



**IMPACT OF WORKPLACE QUALITY ON EMPLOYEE'S PRODUCTIVITY:  
CASE STUDY OF A BANK IN TURKEY**

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**ABSTRACT**

The workplace environment plays a crucial role for the employees. Nowadays employees may have a large number working alternatives, then the environment in workplace becomes a critical factor for accepting and/or keeping the jobs. The quality of environment in workplace may simply determine the level of employee's motivation, subsequent performance and productivity. How well employees get along with the organization influence the employee's error rate, level of innovation and collaboration with other employees, absenteeism and ultimately time period to stay in the job. This paper presents the analysis of working environment of a foreign private bank in Turkey and examines the relationship between the workplace physical conditions and employee's productivity.

**1. INTRODUCTION**

Nowadays the relationship between employees and employers may be seen upside down. Since there the number of job opportunities available for employees has been increasing in a growing worldwide economy, not just employees but also employers need to readjust themselves in order to cope up with the dynamics of business life. Therefore, HR executives need to consider new strategies for recruiting and retaining best fit talents for their organizations. Higher salaries and compensation benefits may seem the most likely way to attract employees. However, quality of the physical workplace environment may also have a strong influence on a company's ability to recruit and retain talented people. Some factors in workplace environment may be considered keys affecting employee's engagement, productivity, morale, comfort level etc. both positively and negatively. Although convenient workplace conditions are requirements for improving productivity and quality of outcomes, working conditions in many organizations may present lack of safety, health and comfort issues such as improper lightening and ventilation, excessive noise and emergency excess. People working under inconvenient conditions may end up with low performance and face occupational health diseases causing high absenteeism and turnover. There are many organizations in which employees encounter with working conditions problems related to environmental and physical factors. Pech and Slade (2006) argued that the employee disengagement is increasing and it becomes more important to make workplaces that positively influence workforce. According to Pech and Slade the focus is on symptoms of disengagement such as distraction, lack of interest, poor decisions and high absence, rather than the root causes. The working environment is perhaps a key root causing employee's engagement or disengagement. Another research indicates that improving the working environment reduces complaints and absenteeism while increasing productivity (Roelofsen, 2002). Wells (2000) states that workplace satisfaction has been associated with job satisfaction. In recent years, employees comfort on the job, determined by workplace conditions and environment, has been recognized as an important factor for measuring their productivity. This is particularly true for those employees who spend most of the day operating a computer terminal. As more and more computers are being installed in workplaces, an increasing number of businesses has been adopting ergonomic designs for offices and plant installations. Ergonomics, also called biomechanics, has become popular because of demand of workers for more human comfort.

The paper presents the analysis of the working environment of a private foreign bank in Turkey. The objective of this research is to investigate if there exists any relation between workplace conditions and employee's performance. A survey study is implemented on the employees of the bank. The paper is divided into five sections as follows. The next section explains the related literature. The methodology of the research is explained in the third part. The next section illustrates the findings. The final sections presents the conclusions.

## 2. RELATED LITERATURE

Many executives are under the mistaken impression that the level of employee performance on the job is proportional to the size of the employee's compensation package. Although compensation package is one of the extrinsic motivation tool (Ryan andDeci, 2000) it has a limited short term effect on employees' performance. A widely accepted assumption is that better workplace environment motivates employees and produces better results. Office environment can be described in terms of **physical and behavioral components**. These components can further be divided in the form of different independent variables. An organization's physical environment and its design and layout can affect employee behavior in the workplace. Brill (1992) estimates that improvements in the physical design of the workplace may result in a 5-10 percent increase in employee productivity. Stallworth and Kleiner (1996) argue that increasingly an organization's physical layout is designed around employee needs in order to maximize productivity and satisfaction. They argue that innovative workplaces can be developed to encourage the sharing of information and networking regardless to job boundaries by allowing communication freely across departmental groups. Statt (1994) argues that the modern work physical environment is characterized by technology; computers and machines as well as general furniture and furnishings. To achieve high levels of employee productivity, organizations must ensure that the physical environment is conducive to organizational needs facilitating interaction and privacy, formality and informality, functionality and cross-disciplinarily. Consequently, the physical environment is a tool that can be leveraged both to improve business results (Mohr, 1996) and employee well-being (Huang, Robertson and Chang, 2004). Ensuring adequate facilities are provided to employees, is critical to generating greater employee commitment and productivity. The provision of inadequate equipment and adverse working conditions has been shown to affect employee commitment and intention to stay with the organization (Weiss, 1999; Wise, Darling-Hammond and Berry, 1987) as well as levels of job satisfaction and the perception of fairness of pay (Bockerman and Ilmakunnas, 2006). From a safety perspective, Gyekye (2006) indicates that environmental conditions affect employee safety perceptions which impact upon employee commitment.

Extensive scientific research conducted by Roelofsen (2002) has also yielded indications suggesting that improving working environment results in a reduction in a number of complaints and absenteeism and an increase in productivity. The indoor environment has the biggest effect on productivity in relation to job stress and job dissatisfaction. As suggested by Govindarajulu (2004), in the twenty-first century, businesses are taking a more strategic approach to environmental management to enhance their productivity through improving the performance level of the employees. It is evident in the research findings of Patterson et al., (2003) that the more satisfied workers are with their jobs the better the company is likely to perform in terms of subsequent profitability and particularly productivity. Sekar (2011) argues that the relationship between work, the workplace and the tools of work, workplace becomes an integral part of work itself. The management that dictate how, exactly, to maximize employee productivity center around two major areas of focus: personal motivation and the infrastructure of the work environment. (Sekar, C.(2011). There are various literature that defines different factors that influence the performance of the employees. Haynes (2008) explains the behavioral office environment behavioral components of the office environment that have the greatest impact on office productivity. In all of the work patterns, it was found that interaction was perceived to be the component to have the most positive effect on productivity, and distraction was perceived to have the most negative. As people are the most valuable resource of an organization, and that the management of people makes a difference to company performance (Patterson et al., 1997). The workplace environment factors which lead to engagement or disengagement are illustrated in Figure 1. The factors encourage employees to communicate with each other in the workplace.

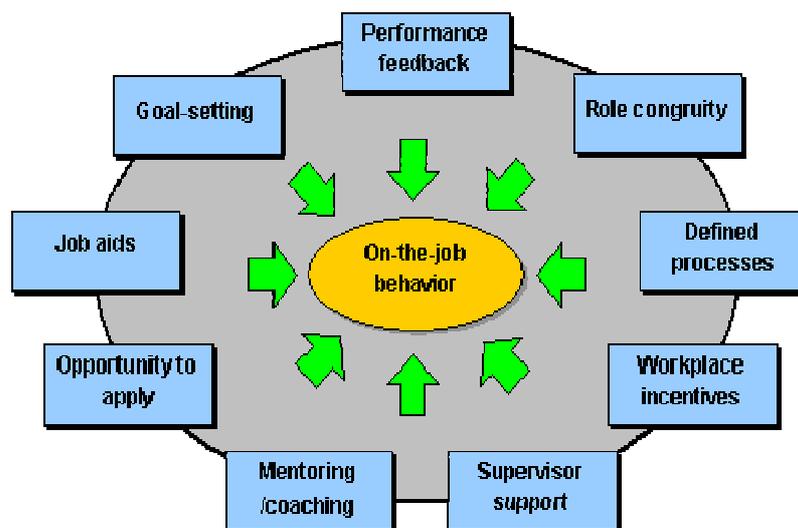


Figure 1 – Workplace factors affecting employee performance

Source: ([http://www.businessperform.com/workplace-training/workplace\\_environment.html](http://www.businessperform.com/workplace-training/workplace_environment.html))

**Goal setting** is an important tool to attract motivation of the employee. There are two important purposes of goals in organizations are to guide the behaviour of individuals and to motivate them to perform at higher levels of effectiveness (Richards, 1978). Specific goals are more effective than generalized goals that difficult goals lead to greater performance than do easy goals, as long as the goals are accepted (Erez et al, 1985), and that frequent, relevant feedback is important for goal setting effectiveness (Latham and Yukl, 1975). Effective goals, those with the above characteristics, are likely to promote a greater frequency of the workstyle behaviours. They help generate commitment, both to the goals and to the organization, which results in people doing more than they are required to do (Morrisey, 1977). Open communication is encouraged by the existence of effective goals. Members in groups with clear goals are more likely to communicate openly than those with unclear goals (Kiesler, 1978).

**Performance Feedback** is an information exchange and conflict resolution process between the employee and supervisor. While the supervisor gives his/her feedback and requirements, the employee enables to give his her feedback regarding his/her requirements. Although this process is formal, it could be managed informally by gaining closer relations for two sides (Chandrasekar, 2011). Each employee has a role in the organization. These roles are explained in Job Descriptions forms in a formal way. Employees' roles and task should be allocated consistently by his / her supervisor (Chandrasekar, 2011) which is defined as **role congruity**.

**Defined Processes** is the organization's responsibility to explain the workflow through documenting and communicating (Chandrasekar, 2011). The organization should find out tools what motivates its employees and has set up formal and informal structures for rewarding employees that behave in the way required. Rewards may consist of a mix of internal rewards, such as challenging assignments, and external rewards, such as higher compensation and peer recognition (Chandrasekar, 2011). This rewarding explains **workplace incentives**.

**Supervisor support** is crucial for employees to complete the job. Supervisors' interpersonal role is important to encourage positive relations and increase self-confidence of the employee. (Chandrasekar, 2011). Skilled and respected people are available to employees to help them to perform better in their current role and to assist them develop further into a future role. Chandrasekar (2011) defines the situation as **mentoring/coaching**. Time and material resources should be available to employees, enabling them to perform to the best of their ability. Individual workloads and organizational systems and processes do not hinder employees from applying established skills or from practicing newly learned skills. Thus, the employees should be provided **opportunity**

**to apply.** The work environment is set up so that templates, guides, models, checklists and other such workplace aids are readily available to help minimize error rates and customer dissatisfaction. Therefore, Chandrasekar (2011) discusses the necessity of **job aids**.

There are various literatures that illustrate the relation between some of these factors and the productivity of the employee. There are different productivity definitions in literature. Rolloos (1997) defined the productivity as, "productivity is that which people can produce with the least effort". Productivity is also defined by Sutermeister (1976) as, "output per employee hour, quality considered". Dorgan (1994) defines productivity as, "the increased functional and organizational performance, including quality". Productivity is a ratio to measure how well an organization (or individual, industry, country) converts input resources (labor, materials, machines etc.) into goods and services. In some case, the productivity is measured considering performance increase as when there is less absenteeism, fewer employee leaving early and less breaks; whereas increase in performance can be measured by the number of units produced per employee per hour. In this study, subjective productivity measurement method is used. The measures of this method are not based on quantitative operational information. Instead, they are based on personnel's subjective assessments. Wang and Gianakis (1999) have defined subjective performance measure as an indicator used to assess individuals' aggregated perceptions, attitudes or assessments toward an organizations product or service. Subjective productivity data is usually collected using survey questionnaires. Clements-Croome and Kaluarachchi (2000) discusses that subjective data can also be descriptive or qualitative collected by interviews.

### 3. RESEARCH METHODOLOGY

Many organizations have been trying new designs and techniques to construct office buildings, which can increase productivity, and attract more employees. Many authors have noted that, the physical layout of the workspace, along with efficient management processes, is playing a major role in boosting employees' productivity and improving organizational performance (Uzee, 1999; Leaman and Bordass, 1993; Williams et al. 1985). An independent research firm; Gensler conducted a research on US workplace environment. In March 2006, a survey was conducted by taking a sample size of 2013. The research was related to; workplace designs, work satisfaction, and productivity. 89 percent of the respondents rated design, from important to very important. Almost 90 percent of senior officials revealed that effective workplace design is important for the increase in employees' productivity. The final outcome of the survey suggested that businesses can enhance their productivity by improving their workplace designs. A rough estimation was made by executives, which showed that almost 22 percent increase can be achieved in the company's performance if their offices are well designed. But practically, many organizations still do not give much importance to workplace design. As many as 40 percent of the employees believe that their companies want to keep their costs low that is why their workplaces have bad designs; and 46 percent of employees think that the priority list of their company does not have workplace design on top. When data was summarized, almost one out of every five employees rated their workplace environment from, 'fair to poor'. 90 percent admitted that their attitude about work is adversely affected by the quality of their workplace environment. Yet again 89 percent blamed their working environment for their job dissatisfaction (Gensler, 2006). Similarly, The American Society of Interior Designers (ASID, 1999) carried out an independent study and revealed that the physical workplace design is one of the top three factors, which affect performance and job satisfaction. The study results showed that 31 percent of people were satisfied with their jobs and had pleasing workplace environments. 50 percent of people were seeking jobs and said that they would prefer a job in a company where the physical environment is good. Brill et al. (1984) ranked factors, which affect productivity according to their importance.

The factors are sequenced based on the significance: furniture, noise, flexibility, comfort, communication, lighting, temperature and the air quality. Springer Inc (1986). Leaman (1995) conducted a survey which is briefly highlighted here. Author attempted to find the relationship between indoor environment, dissatisfied employees and their productivity. The results revealed that the productivity of the work is affected because the people were unhappy with temperature, air quality, light and noise levels in the office. Similar to the literature, this paper focuses on to figure out the relation between workplace conditions and employee's performance. The research is investigated dimensions of workplace environment in terms of physical as well as behavioral components. The analysis is implemented to a private foreign bank in Turkey which has been operating for 4 years on consumer credits basis with 300 Head Count. In the study both primary and secondary data is used. Secondary data represents the factors that are frequently used in literature. These factors that are accepted to influence the performance were explained in the previous section in details. The primary data is the inferences

drawn from the results of the survey which is conducted among 50 employees. The survey is employed to the call center personnel of the bank who mostly are affected from the workplace conditions than the other employees due to their job requirements. A well designed questionnaire was conducted to collect the primary data. The data which is collected by survey is subjected to some basic statistical techniques for analyzing the workers' opinions towards the workplace and its impact on performance.

**Figure 2. Productivity Cycle of Employees**



Figure 2 exhibits the productivity cycle of the employees which constitutes the conceptual framework of this study. The conceptual framework of this study is constructed around the following three research questions..

- Is there any relationship between the components of office environment and the performance level of employees?
- Which component of office environment? Behavioral or physical has the greater impact on productivity of the employees.
- Which elements of the two components of the office environment have the significant effect on the performance level of employees?

The dependent variable and independent variables of the study are as follows:

#### **Dependent Variable**

- ❖ Productivity of the Employees

#### **Independent Variables**

- ❖ Physical Components of Environment
  - Comfort Level: Ventilation, heating, natural lighting, artificial lighting, decor, cleanliness, overall comfort, physical security.
  - Office Layout: Informal meeting areas, formal meeting areas, quiet areas, privacy, personal storage, general storage, work area – desk and circulation space
- ❖ Behavioral Components of Environment
  - Level of Interaction and Distraction: Social interaction, work interaction, creative physical environment, overall atmosphere, position relative to colleagues, position relative to equipment, overall office layout and refreshments.

Thus, this research study explores the following research hypothesis.

H0: There is no relationship between office environment and productivity of the employees

H1: There is a relationship between office environment and productivity of employees.

H2: It is the behavioral components of office environment that have a greater effect on productivity, than the physical components.

H3: It is the comfort level has the significant impact on the performance level of employees than office layout.



## Section II: Appraising Workplace Environment Factors

**Table 5: The effect of relations with Superiors at the Workplace for Productivity**

Score	Responses	H/C	Percentage
1	Strongly Agree	50	100%
2	Agree	0	0%
3	Partially Agree	0	0%
4	Disagree	0	0%
5	Strongly Disagree	0	0%
	<b>Total</b>	<b>50</b>	<b>100%</b>

A supervisor support is crucial for employees to complete the job. Furthermore, interpersonal role of the supervisor is important to encourage positive relations and increase self-confidence of the employee. 100 % of survey attendees strongly agree that relations with superiors at the workplace affect their production.

**Table 6: Fair Treatment at the Workplace:**

Score	Responses	H/C	Percentage
1	Strongly Agree	47	94%
2	Agree	3	6%
3	Partially Agree	0	0%
4	Disagree	0	0%
5	Strongly Disagree	0	0%
	<b>Total</b>	<b>50</b>	<b>100%</b>

Feeling as treated fairly is important for all employees in the workplace. Fair treatment motivates all employees to do and develop their tasks with full of interest. Table 6 shows that 94% of employees strongly agree that fair treatment plays a crucial role in motivation.

**Table 7: Communication System at the Workplace:**

Score	Responses	H/C	Percentage
1	Strongly Agree	45	90%
2	Agree	4	8%
3	Partially Agree	1	2%
4	Disagree	0	0%
5	Strongly Disagree	0	0%
	<b>Total</b>	<b>50</b>	<b>100%</b>

Communication promotes trust and loyalty among the employees and encourages better team work and relationship shows communication system at the workplace.90% of employee strongly agree with the importance of the communication at the workplace.

**Table 8: Environmental Factors – Physical Factors- are Conductive to Work:**

Score	Responses	H/C	Percentage
1	Strongly Agree	29	58%
2	Agree	11	22%
3	Partially Agree	6	12%
4	Disagree	3	6%
5	Strongly Disagree	1	2%
	<b>Total</b>	<b>50</b>	<b>100%</b>

It is the responsibilities of the companies to provide safe, healthy, friendly working conditions. Besides this; lightning, ventilation, heating, ergonomics are crucial factors for employees .58% of employees strongly agree that environmental factors are important for them. Majority of employees agree that there exists a strong relation between physical factors and motivation.

### Section III: Influence of workplace environment on Employee's Performance

**Table 9: Behavioral Factors Affecting the Employee's Productivity at the workplace:**

Factors	Mean Value	Rank
Interpersonal Relationships	4,32	2
Emotional Factors	4,76	1
Job Assignment	4,26	3
Overtime Duty	3,40	4
Extended work	2,48	5

Employee's attitude at the workplace is affected by factors like interpersonal relations, emotional factors, job assignment, overtime duty and extended work. The emotional factor is one of the leading factor that affect the employees' attitude with a mean of 4,76. Interpersonal relations is regarded second with mean of 4, 32. Since interpersonal relations at workplace does not serve a critical role in development and maintenance of trust and positive feelings among employees in the organization.

**Table 10: Physical Aspects Influencing Employee's Performance at the Workplace**

Factors	Mean Value	Rank
Furniture and Furnishing	3,42	1
Office Space	3,26	2
Interior Surface	2,18	3
Storage of Materials	1,14	4

Furniture and furnishing is one of the leading physical aspects – comfort level - that influence the employee's performance at the workplace with mean value of 3,42. Majority of employees ensure in bank that good condition and proper furnishing should be maintained in order to make them feel sophisticated while they work. The results show that furniture and furnishing is the most effective physical workplace environment factor which increases or decrease employee's performance. Office space is ranked as second leading physical aspect with mean of 3, 26 by the employees. Employees ensure that poor arrangement of office space, wastes time and energy by failing to provide the means for effective work habits. Interior surface has been given third rank with

mean of 2, 18. Interior surface acts as practical, aesthetic and conducive to intended purposes such as raising productivity, improving life style employees. Since it is ranked by third it signifies that employees are comfortable with interior surface. Storage of materials has been given the lowest significance with the mean value of 1,14. Adequate storage facilities for materials are provided by the bank in order to arrange the materials properly. Thus it has weaker influence on work performance.

**Table 11: Satisfaction of Employees towards the Physical Factors Provided:**

Score	Responses	H/C	Percentage
1	Strongly Satisfied	1	2%
2	Satisfied	7	14%
3	Partially Satisfied	3	6%
4	Dissatisfied	39	78%
5	Strongly Dissatisfied	0	0%
	<b>Total</b>	<b>50</b>	<b>100%</b>

The physical layout of an office is extremely important when it comes to maximizing productivity. Table 5 shows the appraisements of employees towards to the importance of the space and facilities provided to do their job. 78% respondents are dissatisfied with the space and facilities.

**Table 12: Satisfaction of Employees towards the Behavioral Factors:**

Score	Responses	H/C	Percentage
1	Strongly Agree	30	60%
2	Agree	14	28%
3	Partially Agree	3	6%
4	Disagree	2	4%
5	Strongly Disagree	1	2%
	<b>Total</b>	<b>50</b>	<b>100%</b>

30 employees out of 50 with 60% agree that they are satisfied with the behavioral environmental factors which they face with in the workplace. Only 6% of the attendees give unfavorable answers to the question.

**Table 13: Satisfaction of Employees towards overall Workplace Environment**

Score	Respondents	%
Yes	42	84%
No	8	16%
Total	50	100%

Overall satisfaction has been exhibited in Table 13. Only just 16% of employees are dissatisfied with the overall working conditions of the bank. 86% of the staff are happy to be a part of the company.

The survey results finalize hypothesis which is set before the implementation of the survey.

Hypothesis	Statement	Status
H0	There is no relationship between office environment and productivity of the employees	<b>Do Not Accept</b>
H1	There is a relationship between office environment and productivity of employees.	<b>Accept</b>
H2	It is the behavioral components of office environment that have a greater effect on productivity, than the physical components.	<b>Accept</b>
H3	It is the comfort level has the significant impact on the performance level of employees than office layout	<b>Accept</b>

## 5. CONCLUSION

The research is investigated dimensions of workplace environment in terms of physical as well as behavioral components. The analysis is implemented to a private foreign bank in Turkey which has 300 employees. In the study both primary and secondary data is used. Secondary data represents the factors that are frequently used in literature. These factors that are accepted to influence the performance were explained in the previous section in details. The primary data is the inferences drawn from the results of the survey which is conducted among 50 employees. The survey is employed to the call center personel of the bank who mostly are affected from the workplace conditions than the other employees due to their job requirements. The first part of the survey includes demographic questions. The outputs show that the gender of this sample size is approximately in the middle of female and male. %72 of the attendees are between 20 to 29 years old. %84 of the employees have at least undergraduate degree and more than %80 of the employees have more than 1 year seniority within the bank. Second part of the survey gives us some clues regarding the effects of environmental factors on employee's productivity from the employees' perceptions. Questions regarding relation with the supervisors, fair treatment and communication within the bank are asked to the attendees in order to be ensure that behavioral environmental component are significant for them. Almost all the attendees give strongly agree replies that relation with the supervisors, fair treatment and communications is important.

Added to behavioral, also attendees evaluated the importance of physical factors. Surprisingly only 58% of employees give strongly agree replies to the question. It is the first clue that behavioral factor is more important than physical factors for the employees. In the third part, components are evaluated one by one in order to rank within each other. For the behavioral part emotional factors and relations are gotten the first two highest ranks. Comfort level of the offices is more important factor than the office lay out for the employees as physical environmental factors. In this part of the survey, satisfaction of the employees' towards the physical and behavioral environmental factors is evaluated. Employees are not satisfied with the physical factors which the bank provided for them. But on the other hand, employees' satisfaction towards the behavioral environmental factors is remarkably high. At the last question, overall satisfaction towards the workplace environment is asked to the employees, They give favorable results, almost all of them declared that they are satisfied with the workplace environment.

Finally, survey results show that while the employees are unhappy with the physical conditions of the workplace, they have remarkable satisfaction with the workplace by having strong behavioral workplace conditions. According to the survey results it is proven that workplace environment affects employee performance but behavioral workplace environment has greater effect on employees' performance.

## 6. LIMITATIONS AND RECOMMENDATIONS

Questionnaire design and results depend on employees' perception which has been implemented in order to analysis the effects of workplace environment towards to employees' performance, Since there is no performance management measures in the bank, the real effects of workplace environment on employees' performance (productivity) could not be measured systematically. In addition to this, 50 employees of the bank out of 300 who work in the same department have conducted to the survey. Survey results could be altering if the survey would conduct to the other department's employees. Also, analysis could be extended by investigating the gender differences towards the effects of workplace environment and productivity survey.

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