



PERCEIVED SATISFACTION WITH WINDOW VIEW AND EMPLOYEES' PRODUCTIVITY

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ABSTRACT Widespread opinion that people do not like to work in windowless offices", though evidence from more systematic research is scant. Window view or window proximity is an important component of office environment. However, there has been surprisingly little research on the psychological benefits of a windowed work setting.' In India, office environment and related processes are considerably sidelined. There is a need to find out the impact of office design (in terms of satisfaction with window view) on employees' productivity. A total of 250 employees from various offices of Ludhiana were recruited as sample. The age range of the sample was between 25 to 50 years. The data collection instrument for this study was a structured questionnaire developed by the researcher with the help of experts. Results suggest that employees' productivity is positively correlated with satisfaction with window views. This research study is adding to the existing body of knowledge in environmental psychology by providing insights into employees' perception of their office environment.

KEYWORDS : environment, Nature, Views, perceived satisfaction, correlate, Design, Built environment

Introduction

Window view or window proximity is an important component of office environment. However, there has been surprisingly little research on the psychological benefits of a windowed work setting.' The anecdotal evidence is compelling. Mention the issue of windows and employees are ready to express their dismay if their work setting lacks a view. Lack of clear documentation notwithstanding, there is reason to believe that windows have been used as a work perk, with more or larger windows or corner views being the privilege of those higher in the organization. Farrenkopf and Roth (1980) provide some substantiation of this in the academic context. They reported that of their sample of 150 faculty members at two universities, half had windowed offices and those with higher academic rank had significantly more windows. Sommer (quoted by Collins, 1975) reported that office personnel working in underground offices found their situation "harder to endure because of [their] knowledge that the executives have large offices upstairs with splendid views of the city". Wargoeki et al. (2000) identify a 1.1% productivity increase for every 10% reduction in SBS complaints, suggesting an average 4.3% productivity gain for workers seated near a window.

The CBPD team has identified thirteen studies linking improved access to the natural environment with gains in individual and organizational productivity. Six studies further indicate that the addition of operable windows for thermal comfort, natural ventilation, or simply access to the outdoors, can impact productivity by 0.4-15%. The upper range of these productivity improvements, from 10-15% increased productivity, is achieved in mixed-mode buildings where operable windows are coordinated with mechanical air conditioning strategies (Loftness et al., 2003). A study by the Heschong-Mahone Group (2003) found a 6% improvement in call center average handling time for workers with the highest rated views, as compared to workers with no view at all.

In reference to India this is a new area of research. In India, office environment and related processes are considerably sidelined. There is a need to find out the impact of office design (in terms of satisfaction with window view) on employees' productivity.

Methodology

Sample

A total of 250 employees from various offices of Ludhiana were recruited as sample. The age range of the sample was between 25 to 50 years. The employees who were working for the last three years in a particular organization were considered for inclusion in this study. The minimum educational qualification of the selected subjects was graduation.

Questionnaire

The data collection instrument for this study was a structured questionnaire developed by the researcher with the help of experts. The questionnaire is adapted and modified version of already existing scales of occupants' satisfaction with indoor environment quality

(IEQ) components of other buildings by different researchers. The questionnaire items were developed to reflect the satisfaction/comfort/productivity components of the office environment. The questionnaire for the study contained 44 total items pertaining to employees' general demographics and satisfaction with thermal, acoustic, and lighting conditions.

Data Analysis

For result findings and in-depth analysis of the different components of office environment on the productivity of the office employees, statistical techniques of correlation has been used. SPSS 16 software as research tool for data analysis was used for this research.

Results and Discussion

Table 1: Descriptive Statistics

Variables	Mean	Std. Deviation	Respondents (N)
Productivity	3.51	.73	250
Window view	3.46	.72	250

Table 2: Coefficients of Correlations between Productivity and Element of Office Design

Sr. No.	Variable	(r)
1	Window view	.161**

** Significant at .01 levels

Results suggest that employees' productivity is positively correlated with satisfaction with window views. The obtained findings are consistent with earlier research. Results of present study are supporting previous research (Collins, 1975; Young, 1979; Farrenkopf and Roth, 1980; Finnegan and Solomon, 1981; Mendell, 1991; Wargoeki et al, 2000; Heschong-Mahone Group, 2003). Of the many aspects of the physical environment that can affect environmental satisfaction and comfort, the role of potential exterior view was of particular interest in this study. Windows are generally seen as favourable influences on health and well-being, providing access to views of the outside and the potential for restorative experiences (e.g., Ulrich, 1984; Kaplan and Kaplan, 1989; Chang and Chen, 2005). Having a window in one's workspace has been associated with improved job satisfaction and interest in the job (Finnegan and Solomon, 1981).

Building Designers and psychologists will be guided by the results of this study for providing better designed spaces and in understanding the built environments impact on occupants. This research study is adding to the existing body of knowledge in environmental psychology by providing insights into employees' perception of their office environment.

References

1. Chang, C.Y., and Chen, P.K., (2005), "Human Responses to Window Views and Indoor Plants in the Workplace," Hort. Science, 40, pp. 1354-1359.
2. Collins, B. L., (1975), Windows and People: A Literature Survey (NBS Building Science Series 70, National Bureau of Standards, Washington, D.C.,

3. Farrenkopf, T., and Roth, V., (1980), "The University Faculty Office as an Environment," *Environment and Behavior*, 12(4), pp.467-477.
4. Finnegan, M.C., and Solomon, L.Z., (1981), "Work Attitudes in Windowed vs. Windowless Environments," *J. Soc. Psychol.*, 115, pp.291-292.
5. Heschong Mahone Group. (2003). *Windows and classrooms: A study of student performance and the indoor environment* (No. P500-03-082-A-7). Sacramento: California Energy Commission. Kaplan, R., and Kaplan, S., (1989), *The Experience of Nature: A Psychological Perspective*, Cambridge University Press, New York. (Lofness et al., 2003).
6. Mendell, M.J., (1991), *Risk Factors for Work-Related Symptoms in Northern California Office Workers*. Doctoral Dissertation, University of California.
7. Ulrich, R., (1984), "View through a Window may Influence Recovery from Surgery," *Science*, 224, pp. 420-421.
8. Wargoeki, P., Wyon, D., and Fanger, P.O., (2000), "Pollution Source Control and Ventilation Improve Health, Comfort and Productivity," *Proceedings of Cold Climate HVAC 2000*, Sapporo, Japan, pp 445-450.
9. Young, H.H., and Berry, G. L., (1979), "The Impact of Environment on the Productivity Attitudes of Intellectually Challenged Office Workers," *Human Factors*, 21(4), pp. 399-407.