

Preference and Impact of Colour in the Residential Workplace



Management

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ABSTRACT

Man has a strong urge to express his creative and aesthetic instincts in visual form. Since his home is the center of all his activities, his way of life and thoughts spring from within his protective shelter. The internal space of the building must therefore be functional and comfortable to man, to perform his various functions. A comfortable house has proper composition of natural element and manmade elements where the man can perform various functions in the best possible ways and feel pleasant. By the help of interior decoration and ergonomics we can create that environment and the use of colour is the easiest and best way to create a functional environment with character and beauty.

Introduction

“The craving for colour is a natural necessity just as for water and fire. Colour is a raw material indispensable to life. At every era of his existence and his history, the human being has associated colour with his joys, his actions and his pleasures.”

- Frenand Leger, “On Monumentality and Colour”

The house grew out of man’s need for shelter and also out of his ability to symbolize and his need for identity. Whether it is an elaborate building or a cottage, Varghese et al., (1994) opine that a major portion of our time is spent at home, and a thoughtfully decorated home should provide the needed comfort and pleasant surroundings.

Although it may come in all shapes and sizes, all manner of forms, the home is of huge social significance. There is a lopsided understanding of the world; the domestic places of our lives are not given as much attention as the public spaces. Today the home has also become a “workplace”, where the homemaker is the “worker” in or “user” of that place. The homemaker spends long hours at her the workplace which, may be the kitchen, the dining room, the living room , the bedroom and so on, therefore it should be comfortable and productive and should be appealing to the eyes. The quickest, the most dramatic, and the most reasonable way in which one can create instant change in a room is through the use of colour.

Ergonomics is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimize human well-being and overall system performance (Karwowski, 2006). The workplace communicates with its users in such a way that, when there is a good relationship between the two there is an increase in the productivity. As a powerful form of communication, colour is irreplaceable, as the colours of our environment affect our behaviour and mood. These aspects associate Colour and Ergonomics in such a way that when both are used together, an ergonomically efficient workplace results, in which colour plays its influential role (Söderback, 2009). The depth of this vast topic was investigated to assess the views of the selected homemakers on the impact of colour in terms of comfort and productivity, to analyze the preference of colours for residential spaces and to examine the benefits and problems encountered as a result of the users’ choice of colour for the residential spaces. This knowledge would also strengthen the theoretical approach in the study of colour in relation to the principles of ergonomics in order to provide residential spaces that would be comfortable to work in, be productive in nature and aesthetic and appealing to

look at.

Methodology

Coimbatore, also known as Kovai is the second largest city in the Indian state of Tamil Nadu and one of the fastest growing cities in India. It is known for its peaceful atmosphere, cosmopolitan outlook and private enterprise. The growing number of industries in Coimbatore resulted in an increase in population as the number of migrants entering the city shot up. After the humungous development of commercial property, housing sector in Coimbatore began to multiply manifold.

With the development of residential property Interior Designers and Colour Consultants have also started expanding cognizant growth in the city. Areas namely Sivananda colony, Saibaba colony, Gandhipuram, Ramnagar, R.S. Puram and Race Course were selected for the study. Hundred residences in Coimbatore that were - individual houses or bungalows; constructed after 2006 and owned by High Income Group families were selected by purposive sampling method as it was felt that only this group of people would have used the recent fashion in using colours and they would have better awareness and knowledge on the latest trends in the use of colour. The study was designed to ascertain the function and importance of colour in making the residential spaces ergonomically efficient by adopting personal interview cum observation method for the household survey.

Results and discussion

A. General Family Background

The occupation of the homemaker and head of the family is an important criterion as it will determine both the income of the family and their standard and style of living. Seventy per cent of the homemakers were full time homemakers, 63 per cent of the heads of the families were successful and accomplished businessmen by occupation. Eighteen per cent earned monthly an income between Rs. 40,001 and 50,000. Fourteen per cent of the families earned a monthly income of more than Rs. 1, 00,000.

B. Details of the House

Forty seven per cent of the houses exhibited modernity in their style of construction. Though a majority of all the houses had one living room (86 per cent), kitchen (93 per cent), dining room (87 per cent) and master bedroom (56 per cent) each, 12 per cent, 7 per cent and 13 per cent of the houses had two living room, two kitchens and two dining rooms respectively and 28 per cent and 16 per cent had two and three master bedrooms respectively.

C. Preference of Colour for Rooms

The head of the family in a majority of 44 per cent of the house-

holds chose the colour schemes for all the rooms. Thirty three per cent stated that durability was their prime reason for selecting the colour of their rooms. Table 1 shows the member responsible and reasons for the selection of colour schemes.

Table 1: Member Responsible and Reasons for the Selection of Colour Schemes

Details	Percentage (N=100)
Selection of Colour	
By the head of the family	44
By the specific users	33
Suggested by Interior Designer / Architect	12
Suggested by Colour Consultant	6
By the painter	2
Magazines/Catalogues	2
Influenced by the colour choice of friends or relatives	1
Reasons	
Durable	33
Ease in maintenance	19
Aesthetic	17
Economical	16
All the above	15

Table 2 shows the number of colours used in the rooms. Cream colour was used for their living rooms in maximum (32 per cent) houses. The preference of the colours cream and white for kitchens was shared equally by 28 per cent. Thirty two per cent cream for the walls of their dining rooms. Bedrooms also, had white (24 per cent) and cream (24 per cent) for the walls. Various other colours like violet, blue, green, yellow, orange, red, pink and beige were preferred by less than 21 per cent of households for their rooms. Fifty three per cent and 67 per cent of the households preferred white for the floors and ceilings respectively.

Table 2: Number of Colours Used in Rooms

Room	No. of colours used on the walls of various rooms in Percentage (N =100)			
	One	Two	Three	Four
Living room	62	33	5	0
Kitchen	84	12	4	0
Dining room	76	20	4	0
Bedroom	73	23	3	1

D. Effect of Texture on Colour

Seventy four per cent considered that the texture of the wall has an impact on the final visual effect of the wall. A majority of the households preferred a smooth texture that reflected maximum light for their living rooms (76 per cent), kitchens (84 per cent), dining rooms (50 per cent) and bedrooms (60 per cent). Special textural finishes were used on the walls in 46 per cent of the living rooms, 17 per cent of the kitchens, 21 per cent of the dining rooms and 44 per cent of the bedrooms.

E. Effect of Light on Colour

Seventy two per cent of the homemakers acknowledged the fact that light and the colour of light influence the visual effect of the colour of the wall significantly. White coloured light for the living room by all the households. More than 90 per cent used only white coloured light for their kitchen and dining rooms. Fifty seven per cent of bedrooms used only white coloured light while 43 per cent used both white and yellow coloured light.

F. Relationship between Colour and Temperature

Table 3 shows that more than 55 per cent of them preferred neutral colours for their living rooms, kitchens and dining rooms. In the bedrooms also 48 per cent used neutral colours revealing

that people are still hesitant to use and experiment with colour.

Table 3: Use of Warm, Cool and Neutral Colours in the Rooms

Room	Percentage (N=100)		
	Warm Colour	Cool Colour	Neutral Colour
Living room	32	12	56
Kitchen	28	12	60
Dining room	32	12	56
Bedroom	24	28	48

G. Psychological Effect of Colour in Rooms

Forty six per cent of the sample acknowledged that colours affect the psychology of the users. Blue, green, yellow, orange, red and white influenced its users positively in above 80 per cent of the households where they were used. Brown was the only colour that failed to influence its users positively as 54 per cent felt sad when they saw the colour for a long time. Table 4 explains the psychological effects of colours.

Table 4: Psychological Effects of Colours

Colour		Percentage
Violet	Regal, Dramatic	56
	Lonely	44
Blue	Calm, Relaxing	88
	Depressing	12
Green	Fresh and Natural	87
	Tiresome	13
Yellow	Cheerful, Optimistic	89
	Overpowering	11
Orange	Lively, Energetic	97
	Overbearing	3
Red	Warmth, Intensity	93
	Danger	7
White	Pure, Spiritual	83
	Blank	17
Brown	Warm, Earthy	46
	Sad	54

H. Ergonomic Aspects in the Use of Colour

Ergonomic Aspects	Percentage (N=100)	
	Yes	No
Discomfort while Painting	0	100
Comfortable to View	90	10
Easy to Combine	96	4
Easy to Maintain	88	12
Affects Productivity	46	54
Enhances Aesthetics	76	24

More than 90 per cent felt that the colour was comfortable to view and easy to combine and use with other colours in the room. Eighty eight per cent felt that the selected colour was easy to maintain. Seventy six per cent acknowledged that the colour they used added to the aesthetic appeal of the room. Table 5 elucidates the ergonomic aspects in the use of colour.

Table 5: Ergonomic Aspects in the Use of Colour

Summary and Conclusion

“The purest and most thoughtful minds are those which love colour the most.”

- John Ruskin

Homes and families have entered that threshold of the 21st

century where life is neither calm nor easy. In the realm of his busy life “home” is the place where a man feels his self, hence in home planning and interior designing, it is extremely important to keep in mind that an ergonomically efficient home that is functional and beautiful home is the setting for a happy and satisfied family life. The element of colour is one of the most fascinating tools to work with in order to create an environment that is functional and aesthetic so that it is ideal to confront the demands of a busy and productive life because.

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