EMPLOYEES FEEDBACK ON OFFICE WORKSPACE CONFIGURATION IN PUBLIC HIGHER LEARNING INSTITUTION

S.N. Kamaruzzaman[1], E.M.A. Zawawi[2]
[1]Department of Building Surveying, Faculty of Built Environment, University of Malaya, Lembah Pantai, 50603 Kuala Lumpur, Malaysia.
[2]Department of Research & Graduate Studies, Faculty of Architecture, Planning & Surveying, University Technology MARA, 40450 Shah Alam, Malaysia
*Corresponding author: syahrulnizam@um.edu.my

Abstract

Space planning is an integral part because without proper planning, a good workspace configuration could not be achieved. Models and concepts that were reviewed could be an essential guide in planning process. Attention should be put on the core elements as the workspace is design for a purpose. If the design fails and the users were not satisfied, then the configuration could be considered fail as a whole where it cannot help the organizations reach their goals and objectives. Therefore, a thorough understanding of the planning process will be very useful to achieve the ideal workspace configuration. This research aims to study and analyze workspace configuration that has been implemented in offices on public higher learning institution in Malaysia. Based on the observation and the data gathered, the workers comfort and satisfaction level are very important as these two aspects would result in the overall productivity of the organization. The workspace in offices should be reconfigured according to the people, location, design and worker's work style. These factors play an important role in shaping a good working environment with a proper workspace configuration. Questionnaires were distributed to each case study and feedbacks from the respondents were gathered. The questions enquired on their perception and the satisfactory level on their current workstation. Case studies will provide essential background information reflecting the office workspace configuration in today's offices. This study believes to be valuable in identifying the criteria and key factors affecting the satisfaction level of the workers. Analysing data will provide the first indication of how well the space configuration practice is performing and helped pin point problem areas within office workspace. It is anticipated that this study would contribute to the development of a better office workspace by improving quality and value of workspace configuration of public higher learning institution in Malaysia.

Keywords: Satisfaction level, Workspace, Public higher learning institution.

Introduction

A workplace is essentially made up of a number of planned zones and workspaces. Organizations live by their informal structures, based on the day-to-day activities that include the daily tasks, problem-solving and learning situations. The informal structure involves workers to interact and share ideas among each other despite their hierarchy level. They are allowed to communicate freely in terms of achieving the same goal for the organization. The way they interact and where they do it makes a workspace an essential part of allowing them to be able to work as a team. The workspace thus becomes essential to organizational performance as its configuration plays an important role as a medium of interaction and resource.

Leete (2003) stated that when asked to name important factors contributing to workplace evolution, many would agree that technology has done the most to change the way we work. Tyler (1997) concurs that office-layout design is changing to take advantage of such mobile office technology as cordless telephones and laptop computers. That same technology allows more people to do more of their work without coming into the office at all. As employees become more mobile, companies are realizing that dedicating floor space to the service of a person who is not always there to occupy it is a waste of resources. Moreover, it can lead to the office equivalent of a village riddled with holiday homes where too many empty spaces for a proper working atmosphere to develop.

Some companies are concluding that permanent desks and workstations should be given only to those who occupy them throughout the working day. According to Lindahl (2004), work environment qualities have received attention from researchers for a number of years. If, however, the work environment qualities are very poor, the focus at the place of work will be on carrying out the working tasks at their most basic level. The physical workplace is one of the top three factors employees take into account when deciding to accept or leave a job, so this clearly has a massive effect on employee productivity, meaning that employers have to give serious thought to issues such as employee comfort, access to people and equipment, privacy and flexibility (Sule, 2007). Thus, this research aims to study and analyze workspace configuration that has been implemented in offices as they have an influence on the people in the workplace and also on the organization.

Problem Statements

According to Lindahl (2004), spatial issues are seldom discussed when it comes to evaluating organizational performance. The buildings, or the premises, where the organization performs its activities are often taken for granted. Usually there is an existing building where the organization has to adjust to what is already there. This refers to the facilities including furniture and space that the existing building offers. This differs from a new building that is constructed with the economy of the construction and corporate style in mind, rather than organizational performance which marks a totally different view of space configuration. Since modern organizations are not fixed structures, and might be described as arenas for networking where people interact in different ways, a dynamic view of their resources becomes important. A typical matrix organizational structure would be a good example of how modern organization performs. The basis for the matrix organization is an endeavor to create synergism through shared responsibility between project and functional management. Information sharing is mandatory in such an organization, and several people may be required for the same piece of work. However, in general, the project manager has the total responsibility and accountability for the success of the project. The functional departments, on the other hand, have functional responsibility to maintain technical excellence on the project. Each functional unit is headed by a department manager whose prime responsibility is to ensure that a unified technical base is maintained and that all available information can be exchanged for each project (Visitask , 2004).

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Aim and Objectives of Research

The aim of this research is to study and analyze workspace configuration that has been implemented in Malaysian higher learning institution offices as they have an influence on the people in the workplace and also on the organization. Case studies will provide essential background information reflecting the office workspace configuration in today's offices. Research objective is to identify the criteria and key factors that result in changing the workspace configuration, and how it affects its workers. In completing this research, following objectives are needed:
   a) To evaluate current workspace configuration and determine the satisfaction of the users.
   b) To identify the key factors that would result changes in the office workspace configuration.

c) To illustrate how better workspace configuration would allow better working environment for employees in an organization.

Workspace Configuration – An Overview

A variety of workspace forms for offices have been derived from the application of what have become known as integrated workspace. It combines the nature of the physical settings, the information technology that supports it, the nature of work patterns and processes, and the organizational culture and management (Chilton and Baldry, 1997). Benhar (2004) stress in his article that the office environment is an evolutionary process whereby rows of desks began to give way to the rise of furniture systems that created highly flexible and efficient workstations for the rapidly growing white collar workforce. Leete (2003) asserted that when asked to name important factors contributing to workplace evolution, many would agree that technology has done the most to change the way we work. As highlighted by Miller (2007) in an interview, the thing that's most different about office spaces today is that pretty much anything goes. With IT approaches, there's the office where people work on their laptops in a variety of unusual environments (Tyler, 1997). Technology allows more people to do more of their work without coming into the office at all (Robertson, 2000; Peterson & Beard, 2004). As employees become more mobile, companies are realizing that dedicating floor space to the service of a person who is not always there to occupy it is a waste of resources. Moreover, it can lead to the office equivalent of a village riddled with holiday homes where too many empty spaces for a proper working atmosphere to develop. At the other extreme is the traditional office that can be seen much of, from legal firms to accounting firms, where individual offices with individual people and workstations, or some pool area with support staff. It really depends on how the employees work and the privacy they need. Whether it is a brand new operation, full-scale office relocation or a partial re-organization, a carefully planned and implemented workplace can have a profound impact on the performance of an organization (Steiner, 2005).This is very important as employees' needs do make a huge contribution to the organization productivity and therefore it is consider as a business need to have a comfortable, sustainable and technology friendly workspace design.

a) **Workspace Design**

As stated by Benhar (2004) in his article, the quality of workstations is far superior today, with a greater range of acoustic, consideration and visual privacy, and configurations offering multi functional versatility, as wireless technology becomes more advanced and affordable. A growing number of employers can expect to move more of their space from panel based workstations to the more flexible open desking systems. Steiner (2005) highlighted that the inter-connected nature of today's workplace has set a new benchmark for office workspace design. The need to reconfigure traditional workspaces to suit today's technology and business world has become so important because they affect the organization workforce as a whole. Emerging trends for the next generation workplace, which includes modular systems with multi-tasking functionality, mobility and flexibility, are a clear trend. Solutions that combine storage with soft seating and incorporate power and data connections in breakout area seating are among the new innovative solutions available today (Steiner, 2005). Ergonomics and health are still high on the agenda, with fully adjustable chairs, desks that incorporate lift technology, keyboard trays with wrist supports and more products that incorporate adjustable flat screen technology appearing in the workplace. Lighting solutions that enhance visibility between workstations and distinguish between private workstations and interactive social spaces are becoming more familiar features, also creating a feeling of natural daylight in areas where employees have no access to windows (Steiner, 2005). Hughes stated that cabling solutions for electronic data and telecommunications are being addressed by innovative, easily accessible flooring systems or through ceiling troughs. As teams regroup and evolve essential IT and power supplies can easily be reconfigured in line with the new requirement. Cabling has also been incorporated into seating, further contributing to the emerging concept of workplace freedom; people are no longer

confined to working solely from their traditional workspace (Miller, 2007). Flexibility is the main key that shapes today office workspaces. Alongside with ergonomics and health, the new design of modern office workspace collaborate many solutions that concludes a better configuration that meets the needs of today's organization.

b) Workspace Flexibility

According to Benhar (2004), the main goal of tomorrow's office will be to help workers capture, organize, analyze and share information more easily and efficiently. Ultimately, the focus is not on gadgets, but on production, privacy and personalization for office workers. All of the high technology concepts making their way into the workplace will certainly require new and more versatile workspace design to ensure the comfort and productivity of tomorrow's office worker. The office spaces of the future will likely be designed to improve efficiency without having to worry about reserving rooms and getting people from different points. In much the same way that people move around their own homes to do different things, such as socialize in the living room and read quietly in the bedroom, offices need to enable variety (Benhar, 2004). As always, flexibility and mobility is the key. Current designs still focus on the computers, but the technological building blocks are now in place for a more mobile approach. As new technology and work patterns are incorporated into new designs, the next few years should offer some unique visions for the office of the future. Already it is clear that the future will offer more variety in office space, including comfortable and spacious rooms for entertaining clients, quiet thinking spaces and social areas that give people a place to escape the desk. While the paperless, wireless office may still be a long way away, the thought of designing workspace that will reduce clutter while addressing the need for storage solutions, personal interaction and the incorporation of advancing technologies. The non-territorial options offer some flexibility for staff churn and make economic sense as some companies find they can no longer afford to provide one desk per person. However, the challenge facing facility managers is to create a flexible space that can seamlessly accommodate multiple modes of working (Steiner, 2005). Be it individual or group working space, it is inevitable that future flexibility in today's space configuration is essential. This is not only to ensure that the workspace is sustainable for future use, but also to minimize distractions and disruptions during business which in time will cost loss of profit to an organization.

c) Shaping the Workspace

Steiner (2005) stated in his article that in the current corporate world, more and more people are becoming "Knowledge Workers". Born out of the fast-paced IT sector, the principles of relying on the individual's power of ideas, thought leadership and information to make the right decisions that enhance competitive advantage are crossing over and being adopted by other industries. Knowledge transferred through human collaboration via formal or informal meetings and social interaction is further enhanced by communication technology, which can ultimately translate into company assets. With a variety of needs depending on job function, specific tasks, work-style and personal life, knowledge workers have greater freedom in choosing when and where to work, which helps in the achievement not only of optimum productivity, but also a healthy work/life balance. It naturally follows that the design of the physical workspace and infrastructure must also evolve to successfully accommodate this changing approach to work. Advances in emerging areas of technology such as mobile and wireless devices, power cells and pervasive computing solutions may have further accelerated the changes in the workplace, but this will only continue to have an influence as long as the costs of implementing such solutions are not prohibitive; and the workforce successfully adopts and utilizes the tools to their full potential. In office environments, by far the single greatest cost to employers is that of the salaries of the employees occupying the space. Successful organizations have, therefore, recognized that an effective workplace helps attract and retain the right staff (Steiner, 2005). The physical workplace is one of the top three factors employees take into account when deciding to accept or leave a job, so this clearly has a massive effect on employee productivity, meaning that employers have to

give serious thought to issues such as employee comfort, access to people and equipment, privacy and flexibility (Sule, 2007).

Data Gathering/Methodology

A total of three case studies were selected for this study. The three case studies were selected based on their business nature as a public higher learning institution. The next criteria were to choose the most suitable and typical office in the public higher learning institution that would resembles and illustrate the other offices workspaces in the institution. Thus, the facilities department office was chosen as the case study for each public higher learning institution. The selection was done based on the capability of facilities department in each institution to reflect as the ideal office workspace as they are the ones who plans and configured offices workspaces within the institution.

Post Occupancy Evaluation (POE) method which uses questionnaire to obtain feedback from targeted groups was used (Preiser, 1989). Sets of questionnaire papers were distributed on each case study as a populated sample to obtain data. The questionnaire was set in the simplest form that could be easily understood. The questionnaire was divided into two sections, section A and section B, respectively. The first section which is section A is meant for background information purposes. Background information questions were mainly to obtain information on the respondent's basic information that consist of gender, race, age, working years and job types. Section B of the questionnaire will enquire on the office workspace configuration. The office workspace section intends to evaluate the user's workspace and satisfactory level on their current workspace. The respondents were asked to give a 'yes-no' answer on the first six questions and only the last question allows them to choose and rate the overall satisfactory level of their current workspace. The nature of these questions was established based on literature reviews and past (Lee, 2006; Leishman et al., 2003; Heerwagen & Zargeus, 2005).

The methodological framework used in this study stems from compilation of written discourse from which discourse analysis has identified patterns in the data (Bender, 2007). Results obtained from questionnaires would be further analyzed and categorized into groups for ease of referencing. Data will be presented in graphs for better understanding. Data obtained from case study will be analyze and finalized. Based on the approach, this study will utilize interpretation methods to capture meaning from the data, categorized the data, and produced the findings from the data obtained.

Result & Discussion

Table 1 below summarized the employees feedbacks gathered from the sample of the case studies. A total of 120 questionnaires were sent out to three public higher learning institutions in Malaysia. However, based on the total questionnaires received, only 88 questionnaires were accepted for data analysis with 19 rejected due to uncompleted answer. This results in 73.33% of valid response rate on current workspace configuration and its satisfactory level.

Section A Results

The figures presented below shows the background information for the case studies. The gender, race, age, job type and working experience are all vital data that would be essential during the overall findings of this research.

The information obtained from the figure 1 shows that the number of female workers exceeds the number of male by 52.94%. They also consist of many races that include Malays, Indian and 5.88% respondents of other races (Figure 2). The main job type for

the workers as indicated in figure 3 are administrative support and that governs a majority of 88.24% of the total sample. Managerial level consists of only 11.76% of the total sample. None of the respondents were in the technical line and after some random interview done with the workers in the office, the technical staffs were mostly working outside at the time and no feedback could be obtained from them. Workers in the office are mostly around the age of 26-35 years old. Figure 4 shows that workers that belong under the age of 25 were 26.47%, 36-45 years old were 17.65% and 46-55 years old were only 2.94%. From figure 5, workers above the age of 55 years old were 5.88% from the total sample in the office. Most of the workers have the experience working in the office for around 1-5 years. The rest of them worked less than a year and only 11.76% already worked for 6-10 years in the office. The second largest figure in the working experience chart which was 17.65% belongs to workers with experience working in the office for more than 10 years. These workers can be considered as seniors as they spent the most time in the office.

Section B Results

Figure 6 in the appendix indicates that 85.29% of the respondents gave negative feedback which disagrees that their workspace is suitable for their daily task. In the second question, 73.53% of them also disagreed that the workspace allows them to work efficiently.

Furthermore, 79.41% of the respondents disagreed that their workspace provides flexibility for communication and interaction with other staffs in the office. Another 76.47% gave a negative feedback that their workspace cannot be personalized according to their own needs. The question on privacy saw a majority of 94.12% of the respondents stated that their workspace does not provide enough privacy and only 5.88% stated the other way.

Based on the questionnaires, ranking analysis was conducted to identify most contributing factors. The results were ranked based on mean reading shown in Table 2. The result obtained revealed that all intervening variables tested are important in determining employees' dissatisfaction. The average mean ranking in Table 2 indicates that the variables 'privacy' is the most contributing factors followed by 'suitability' and flexibility', respectively. Majority of the respondents does not agree that their workspace is suitable for their daily tasks. They also express difficulties in carrying out their routine works efficiently on the current workspace. This reflects on the negative side of the management that configures the workspace as many of the workers neither were unhappy nor satisfy with their workspace.

The overall satisfaction of the respondents toward their workspace can be sum up as dissatisfying. As per figure 5, 32.35% were very dissatisfied and 29.41% dissatisfied with the current setting of the workspace. Another 29.41% gave an unbiased feedback while only 8.82% indicates a satisfying condition with their current workspace configuration. Majority of the workers are dissatisfied with the overall workspace configuration. This could be illustrated with the high percentage of dissatisfaction feedbacks from the respondent's as shown in Figure 7. Furthermore, with the lack of privacy and the inability to personalize the workspace as the worker's desire also contributes to the dissatisfaction feedbacks. Satisfactory level was on the low as the workspace provided does not meet the workers needs.

From observation, workspace in the case studies uses cubicle system or cell type office model. The cell type model focuses on individual processes to allow concentrated study for the workers. It was designed for the workers to work without much distraction from others. Although it may seem fit for administrative tasks to be carried out in the workspace, however, feedback from respondents stated the opposite. This might due to the small space provided for each individual. The small space makes it hard for them to do their daily tasks efficiently and therefore resulting in poor satisfactory level among the

workers. Managerial or supervisory level staffs that have their own room were not affected much but the ones that were situated among the workers might find it uneasy to perform their tasks and holding meetings with clients. These rigid cell type model workspaces allow access for communication and interactions among workers. Nevertheless, the limited space discourages the interactions between workers and does not allow great communications with clients. Visitors and clients that came to visit the office for business purposes will find this configuration upsetting as informal meetings and effective communication with the workers are hard to ensue. Majority wanted a change and the satisfactory level was very poor. Improvements are really needed in order to help the workers continue to be productive. Otherwise, it will result losses to the organization in terms of overall work productivity.

Actions based on recommendations should be implemented to help maintain their workers productivity level. The workers morale and comfort level should also be the main priority as their work could have a big impact on the organization's business process. Above all, the study illustrates the workspace configuration and the impact on its workers. It is highlighted that there are plenty room for improvements and therefore recommended actions could act as a guide for the management to implement in the future.

Conclusion

Supporting business processes are the backbone to any infrastructure, especially in the new knowledge worker era. Evolving and dynamic, these include work profiling, user surveys, self-assessment surveys and effective internal communications, all of which help identify the solutions that are most appropriate for individual workers or groups (Steiner, 2005).

Although cubicles are excellent for concentrated processes, a small space provided for each individual might be inadequate and could cause discomfort to them. The workspace should be reconfigured and provide a bigger space for each individual worker. This might help to enhance their comfort level thus encouraging them to perform their work task in a better manner. The workers comfort and satisfaction level are very important as these two aspects would result in the overall productivity of the organization. In terms of communication flexibility, suggested actions would be to provide informal meeting area that can be accessed by workers and clients at the same time. These would benefit the organization in terms of business process and productivity. For managerial or supervisory level staffs, they should be provided a room to suit their job type as it would help them feel valuable and treated as to their rank. This will help to boost their working morale and increase the overall work productivity.

Overall, the workspace in offices should be reconfigured and this time, suggestions by workers should be taken seriously. The workspace should be configured according to people, location, design and worker's work style. These factors play an important role in shaping a good working environment with a proper workspace configuration. It is hoped that this research would benefit organizations to thoroughly understand the important factors and help them to plan and create an ideal workspace for their workers.

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Appendix

Table 1: Summary of respondents' feedback

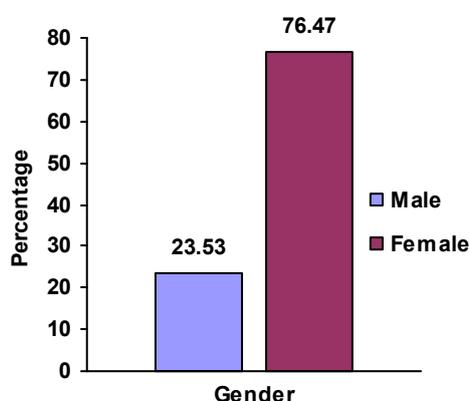|	
Total Questionnaires Sent Out	120
Total Questionnaires Replied	107
Total Questionnaires Rejected	19
Valid Respondent's Rate	**73.33%**

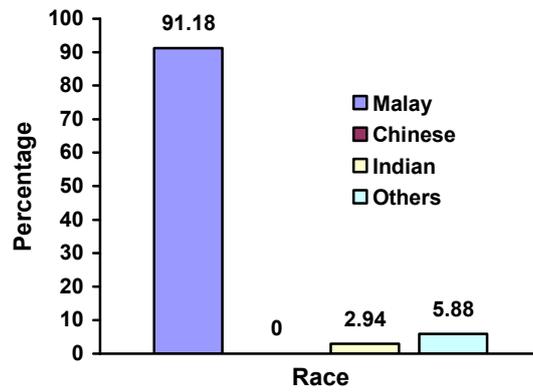Figure 1: Percentage of respondent's gender

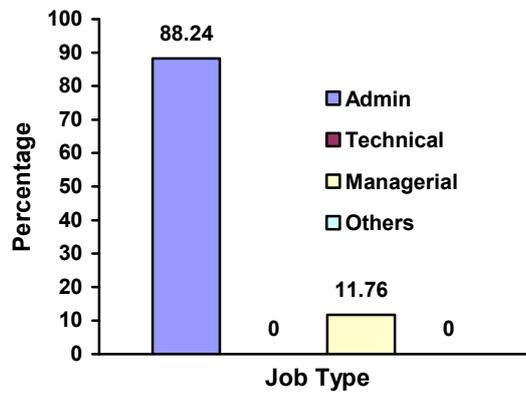Figure 2: Percentage of respondent's gender
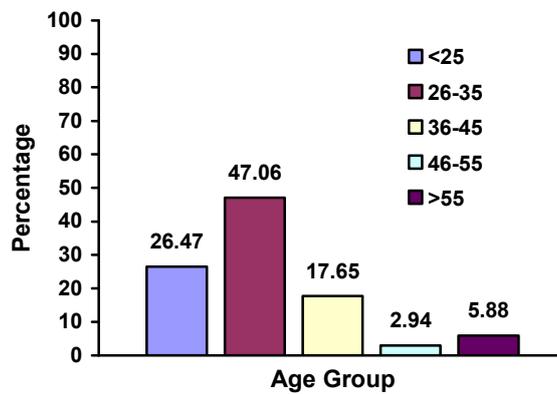

Figure 3: Percentage of job type.

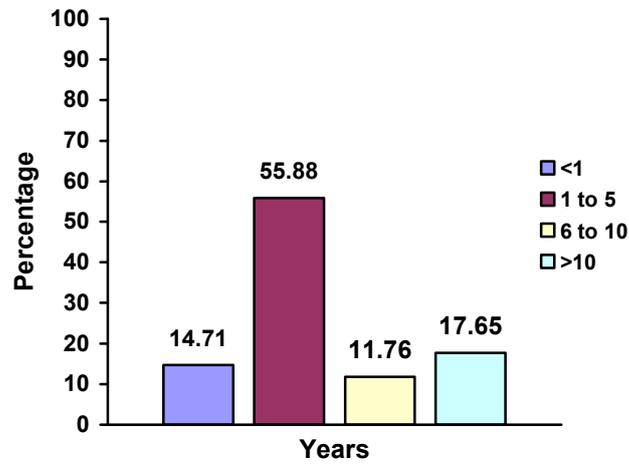Figure 4: Percentage of respondent's age group

Figure 5: Percentage of working experience.

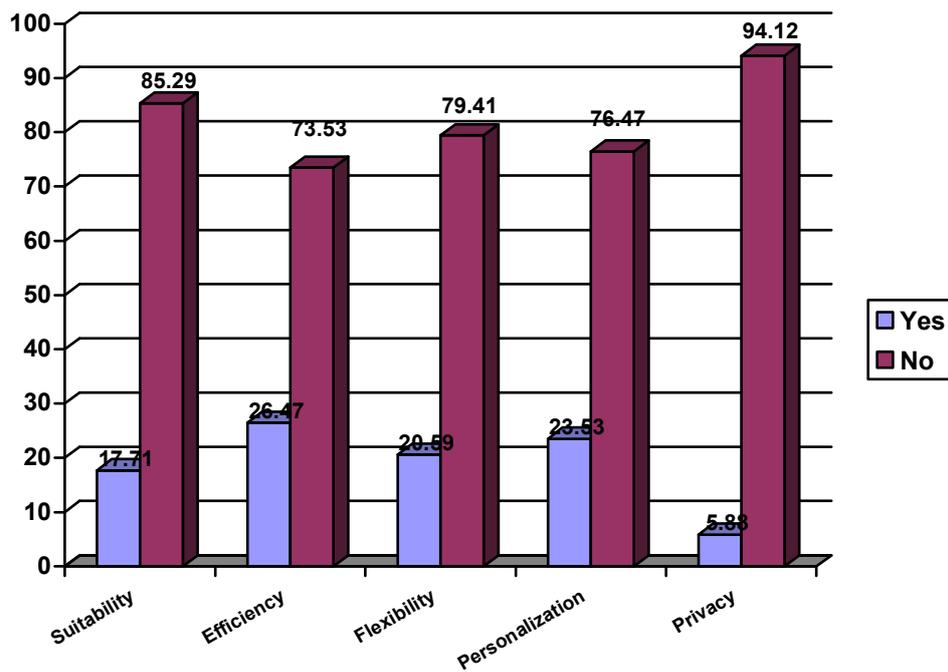Figure 6: Percentage feedback from building occupants

Table 2: Ranking analysis for office configuration factors

	Mean, N=34	Rank
Suitable	**1.88**	**2**
Efficiency	**1.74**	**5**
Flexibility	**1.79**	**3**
Personalization	**1.76**	**4**
Privacy	**1.94**	**1**

☐ very dissatisfied   ☐ dissatisfied
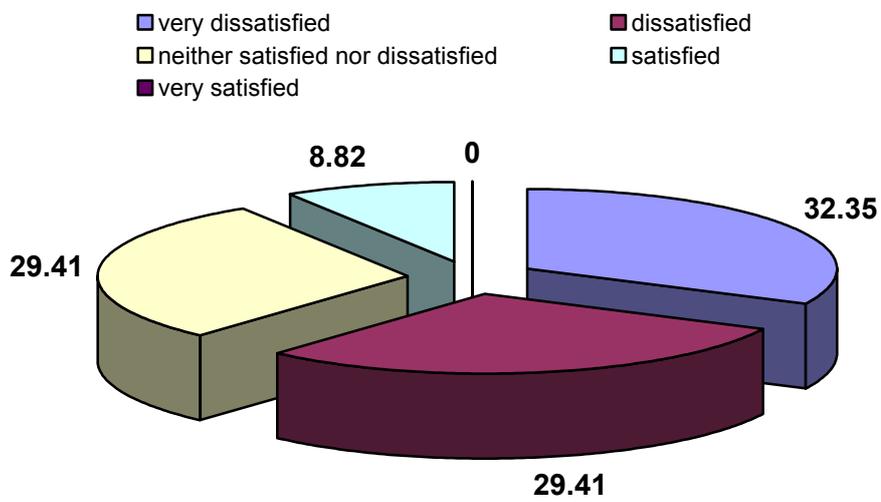☐ neither satisfied nor dissatisfied   ☐ satisfied
■ very satisfied

Figure 7: Overall satisfaction level of building occupants