

## The Effect of Psychological Wellbeing on Employee Job Performance: Comparison between the Employees of Projectized and Non-Projectized Organizations

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### Abstract

The study aims towards verifying the effects of the level of psychological wellbeing (mental health) and its relationship with the employee job performance. It further explores the understanding of psychological wellbeing through comparisons between projectized and non-projectized organization structures. The study is based upon the self-assessment of 84 employees' psychological wellbeing and the evaluation by their superiors of their job performance from 17 Information Technology companies. The study validated that higher psychological wellbeing is useful for the increased employee job performance in the organizations and this relationship is equal in projectized and non-projectized organizational structures. Furthermore, the study shows that the psychological wellbeing and employee job performance levels are same for both projectized and non-projectized organizations.

**Keywords:** Psychological wellbeing; Job performance; Projectized organizational structure; Non-Projectized organizational structure

### Introduction

"The mind is everything. What you think you become." - Buddha

It is well understood that positive mental strength has a significant role in the working environments nowadays. Conferring to statistics taken from the Adult Psychiatric Morbidity Survey [1], around one in six salaried age individuals in England have a mental health disorder at a specified point in time which parallels to likely six million persons in England alone [1]. The current technical term used for mental health is psychological wellbeing [2]. Many studies have addressed this issue and considered its importance for the organizational outcomes such as creativity, innovation, engagement in job, sense of accomplishment and so forth [3,4]. Our study intends to investigate the link between mental health and job performance and further compares this link between the employees of projectized and non-projectized organizations.

Psychological wellbeing was first recognized by Jahoda and basically presented these concepts as clinical perspectives which are a state of mental health. Ryff [5] further extended the work of Jahoda on psychological wellbeing and provided its measures and dimensions. Ryff's proposed six dimensions of psychological wellbeing namely are self-acceptance, purpose in life, environmental mastery, positive relations with others, autonomy and personal growth.

The genesis of the concept psychological wellbeing can be found as early as in 1920 and 1930 in studies related to Hawthorne experiments conducted at the Western Electric Company judging the characteristics as level of brilliance on output. Studies done more recently have established that the psychological wellbeing can forecast the future performance of the individuals, but these studies lacked to establish the extent to which job performance varies with the level of

wellbeing. The literature discloses that there have been two main methods for researching the relationship between the psychological wellbeing and employee job performance. One method was to explore the direct role of psychological wellbeing in employee job performance and this contains work happiness, experience of positive effects and negative affects state job related wellbeing. The second method was to appraise the performance because of the work conditions, work stressors, low autonomy, role ambiguity, role conflict and the lack of social interaction, and assistance from colleagues [6].

It has only been in the past 15 years or so that managerial research has steadily established significant relationship between various measures of employee wellbeing and measures of job related performance. In particular, research is constantly establishing significant bivariate correlations between psychological wellbeing and job performance ratings. These findings have both academic and applied significance. As Wright [2] puts it, "Practically speaking, taking a bivariate correlation of 0.50 between psychological wellbeing and job performance specifies that 25% of the variance in job performance is related to changes in psychological wellbeing".

Extending the domains of the research in the areas of psychological wellbeing and performance, one would find that the organizational structure is an important determinant of health in the working place. Relating psychological wellbeing and employee job performance, according to the organizational structure as projectized and non-projectized is an interesting proposition as it is hypothesized that the deprived psychological health will reduce output and in turn organizations can be less in their productivity. On the other hand, in case when there is a high level of psychological wellbeing, it leads to higher job performance [7]. In this case, two very distinct organizational structures are projectized and non-projectized organization. Project based organization structures are those in which an organization's individuals and departments are structured around each specific project Schepers [8], on the other hand, in non-

projectized organizations an owner or manager manages numerous different department heads, each of whom manages one department in which a particular role is executed. There are many challenges for an employee due to organizational changes, hence; it is required to understand the effect of the structure on the relationship between psychological wellbeing and performance. As Schepers [8] states that a project based organization has got a benefit as compared to the functional aspects because it uses project management techniques and tools and makes it possible for the administrations to cut costs and time through assembling and leveling the business assets through time, space or structural margins, and in conclusion enhances the productivity. Project management also provisions the administrations carry variations with the updates [9] and can raise the awareness level of their employees. It is also supposed that project effort is perceived as higher in reward and having advanced level of psychological wellbeing as compare to the non-projectized organizational structure because of its features like accuracy of goals, development opportunities, self-importance in group accomplishments and cohesiveness.

Following the same line of argument Chiocchio et al. [10] suggests there is necessity to measure the psychological wellbeing effect upon employee job performance between the projectized and non-projectized organizations. As to date an inadequate amount of studies has been conducted to address this gap. This study attempts to address this gap as to confirm some old and investigate some new research questions. Following are the research questions of the research:

Does the psychological wellbeing affect the employee job performance in the organizations?

Does the psychological wellbeing effect upon employee job performance; is it higher in projectized organizations as compare to non projectized organizations?

Does the psychological wellbeing and employee job performance vary among the employees of projectized and non projectized organizations?

### Theoretical Framework

Based on the different theories concerning the experiences of psychological wellbeing, employee job performance, projectized, non-projectized organizational structure and a review of the literature as discussed above the researchers synthesized the following variables of this research. In this theoretical framework, the research investigated the impact of psychological wellbeing on employee job performance, where projectized and non-projectized organizations were used as a control variable (Figure 1).

### Research model

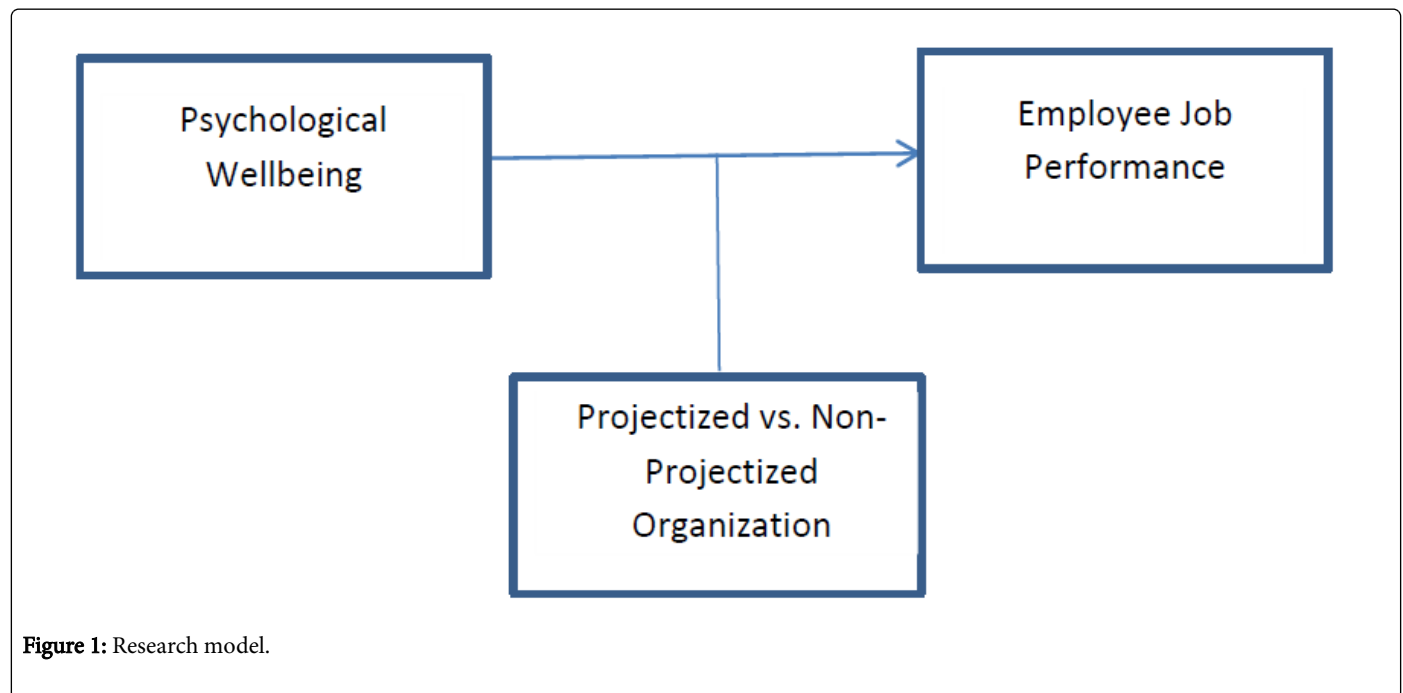


Figure 1: Research model.

### Hypothesis

In view of the previous research and the literature review stated above following four propositions were made.

H1: The psychological wellbeing of the employee significantly affects the job performance of the employee in the organization.

H2: The psychological wellbeing and employee job performance relationship is significantly higher in projectized organization as compare to non-projectized organization.

H3: Psychological wellbeing of the employee from the projectized organization is higher than the employee from non-projectized organization.

H4: Job performance of the employee from the projectized organization is higher than the job performance of employee from non-projectized organization.

## Methods

### Subjects and procedure

The respondents of this study consist of employees working in various positions and departments such as system support, developers and management staff working with IT organizations registered with Pakistan Software Export Board. Some 17 organizations were approached and 220 questionnaires were distributed. All these companies had employees working in both projectized and non-projectized organizational structures. The questionnaire distributed had two parts; the part which measured the psychological wellbeing was filled by the employee himself/herself and was self-assessed. The second section of the performance was filled by the supervisors of the selected individuals. This method was adopted to reduce common method variance bias [9]. Some hundred sets were collected within the given time frame where sixteen questionnaires sets were rejected because of the incomplete information. The other eighty-four accurately filled sets of questionnaires were used for the data entry and for further analysis. For this study, we adopted Ryff et al. [11] forty-two items (7 per dimension) psychological wellbeing instrument and Viswesvaran and Ones [12] twenty-seven items for an employee job performance instrument was adopted. For all the questions asked a seven point Likert scale having values ranging from “strongly disagree” to “strongly agree” was used for both instruments. Since the measures used have already been tested for validity, doing the validity test was not required. To evaluate the reliability of data Cronbach’s  $\alpha$  is obtained on the refine measures. For psychological wellbeing dimension autonomy containing seven items initially from having to be revised as three items Q2, Q4, and Q7 indicated lower loading than 0.5. The Cronbach’s alpha for autonomy after dropping the three items improved to 0.71. For remaining psychological wellbeing dimensions, environmental mastery, personal growth, positive relationship with

others, and purpose in life the Cronbach’s alpha values were 0.69, 0.75, 0.69, 0.72, 0.62, respectively. For employee job performance dimensions task orientation, creativity and interpersonal relationship the Cronbach’s alpha values were 0.85, 0.87 and 0.75, respectively.

For data analysis, regression was used to assess the relationship between the employee job performance and psychological wellbeing. A further comparison of correlation coefficients was used to compare the strengths of the correlation coefficients between psychological wellbeing and employee job performance for projectized and non-projectized organizations separately and for this purpose the data was split between two groups (projectized and non-projectized) and then correlation was run. Further testing the statistical significant difference, firstly we converted the r values into the z scores and obtained the observed value of Z (Zobs value). The value obtained was assessed using decision rules that if the value is between -1.96 and 1.96 the correlation coefficient is not statistically significantly different [13]. Further to check the group difference independent sample t-test was run, psychological wellbeing was assessed between the employees of projectized and non-projectized organizations. Similarly, employee job performance was assessed between the employees of projectized and non-projectized was assessed using t-test.

## Data Analysis and Results

### Demographic variable analysis and descriptive statistics

In Table 1, the descriptive results of the study include the standard deviations, means and intercorrelations of gender, age, marital status, education, job nature, IT industry experience, company experience, job assignment type, job type, employee job performance and psychological wellbeing.

S. no	Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11
1	Gender		0.42	-	-0.219*	0.132	0.034	0.166	-0.252*	-0.047	0.250*	0.001	-0.057	-0.096
2	Age	27.29	4.37	-0.219*	-	-0.376**	0.292**	0.123	.673**	0.490**	-0.1	-0.167	0.035	-0.122
3	Marital status		0.52	0.132	-0.376**	-	-0.221*	0.003	-0.389**	-0.268*	-0.02	0.129	-0.027	0.066
4	Education		0.66	0.034	0.292**	-0.221*	-	0.127	0.128	0.1	0.067	0.03	0.043	-0.076
5	Job nature		0.93	0.166	0.123	0.003	0.127	-	-0.105	0.008	0.202	0.270*	0.071	0.135
6	IT experience	2.34	0.94	-0.252*	0.673**	-0.389**	0.128	-0.105	-	0.530**	0.06	-0.203	-0.128	-0.298**
7	Co experience	1.7	0.79	-0.047	0.490**	-0.268*	0.1	0.008	0.530**	-	-0.009	-0.194	-0.141	-0.237*
8	Job assignment		0.48	0.250*	-0.1	-0.02	0.067	0.202	0.06	-0.009	-	-0.08	-0.077	-0.083
9	Job type		0.58	0.001	-0.167	0.129	0.03	0.270*	-0.203	-0.194	-0.08	-	-0.049	0.061
10	Employee job performance	5.59	0.52	-0.057	0.035	-0.027	0.043	0.071	-0.128	-0.141	-0.077	-0.049	-	0.639**
11	Psychological wellbeing	5.13	0.64	-0.096	-0.122	0.066	-0.076	0.135	-0.298**	-0.237*	-0.083	0.061	0.639**	-

\*. Correlation is significant at the 0.05 level (2-tailed).  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).

**Table 1:** Means, standard deviation and intercorrelations for variables.

## Relationship between psychological wellbeing and employee job performance

In the analysis to check the relationship between psychological wellbeing and employee job performance, linear regression was run on the data collected from 84 employees, including employees from both projectized and non-projectized organizational structures. The significant relationship between psychological wellbeing and employee job performance was assessed. So, the hypothesis in this case would be:

H1: The psychological wellbeing of the employee significantly affects the job performance of the employee in the organization.

The coefficient of determination R Square (0.40) indicated that there was 40.8% variance because of psychological wellbeing in employee job performance. Also, this shows that there were some factors other than employee job performance, which should also be used to predict employee's job performance. Hence, we accepted our hypothesis that the psychological wellbeing of employees significantly affects the job performance of employees in the organization.

## Comparing correlation coefficient for projectized and non-projectized organization

To check the strength of the relationship between psychological wellbeing and employee job performance, comparison of correlation coefficient for the two groups was conducted. The data was split into projectized and non-projectized as the higher significant relationship between psychological wellbeing and employee job performance in projectized organization and non-projectized organization was to be obtained. So the hypothesis in this case would be:

H2: The psychological wellbeing and employee job performance relationship is significantly higher in projectized organization as compare to non-projectized organization.

Correlation is significant at the 0.01 level (2-tailed). The correlation between psychological wellbeing and employee job performance for projectized was  $r_1=0.64$ , while for the non-projectized it was slightly lower  $r_2=0.62$ . Although these two values seem minor different and to test the significance of difference between the two groups Zobs was obtained. From the output  $r_1=0.64$  ( $N_1=54$ ) for projectized and  $r_2=0.62$  ( $N_2=30$ ) for non projectized Z scores were obtained so, the Z values were  $Z_1=0.76$  and  $Z_2=0.72$ , respectively. After calculation Zobs value of 0.17 was received which was within the specified mentioned bounds, i.e.,  $-1.96 < Zobs < 1.96$  so, we concluded that there was no statistically significant difference in the strengths of the correlations between psychological wellbeing and employee job performance for projectized and non-projectized organizations in this study. Hence, we rejected the hypothesis that the psychological wellbeing and employee job performance relationship is significantly higher in the projectized organization as compared to non-projectized organization.

## T-test analysis

Independent sample t-test was used to assess the variation between the groups of data, i.e., difference between the psychological wellbeing of projectized and non-projectized and the difference between the job performance of projectized and non-projectized. So the hypothesis in this case would be:

H3: Psychological wellbeing of the employee from the projectized organization is higher than the psychological wellbeing of employee from non-projectized organization.

The independent sample t-test was done in SPSS for comparison of projectized and non-projectized organizational structure on both the variables. Here, the mean psychological wellbeing scores for projectized 5.17 ( $SD=0.65$ ) and non-projectized 5.06 ( $SD=0.63$ ) were received. Levene's test scores were checked to test the equality of variances and t-test for equality of means. A value of significance (0.09) associated with Levene's test was received which indicate that the two groups had equal variances. The small value of indicating that the two groups, projectized and non-projectized, do have equal variance. Therefore, the statistics associated with unequal variances would not be used for further analysis. Hence, we rejected our hypothesis that the psychological wellbeing of the employee from projectized organization was higher than the psychological wellbeing of employee from non-projectized organization.

For the employee job performance variable independent sample t-test was done in SPSS for projectized and non-projectized organizational structures. The hypothesis in this case would be:

H4: Job performance of the employee from the projectized organization is higher than the job performance of employees from non-projectized organization.

Here the mean employee job performance score for projectized was 5.17 ( $SD=0.65$ ) and for non-projectized it was 5.06 ( $SD=0.63$ ). Levene's test for equality of variances and t-test for equality of means. A value of significance (0.62) associated with Levene's test indicated that the two groups had equal variances. Very small values of this test statistic indicated that the two groups, projectized and non-projectized, do have the equal variance. Therefore, the statistic associated with unequal variances not used for further analysis. Hence, we rejected our hypothesis that the job performance of an employee from projectized organization is higher than the job performance of employees from non-projectized organization.

## Limitations

The study has certain limitations as the data was collected by using the method of convenience sampling technique and only from the city Islamabad, Pakistan which roots sample biases. Secondly, the majority of the respondents were under the age of 40, that is why the practical implication applies only in the context of young people.

## Findings and Discussions

All levels of analyses of this study that assess psychological wellbeing and performance show that the relationship between psychological wellbeing and performance holds true. The association is consistent with the previous results in studies by Daniels and Harris [6]. Henceforth, the current research provides support to the growing body of knowledge suggesting a key role of psychological wellbeing in the prediction of employee job performance.

As far as the effect of organizational structure of the relationship between psychological wellbeing and employee job performance, this research has not been able to establish its effect. The reason for not finding the fact may be contributed to the fact that the projectized organizational structure is a double edged sword, as it may have both merits and demerits for the employee. As project work may be more rewarding compared to compare to the non-projectized organizational structure because of its features, like accuracy of goals, development opportunities, self-importance in group accomplishments and cohesiveness. On the other hand, research shows there is solid



evidence that project task is hectic – most project managers will attest that they work intensely, and that they are overworked and stressed. The dynamics of project work setting will lead employees to uncertain future plans and unbalanced life-work. Because of the temporary and changeable working environment in projectized organizations, employees might feel uncertain and at risky. Therefore, the overall impact of the projectized structures may be a balanced one, where employees might not able to feel the benefits of this type of structure and nullifying the role of structure in the employee mental health and performance relationship.

Similarly, in non-projectized organizational structure, there are also some merits and demerits. As in this type of organizational structure the lines of expertise are clear. Employees specialize and departments incline to develop a common knowledge across the group. Each employee has a clear career path and has the potential to grow within his/her department in the organization [14]. It delivers exactly similar kind of services and products with a lesser amount of ambiguity and deviations in processes. On the other hand, communication across groups becomes difficult because all of the members of the group are so distinct from each other. Slow reaction to variations in the environment. Too much work is referred upward due to a lack of decision making authority and serious problems can ensue when group develops a narrow perspective. Evaluation and control become difficult since each functional area's contribution overlaps with other area's contribution [13].

All in all, both these types of organizational structures have merits and demerits. In both sets of organizational setups the relationship between psychological wellbeing and job performance is strong but there is not much difference in the strengths of these relationships for the two groups i.e., projectized and non-projectized. Therefore, we conclude that there is no difference in the strength of the relationships of psychological wellbeing and job performance with the change in their organizational structures.

## Implications

As the study emphasizes on projectized structure management philosophy and its relations to the mental health of employees in the IT sector of the South Asian country, therefore, their implications are for both practitioners and academics. Managers, human resource personnel and academics in management and behavioral sciences can use this research in their work. Particularly from the perspective of mental health as an important factor which influences performance in the organizations. Several initiatives can be explored to enhance the mind abilities of the employees so that they can achieve better results for themselves and the organizations. As the study indicates regardless of organization structure the psychological wellbeing has a strong relationship, by taking care of employees' psychological wellbeing, the performance of employees can be improved as earlier research has shown that employees with better psychological wellbeing tend to have lesser absenteeism, turnover and physical illness which a direct impact on the output of employees. It is also very important for the researchers to work on the factors and practitioners to consider the factors and take such initiatives which would increase the mental health of employees in the working environment whether it is a projectized, non-projectized or any other organizational structure.

## Future recommendation

To build upon the findings of this research, we would recommend a comparison between a pure projectized and a pure non-projectized organization to further verify the outcomes of this research. Another interesting comparison could be carried out between the psychological wellbeing and job performance in the different phases of the projects, i.e., initiation, planning, executing, monitoring and finishing so that one could gauge the change and can take appropriate measures to maximize the output of the employees by addressing the issues pertinent to each phase of the project cycle.

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