



NATURE INTERVENTION IN OFFICE ENVIRONMENT AND PRODUCTIVITY

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ABSTRACT Major spending of companies is on staff salaries. In order to be efficient ,progressive, profitable and competitive in the profession, the staff should be productive. Staff is productive when Office Environment is comfortable with regard to work conditions . In this paper effect of office nature plants on productivity of occupants is highlighted. A research to this regard was conducted in Offices of city of Chandigarh(India) capital of Punjab and Haryana state. Various Offices were sampled and Questionnaire survey of productivity was conducted to get first hand information from Office Occupants.

KEYWORDS : productivity, office design, plants,comfort, work condition,nature views

1 Introduction

People spend most of their time indoors --be it office or home. The success of any organization is dependent on the productivity of the employees. The productivity of the employees is dependent on comfort levels at their office. World over research has been done to study the effect on office Nature plants/environment on productivity but not in India. so the study is conducted as requirement for PhD Degree under Punjab Technical University,(Kapurthala) to identify the effects of office Nature plants in offices at Chandigarh (India).

Hypothesis:

H₁: There would be a direct relationship between Nature/Plants proximity and employees' productivity

Aim is to study the effect of Plants on productivity of office employees.

2 Literature review

Various literature pertain to the study of multiple offices and office buildings indicated that the factors such as dissatisfaction, cluttered workplaces and the physical environment are playing a major role in the loss of employees' productivity.

How workspace is designed and occupied affects not only how people feel, but also their work performance, their commitment to their employer, and the creation of new knowledge (human capital) in the organization. These are the cornerstones of the domain known as the environmental psychology of workspace. A large number of work environment studies have tested users' satisfaction in reference to specific workspace features (Kaplan1993,Randall et al 1992,Fjeld, Lohr et al,Huelat 2008,Grinde et al 2009,Loder 2011). These studies show that people's preferences are affected by, among other things, Nature plants.

3 Methodology

Sample and Questionnaire

A total of 660 employees from various offices of Chandigarh were recruited as sample. The age range of the sample was between 25-60 years. The minimum educational qualification was graduation. For inclusion in the study the employee must be working in that particular organization since last three years. Primary data was collected through a structured questionnaire. The questionnaire was developed on the basis of the research literature review. The questionnaire consisted of 5 questions on Nature plants variable to be rated on a five point Likert scale.

4 Data Analysis

For result findings and in-depth analysis of the Nature plants components of office environment on the performance level of the employees, statistical techniques of correlation has been used. SPSS software as research tool for data analysis is used for this research conducted as requirement for PhD Degree under Punjab Technical University,(Kapurthala).

Nature/Plants Questionnaire(response frequency)

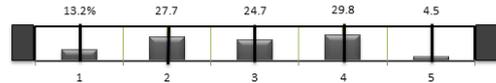
1. Potted plants are there in my room incorporated /work area
57.4% Not at all , 23.8% To some extent, 7.1% Often, 8.8% Mostly,

2.9% Always



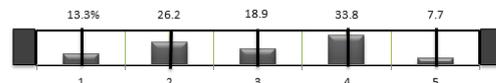
2. Natu

13.2% Extremely dissatisfied, 27.7% Dissatisfied, 24.7% Neutral, 29.8% Satisfied, 4.5% Extremely satisfied



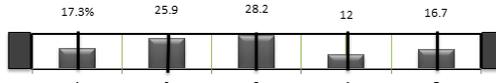
3. I

13.3% Extremely dissatisfied ,26.2% Dissatisfied, 18.9%Neutral, 33.8% Satisfied, 7.7% Extremely satisfied



4. I

17.3%No effect ,25.9% Increase by 20% , 28.2% Increase by 30% , 12.0% Increase by 40%, 16.7% Increase by 50% or more



5.

4.1% No effect , 26.4% Decrease by 20%, 26.7% Decrease by 30% , 20.6% Decrease by 40% , 22.3% Decrease by 50% or more

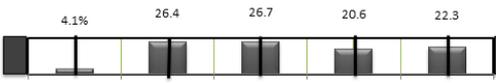


Table 1: Descriptive statistics of various factors/elements of Office Design

Factors	Respondents (N)	Mean	Std. Deviation
Nature Plants	660	2.6049	.8489

Table 2: Correlation between Elements of Office Design and Employee Productivity

Office Design Element	Pearson Correlation (r)	Significance
Nature Plants	.359**	.00

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

6 Result analysis

This relationship between office design and productivity was determined by using the Pearson's Correlation. This shows that when the Nature plants of the office is not comfortable and according to the

needs of the employees their productivity is affected. The positive relationship between Nature plants and productivity ($r = 0.359$) at 0.00 shows that employees' productivity correlates to the Nature plants conditions in the offices. (Table 2).

7 Discussion

Analysis of the collected data revealed that office design has a substantial impact on the employees' productivity. The overall impact of different elements showed that Nature Plants affects the productivity of most employees. The results are similar to previous research viz: Kaplan 1993, Randall et al 1992, Fjeld 2002, Lohr et al 2002, Huelat 2008, Grinde et al 2009, and Loder 2011.

7.1 Hypothesis testing:

Present study found correlation between employee's productivity and Nature Plants. Tapping Nature Plants as a resource reduces energy use and improves productivity.

There is positive correlation between Nature/Plants proximity and productivity ($r = 0.359$) at $p = 0.00$, this supports Hypothesis H₁. Shows that employees' productivity highly correlates to the Nature/Plants proximity conditions in the offices.

(H₁: There would be a direct relationship between Nature/Plants proximity and employees' productivity.)

7.2 Limitations

Following are a few limitations of the study

- the sample size was not diverse enough to give the image of all organizations functioning in India.
- the study is limited to Nature Plants only and is not exhaustive.

7.3 Future Research Scope

Future research can be done on the public sector or semi government organizations and can be compared with the findings of this research. In addition a good study can be conducted for comparison among services and manufacturing sector as well.

8 Conclusion

On the basis of our research done as requirement for PhD Degree under Punjab Technical University, (Kapurthala) in we can conclude that the Nature plants component of office environment have impact on the performance level of the office employees; can affect the output of the employees. If Nature plants factor is favorable for office employees then they can perform much better. This will contribute towards enhanced output and exceptional performance

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