

THE EFFECT OF WORK PLACE DESIGN ON EMPLOYEE JOB ENGAGEMENT: EVIDENCE FROM PUBLIC COMMERCIAL BANKS IN COLOMBO

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ABSTRACT

The organizational success is depending on the employee engagement to their work to achieve organizational goals effectively. Physical environment and the design of the working place are the crucial factors determine the positive work engagement. However, in the present context, designing a workplace has become a somewhat difficult task due to owners, architects, and developers are constructing improper workplaces for any type of job due to a lack of information about appropriate office layout. Therefore, the convenient physical environment with appropriate layout is one of the most important factors that affect employee job engagement. Consequently, the study attempts to identify effects of workplace designs on employee job engagement in selected Public Commercial Banks in Colombo District, Sri Lanka. Sample selection of the study based on convenient sampling including 101 employees from Bank of Ceylon and Peoples Bank in Colombo. For the aim of data collection, a structured questionnaire survey was conducted on a sample of employees. The collected data were analyzed using IBM SPSS statistics using regression analysis. According to the study's findings, the use of various office layouts varies depending on the designation level of employees at a selected public commercial banks. Also, office layout, noise, quality of air, colors and privacy have positive significant impact to the job engagement of employees in public commercial banks. The study will assist property managers and human resource managers in determining employee perceptions and attitudes regarding their workplace, which will be important in developing strategies. Finally, through the convenient and attractive work place designing in future planning context, increase employees' job engagement to achieve organizational goals effectively in Sri Lanka.

Keywords: Employee Job Engagement, Physical Environment, Work Place Design

1. INTRODUCTION

In today's context employees play an important role in each and every organization. That is because an organization's success or failure is determined by the quality of its employees and their level of dedication to or interest in their work (Archive & Personal, 2012). If any organization has more engaged employees, they try to give their best effort to do their job role and successfully achieve the organizational goals (Chandani, et al., 2016; Business Dictionary.com, 2017). When it comes to office workers, they spend the increasing amounts of time in the workplace. As a result, among the several variables that impact employees' job engagement, the physical office environment has been recognized as a key component. This is because employees who are happier with their physical work environment are more likely to be engaged (Abdul-Ghani et al., 2011; Koima et al., 2015). Therefore, consideration of creating

attractive and the convenient physical environment in working place is very important when achieving employee engagement (Hashim, et al., 2011).

When considering about the banking sector in Sri Lanka, it can be identified as a highly competitive sector rather comparing with other sectors in Sri Lanka. However, in most organizations in Sri Lanka, low employee engagement is becoming an issue to effective achievement of cooperate real estate sector fulfillment (Hansika & Amarathunga, 2016). Consequently, the office environment isn't up to standard, employees' job engagement and productivity will decrease (Hansika & Amarathunga, 2016). Most of the studies conducted in worldwide with regard to the workplace design and its impact on employees. Office Market is one such area which has not yet been addressed deeply by the scholars in Sri Lanka. Public Commercial Banking sector contribution to the cooperate real estate sector plays a vital role within that sector to enhance the well-being of the employees for achieving employee job engagement. Therefore, this study focused on analyzing the employee job engagement in terms of interior workplace design in the office spaces (Bank of Ceylon & People's Bank) in Colombo.

2. LITERATURE REVIEW

“Employee engagement is the extent to which employees feel passionate about their jobs, are committed to the organization, and put discretionary effort into their work” (Custom insight, 2020). On the other hand, employee engagement is a measurement about how peoples motivated within their organization in order to put in extra effort for their organization, and a sign of how bound they are to staying there. When considering about employee engagement of office employees who are working in the workplace, physical work environment in that workplace influences their working activities. Therefore, consideration of creating attractive and the convenient physical environment in the work place is very important when achieving employee engagement (Abdul-Ghani et al., 2011). Accordingly, working place design can be defined as the art and science of understanding people's behavior to create functional space within a building through creative and technical solutions” (Khuong & Tung, 2018). Within workplaces, there are many types of structures such as offices, storerooms, factories, bathrooms, and so on. It is also linked to several criteria like as shape, size, placement of the various parts, and amenities (Marmaras & Nathanael, 2012). Hameed & Amjad (2009), office design is the arrangement of the workspace to enable work to be performed in the most efficient way. It incorporated how the workspace and work tools used in the workplace can be designed for comfort, efficiency, safety to enhance workflow, efficiency, effectiveness, productivity and engagement. Therefore, there are some necessary elements affect for the proper work place design. In any organization, physical office space layouts plays a major role for communication & interaction of the employees without any interruption (Sarma, 2020). A fundamental aspect of the workplace environment that contributes to employee behavior is identified as the layout of office space (Abdul-Ghani, et al., 2011). Khanna (2018) revealed that four different types of office layouts including Cellular Office Layout, Open office Layout, Co-working Office Layout and Combination Office Plan. Lighting in office environment effects not only for the employee's wellbeing, job engagement and safety, but also the many aspects including comfort, communication, mood, health, and aesthetics (World Green Building Council, 2014). Privacy in the workplace is an ethical and essential factor and everyone has the right of physical privacy. There are some work activities essentially required for a disruption-free working environment with high privacy to attend high job involvement (Haynes, 2008). Telephones ringing, telephones left ringing at vacant posts, other people's telephone conversations, printers, typewriters and keyboards, computers, external sources and other people talking. Those undesired sounds have been linked with a variety of adverse effects upon the employees work engagement (Beale et al., 2003; Banbury & Berry, 2005). According to Seppanen et al. (2006), temperature has an impact on employees who are working inside the building. That means the temperature inside the building in sufficient level with the perceived level. Air quality also becomes vary and can have a significant impact on employee's health and the well- being (World

Green Building Council, 2014). The color scheme in a workplace has a considerable effect on employee psychological aspects (Kamaruzzaman & Zawawi, 2010) with their work performance. Facilities and amenities of workplace create an impact on employee's health, wellbeing and finally on employee engagement towards their work. Amenities and facilities are available to employees such as water dispensers, coffee machines, kitchen basin and washrooms, etc. Accordingly, many research work have done based on the several elements in work place design affect for the employee working engagement, performances and well-being in different contexts. However, the study was targeted to study the work place design effects to job engagement of the employees by considering public commercial banks in Colombo, Sri Lanka.

3. METHODOLOGY

Above mentioned research objective was achieved through the quantitative approach selecting two public commercial banks in Sri Lanka are Bank of Ceylon and Peoples Bank in Colombo district. These are the top state-owned commercial banks in Sri Lanka which have higher employee involvement who were the target population of the study. Convenient sampling method was utilized to select 101 employees from both banks to gain an exact result related to the research problem. A structured questionnaire is applied with Likert scale questions (1 for strongly agree and 5 for strongly disagree) to collect the relevant data from respondents. Hence, it is focused and tested seven main factors such as Office layout, Lighting, Noise, Temperature, Quality of air, Facilities and amenities, Colors and Privacy (Independent Variables) used to determine the employee job engagement in selected public commercial banks (Dependent variable). To obtain an effective result, data analysis was performed using IBM SPSS Statistics 23. Accordingly, Regression analysis was evaluated the impact of the work place design on employee engagement.

Accordingly, the following hypothesis were developed in the study;

H1	Office layout has a significant impact on employee engagement in public commercial banks.
H2	Lighting has a significant impact on employee engagement in public commercial banks.
H3	Noise has a significant impact on employee engagement in public commercial banks
H4	Temperature has a significant impact on employee engagement in public commercial banks
H5	Quality of Air has a significant impact on employee engagement in public commercial banks
H6	Facilities and amenities have a significant impact on employee engagement in public commercial banks
H7	Colors has a significant impact on employee engagement in public commercial banks
H8	Privacy has a significant impact on employee engagement in public commercial banks

Validity and reliability establish the foundation for regression analysis for testing hypothesis. Validity and reliability are ideas used by researchers to assess the quality of their study. This reflects how successfully the researcher's methodologies, procedures, and measures were employed to perform the research. Cronbach Alpha values greater than 0.7 suggest that the questions are reliable to an acceptable. Accordingly, in the study, it was 0.93 exceed the acceptable level. Validity test measure using KMO test should be greater than 0.5. Therefore the value indicated 0.922 has good validity.

4. FINDINGS AND DISCUSSION

4.1 Factor Analysis

Table 1: Correlation Matrix

Factors	Office Layout	Lighting	Noise	Temperature	Quality of Air	Facilities and Amenities	Colors	Privacy
Office Layout	1	0.403	0.301	0.235	0.396	0.357	0.145	0.393
Lighting	0.403	1	0.443	0.446	0.363	0.388	0.255	0.444
Noise	0.301	0.443	1	0.390	0.473	0.395	0.182	0.454
Temperature	0.235	0.446	0.390	1	0.413	0.375	0.300	0.436
Quality of Air	0.396	0.363	0.473	0.413	1	0.508	0.170	0.488
Facilities and Amenities	0.357	0.388	0.395	0.375	0.508	1	0.266	0.531
Colors	0.145	0.255	0.182	0.300	0.170	0.266	1	0.324
Privacy	0.393	0.444	0.454	0.436	0.488	0.531	0.324	1

Source: Survey Data, 2020

Correlation matrix interprets that when values are having less than 0.8, independent variables are free from mutual interrelationships. As per the table indicates the independent variables office layout, lighting, noise, temperature, quality of air, facilities and amenities, colors and privacy have values 0.403, 0.301, 0.235, 0.396, 0.357, 0.145, 0.393 respectively. Therefore, each independent variable does not have any mutual relationship with each other. Hence, all variables are suited for the regression analysis.

4.2 Regression Analysis

Regression analysis do to measure the variation of the dependent variable caused by changes of one or more independent variables. When there are two or more independent variables it should do multiple regression analysis.

The model summary of the effect of Office layout, Lighting, Noise, Temperature, Quality of Air, Facilities and Amenities, Colors, Privacy on employee engagement. R square is 0.695. This indicates that these eight variables jointly explain about 69.5% variance employee engagement in public commercial banks. 0.669 is the adjusted R square. It shows that office layout, lighting, noise, temperature, air quality, facilities & amenities, colors, and privacy have a 66.9% impact on employee engagement (dependent variable). Other variables are maintained constant in this analysis, accounting for the remaining 33.1 percent.

The degree of significance can be displayed using an ANOVA table. It was evident that all of the factors, including office layout, lighting, noise, temperature, air quality, facilities and amenities, colors, and privacy, are related to employee engagement, with a significant association between them when compared to the alpha value of 0.05.

Table 2: Assessment of Results in Multiple Regression Coefficient

Factors	Unstandardized	Standardized	Sig.
Constant	-.159		.212
Office Layout	.189	.209	.014
Lighting	.049	.051	.589
Noise	.177	.187	.043
Temperature	-.136	-.150	.102
Quality of Air	.207	.216	.032
Facilities and Amenities	.079	.080	.407
Colors	.137	.180	.018
Privacy	.233	.234	.026

Source: Survey Data, 2020

Unstandardized coefficients (Beta) indicate how much independent variable influence the dependent variable. All the independent variables (.189, .049, .177, .207, .079, .137 and .233) of the study positively affect for the employees job engagement in public commercial banks except the temperature indicated as (-.136). However the findings revealed that office layout, noise, quality of air, color and privacy have significantly influenced for the job engagement. The value indicated as .014, .043, .032, .018 and .026 respectively, supported with H1, H3, H5, H7 and H8. Among them, office layout is the most positively significant factor for the job engagement in public commercial banks. It proved the layout is open plan or closed plan, the layout should be promoted transparency in order to prevent frauds and mismanagement. Noise is the less important factor which is difficult to work and it disturbs to communication. Calm places support for working and relaxing the mind for working. So, lower noise environment suitable for workplace. Conversely, Lighting, temperature, facilities and amenities are recorded as insignificant independent variables, excluded the H2, H4 and H6 of the study. It proved that the too much bright light, high temperature in the working place and the lack of availability of facilities for working caused for the disengagement of employees to their job in the selected public commercial banks.

4.3 Testing Hypothesis

The sig. value, which is shown in the coefficient table, was used to test the hypothesis. If the sig. value (P value) is 0.05 or below, the null hypothesis is accepted. The null hypothesis is rejected if it is greater than 0.05. As per the results, H1, H3, H5, H7 and H8 were accepted in the study.

Table 3: Results of Hypothesis Testing

Hypothesis	Null Hypothesis (H0)
H1 Office layout has a significant impact on employee engagement in public commercial banks.	Accepted
H2 Lighting has a significant impact on employee engagement in public commercial banks.	Rejected
H3 Noise has a significant impact on employee engagement in public commercial banks	Accepted
H4 Temperature has a significant impact on employee engagement in public commercial banks	Rejected
H5 Quality of Air has a significant impact on employee engagement in public commercial banks	Accepted
H6 Facilities and amenities have a significant impact on employee engagement in public commercial banks	Rejected

H7	Colors has a significant impact on employee engagement in public commercial banks	Accepted
H8	Privacy has a significant impact on employee engagement in public commercial banks	Accepted

Source: Survey Data, 2020

4. CONCLUSION AND RECOMMENDATION

The study attempts to identify effects of workplace designs on employee job engagement in selected Public Commercial Banks in Colombo District, Sri Lanka. According to the findings of the study, identify the usage of office layouts are differ according to the different level of designations. And also, there are eight hypotheses were tested in this study. Among them, five hypotheses were accepted and three were rejected. The accepted hypothesis proved that; there is a positive relationship between office layout and employee engagement and there is a positive relationship between office layout, noise, quality of air, colors, privacy and employee engagement. In addition to the findings of the study, there is no evidence to prove that there is a positive relationship between lighting, temperature, facilities and amenities and employee engagement. Therefore, office layout, noise, quality of air, colors and privacy can be considered as the most significant factors which affect employee engagement.

Employers should examine the office layout and facilities of the workplace while considering the research findings and employee opinions. When designing an office plan, consider how convenient it will be for the employees. Workers are unsatisfied, according to the author's study experience, if the working environment is not adequately planned with adequate amenities and space. Employees do not then actively engage to their full potential in order to achieve corporate goals.

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