

THE POSITIONING OF RECREATIONAL SPACES INTO THE CORPORATE OFFICE: COLOMBO, SRI LANKA

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Abstract

The workplace is where office workers spend most of their lives and in a typical workday eight hours are spent in the work environment. Therefore, the workplace must be a comfortable environment in which employees can perform to their greatest capability. To ease the mental stress of employees, offices invest in recreational spaces that boost teamwork and morale.

But there is a lack of studies with guidance regarding what recreational spaces are preferred by employees or how these spaces can be integrated into the workspace. Without this knowledge, offices may invest in spaces that will hardly be used by the employees and create an overall loss. Hence, this study was conducted to find what recreational spaces are essential in the workspace and where they should be placed in terms of a typical corporate office layout. A questionnaire was used to collect data from offices in the Western Province of Sri Lanka to test out the following hypotheses. (1) Employees prefer to work collectively and prefer common spaces. (2)The most preferred recreational activity is 'walking in the park'. (3)Those with recreational spaces in their offices would have better physical and mental health.

The data was analyzed and the preponderance of the available data indicates that the above hypotheses cannot be rejected. Among these an unexpected preference towards personal workspaces was discovered, which stemmed from the amount of individual control a person has over their space. Depending on the analysis was possible to conceptualize a recreational workplace design model which opens thoughts with new concepts of living and working in cities, suggesting new directions to urban recreation for working citizens.

Keywords: recreation spaces, corporate office, workplace, office environment

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Introduction

According to Investopedia, a corporate office is a central office space where a company's management and key staff operate and oversee overall business activities. It can be considered the main functioning engine of a company. Engines are composed of different cogs and require fuel to output energy. Similarly, a company is composed of a variety of employees that require motivation to produce results. A smoothly run company provides its employees with sufficient fuel to generate outstanding accomplishments.

Companies are organizations that constantly strive forward to achieve certain benchmarks in their relevant industries and pressure their employees to work towards achieving them as well. This is often done using key performance indicators (KPI) to measure the success of a certain project and the involved personnel. For this purpose, the employees must be able to perform to their greatest potential. However, employees are not cogs in an engine, they are human beings with emotions and limits. Therefore, they must be cared for in order to thrive.

A company cannot fully take this responsibility, but they can improve their employee's lifestyles within the work environment. Some companies offer benefits such as medical insurance, bonuses, and retirement planning to encourage their employees to perform better and thrive in their tasks. While these benefits have been proven to motivate employees there are intangible factors that still affect employee performance. A common commodity that is caused by the pressured environment in corporate offices is workplace stress. As depicted by the 'Human Function Curve' by Peter Nixon (Figure 1), stress is necessary to produce results. But after a certain straining point, stress has a negative impact and reduces efficiency, and often leads to other mental disorders. Therefore, workplace stress is considered a main concerning factor as it affects employees' effectiveness while impairing both their mental and physical well-being (World Health Organization, 2011).

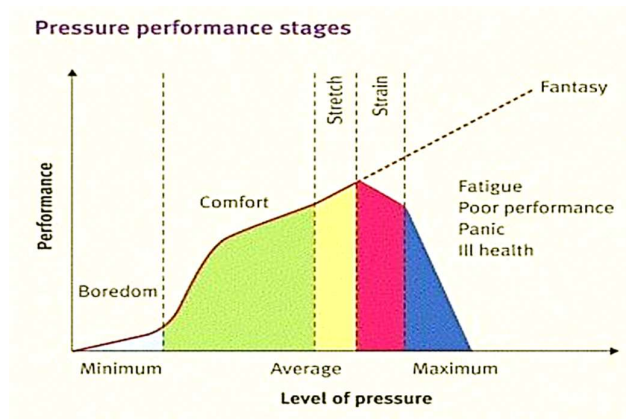


Figure 1: Human Function Curve
Source: Peter Nixon (1979)

However, this is not unmanageable. It can be dealt with using intelligent leadership, having a positive work environment, focusing on employee health, and having an optimum work/home balance (Eric L Teasdale, 2006). There're different ways of approaching these four factors and one way of approaching the positive work environment factor is to physically improve the environment in which employees work.

It is evident that the built environment affects mental well-being and causes a decline in job performance (Gary W. Evans, 2003). And if this is the case, the environment in which a typical employee works an average of eight hours will have a significant impact on their mental well-being. Therefore, a comfortable work environment has the potential to improve employee performance. To achieve these workplaces have recently started adding recreation into the office layout. Recreation is defined as:

Any activity pursued during leisure, either individual or collective, that is free and pleasurable, having its own immediate appeal, not impelled by a delayed reward beyond itself, or by any immediate necessity.

Fairchild, H. (ed.) (1970) Dictionary of Sociology

But there is a lack of studies with guidance regarding what recreational spaces are preferred by employees or how these spaces can be integrated into the workspace. Without this knowledge, offices may invest in spaces that will hardly be used by the employees and create an overall loss. Hence, this study aims to find what recreational spaces are essential in the workspace and where they should be placed in terms of a typical corporate office layout. A questionnaire will be distributed among the corporate offices in Western Province Sri Lanka to collect data. Both qualitative and quantitative data will be statistically analyzed to discover the placement of recreational offices in a typical corporate office layout. This will open thoughts with new concepts of living and working in cities, suggesting new directions to recreation for working citizens.

Research Problem

Previous research has established the correlation between workplace stress and the physical work environment, and how improving the working conditions of employees with recreational activities can lead to better performance. Therefore, this research will focus on:

- What kind of recreational spaces do corporate office workers prefer?
- Where should these recreational spaces be placed in a typical office layout?

Research Objective

- To add more insight to the growing topic of recreation and work by specifically targeting corporate offices that are common in urban environments.
- To discover guidelines for incorporating recreational spaces into the office environment, which will improve work environments and lead to a better quality of life and relieve the mental stressors of employees

Literature Review

To create guidelines for incorporating recreational spaces into corporate offices it is necessary to use the knowledge of previous research. Finding out how the work environment causes stress, what kind of workplace design is the best, and what kind of recreational spaces already exist in offices will lay the groundwork for this research.

A main hindrance to employee performance is workplace stress and numerous studies have looked into the psychological factors affecting the mental health of employees. But there is truly little research on how the physical work environment affects the employee's mental well-being.

A study by Vischer (2007) focuses on this issue and produced a theoretical model of workspace stress. This model is based on the following principles:

- The compatibility of the user and the environment
- The concept of control and managing novelty and unpredictability
- The measurement of daily hassles and energy-consuming impediments to smooth the performance of tasks
- The importance of social support, territoriality, and environmental control

This theory displays how the workplace environment creates stress. To break it down, Vischer explains that work environments must support the task being performed. When the user tries to compensate for a lack of support from the work environment it creates stress. The above four factors are the full framework around this theory. For example, if the pantry space in the office is too compact to put together a meal or make coffee, an employee has to resort to other means of acquiring nutrition, which creates a stressful situation. If the pantry were designed in a way that accommodated its task, this stress could be avoided. Similarly, if a recreational space provided by the office is inadequately designed, it will lose its purpose and create stress instead of diffusing it.

A study by Chan et al (2007) in the California Management Review divides workplace design into 4 main functional axes. The Social-Physical axis, the Spatial-Network axis, the Knowledge-Communication axis, and the Cost-Strategy axis. And they produced a workplace design model that would increase efficiency in reference to these axes. It is important to look into this study because the workplace design model gives a sturdy base to the theories of workspace design. And in order to integrate recreation into the workspace we must first understand its fundamentals. Figure 2 displays the workplace design model developed as a result of their research. This model can be used to understand how different departments in a corporate office respond to the work environment. Departments like Information Technology thrive in a virtual-remote environment, and Organizational Design sectors work better in 'software strategies' which means that they thrive in community-based workspaces. Similarly, Facilities Management spaces that encourage a more individual approach in a physical environment have proved to be more effective. The Cost-Strategy axis that runs along all the axes defines how the cost of things and implementing strategies can affect the design layout. For example, it may cost less to have IT workers work remotely but it may create less pressure and produce lower results than having them in an interactive physical environment.

Based on these results it is possible to analyze where recreational environments would be most and least effective. Applying the four main departments used it will be possible to find out the individual recreational preferences of each department to create a common guideline for recreational spaces in a corporate environment (Figure 2).

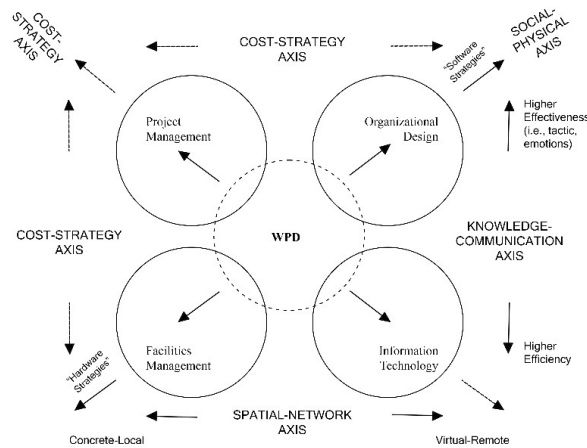


Figure 2: Workplace Design Model
 Source: Jeffrey K. Chan et al (2007)

Among existing recreational spaces in offices are green environments due to their medical benefits. Greenery itself has always had a positive correlation with reducing mental stress (Jiaqi Gu et al, 2022). Adding an organic element to the workspace interiors can create more positive outputs such as greater attentiveness to tasks (Lohr et al, 1996) and reduce perceived levels of stress (Lottrup et al, 2012).

The research conducted by Lottrup et al studied the relationship between access to the outdoor environment and the perceived levels of stress of office workers. The study yielded a definite positive correlation between access to the outdoors and positive workplace attitudes.

However, there was a gender difference in the yielded results. For both men and women, there was a positive correlation between workplace greenery and positive workplace attitude but only men had a positive correlation between workplace greenery and lower levels of stress. Alternatively, women had a positive correlation between low levels of stress and positive workplace attitude, but workplace greenery had no effect on levels of stress. This proves that gender is a significant variable in studying the effect of the physical environment on perceived levels of stress and workplace attitude.

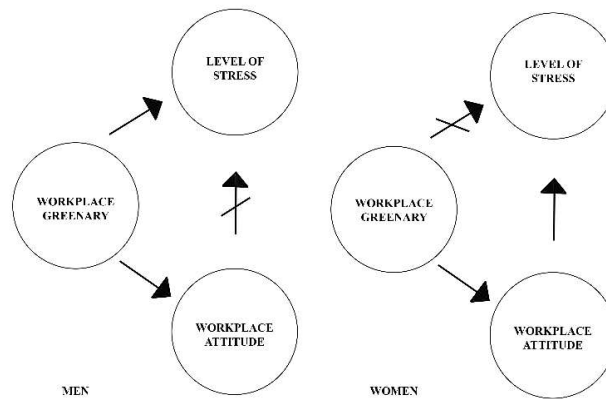


Figure 3: Gender difference between effects of workplace greenery
 Source: Lottrup et al, 2012

Among other common methods to relieve employee work stress through recreation is sports complexes. Physical activities such as sports, yoga, and aerobics have resulted in better physical health and mental health. A study conducted by Taliaferro et al in 2011 compared the mental states of adolescents in middle and high school and found that individuals who were involved in sports had a more positive attitude towards life than non-sport participants. A similar study conducted by Synder et al in 2014 revealed that athletes had greater social functioning, mental well-being, and positive attitude in comparison to non-athletes. A study done to determine if employees with differing occupational stress and mental health profiles differ in their self-reported levels of physical activity found that in the case of similar levels of stress, individuals that reported higher levels of physical activity had better mental health than those that reported lower levels of physical activity.

Research Method

This study aims to reveal what types of recreational spaces are preferred by corporate workers and where they should be placed in terms of a typical corporate office layout. The typical layout chosen for this study is based on the workplace design model by Chan et al (2007) which reveals the different spatial preferences of individuals belonging to different departments. Data will be collected in the form of a questionnaire and will collect both quantitative and qualitative data. As the objective of the research is to find the preferences of the majority, a questionnaire is the most suitable in collecting large amounts of data. Quantitative data is collected to analyze the distribution of the sample and measure their preferences objectively. However, it is also necessary to understand why individuals prefer certain spaces or activities in comparison to others and therefore the questionnaire will collect qualitative data from individuals, but this was not made compulsory.

An interview runs the risk of personal bias affecting the responses, so a questionnaire was deemed the most suitable in collecting data for this research. The questions are structured in a conversational form with colloquial language to encourage more genuine responses. This also avoids any miscommunication that may occur when collecting qualitative data.

The quantitative data was made compulsory in the digital questionnaire as the data is vital to the research and it does not take a long time to complete. However, corporate workers are busy individuals and averse to spending time answering questionnaires. Therefore, the qualitative questions were minimized to three and not made compulsory.

Based on the literature review this study has three main hypotheses that will be tested. These are:

- Employees prefer to work collectively and prefer common spaces
- The most preferred recreational activity is 'walking in the park' due to many studies revealing the stress-relieving symptoms of greenery
- Those with recreational spaces in their offices would have better physical and mental health

Table 5: Breakdown of Departments

Workplace Design Model	Departments used in the Questionnaire
Project Management	Marketing and sales
	Customer Services
Organizational Design	Administration/Operations
	Human Resources
Information Technology	Information Technology
	Research and Development
Facilities Management	Accounting and Finance
	Manufacturing

Besides testing these hypotheses, this research aims to incorporate recreational spaces into the workplace design model by Chan et al (Figure 2). The responses of departments as a whole will be analyzed to find the correlation between a specific department and their preferred recreational activity. Table 1 displays how each department in the questionnaire has been matched with the workplace design model. The same terminology as the workplace design model was not used in order to simplify the data collection process. An inductive approach will be used to analyze the qualitative data by recognizing the common trends between the responses.

Analysis

The questionnaire was sent to leading corporate firms in the Western Province of Sri Lanka (MAS, Hayley's) and 50 responses were collected from all departments. 54% of the sample were males and 46% were females. 42% of the sample were between the ages of 41-50 years, 26% were between the ages of 20-30 years, 18% were between the ages of 31-40 years, and 14% were between the ages of 51-60% years. Figure 4 shows the percentage distribution of the sample across all 8 departments. The uneven distribution of the departments is a flaw to be fixed in future research.

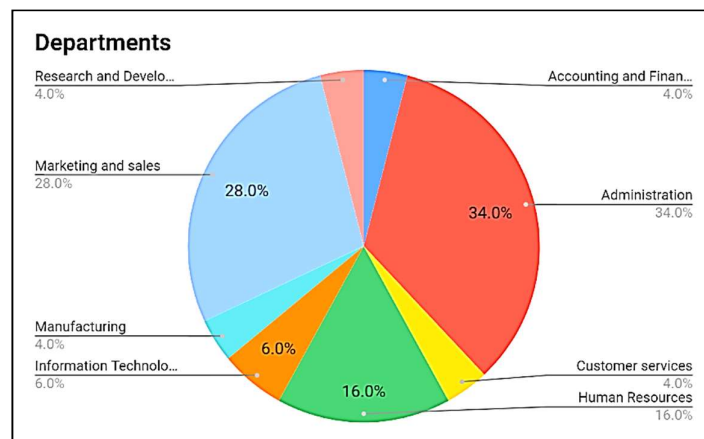


Figure 4: Percentage distribution among departments
Source: author

A qualitative measurement was taken to determine the factors that led to employees favouring certain spaces while disliking others. The recognized factors for employees favoring a certain space (as against the percentage of the total population interviewed) were:

- The spaces' ability to allow socialization (10%)
- How aesthetically pleasing the space was (10%)
- The views it provided (12%)
- If it had greenery (10%)
- How open it was (20%)
- Personalization of space (36%)

The most favored space was the employee's personal work desk (44%). The most common reason (82%) for this was the ability to personalize the space according to the users' wishes. 18% claimed to like their personal workspace due to the view from their workspace being pleasing. Common areas (22%) and gardens (12%) were favored for their openness, greenery, aesthetics,

views, and sociability. Spaces such as meeting rooms (10%), lobbies (2%) and pantries (6%) were not as commonly favored.

The common factors for employees disliking a certain space were:

- Compactness of space (74%)
- Maintenance (6%)
- Lack of greenery (8%)
- Aesthetic (6%)
- Lighting (6%)

The least favored space was meeting rooms (30%) mainly due to their compactness. Pantries (16%) and work desks (18%) were also unpopular for this reason and the employees additionally complained of a lack of privacy regarding work desks.

As predicted the most common leisure activity enjoyed by the employees was 'Walking in the park' (38%). The second most commonly favored leisure activity was sports (24%) and the pie chart in Figure 5 displays the percentage distribution of the other leisure activities enjoyed by employees.

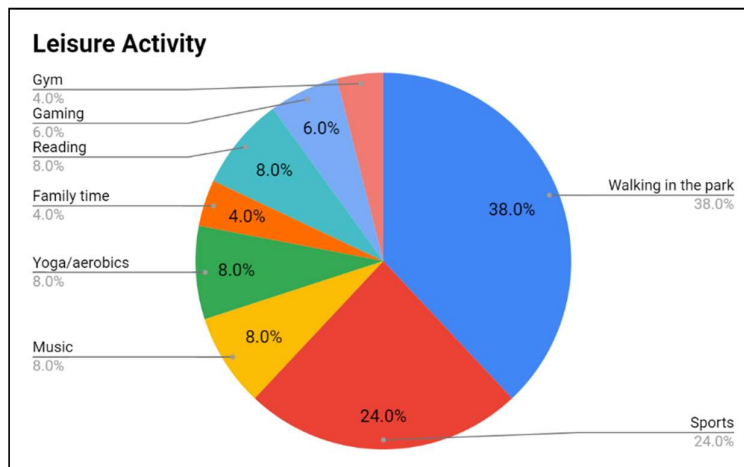


Figure 5: Percentage distribution of preferred leisure activities
Source: author

To analyze the distribution of preferred leisure activities across departments, a bar graph (figure 6) was plotted. When cross-referring the differences in types of recreation between departments the most variety is seen in the marketing and sales department. The information technology department shows a preference towards more introverted activities such as listening to music, gaming, and yoga. Human resources and administration and operations have a similar variety of leisure activities.

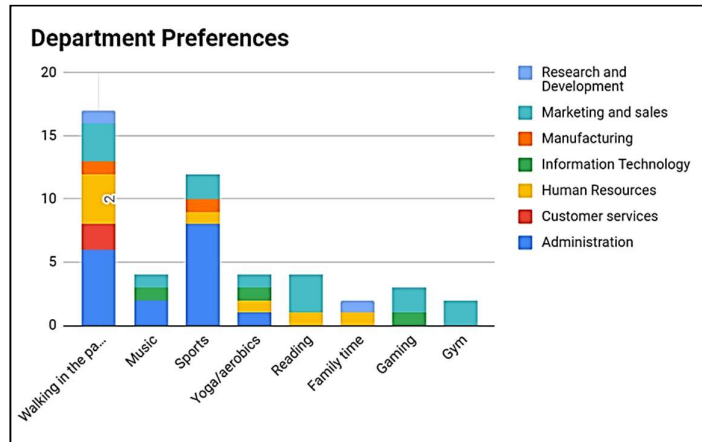


Figure 6: Leisure Activities preferred by each Department
 Source: author

Considering the activities that employees engage in during their leisure time in the office, socializing ranked the highest. Research was specifically favored by those between 41 – 60 years. While social media was more common in the 20-30 age group. Figure 7 shows a bar chart of how the 50 employees enjoyed their leisure time at work.

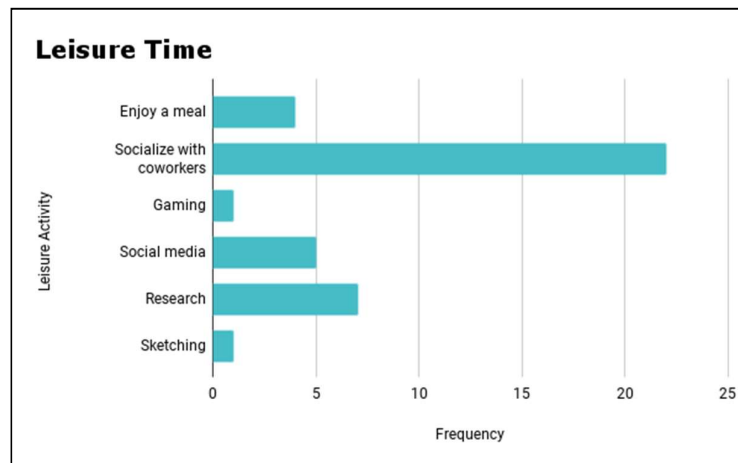


Figure 7: How employees spend their leisure time
 Source: author

In rating the importance of workplace comfort, it was inquired, if they found greenery to be calming, if they preferred a common workspace or a separation between departments, and if they thought working with their coworkers would increase productivity on a 1–5–point scale, and the following results were obtained.

In general, 72% of the sample deemed that comfort in the workplace was highly important. But there was a significant gender difference in how important comfort was for the employees. More women (83%) rated workplace comfort to be important than men (63%). This trend was notable in terms of preference for greenery in the workplace as well. 60% of the sample in total found greenery to be very calming. And while 70% of women rated greenery to be very calming only 52% of men gave it the same rating.

As theorized, when considering workspace preferences, the majority of the sample, 52%, favored a collective workspace. The remainder were either neutral (28%) or favored a separation between departments (20%). And in terms of believing that interacting with coworkers would increase productivity, 54% of the sample very strongly believed that interacting with their coworkers would increase productivity, while 26% strongly agreed and only 20% of the sample was leaning towards the belief that interacting with coworkers would not yield higher productivity.

The third hypothesis in this research was that those with recreational spaces in their offices would have better physical and mental health. The data revealed that most employees have no recreational spaces in their workspace (60%). And of the 40% with recreational space, the majority (24%) use their recreational space while some do not (16%). These responses were then cross analyzed with their health conditions.

Of those that have reported a health condition, 42% have reported a mental illness and 75% of these individuals do not have access to recreational spaces. 73% of those with physical health conditions both do not have access to recreational spaces or have access and do not use it.

Discussion

It was revealed that a majority of the employees preferred working collectively in a common space and this was associated with the belief that interacting with other employees would result in increased productivity. This shows that corporate offices should aim to create common spaces that allow the highest level of interaction between different departments and encourage healthy employee relationships. A study conducted by Basford and Offermann (2012) researched to find if positive coworker relationships independently increase employee motivation and intent to stay discovered that these two factors were highly correlated.

The idea of recreational activities at work had positive responses in this research. Employees with recreational spaces in their workplaces had a lower chance of developing mental and physical health issues.

An interesting discovery of this research was that the most favored space of the employees was their work desks. This was due to the ability to personalize this space. It can be theorized that within spaces where a user feels comfortable in the environment, they created for themselves, recreational activities are not necessary. However, in and near spaces with less personal control such as common areas, meeting rooms, the pantry, and the lobby, a certain level of leisure is needed for employees not to feel overstressed.

The most preferred leisure activity was walking in the park. Greenery was found to be calming by a majority of the sample and previous studies such as Lene Lottrup et al (2012) have found greenery to improve workplace attitude. Besides walking in the park, employees also strongly preferred sports to relieve stress. Therefore, physical activity in general can be equaled to recreation that alleviates workplace stress. And even though in separation recreational activities such as reading, gaming, and music are a minority, a common space that supports introverted activities could be beneficial in the working environment.

Since the research considered all spaces present in corporate offices, the respondents of the research appear biased towards their 'personal workspace'. To improve the research, future studies should focus on departments as a whole in terms of categorization.

Conclusion

After analyzing the preferred recreational activities and the reasoning for liking and disliking certain spaces, it was possible to conceptualize these spaces among a corporate office layout in terms of different departments. Figure 8 shows the proposed recreational workplace design model.

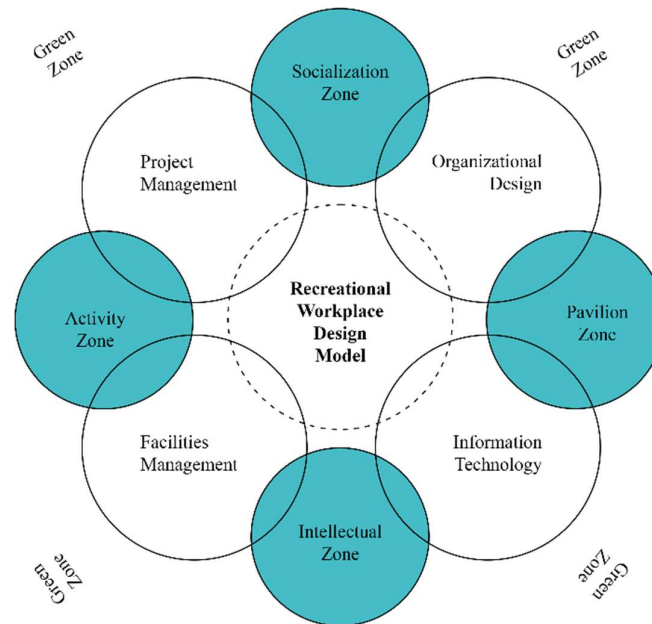


Figure 8: Recreational Workplace Design Model
Source: author

The zones displayed in figure 8 are recreational zones that have been incorporated into Chan et al (2007)'s workplace design model. Green zones are beneficial and commonly preferred by all departments. This can be incorporated into workplace design by green corridors between departments, having access to a nearby park, and having a rooftop garden or mid-floor garden in skyscrapers. The socialization zone is associated with recreational activities such as chatting with colleagues and having a common area to display and discuss employee talents. This kind of recreational activity is at a higher demand among employees in Project Management and Organizational Design which are departments that thrive in a physical and social environment. The activity zone is for recreational spaces such as sports complexes and gyms where those that prefer a physical environment and a lower level of socialization can thrive. The intellectual zone is best described as a library space that promotes activities such as reading, research, online gaming and listening to music. This is a more introverted environment that is preferred by employees in Information Technology and by some in Facilities Management. The pavilion zone supports recreational activities that are both introverted and extroverted such as yoga and would function best in an outdoor environment. These conclusions were derived after thoroughly analyzing previous research and the data provided by the researched sample.

This research explores the different types of recreational spaces preferred by employees and how these can be incorporated into a corporate office layout. The recreational workplace model is beneficial in setting guidelines for incorporating recreational spaces into corporate offices for those in the field of architecture and design. The findings of the research support previous studies carried out on the norm of workspace design and how it reduces workplace stress.

However further research must be carried out to fill the gaps and uncertainties in this research in terms of a larger sample size and a larger variety of participants. Since the research revealed an unexpected bias towards personal workspaces it is worth studying into how highlighting individualism in the workspace could improve the productivity and mental health of employees.

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