Psychology of Color and Its Health Benefits in Office Buildings

[1]Assi.Lec. Lina Kifah Kadhum Al Khazaali , [2] Assi. Prof. Dr. Shamael Mohamed Wajeeh Al Dabbagh, [3] Assi.Lec Ali Kifah Kadhum

[1] University of Al-Mustansiriya/ Department of Architecture, Baghdad, Iraq

[2] University of Technology / Department of Architecture, Baghdad, Iraq

[3]University of AL-Mustansiriyah /College of Engineering/ Department of Water resources , Baghdad, Iraq

Abstract:

Administrative buildings are working environments linked to the performance of visual tasks in general and they reflect the progress of the community, the administrative building is an integral part of the community and may be an independent building and may be part of a building and in all cases must be aware of the best ways to design this type of building. Office buildings are one of the buildings most needed to take into account the psychological dimension when designing them, especially since their spaces are carried out by multiple activities carried out by employees (Internal Users) with different characters and frequented by various external visitors, all of which require taking into account these different segments during the design process of integrating the system and the final product is a highly efficient work environment that motivates employees and increases their activity and output, and the reasons contribute to reducing the motivation for performance, concentration and distraction in office buildings, and causing inconvenience and distress. This affects the employee and increases his feelings of fatigue and mental and physical fatigue, thereby reducing his productivity and reducing his ability to work. The problem of research was determined by the lack of a clear perception of the role of the single " Psychology of Color " in relation to the spatial settings and detailed architectural elements of the interior space and its impact on the performance of the employee, and in light of the research problem determines the objective of the research in the investigation and identification of the role of spatial settings and detailed design elements achieved for the individual cytological color within the atmosphere of the interior environment of office spaces and administrative buildings and its impact on the performance of the employee

Keyword: Office buildings, office interior space, psychological dimension, color psychology, performance efficiency.

1.Introduction

The formulas and methods of internal organization of spaces in office buildings have evolved significantly

in recent times, and the development of office space functions and events and challenges facing office buildings and the desire to increase the efficiency of office spaces within contemporary trends have had a significant impact on the emergence of the idea of research. Human behavior represents the outcome of the interaction between the human element and the surrounding environment, human beings affect the environment and is affected by it, so the user of administrative space (employee) is the most needed " for the efficiency of the internal space and achieving functional requirements to face the pressures faced during the course of work, which affect shaving the behavior of the employee and hinders his psychological balance and may lead to tension or psychological anxiety, and emerged modern views focused on the mutual interaction between the individual and the surrounding environment, and given the increase of office buildings in Iraq and taking into account the diversity of needs Psychological staff need to know the means that can contribute to the achievement of stimulating spaces, and within this framework the research focused on the concept of color ecology in the internal environment of office structures And its psychological impact because of its effective role in achieving job satisfaction for the employee's office space user and thus increasing the efficiency of performance and enhancing the sense of belonging to the organization, the research problem was drawn and the objectives of research were identified in light of the establishment of this information base, and understanding the relationship between the concept of color ecology and the design of the internal environment of office buildings and the statement of characteristics and design elements that contribute to achieving an efficient internal environment to ensure increased production. Trying to reach results that will help to develop recommendations that will reduce the causes of work pressures and mitigate their negative effects on employees in administrative buildings to achieve higher levels of individual and institutional performance. The research hypothesis states: " The spatial settings and detailed design elements of the interior spaces contribute to reducing psychological pressure and enhancing the psychology of color and thereby increasing the efficiency of performance in office buildings.}

The First Axis / Theoretical Subtraction

2.Office Buildings

Office buildings are generally defined as "work environments associated with the performance of basically visual tasks (Öztürk, 2010,p.7). Vincent E Giuiliano noted in his study that office buildings represent a form of construction that contains largely designed spaces for office use and provides office tables, personal computers and other equipment within those spaces. Management, as employees can have lunch or take a short break. (Vincent, 1982, p.148, as the researcher Abdul Karim Hassan considers in his study that office buildings are the most needed to take into account the social dimension When designed especially as its spaces are engaged in multiple activities, carried out by employees (internal users) with different characters and frequented by various external users, all of this requires taking into account these different segments during the design process to integrate the system and the final product is an administrative building" efficient that motivates employees and increases their activity and output. (Abdul Karim, 2008, p. 177)

2.1 The Office:

 Within the linguistic connotation: it is a place where employees and employers work, to do a certain work such as the office of counsel and engineer, and the origin of the word office from the Latin word (Officium), and Its equations in different languages, mainly within romantic languages, are an architectural, design and social "space", whether it's a small office such as a seat in the corner of a small workplace or entire floors within buildings to the enormous buildings all dedicated to a single company. (Vincent.1982. p. 164), the function of the Administrative Office was determined by the American National Standard as follows: "Offices are used for many tasks such as reading, printing, counting, writing, data entry, output receipt, computer operation, editing and meetings (American National Institute of Standards1)

2.1.1The Importance of The Office And Its Function

The Office plays a major role in the activity of organizations in various forms and sizes, as the administration in these organizations relied heavily on the Office in making decisions, which represents the most important function of the administration and is related to organization or related to planning and control, sound decisions are based on facts and information, hence the importance of the office in providing correct data and information

to help the administration to make the right decision. The office collects, categorizes, arranges and distributes data and information to various departments and departments of the organization. (Kaplan, 1993 p35)

The research considers that the concept of administrative offices is to be a working environment containing a set of designed spaces that must take into account the achievement of design efficiency and the promotion of the psychological dimension to contribute to motivating employees and increasing their activity during the practice of various activities assigned to them within these spaces.

2.1.2 Systems In Office Buildings

The development in the various fields of life has affected the functions and activities of the office, which has had a great impact in the emergence and innovation of new means of internal organization such as systems of distribution of equipment and furniture within the spaces of the administrative building according to rules depending on the nature of administrative divisions and the number of employees in each administrative unit and their duties, the most important of which is:

a.Cellular Type : This system is one of the oldest and most widely used systems in office buildings, with little depth of building and a corridor for the main movement to which the rooms are directly connected, and engineers differ in their opinions about the pros and cons of this system and from this system to achieve high privacy. Personal identity with work space and decreased noise, the disadvantages of the cellular system are limited contacts with other employees and members and managers of different teams, reduced learning opportunities and implicit guidance, difficulty of mobility between employees because of barriers to social-professional relations, lack of attention to the psychological and social dimension of the emergence of prestige and administrative standing by the manager towards the employees problems of visual communication and natural lighting and not distributed equally. (O'Neil, 2008,p.37)

b.Open Plan : Is the linguistic name in the design of the office space, as it represents the projected liberated from the deaf walls that extend from the floors to the roofs and replaced them with light transparent or semi-transparent barriers do not hinder the visual communication of vacuums and does not prevent the penetration of natural lighting or ventilation into the spaces of the building, and represents the most modern system used" compared to the cellular system, and the advantages of the open system being more suitable for the effectiveness of overall work, communication and interaction within the work process supports the tasks of the team , remove physical barriers between managers and employees, improve clarity and quality at work, improve the density of the workstation and thereby reduce space costs for each employee, flexibility in the use of space, provide visual access and "tacit learning" by monitoring and learning, facilitating the transmission of information both within and across teams ,Increasing levels of natural light, but the negatives of the open system are concentrated in the loss of privacy and identity, as some studies have shown the reasons for low productivity at work due to sound effects in the internal spaces, greater difficulty in controlling deviations and unwanted interruptions, the possibility of some negative effects on the welfare of the employee for lack of quiet places or areas designed mainly for individual work, which in turn can affect the focus as it pushes employees to seek other places of work away from the office. Hickey, 2010,P.37,38))

c.Systems Integrated: Some functions require that their employees be in special rooms for considerations of prestige and administrative status or the requirements of mental focus while other employees do not require from their jobs these considerations and can be placed in open rooms so there is a merger between the cellular system and the open system in the building itself and this is called modified open plan office) which is in this way an attempt to reduce the disadvantages of the previous two systems and take advantage of the positives of their sins. (Carey,2012,p.342).

2.2 Stresses Faced by the Employee in the Workplace :

The subject of work pressures has received increasing attention from researchers in several fields such as management science, psychology, sociology, sociology, medicine, law and social service. The professional specificity of each work, as the degree of feeling of working pressure varies depending on different factors related to the employee himself in terms of personality, scientific level and gender. Institutions and

organizations rely mainly on the human element in achieving their objectives, and the elements are supposed to carry out their professional duties in an effective manner to provide the services expected. But despite the sincere desire of these professionals and their institutions to overcome the obstacles that stand in the way of providing the required services, there are obstacles in the working environment that prevent them from doing their part fully, and this is called job stress, which is generally the variables that surround workers and cause them a feeling of tension, and the seriousness of this feeling lies in its negative consequences, which are represented in different cases, including the automatic carrying out duties lacking in emotional integration, pessimism, and lack of Motivation, loss of creativity (Adel Abdullah, 1996, p60-65).

The pressures of action are known by the intense environmental changes that can be responded to and combined with organic and psychological factors that form a society that is stressed by the individual and ends up being unable to conform in the face of environmental and social pressures." (2000,p72), recent perspectives have focused on the mutual interaction between the individual and the surrounding environment, as the pressure of action acts as psychological and physiological reactions in its interaction with the environment, and the environmental conditions surrounding the individual in the work environment are referred to the methods of designing the workplace, its location, furniture, available equipment, ventilation, humidity, noise, etc. The lack of proper availability causes psychological and physical stress (Maher, 2003, p. 386). Feeling the stress of daily work leads to two types of reactions The first positive can "be the increased performance effectively to increase the sense of success and self-confidence with more ability to adapt oneself to the abnormal situation in the work environment, secondly negative responses and produced through a set of signals, the most important of which is what appears on the organizational behaviors of professionals, including low morale, increased absence rates, increased complaints and bickering, inability to accomplish tasks, as may appear as a psychological problem such as suicidal behavior, tendency to violence, as well as physical symptoms such as blood pressure disorders, colon Stomach pains, seizures and heart disease. Work pressures can be classified according to their source into two groups: work-related pressures, changes in organization policies, changes in the level of administrative activities or large requirements within a limited time limit, while the second includes external pressures resulting from the physical or social environment within which the individual performs his work and responsibilities (Osach, 2006:p.5.6).

From the above presentation, the pressure of the work can be defined as: "The intense environmental changes to which the individual is exposed in his field of work when the requirements of the job are not suitable for his needs, abilities and energies, leading to physical and psychological changes as a result of psychological and physiological reactions, causing a state of tension and psychological anxiety that makes him unable to make a decision or to conduct rational behavior towards administrative or operational attitudes, and the research here will focus on the group that includes the external pressures of the physical environment within which the individual performs his work.

2.2.1   Impacts Resulting from Job Stress:

People who are subjected to severe work pressures are exposed to many negative consequences that are caused by these pressures when they cannot withstand those high pressures or deal with them in a positive way and to vary the response from one individual to another, because any kind of stress or emotion must be accompanied by some kind of physical changes visible and physiological changes involved, and can shorten the most important effects of working pressure on the individual: :

Health Effects: Numerous studies have shown a link between work pressures and health and psychological problems, which confirm that stress leads to enlarged heart muscle and thus to heart disease and ulcers. Stress weakens the immune system in humans, reduces its ability to resist diseases and fatigue and increases depression, anxiety and nervous tension in individuals.

Behavioral Effects:When pressures exceed normal levels, they translate into many of the behavioral reactions that an individual takes against himself or the institution in which he or she works, namely unjustified absence from work, aggressiveness, fatigue, etc.

Organizational Effects: Many studies have shown that there is a close relationship between the pressures of work and the health and behavioral effects that occur to the workers because of it, and in fact the affected by

these effects not only individuals but extend its effects to include the organization or institution in which these individuals work, as the outputs of any institution are affected by the obstruction of the capabilities of workers and result in losses of the lack of access to the available expertise and capabilities. (Ivancevich, & Matteson ,2002,p.270)

2.2.2 Stress Work , Performance and Job Satisfaction:

The compatibility between the work performed by the employee and his own potential leads to high job performance and a sense of job satisfaction while the imbalance between these parties leads to increased pressure on the employee, as the presence of a low level of performance indicates the presence of situations of pressures at high levels due to limited ability, qualification and skill and vice versa if the level of pressure is low, it indicates the increase of the performance of workers normally, taking into account that this adverse relationship will be fluctuating based on different personalities Workers and their response to the factors affecting and this will of course save the production cost as there is a direct relationship between the level of pressures and the resulting cost as well as the weakness of the job loyalty of workers due to the lack of motivation for work and the opportunity to be absent and delayed completion of work and not to be careful to accomplish tasks and others. (Maher, 2008, p. 153).

The researchers cited many definitions that try to clarify the meaning of performance and job satisfaction due to the multiplicity of studies and research that addressed these topics in different aspects, and defines job satisfaction by (Stone) as "a situation in which the individual integrates with his job and work, or becomes a human being taking the job and interacting with it from During his career ambition and desire to grow and progress and achieve his social goals through it" (Al-Radioactive, 2000.p47), Louler believes that getting more as he expected makes him more satisfied and satisfied, and often refers to literature. Organizational behavior that job satisfaction expresses the individual's sense of satisfaction and happiness towards the work itself and the work environment. (The Radiator, 2000, p. 48).

As for the concept of performance, it is linked to both the conduct of the individual and the organization, where it occupies a special place within any organization as the final product of the outcome of all activities in it, at the level of the individual, the organization and the state (Jaber, 1996, p. 24), the definitions of researchers, as (Haynes) defined administrative performance as "the actions of an employee or manager of the actions and activities associated with a particular job, and differs from one job to another, although there is a common factor between them that conduct, performance does not appear as a result of forces or pressures. Emanating from only within the individual himself, but as a result of the process of interaction and compatibility between the inner forces of the individual and the external forces surrounding it) (Warrior, 2004, p. 20). Figure (1-1)

From the above it can be said that (performance) results in the outcome of various activities resulting from the interaction of human behavior of the employee containing a set of efforts and capabilities of "internal forces" with "external forces" surrounding him. Job satisfaction is a state of satisfaction and acceptance of the satisfaction of the needs and desires provided by both the work environment and the work itself.
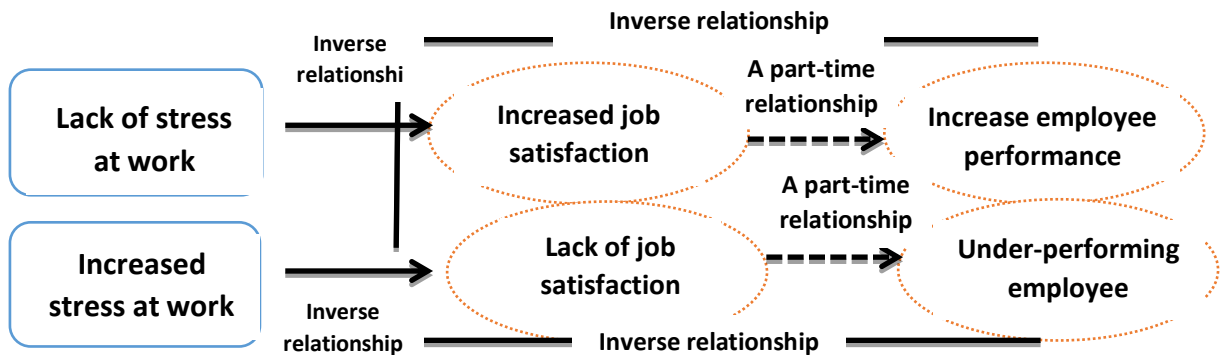
Inverse relationship

Inverse relationshi

Lack of stress at work

Increased stress at work

Inverse relationship

Increased job satisfaction

Lack of job satisfaction

A part-time relationship

A part-time relationship

Increase employee performance

Under-performing employee

Inverse relationship

Fig (1.1) shows the exorcism and vice-versa between both pressures/performance/job satisfaction (researchers)

3. Dimensions of Experience Affecting Office Places :

Studies and research espousing a variety of concepts and names related to the experience of spaces that have an impact on increasing and improving the efficiency of the internal space in administrative buildings thus improving and increasing functional performance, Laing, A., DEGW North America-2006, (2007-Barry P. Haynes) (2012- Emmanuel Majekodunmi Ajala) referred to a dimension group that includes: "behavioral (social and psychological) dimensions" and "physical dimensions", and the study (Nonaka & Konno-1998) addressed the virtual dimension by referring to e-mail communications and conference-to-conference communications or after conferences. As one of the possible possibilities and forms of inner space within the virtual dimensions (Konno 1998, p. 40-Nonaka), each study touched on a set of data within the same dimension that had positive implications for the inner space and thus on functional ity and increased interaction within space. The research considers the possibility of classifying the dimensions affecting the office space in general to (social dimension - psychological dimension - physical dimension - virtual dimension) and will focus on the psychological dimension.

3.1 Psychological Dimension:

Many of the above studies pointed to the pressures of work as a subjective experience that causes psychological or organic imbalance in the individual such as stress, nervousness, permanent anxiety or frustration in addition to organizational symptoms including low quality and efficiency of performance, and therefore highlights the importance of taking into account the psychological dimension through the provision of solutions that enhance communication, interaction and teamwork, and supports the raising of the morale of the employee and seeks to achieve his job satisfaction to improve performance, as the internal spaces must be designed well in order to meet the psychological, social and material needs of the employee, through pain The principles of human needs and their observance in integration with the design solutions taken in the design process of office space. Many researches and studies in the field of internal space of office structures dealt with how to use the dimensions of psychological space according to the nature of the activities established within it in improving and increasing performance, and the study (Sam Kubba 2003) referred to the " Psychology of Color" and its impact on the office space as a concept addressed within the psychological dimension of effective administrative space

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3.1.1 Psychology of Color:

Colors are a silent language and it is the language of the soul to the soul, as the painter "Delacro" says, and since this silent language speaks to the soul directly, it was necessary for designers to design offices and use the language of colors in creating different comfortable atmospheres for the interior spaces of the offices. (Smith, 2003,P.361, lead and brown were the two colors controlling the interior spaces of the offices in the pre-World War II period, because they require less maintenance than the rest of the colors, and the time factor does not

affect them because they are dark colors in addition to being less exposed to dirt than light colors, so the internal spaces of the offices were not pleasant, and when attention was drawn to the psychological impact on the productivity of employees Focus ing on improving the lighting of the office first and the color decoration second, as the amount of source light and the result of radiation on the workspace will be affected by the colors of the walls, ceilings, floors, appliances 'This is why the efficiency of the lighting system should be linked to the color system used for inner space and to plan them together. (Stone. 2001,P.21, the beginning of color opening was using green in all its shades of color, relying on the fact that the green color is comfortable for the eye, as well as the agreement of engineers specialized in lighting and specialists in the psychological impact of colors that the color serves two purposes: being a good reflector of light, it is comfortable to look. (Mahnke, 1996,P.17).

The researchers discussed in many studies and researches the colors of the internal office spaces and their psychological effects on employees, in offices with large public spaces and most workers face one direction, in this case the use of contrast in the treatment of colors, may dye the color of the wall facing workers in a complementary color to the color of the remaining three walls, and this type of solutions, is considered successful in the working spaces where the work requires attention and full and precise attention and attention tiredness of the eye (Mahnkeke 1996, P.19), and with this solution the researchers reached good practical results, the most important of which is to help the eye to rest and relax when looking at the wall of color complementary in addition to that it keeps boredom in the atmosphere of the room because the color differs from the rest of the colors of the walls, but the other psychological reaction for colors, it stimulates the feeling of the individual, each person may have a favorite color associated with his mind, multicolored internal achieves distinctive functions in the field of color movement (Ladau) , et al, 1988,P.41). The big room .Which uses only one color may be boring and may cause an uncomfortable psychological feeling for the staff, as the room that has more than one color of high intensity will be uncomfortable and tired when faced every day, and the light colors in the floor in the tiles are convincing in use and generally light metal color and light color wood (lead, green, beige), comfortable colors if used in furniture and equipment, the goal of using color in the office spaces effective is to stimulate the atmosphere and create A pleasant, joyful, comfortable and positive impact on employees, as well as identifying paths as inference points for spaces, thereby increasing the interaction of employees and thus increasing their productivity as in figure 2-11. (Ferhman & Ferhman 2000,P.22)

1.Psychology of Thermal Comfort / Colors may affect the feeling of individuals working in the internal spaces of the offices at the actual temperature for example when the rest room in a large office is repainted in a large light blue color, the staff complain about the cold weather and if there is no change in temperature in that office (Kwallek, In one of england's insurance companies, the winter indoor office space was changed to blue, and staff insisted that the temperature was too low, even after the temperature had been raised five degrees, and when the interior walls were repainted to yellow, staff asked for a temperature reduction, and many similar examples occurred in other institutions. There is a real rule of these measures and reactions to them as color experts support that there are some colors called warm colors that make the individual feel warm, and that there are colors called cold colors that make the individual feel cold. (Ferhman & Ferhman,2000,P.23). The warm or warm and stimulating colors of the work are the colors of the sunshine, and therefore they include , (yellow, orange, red, pink), while the cold colors in colors of water, snow and sky and therefore include (green blue, green, light violet). The heat and coolness of colors is important when deciding to choose the colors of a particular space, the room that gets a little sunlight because of its lack of windows, or may meet the north or eastern front, it tends to be cold and compensate can warm emotionally through the use of warm or warm colors such as ivory, yellow, beige or other . The room that meets the south or west must have cool colors to equal the direct sunlight you receive, such as the use of green, light tones, blue color and light color, etc. (Camgöz, 2000, p.29).

2.Psychology Of Space Feeling / The capacity of the office space from the inside is affected by the choice of color, for example, the use of color One for the walls and furniture will help to make the office space appear larger, and if another color is used as a distinctive sign in the space, such as coloring chair seats, and because the light and cold colors appear to be retreating from the eyes or withdrawn, so these colors are used to increase the appearance of the room's capacity, while dark or Dark or warm makes the room appear smaller than its size.

In dealing with effective workplaces, the following: If the office space is small, it can work more effectively than using furniture and wall colors of one light color. If the office space is large, two or three colors can be used, including the colors of the chairs. If the office space has dimensions. Asymmetric, the use of a light color on the short wall will appear longer than it is, and if the office ceiling is high, the height can reduce its appearance by painting the upper part of the wall the same color as the ceiling (Küller, 2006, P.49)

3.Psychology Of Light Feeling / the color of furniture, walls, floors, and ceilings affects the effectiveness of the lighting system: the surfaces of the room and the furniture must be treated so that the color is used to reflect the light and distribute it correctly and determining or reducing the contrast of radiation, and it is assumed that the final works are Each surface is not irradiated or shiny to reduce reflection and the following uses are preferred:

   It is preferable to use white or light tones for the ceilings. Colors such as (blue, green, yellow, beige, pink) are convincing for most wall areas. The use of brighter colors for columns or walls of a small area or both, to obtain change and break the boredom, is not preferred to use bright colors on the wall of windows because of the sharp contrast with natural light, or on the wall facing workers directly (Gordon, 1987, P.25)

A large group of scientific evidence above indicated the multiplicity of reasons that contribute to reducing the motivation to perform and focus in the administrative buildings, and that cause inconvenience and distress, which affects the employee and increases his feelings of fatigue and psychological and physical exhaustion, thus reducing his productivity and reducing his ability to work, and accordingly this paragraph aimed at Extracting the frameworks inherent in the architectural propositions for the purpose of determining the vocabulary and indicators (spatial settings and detailed design elements) that achieve the uniqueness of the psychology of color within the atmosphere of the internal environment of the office spaces with its supporting results to reduce tension and support performance efficiency. After a brief presentation of the analyzes of the theoretical framework, the research concluded to define a term within the psychological dimension: (color psychology) with its indicators "the psychology of thermal comfort", the second (the psychology of space sense) and the third "the psychology of light sensation." Table(1-1)

Table (1-1) shows the main and secondary singularity that is enhanced by the concept of color ecology. (Researchers)

Pointers		Secondary singular	The main singular
orange	Warm stimulating colors	The Psychology of Thermal Comfort	The psychology of color
yellow			
RED			
GREEN	Cold colors		
BLUE			
Purple			
Use one-color wall paint		Psychology of space sense	
The color of the furniture changed from the color of the room's paint			
The use of light colors for the ceilings		The psychology of photosensitivity	
Use non-shiny wall colors			
Use bright colors for columns and small walls			

The Second Axis / Application Framework

Applied Procedures: The paragraph discusses the steps and methods adopted to achieve the objectives of the research, starting with describing the methodology adopted for the research and the selected samples, designing the measurement form, processing and analyzing the results and data, as the research adopted the analytical and comparative descriptive measurement based on the analysis of detailed explanation texts, drawings and illustrative charts by selecting an intentional sample that includes an analysis of a global project that included (Cisco)), And then measuring the verification values of each of the detailed indicators. 1-1

1.1 General Description Of The Sample Selected For Practical Study :

A project for a contemporary administrative building was elected to conduct the practical study with the aim of testing the hypothesis after achieving a set of indicators, including that the elected project is newly designed and implemented on the ground. The selected sample is an administrative building that has a degree of diversification in the areas allocated for and supporting work with regard to the treatments of the elements of the internal spaces and their features, which allows a clear field for comparison between the space characteristics and features and to come up with more objective and comprehensive results on the topic of research.

1.1.1 The first project is a building (Cisco Offices) in (San Francisco) and designed by (Studio O + A) in 2013

The building occupies a privileged position "for the panoramic views of the waterfront and the diversity of design aesthetic backgrounds that were adopted (O + A's) during their design taking into account them such as streets and roads, enhancing the possibility of enjoying the view from any angle within the internal space of the building." As well as giving and giving the interior space a special identity through the unification of offices In the building and under one roof, a group of diverse formal and informal spaces mingle under forms of elegant 'Yurts and Cabanas' tents and cabanas, where the feeling of pleasure is merged between the interior and outdoor spaces and creating work spaces that enhance motivation to work and support cooperation and social communication by focusing on Simplicity and ease of smooth use, offering an unconventional workspace that inspires and encourages creativity.

Project analysis: The (Cisco) building was distinguished by employing its (physical) space dimensions to achieve comfort and joy for the building users, and clearly embody the psychological dimension through physical treatments to avoid mental effort and loss of focus while performing the work Figure (1-2), by providing spaces characterized by the psychology of comfort The use of warm and stimulating colors such as orange and yellow, as well as the use of comfortable cold colors such as blue, purple and green, Figure 1-2, while the psychology of space sensation had a clear effect by providing one-color wall paint and the use of furniture pieces with a color difference to paint the room, as in Figure 1-2. The psychology of light sensation was represented by using light-colored ceiling paint, as well as not using bright colors, Figure 1-2. (Www.archidaily.com)

1.2 Research hypothesis test

This research was based on its main hypothesis (the contribution of spatial settings and the detailed elements designed for interior spaces in reducing psychological pressure, enhancing color psychology, and thus increasing the efficiency of performance in office buildings). The research adopted a descriptive, analytical, and comparative measurement based on the analysis of the detailed explanation texts, drawings and explanatory plans for the elected global project, and the analysis process included several stages:

First: A general description of the project based on the sources, and a re-analysis of project according to the specific terms of measurement, descriptions, diagrams, and illustrations.

Second: The specialized description and measurement form contains a detailed explanation of each secondary variable within the vocabulary of the internal space in the administrative buildings specified for measurement, including (the vocabulary of psychological color) and (the physical dimension) investigated for them. Possible values depending on the nature of the relationship and the extent of its strength between each of the psychological color term and the secondary indicators as proven in the questionnaire, which was later applied to

the selected sample, including a test that verifies each of the possible values through the check list, based on the information extracted from the selected project. , And for each item according to its specificity, and in line with the research goal.

1.3 Analysis of the results

This paragraph includes a discussion and analysis of the application results extracted from the questionnaire measuring variables on the selected global project, and the results related to the psychological singularity of color indicated the discrepancy between its indicators, including:

-The psychology of thermal comfort represents the secondary term of the main word psychology of color, and this was achieved by the availability of the possible values represented by the warm and stimulating colors such as orange and yellow as in the figure (A, B, D 1-2), while the cool and comfortable colors were by the availability of blue, purple and green (F, H). , I 1- As in Fig.(1.2)
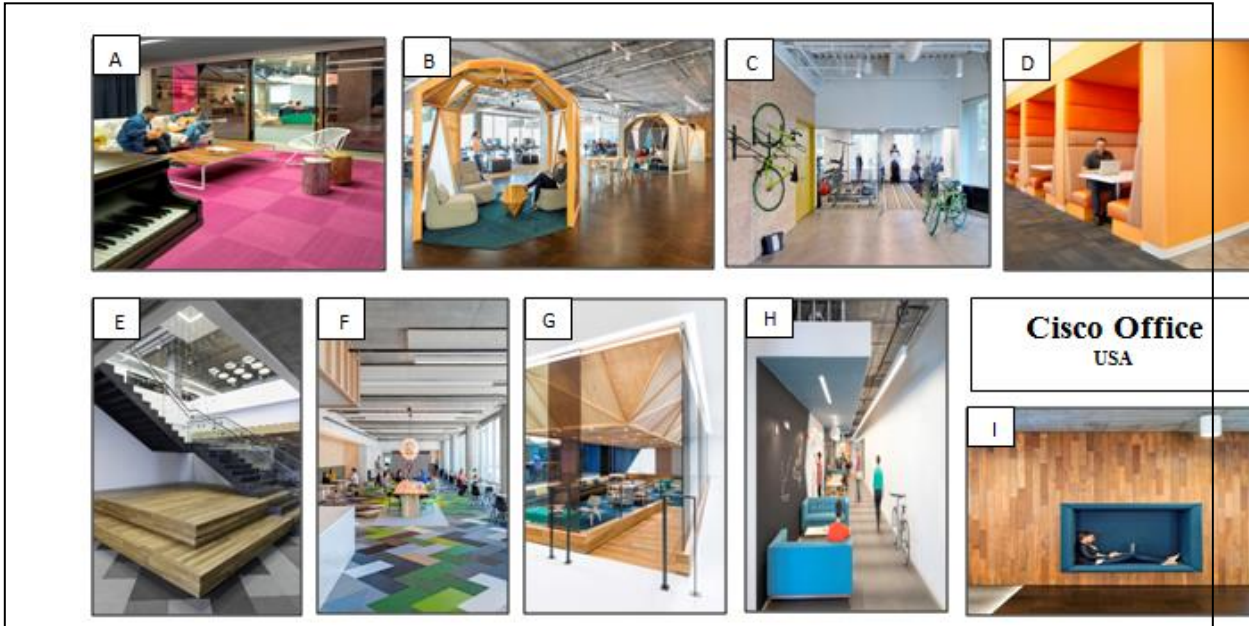
-The psychology of space sensation and the secondary term of the main word represents the psychology of color achieved through the use of wall paint with one color as in the shape and color contrast between furniture and wall painting show in figure (1.2)

-The psychology of light sensation The secondary term of the main noun is the psychology of color by using matte colors and using light colors for ceilings show in figure (1.2) .

Table (1-2) represents a description and measurement form, to measure variables by specifying values ranging from 0-1, as it represents:

:1)realized value - 0: unrealized value(

Possible values of the selected sample			Secondary singular	The main singular
1	orange	Warm stimulating colors	The Psychology of Thermal Comfort	The psychology of color
1	yellow			
0	RED			
1	GREEN	Cold colors		
1	BLUE			
1	Purple			
1	Use one-color wall paint		Psychology of space sense	
1	The color of the furniture changed from the color of the room's paint			
1	The use of light colors for the ceilings		The psychology of photosensitivity	
1	Use non-shiny wall colors			
0	Use bright colors for columns and small walls			

–A-B-C-D-E-F-G-H-I   Represents different perspectives of the Cisco Building. Figure) 1.2(www.archdaily.com

2.Conclusions

The importance and effectiveness of the knowledge presented in the previous studies regarding the concept of "color psychology" and its role in enhancing the performance drive within the internal spaces in the office buildings up to the fact that the design that enhances the capabilities of the internal environments of the offices in reducing the distraction or mental effort, and the design of internal environments that achieve the concept Color psychology is based on providing functional requirements in addition to achieving psychological comfort through a balance between the various design and psychological factors. Studies also confirm the importance and effectiveness of the knowledge presented regarding the design considerations in support of the concept of the psychology of color in effective office spaces, according to which it is possible to understand the nature of color that contributes to the reduction The impact of surrounding psychological pressures and the large number of burdens that the employee performs, achieving job comfort and comfort, and raising the level of concentration and performance in return. As the results of the application confirmed the importance and effectiveness of the vocabulary of the theoretical framework that dealt with the focus on the psychology of color and the importance of assessing the ability of the elements of the interior space to enhance this within the office spaces through:

Adopting work using colors that stimulate work and give rise to energy and energy.

Optimal use to achieve relaxation by using cool and comfortable colors

The need to allocate non-shiny colors to paint walls and ceilings to rest within the light sense

Focusing on using light colors to paint the ceilings and with one color to achieve a comfortable feeling of space.

3. Recommendations

The research presents a set of recommendations and proposals to improve the internal environment of office buildings by achieving harmony between human requirements and work requirements by creating effective and stimulating spaces to perform tasks and reduce work pressures. The research recommends:

- Knowing about modern construction techniques, contemporary building and finishing materials, in addition to keeping pace with modern technological techniques and means of modern technological communication and exploiting their advanced capabilities to achieve control, sound insulation and prevent dispersion during work.

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