The degree of freedom= $(R-1)x(C-1)= 9 \times 4 = 36$

Where, R = Number of rows and C = Number of columns

Grand total =736.8369971

P value = 1.2447E-131

Since the p value< 0.5, the null hypothesis is rejected. Hence there is a relationship between the job roles and personality trait.

FINDINGS

- a. The big five model depicts that with the extra version personality the individuals can be recruited as the sales representative, marketing professional, event coordinator and many more, this was the case with the respondents as well where some of them listed their profession/designation as sales representative.
- b. Next in line is openness to experience where the job roles suited for respondents is art curator, creative director, artist etc. Since this trait was not found in the majority the job roles also were deficient of similar job profiles.

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- c. Conscientiousness includes job roles such as account, project manager, administrative assistant etc., a job where intellect and reasoning are required, and since all the job roles mentioned in the survey requires intellect and reasoning this trait was found in the most of the answers provided by the respondents.
- d. Agreeableness includes job roles such as human resources, social worker, and customer service representative. Some of the roles in the designation seem to match with the personality trait mentioned.
- e. According to the hypothesis analysis, the p value after applying chi square test was less than 0.05, hence the null hypothesis was rejected and the alternate hypothesis was accepted, where there is a relationship between job roles and personality trait exists.

SUGGESTIONS

- a. The study can be extended to the use of artificial intelligence in assessing the psychological evaluations in recruitment. Many of the individuals believe that AI will have an input in assessing the behaviour of employees in near future.
- b. Psychological evaluations are a great way to recruit right person for the right
 job but there are some restrictions to it such as time, cost, lack of training etc.
 Many of the respondents have highlighted that in the form.

CONCLUSION

- Psychological evaluations can be considered a great way to hire the right person for the right job. Psychological evaluations such as inkblot tests are often conducted for some job roles such as defence.
- The survey in which one hundred and three respondents answered the questionnaire, is not without its limitations, as the group was not the controlled group the participants had ample amount of time to think about the answers. There are also social constraints which are also not taken into consideration, where the individuals could have answered the questions according to the social norms i.e. what the society expects them to do, rather than staying true to their personality.
- The factor of age and experience also comes into play where the age was varied randomly and because of the influence of the experience and age, the results could have been impacted. The study can be expanded to a more

- controlled group where certain extraneous variables such as age and experience could be fixed to get more accurate results.
- The starting of the study presented itself with a doubt whether the
 psychological evaluations should be used in the recruitment process or not,
 but after conducting and concluding the research it can be said that
 psychological evaluations can bring a very fruitful result in the process of
 recruitment.

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