



## **The Experience of Employees in Open-Planed Office Layout: A Field Research on Jordanian Offices**

**Yazan Al Akhras**

**Prof.Dr. Güliz Muğan**

Master of architecture student, Okan

**Email:**yazan.rh92@gmail.com

### **1.1 Abstract**

This study aims to identify the impact of furniture, support areas and office layout characteristics have on privacy at work and its consequent effects on employee's performance in Jordan. Therefore, twenty employees (n=20); 5 females and 15 males, who are between 26 and 45 years old from four Jordanian companies - with open planned office layout - were interviewed.

Analysis of interviews revealed that the level of satisfaction with the office design among employees has ranged between dissatisfaction and complete satisfaction; where 45% of employees were satisfied, 10% were neutral and 15% of employees expressed they were either very dissatisfied, dissatisfied and very satisfied, which in turn indicates that there is a difference in the views of employees with regards to appropriate space layout characteristics of working spaces for them. From the interviewees' responses, it is clear that there are a many disadvantages towards work in the open places in relation to: focus, noise, crowdedness, privacy, sense of control and sense of belonging. Other employees pointed out advantages of related to their experience in open offices such as: increased interactivity and ease of workflow.

Comfort and functionality are identified as the most important aspects in furniture design. Many interviewees expressed high levels of discomfort when the furniture design was inflexible chairs and not adjustable.

In general interviewees' expressed that support areas are essential in providing convenience, stress relief and comfort specially smoking rooms; as Jordan has one of the largest percentages of smokers in the world.



**Keywords:** open plan offices, performance, layout characteristics, furniture design, support areas

## 1.1 الملخص

تهدف هذه الدراسة إلى التعرف على تأثير الأثاث ومناطق الدعم وخصائص تخطيط المكاتب على الخصوصية في العمل وتأثيراتها المترتبة على أداء الموظف في الأردن. لذلك ، عشرون موظفًا (ن = 20) ؛ تمت مقابلة 5 إناث و 15 ذكور ، تتراوح أعمارهم بين 26 و 45 عامًا من أربع شركات أردنية - مع تصميم مكتب مفتوح مخطط -.

أظهر تحليل المقابلات أن مستوى الرضا عن تصميم المكتب بين الموظفين تراوح بين عدم الرضا والرضا التام. حيث كان 45% من الموظفين راضين ، و 10% محايدين ، و 15% من الموظفين أعربوا عن أنهم إما غير راضين للغاية أو غير راضين أو راضين للغاية ، مما يشير بدوره إلى وجود اختلاف في آراء الموظفين فيما يتعلق بخصائص تخطيط المساحة المناسبة من مساحات العمل لهم. من ردود الأشخاص الذين تمت مقابلتهم ، يتضح أن هناك العديد من العيوب تجاه العمل في الأماكن المفتوحة فيما يتعلق ب: التركيز والضوضاء والازدحام والخصوصية والشعور بالسيطرة والشعور بالانتماء. وأشار موظفون آخرون إلى مزايا تتعلق بخبراتهم في المكاتب المفتوحة مثل: زيادة التفاعل وسهولة سير العمل.

تعتبر الراحة والأداء الوظيفي من أهم الجوانب في تصميم الأثاث. أعرب العديد من الأشخاص الذين تمت مقابلتهم عن مستويات عالية من عدم الارتياح عندما كان تصميم الأثاث غير مرن وغير قابل للتعديل.

بشكل عام ، أعرب الأشخاص الذين تمت مقابلتهم عن أن مناطق الدعم ضرورية لتوفير الراحة وتخفيف التوتر والراحة خاصة في غرف التدخين ؛ حيث يوجد في الأردن واحدة من أكبر نسب المدخنين في العالم.

الكلمات المفتاحية: المكاتب المفتوحة ، الأداء ، خصائص التخطيط ، تصميم الأثاث ، مناطق الدعم

## 1.2 Introduction

Business cultures may differ between countries in the world, were strict formalities applying at certain countries on the other hand some countries depend on personal relationships dominance for conducting business such as the case of Jordan.

Jordan is a higher middle-income country in which employment is a huge challenge for the government and therefore it is constantly seeking to improve business performance and productivity.

Companies in Jordan are more and more becoming aware of the offices' interior design importance as an image for their business. Various office layout choices are available in Jordan; open planned and closed planned offices. People in Jordan spend much of the time inside their offices; their experience of the space impacts their mood, actions and performance

The working space environment is said to affect greatly employees' performance and thus can be utilized to improve the company's outcome. It seems that better physical environment will encourage the employees and enhance their performance (Hameed & Amjad, 2009). Business achievements come from a flow of immaterial aspects such as thoughts, information, and aptitude. Hence businesses are now



more aware that the work environment is much more than just physical space that houses their employees (Meerwein, Rodeck, & Mahnke, 2007) .

The workplace's interior design is an important consideration due to several factors. To start with choosing the right interior design can positively affect employees' work through reflecting certain standards and expectations to the employee. Additionally, the image of the company to the customers can be crucial and essential for a business to grow more clients. Moreover, the interior design of the workspace supports the business quality, style and even operation; it can either cater to the workflow or make it more difficult. Hence, a workplace design is a tool that can assist companies successfully meet many challenges (El-Zeiny, 2012).

Interior design is a process that is aimed at improving the quality of life, with respect to the interior space. There are many parameters that make up the workspace or living space; these are related to aesthetics, functionality and comfort. For instance, color and lighting are often carefully designed in accordance to the individual needs of a business and its branding. These aesthetic decisions are important to reflect the company's function, operation and individual brand. (Poursafar, Devi, & Rodrigues, 2016). Lighting and color in this case become a major aspect in interior design that can set a mood and a tone for the company, and become part of the business's overall picture. Moreover, the choice of color has an effect on employees, hence the interior designer must be careful to pick proper colors in every office design with accordance to the office's needs. (Meerwen et al., 2007).



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In terms of functionality, many organizations over the years have experimented with new designs and techniques to create office buildings, which can increase performance and attract more employees. The workflow, operation, movement and communication are aspects of a business that is directly affected by the interior design. Functional aspects include the division of spaces in an office, privacy considerations in design and the fulfillment of logistical requirements. Many authors note that actual workspace planning, along with effective management processes, plays a key role in increasing employee productivity and improving the organizational performance (Hameed & Amjad, 2009). Office design or its layout is defined by Hameed and Amjad (2009) as arranging the workspace so that work can be carried out in the most efficient way; hence the office layout includes both ergonomics and workflow.

Over the decade there has been a transition and a shift from conventional private (or cellular) spatial configuration to modern open-plan. This type of office layout characteristics has been praised for encouraging teamwork and collaboration which reflected positively on the overall business performance. The open-plan office layout characteristics is believed by many to facilitate communication and interaction between co-workers by removing internal walls, which should improve individual work performance and organizational performance (Brand & Smith, 2005; Kupritz, 2003) Hence the office layout characteristics is an important factor in job satisfaction and performance. Additionally, there are tangible economic benefits to open-plan offices such as increased net usable area, higher occupant density and ease of re-configuration (Duffy, 1992; Hedge, 1982),



Another important aspect of interior design is comfort. The office layout characteristics have a direct relationship with employees' comfort and job satisfaction. Several studies in organizational behavior have suggested that interior design and space layout planning for workplaces can affect employee satisfaction, well-being performance, motivation and creativity (Dul, Ceylan, & Jaspers, 2011; Hameed & Amjad, 2009; Kupritz & Hillsman, 2011). The current trend in workplace development is to broaden the presentation of the physical and social features of employee environments in order to improve working conditions, thereby enhancing employee satisfaction, well-being and effectiveness in the job (Ahmadpoor Samani, Zaleha Abdul Rasid & Sofian, 2017).

Although initially open offices were viewed in positive light, recently many studies are directed towards indicated the privacy issues of the open-plan offices. Open offices are thought to encourage communication and collaboration; however, issues of distraction, noise and lack of privacy were reported to hinder progress and performance. In the analysis of the office, Brill (1985) distinguished three conditions that contribute to privacy. These include control over accessibility, the presence of visual distractions and interruptions, and aspects of speech privacy. It became important to identify the problems with open-plan offices in relation to privacy, and uncover the interplay between privacy, interior design and employee's performance.



## 1.2 Problem Statement

A comfortable and supportive work space is found to be significant in enhancing and improving employees' outcomes (Kim & de Dear, 2013). Interior design can help employees feel that their needs are met, as well as give a feel of comfort and safety (Thatcher & Milner, 2012; Veitch, 2011). Moreover, many aspects of interior design are connected to psychology and behavioral science; such as personalizing the environmental surroundings and enhancing a relaxed mood, which contributes to employee satisfaction. Proper design and comfortable space planning seem to be important to employees and affect their work-related behaviors and skills contributing into their performance (Lee & Brand, 2010).

Various studies tackled issues related to interior design factors that play a primary role in the performance of employees (Hameed & Amjad, 2009). Recently many offices developed an open plan layout instead of closed offices as it has been said to increase collaboration, communication and creativity between employees.

Privacy issues have been rising in open plan offices due to implementing the open-plan office without careful considerations for each individual case. In order to uncover the root of the issue with privacy in interior design, the research focused on the privacy relation with main interior design elements layout; furniture style and support areas arrangement. Firstly, the privacy is related to office furniture, such as the workspaces design, partitioning, shelves, cabinets and any other furniture that is found in an office. Secondly, support areas are essential and might influence employee's privacy. These areas are spaces used by a group within the

entire organization or for the organization to meet common needs such as cafeteria, meeting room or waiting area.

This study addressed the impact of interior design elements on privacy and therefore on employee's performance in open office layout. The research revealed the interplay between privacy and performance in relation to interior design aspects such as support areas, furniture and office layout characteristics.

### 1.3 Objectives of the Study

The main objective of the study is to identify the impact of furniture, support areas and office layout characteristics have on privacy at work and its consequent effects on employee's performance.

The research aims to tackle the following questions.

1. What are the privacy experiences of open-planned Office employees?
2. How does furniture design affect privacy experience in open-planned offices?
3. How does existence of supporting areas affect privacy in open-planed offices?
4. Is experience of privacy related to job satisfaction that will affect performance at offices

The main aim of this study is uncovering the relationship between interior design, privacy and performance. There has been much debate on whether open offices



have been beneficial for businesses or have they bought more issues through creating spaces with little privacy and many distractions.

This main objective is subdivided into the following sub-objectives:

- 1) To investigate the relationship between open-planned Office design and privacy experience of Office employees?
- 2) To explore the impact of furniture design on privacy experience of employees in open-planned offices?
- 3) To explore the impact of existence of support areas privacy experience of employees in open-planned offices?
- 4) To investigate the relationship between privacy experience and job satisfaction in open-planned offices?
- 5) To investigate the relationship between job satisfaction and performance of employees in open-planned offices

#### 1.4 Study Significance

Many recent studies have investigated the privacy loss component of an open office and its influence on performance. However, and despite the importance of workplace interior environment and layout characteristics on performance, there are a scarcity in studies, especially in Jordan which are concerned about investigating elements and dimensions that focus on privacy and its impact on employee's performance. This study is intended to contribute to the body of knowledge and bridge such gap and lack of research in this domain.

## 2. Literature review

### 2.1 Interior design and performance

Interior design is an important aspect in every space, it not merely a project's aesthetic appeal, it also accounts for space functionality and performance. Different spaces have their own set of interior design requirements to make them functional and serve their specific purposes. There have been many studies conducted to identify the specific needs that can influence the performance of a certain space.

The variation of spaces means there is abroad set of requirements in interior design spaces, each project requires attention in a unique way. For instance, in school designs issues of absorption of noise (through floor coverings) as well as classroom flexibility, safety, and security are essential factors to consider as they affect greatly student's performance. (Tanner & Langford, 2003) However, it is a different case for restaurant and café', in a study conducted on interior design's influence on customer satisfaction, participants were more interested in the color and furniture design aspects of the interior design. (Pecotic'i, Bazdani, & Samardzic, 2014)

Other spaces such as health-care spaces can help create a relaxing and healing atmosphere for the patient. Patients reported that visual and auditory privacy was of primary importance, as was a feeling of choice and control over seating provisions. Moreover, the environments need to be easy to "read", and inclusive design, such as wheelchair access, was particularly important. (Paynea, Mackrill,



Cain, Strelitz, & Gate, 2015) Interior design has also been directly linked to employee's job performance in offices and work areas. Thus, designers must consider the interior design features and attributes to ensure all end users have a positive interaction with the environment whether its offices or any other spaces.

## 2.2 Job Satisfaction as a Criterion for Job Performance

There are several literatures that identify various factors that affect employee performance. Haynes (2008) explains the behavioral components of the office environment and the behavioral effects of the office environment that have the greatest impact on office performance. Management that dictates how, exactly, to maximize employee performance is centered on two main areas of focus: personal motivation and infrastructure for the work environment (Sekar, 2011). This section discusses personal motivation and job satisfaction as a criterion for employee performance. Schroeder and Dole stated that, in the workplace, it is often assumed that employees most satisfied with the physical environment are more likely to achieve better work results (Dole, 2001). It is clear in the results of research by Patterson et al. (2003) that employees who are more satisfied with their jobs are more likely to achieve in the company in terms of subsequent profitability.

Jayaweera (2015) assessed the cross-sectional relationship between environmental factors of work and job performance with motivation to work using 254 hotel workers in twenty-five hotel chains in England. Additionally, the study analyzed the degree to which the relationship between elements of the work environment and job performance is facilitated by work motivation. He found that there was an important relationship between environmental factors and job performance, and

also pointed out that work motivation facilitates the link between work conditions and job performance. Also, the motivation for the job was found to have a significant impact on the functionality of the hotel staff. The results indicated the importance of work motivation and working conditions in explaining the job performance of hotel staff in the context of environmental working conditions and job performance (Jayaweera, 2015). Leblebici (2012) conducted a study at a bank in Turkey to analyze the impact of workplace quality on employee performance. The author assessed the employees' satisfaction with the physical and behavioral environmental factors of the bank and found that the employees were dissatisfied with the material factors provided by the bank. However, employee satisfaction with behavioral environmental factors was recorded significantly. The results of the study proved that the workplace environment affects employee performance, whereas the behavioral workplace environment has a greater impact on employee performance (Leblebici, 2012).

### 2.3 Privacy Need for Job Satisfaction

Privacy can be defined in several ways, from a psychological point of view or as a physical feature of the environment. From a psychological perspective, it describes the sense of control over access to oneself or one's group with regards to transmission of information about oneself to others and control over inputs from others. A common understanding of it means personal control over interactions with others (Brill, 1984). On one hand little social contact might produce feelings of isolation (Wohlwill, 1974) on the other hand too much might produce crowding (Sundstrom. 1975, 1978). Architectural privacy refers to the environmental aspects

that can offer visual and acoustic isolation, for example soundproof walls and lockable doors. Architectural privacy often contributes to psychological privacy.

“The University of California estimates that the average office worker is interrupted or distracted every 3 minutes, and it takes an average of 23 minutes to return to a task after being interrupted in some way. Further, a lack of privacy has been found to negatively affect employees’ stress levels, performance and engagement” (Penketh group website, n.d.).The level of privacy required by employees depends on the type of work, (Geen & Gange, 1977) suggests that employees with repetitive tasks, a non-private workspace might be more preferable since employees can find their jobs boring if there was a lack of stimulations (Geen & Gange, 1977). Hence, people with routine tasks might feel most satisfied and work most effectively where there is more accessibility with other co-workers provided as long as there is no over-crowdedness. As the difficulty of the job increases, the desired amount of social contact may decrease. People with complicated tasks may need less distraction and consequently need more architectural privacy for greatest job satisfaction and best job performance.

However, (Justa & Golan, 1977) study reported that for all types of jobs studied, participants generally preferred privacy over accessibility. Moreover, people may prefer private offices because they often signify status or importance; it also enables control over aspects of individual's self-identity by creating personal boundaries (Altman, 1975; Westin, 1970).

### 3. Research Methodology

The research is concerned with people's behavior, level of comfort and performance in the workspace, which is a personal experience that depends on several interrelated factors; hence a qualitative field research method was selected; semi-structured face-to-face interviews. This is because a field research allows understanding, observing, and interacting with people in their natural settings, which is the main purpose of this study.

Moreover, this paper relied on the experience of employees in open-planed office and attempted to interpret and explain the impact of space layout characteristics of interior working spaces on employees' privacy and performance, from the perspectives of Jordanian employees.

Purposive sampling method (a form of non-probability sampling) was used since it is a popular method that is used by several researchers due to the fact that it is extremely time and cost effective when compared to other sampling methods. The businesses selected were from various sectors; such as interior design, engineering and pharmaceutical to examine a diverse range of cases and gain broader insight and angles that are all relevant to achieve the purpose of this study.

The companies that were chosen to be studied in the study were of various size and industry; however they all shared one aspect that is the open office arrangement.

**Company A** was a start-up interior design office that has a total of four employees.

**Company B** was an engineering systems and controls company; they are supply, design and install security and smart systems that has 11 employees.

**Company C** was an architectural design company of 20 employees.

**Company D** was the administrative offices for a large chain pharmacy business.

An interview guide was developed and it consisted of two main parts with a different number of open questions that gave the respondent the freedom to express his or her opinion / words. The first part of the interview; is a part that does not serve any of the aims of the study, but is merely a description of the study sample and its demographic characteristics. The second part of the interview; consisted of 19 questions mainly directed to identify the impact of space layout characteristics, existence of support areas (reception, conference rooms, training rooms, mail rooms, pantries and special support) in offices as well as offices' furniture (amount, direction, comfortableness and its flexibility to be adjusted and rearranged) on employees' privacy and performance.

This allowed the study to generate a deep understanding of the office design's impact on employees through having feedback from real life situation and experiences of four separate case studies.

#### 4. Discussion

The purpose of clarifying the analysis of data and results is to provide a clear understanding of the study problem represented by the impact of space layout characteristics of interior working spaces on employees' sense of privacy and performance from the perception of a sample of Jordanian employees interviewed.

Through thorough analysis of the transcripts and the process of coding interviews it was clear that certain themes emerge the four office case studies. There were some overlapping in many cases which allowed the themes to be quite reliable since they have been observed in more than one situation, sometimes even in all four cases.

The coding includes coding patterns and themes in such a way to give greater clarity regarding their detailed content; a distinction was made between the different aspects of the content by organizing data into a group of categories by dividing the questions and their answers into groups (topics) that answer the questions of the study.

Analysis of interviews revealed that the level of satisfaction with the office design among employees has ranged between dissatisfaction and complete satisfaction; where 45% of employees were satisfied, 10% were neutral and 15% of employees expressed they were either very dissatisfied, dissatisfied and very satisfied, which in turn indicates that there is a difference in the views of employees with regards to appropriate space layout characteristics of working spaces for them. From the interviewees' responses, it is clear that there are a many disadvantages towards work in the open places in relation to: focus, noise, crowdedness, privacy, sense of control and sense of belonging. Other employees pointed out advantages of related to their experience in open offices such as: increased interactivity and ease of workflow.

Office furniture was discussed from two points of view, comfort and functionality. The goal of the presence of furniture is to provide the human needs of functional



and performance requirements in an optimal way within the environment in which he lives and in accordance with his desire. Many interviewees expressed high levels of discomfort in Company C, where they had inflexible chairs that are not adjustable; this included having back pain feeling tired all the time.

Support areas are spaces used by a group within the entire organization or organization to meet common needs .In general interviewees' expressed that support areas are essential in providing convenience, stress relief and comfort specially smoking rooms; as Jordan has one of the largest percentages of smokers in the world. The type of business indicates the importance of support rooms; sometimes the lack of them is a huge problem as expressed by some employees.

## 5. Conclusions and Recommendations

The office interior space layout characteristics play a vital role in encouraging employees to successfully perform their specific work. When there is a favorable office space layout characteristic, employees are motivated to perform their duties effectively and efficiently which leads to increased employee performance and hence also the productivity and performance of the organization. Most of the time, senior management of enterprises does not realize the benefits of good office space layout characteristics and believe that only money can be used as an incentive. Adequate attention should be paid to the favorable arrangement of the office space layout characteristics, supporting areas and its furniture in order to obtain the maximum contribution from staff.

Despite the importance of the interior environments of the workplace and its design for enhancing performance, many Jordanian offices neglected the design of

a suitable work environment that would achieve the functional purpose and the necessary comfort to employees to the fullest extent, which negatively affected the employee in particular and the performance of the work in general.

The result of analyzing the interviewees' answers showed that a relationship between space layout characteristics of interior working spaces and quality of submitted work (Concentration, Accuracy and efficiency of work) could be assumed, and that this relationship could positively reflected in the increase in interactive, cooperative, and performance as indicated by the researches of Bernstein, and Turban (2018) and Haynes et al. (2011), while it has negative implications in other times, represented by inconvenience, dispersal of employees, and breaches of their privacy as indicated by Ding (2008) and Kim and deDear (2013), which may cause a decline in achievement and harm effectiveness, and this ultimately depends on the nature of the work and the objectives to be achieved.

One of the major conclusions drawn from the interviews is that privacy and its relation to job satisfaction and performance is influenced primarily by the job role. One can conclude that the feeling of privacy might be a subjective matter, some people expressed that a lack of privacy and the general feeling of being watched annoyed them and it would definitely affect their performance. Hence a minimum amount of privacy must be provided to ensure employees comfort, or the employees can be consulted with regards to the interior design. The working environment condition has an immediate effect towards the employees' performance both negatively and positively.

Office layout characteristic's that accommodate employees concerns with regard to privacy and that enables them to exercise their daily routine roles effectively have positive impact on their wellbeing , job satisfaction, performance and therefore positively impact the company performance.

The human-space interaction; between employees and the office layout characteristics, furniture design and the provision of support areas should be prioritized and given more importance by company-owners and management as



well as by interior designers at all stages ; from selection to business operation and development.

Designers must consider the interior design features and attributes to ensure all end users have a positive interaction with the environment whether its offices or any other spaces.

Employees most satisfied with the office layout characteristics (physical environment) are more likely to achieve better work results. In that context, business managers and owners need to give more consideration to the design and arrangement of the work place. As a matter of fact, it ought to be designed and rearranged in a way in which workers are encouraged enough to perform well in their work places. The working environment condition has an immediate effect towards the employees' performance both negatively and positively.

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