

Designing Interiors of Small Space for Enhancing Satisfaction of Residents

Dr. Sarjoo Patel¹ and Ms. Shabreen Pathan²

¹Assistant Professor (Stage -III) ,

Department of Family and Community Resource Management and
Associate Director, Institute of Hotel Management and Catering Technology,
Faculty of Family and Community Sciences, The Maharaja Sayajirao University of Baroda, Vadodara,
E- mail: sarjoo_patel@yahoo.com

² Master's Student, Interior Design Specialization,

Department of Family and Community Resource Management,
Faculty of Family and Community Sciences, The Maharaja Sayajirao University of Baroda, Vadodara.
E-mail: Shabreen0408@gmail.com

Abstract: *Everyone wants their home to be pleasant, comfortable and beautiful. Also, the space should be such that attracts everyone. But, in today's world owning a large space or bungalow becomes quite impossible due to over population. Especially in metro cities owning a large house is not possible. This problem leads to compromise in the space and force people to live in small space i.e. apartment where the space is very less. When it comes to small space, there is a common misconception that it is not worth the time or money that it takes to create a beautiful home. So, it is important to establish consistency in space available. This effect can be achieved through wise utilization of space created using the same colours, fabrics, proportions, textures and furniture styles. Therefore, a study was conducted for providing information and guiding about how to create small space interiors without neglecting any of the area. This study will give detailed information about how substitutes available can make a small space beautiful in terms of appearance and equally functional.*

Key Words: *designing interiors, small space, satisfaction, residents.*

1. INTRODUCTION:

Interior designing is about much more than merely having good taste. Designing elegant interior requires knowledge, resourcefulness and creativity, especially in small spaces (<https://gailgreeninteriors.com>). Interior design is an art or practice of planning and supervising the design and execution of architectural interiors and furnishings (Merriam-Webster dictionary). As with most art forms, interior design is highly subjective, however, with the right focus and planning, it can be an exciting and cost-effective adventure with instant returns and extraordinary, long-lasting results. Interior design is the most upcoming and demanding field in today's world. Everyone wants their home to be pleasant, comfortable and beautiful. Also, the space should be such that attracts everyone. But, today owning a large space or bungalow becomes quite impossible due to over population. Especially in metro cities owning a large house is very difficult. Due to the problem of space people are forced to live in small space i.e. apartment where the space is very less. When it comes to small space, however there is a common misconception that it is not worth the time or money that it takes to create a beautiful home. Conversely, many overspread and over decorate their spaces because they do not have proper direction. In simple terms, definition of space means allocating different interior areas for primary functions: eating, bathing, resting, entertaining. A few examples of common areas that people usually define immediately are the dining room, living room, kitchen, sleeping area and bathroom. So, it is important to establish consistency in your space. This effect can be achieved throughout a space with the same colours, fabrics, proportions, textures and furniture styles.

A person can attain a sense of solace every day by having a home that is proportional and balanced. A personal setting that fosters stability and security is an important outlet for counterbalancing the distractions or stress that may come from everyday life. Everyone have the ability to influence how they feel when they are at home. With this in mind, one should create a space that is reflection of how one want to feel. From an interior design perspective, words such as proportion, balance, rhythm, scale, symmetry and harmony are all essentially alluding to the same thing; a feeling of order and comfort within one's space. Focal points are visual destination that naturally captures a person's attention. From a design perspective, they are important because they offer the eye a comfortable resting place. For this reason, focal points can subconsciously provide more relaxing and peaceful atmospheres. When interior space is limited, it is important to control where one want focal points to be. By keeping patterns and bold colours to a minimum, one is able to direct the eye to specific areas or pieces. Tiny homes are a national phenomenon, and the lifestyle changes associated with low-impacting living. For many city dwellers small space living is the only option. But that doesn't mean it has to be any less intentional

([http://googleweblight.com/i?u=http://www.elledecor.com/design-decorate/roomideas/g2883/small-home-hacks/\\$grqid=e3-rkwoo\\$hi=en.in](http://googleweblight.com/i?u=http://www.elledecor.com/design-decorate/roomideas/g2883/small-home-hacks/$grqid=e3-rkwoo$hi=en.in)). If one is residing in a small space one don't have the luxury as others with large space do. There are number of items available to make the space as luxurious as one want to with proper guidance. One need to shop smart and place equal emphasis on form and function. With some Out-of-the-box thinking, one will find there are plenty of stylish solutions, multipurpose pieces included, that make living small and light simple ([http://googleweblight.com/u=http://www.mydomaine.com/small-space-solutions\\$grqid=ocs](http://googleweblight.com/u=http://www.mydomaine.com/small-space-solutions$grqid=ocs)). Keeping this in mind a study was conducted to find out the extent of problems experienced by the occupants in existing residence and suggest design for enhancing ambience, functionality and proper space utilization to increase satisfaction of the residents of small space

2. OBJECTIVES:

- To find out the extent of problems experienced by the occupants in existing residence.
- To suggest design for enhancing ambience, functionality and proper space utilization to increase satisfaction of the residents of small space

3. METHODOLOGY:

Descriptive research design was adopted for conducting the present study. The study had two types of variables: Independent variables and dependent variables. Independent variables comprised of personal variables of the respondents age, educational level and family variables of the respondents type of family, size of family and total family income. Dependent variable comprised of problems faced by the respondents in small spaced residences. The sample of the study comprised of 60 homemakers from Vadodara who resided in small spaces (450 to 800 sq.ft) selected through purposive sampling method. Questionnaire and observation sheet were used as an instrument to gather the information from the respondents. The questionnaire was divided into two sections. Section 1 dealt with the background information of the respondents. Section 2 dealt with the problems experienced in small spaced residences. The respondents were asked to respond to a 3 point continuum in terms of “agree”, “undecided”, “disagree” and the scores from 3 through 1 were given to the respondents respectively. To obtain the extent of problems, the score range was divided on equal interval basis. The data were analysed using descriptive statistics such as percentage, frequency and weighted mean.

Major Findings: The findings of the study are as follows:

Section :1 Background Information : It was found that very few of the respondents (8.33%) had education till 10th standard, little less than one-fourth of the respondents (20%) had education till higher secondary (12th pass), little more than half of the respondents (58.34%) were graduate and few of the respondents (13.33%) were post graduate. It was found that one-fourth of the respondents (25%) were homemakers, one-half of the respondents (50%) were in service, very few of the respondents (6.66%) were self-employee and less than one-fourth of the respondents (18.34%) were in business. It was found that more than three-fourth of the respondents (71.67%) lived in nuclear family and remaining respondents (28.33%) lived in joint family. It was found that minimum income was Rs 10,000 and maximum was found to be 56000. Majority of the respondents (76.67) had total family income ranging from 10,000 Rs to 20,000 RS per month and less than one-fourth of the respondents (23.33%) had total family income from 20,001 Rs and above per month. It was found that little less than three-fourth of the respondents (71.66%) lived in small sized family and more than one-fourth of the respondents (28.34%) lived in large sized family. It was found that little less than one-third of the respondents (31.66%) have their plot size ranging from 450 to 566 sq.ft, little less than one-half of the respondents (48.34%) have their plot size ranging from 567 to 683 sq.ft and little less than one-fourth of the respondents (20%) have their plot size ranging from 684 to 800 sq.ft.

Section II: Extent of problems experienced by the occupants in small spaced residences

This section contained a scale to find out the extent of problems faced by the respondents related to small spaced residences. The respondents were asked to respond to a 3 point continuum in terms of agree, undecided and disagree and the scores from 3 through 1 were given to the respondents respectively.

Table:-1 Frequency and percentage distribution of the respondents according to problems experienced in small spaced residences

Sr.no	Statements	Respondents(n=60)					
		Agree		Disagree		Undecided	
		F	%	f	%	f	%
1.	The clearance space is not enough to make person move	32	53.34	25	41.67	3	5

	freely						
2.	There is no clearance space between bed and wardrobe	34	56.67	25	41.67	1	1.66
3.	There is no enough space to access the wardrobe door	29	48.34	28	46.67	3	5
4.	The furniture is very compactly arranged	36	60	20	33.34	4	6.66
5.	The size of wardrobe is very small	28	46.67	28	46.67	4	6.66
6.	There is no sufficient space to store all the items	32	53.34	24	40	4	6.66
7.	There are no lofts for additional storage	30	50	27	45	3	5
8.	There is no storage provision in bed	29	48.34	28	46.66	3	5
9.	The flooring is too dark in bedroom	20	33.34	37	61.66	3	5
10.	The walls are of dark colour in bedroom	17	28.34	42	70	1	1.66
11.	The ceiling is very low in height in bedroom	18	30	40	66.67	2	3.33
12.	The window is located very high in bedroom	21	35	38	63.64	1	1.66
13.	There is no mode for cross ventilation in kitchen	40	66.67	20	33.33	0	0
14.	The work centres are very compactly designed	37	61.67	21	35	2	3.33
15.	There is no work space for pre-preparation of food	32	53.34	25	41.66	3	5
16.	The kitchen cannot accommodate more than one person at one time	27	45	31	51.67	2	3.33
17.	The storage space is not enough to place all utensils	38	63.34	18	30	4	6.66
18.	There are no upper cabinets available	34	56.67	21	35	5	8.33
19.	The shape of kitchen doesn't allow to move freely	35	58.34	22	36.66	3	5
20.	The refrigerator cannot be accessed efficiently	28	46.67	28	46.67	4	6.66
21.	There is no provision for placing spoons and pans	24	40	36	60	0	0
22.	Lower cabinets are of very small size	34	56.67	22	36.67	4	6.66
23.	The furniture placement of drawing room is very compactly arranged	33	55	24	40	3	5
24.	Very less amount of space is left for moving	32	53.34	25	41.66	3	5
25.	Accessing from sofa to table becomes quite difficult	28	46.67	29	48.33	3	5
26.	The flooring is of dark colour in living room	22	36.67	36	60	2	3.33
27.	The ceiling is low heighted making room appear too small	22	36.67	37	61.67	1	1.66
28.	The window is not available in drawing room	24	40	33	55	3	5

29.	The washroom flooring is very slippery	26	43.34	33	55	1	1.66
30.	Toilet is very small in size	42	70	17	28.34	1	1.66
31.	There is no storage space to keep basics in bathroom	35	58.34	23	38.33	2	3.33
32.	Ceiling is very low making more sophisticated in bathroom	26	43.34	33	55	1	1.66
33.	Ventilation is not adequate in toilet and bathroom	34	56.67	23	38.33	3	5

Table 1 describes the problems faced by the respondents in small spaces. Almost half of the respondents agreed that the clearance space is not enough to make a person move freely, there is no sufficient space to store all the items, there are no lofts for additional storage, there is no work space for pre-preparation of food and there is very less amount of space is left for moving.

Little more than half of the respondents agreed that there is no clearance space between bed and wardrobe, there are no upper cabinets available, the shape of the kitchen doesn't allow moving freely, lower cabinets are of very small size and there is no storage space to keep basics in bathroom.

Little less than three-fourth of the respondents agreed that the furniture is very compactly arranged, there is no mode for cross ventilation in kitchen, the work centres are very compactly designed and the storage space is not enough to place all utensils. More than three-fourth of the respondents agreed that the toilet is very small in size.

Table 2: Extent of problems experienced by the respondents residing in small residences

Sr.No.	Extent of Problems	Range of score	Respondents (n=60)	
			f	%
1	Low	33-55	0	0
2	Moderate	56-77	21	35
3	High	78-99	39	65
Total			60	100

Table-2 describes the extent of problems experienced by the respondents residing in small residences. The respondents were asked to respond to a 3 point scale in terms of low extent, moderate extent and high extent. This scale comprised of 33 statements with the three point continuum response pattern. The minimum possible score was 33 whereas the maximum score was 99. The overall data for problems related to small residences revealed that 65% of the respondents faced problems to high extent, 35% of the respondents faced problems to moderate extent.

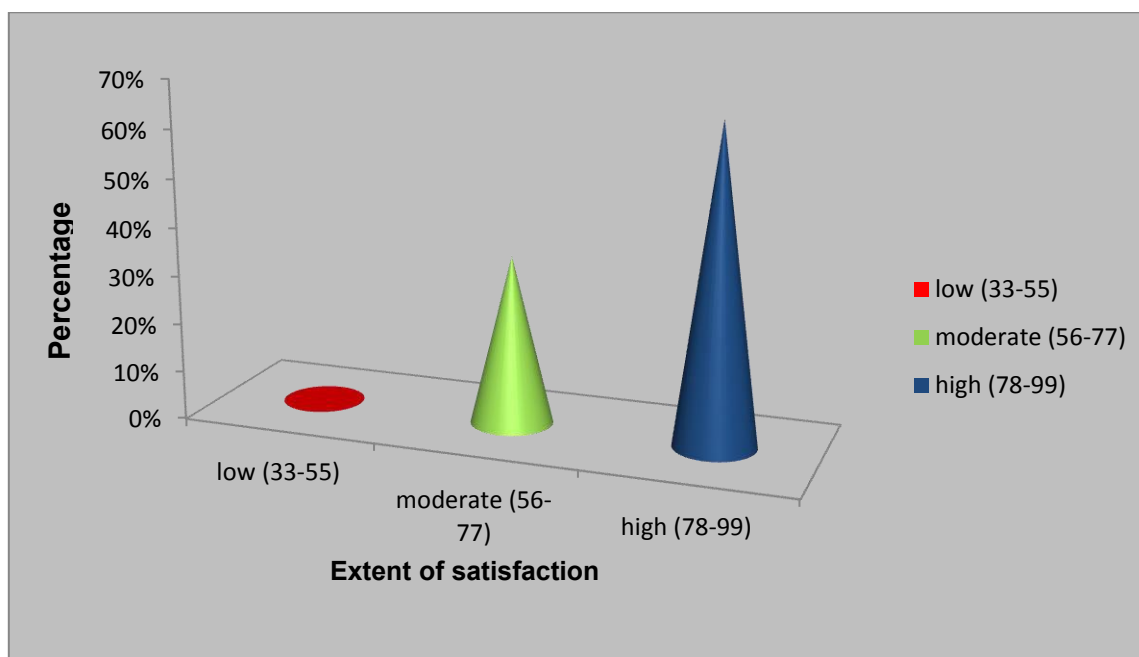
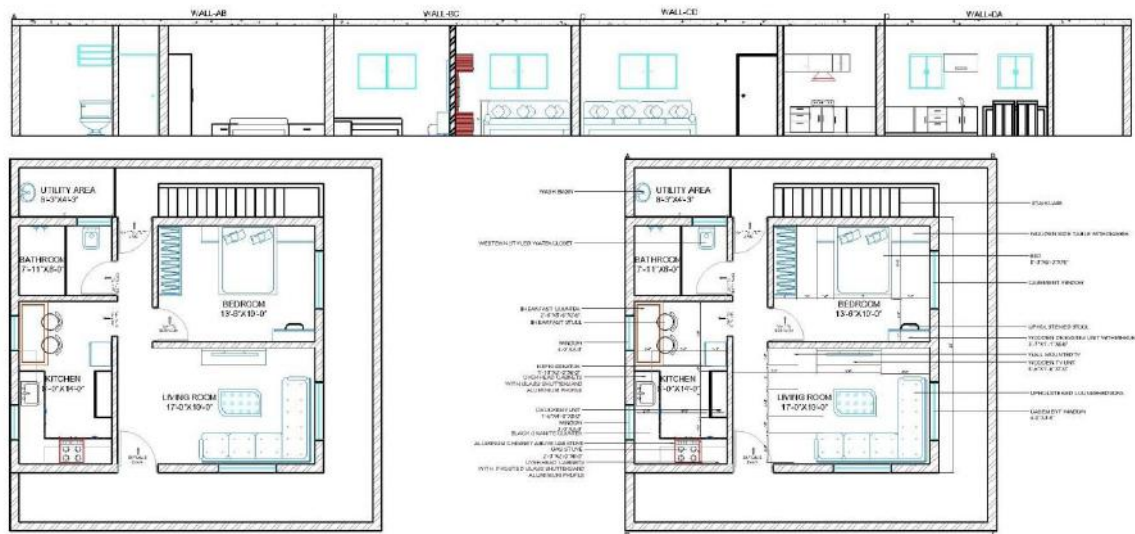


Figure: 1- Graphical representation of the respondents according to the extent of Satisfaction with the existing residence

Section III: Suggestions for enhancing ambience, functionality and proper space utilization to increase satisfaction of the residents of small spaced residences

Considering the basic requirement, an attempt was made in the present study to propose options for interior design of small spaced residences which included proposed floor plan design and proposed four wall elevation of the room.



4. PROPOSED DESIGN FOR SMALL SPACED INTERIORS:

The design for small spaced interior is proposed considering the observations made during study. The design is proposed keeping in mind the problems faced by the residents residing in small space. The design was developed with the needs and problems of small spaced residence users. The specifications of the designs are as follows.

For the proposed small space, the area is of 1024 sq.ft, and the built up area is 572sq.ft. It includes all the basic essential area like living room, bedroom, kitchen, bathroom, utility area.

Wall AB

The wall AB consists of a front elevation of western water closet. Water closet is at a height of 3'-0" in total which comprises of 1'-6" seating height and 1'-6" of flush tank above it. Above water closet there is a louvered window provided for ventilation at a height of 6'-0" from ground. The height of window is 1'-9" with the width of 3'-0".

The main wall of the bedroom is wall AB. The wall contains bed and wardrobe. It consist of side elevation of wardrobe and front elevation of bed. It consists back door which is the way to utility area of 7' height and 3' wide. Next to the door is a side elevation of wardrobe. The wardrobe is made of wooden with the height of 7', depth of 2' and width of 6'. The bed is made of wooden with height of 1'-6", depth of 6'-3" and width of 5'-0". The bed seating height is 1' and a mattress of 6" above it which makes 1'-6" height in total. Double bed also has a side table with drawer of 1'-0" height, 3'-1" and 1'-6" width and depth of 1'-0".

Wall BC

Wall BC consists of a side elevation of bed and side table at one wall and dressing unit at another, this wall also contains a casement window of 3' in height of 5' in width. The window sill level is at 3' from the floor level. The window has wooden framing of 1". The window is divided into two parts. The main aim of providing a casement window is that the proposed bedroom does not contain a utility door and hence due to that the cross ventilation might be affected. So, in order to maintain the cross ventilation the casement window is provided on the opposite wall of door and also to the opposite side of bed for proper natural lighting. This wall also contains the front elevation of living room which is comprised of front elevation of loungered sofa which is 3' height in total which comprises of 1'-6" seating height and 1'-6" back rest and 7'-4" loungered extended leg. This wall also contains a casement window of 3' in height of 5' in width. The window sill level is at 3' from the floor level. The window has wooden framing of 1". The window is divided into two parts and also comprised of side elevation of t.v unit which is at the height of 7', 1'-6" depth and 5'-6" width. Tv unit is designed such that it has storage at the top as well as drawers bottom.

Wall CD

Wall CD consists of front elevation of loungered sofa which is 3' height in total which comprises of 1'-6" seating height and 1'-6" back rest and 9'-8" width which is divided as a normal sofa. It consists main door of living room of 7' height and 3' wide which is next to sofa at a distance of 3'-7" from sofa. This wall also contains one wall elevation of kitchen. The main wall of the kitchen is wall CD. This wall contains range centre. This wall contains countertop finished with black granite of 2" in thickness. The total counter space is limited to 7'-5" in length, 2'-6" in height and 2'-3" in depth. The counter has 3" of skirting and the total height of the cabinets is 2'-3". The total length of

countertop is divided into specific dimensions in order to utilise the space below the countertop in form of storage. Starting from left side, drawers with height 7” and 1’8” wide and 2’ in depth is provide to store small utensils, two drawers are provided. Below of height 10” and 1’8” width and 2’ in depth wide for large utensils. The drawers shutters are finished with matt laminate, has S.S material baskets within it and channels used are also of S.S material. A double door cabinet is provided next to drawers below the range which is 2’3” in height and 2’ in width and 2’ in depth to store gas cylinder and utensils in. The cabinet has matt finished laminate shutters with auto hinges working mechanism. Range with four burners of standard size available in the market, is provided above the double door cabinet. After that single door cabinet is provided of 2’3” height, 1’2” width and 2’ depth. The outer surface of drawers are made up of wood with matt finished laminate sheets over it. All the baskets and channels of drawers and cabinets are made up of S.S material as it is easy to clean and maintain. As it is L shape kitchen it provides continuous work surface, simultaneously it also provides continuous storage space also of 2’6”. To utilise each and every space with in the kitchen effectively, overhead cabinets are provided above the countertop at a height of 3’. Starting one shutter of 2’2” width is provided with 1’6” height . After than an open space of 2’ has been provided for the placement of aluminium chimney of 2’2” in height. Next to which storage is provided of double door cabinets which is 1’6” width, 1’6” height and depth of 1’6”. All the overhead cabinets are 1’6” deep and 1’6” in height with frosted glass shutters fitted in 1” aluminium frame. All the base cabinets, drawers, pull out shelves and overhead/wall cabinets have 1 ¾” aluminium profile handles which are very comfortable in use and are the concealed handles. Each division of the storage unit is differentiated with 1” of wooden plank in between.

Wall DA

On wall DA, sink centre is provided, the sink proposed is of single bowl. The sink is made up of aluminium material of size 2’. This wall contains countertop finished with black granite of 2” in thickness. The total counter space is limited to 8’ in length, 2’6” in height and 2’3” in depth. The counter has 3” of skirting and the total height of the cabinets is 2’3”. The total length of countertop is divided into specific . As it is L shape kitchen it provides continuous work surface, simultaneously it also provides continuous storage space also of 2’6” which creates a storage of both the cabinets and to access this space is provided with a single door cabinet of 1’1”. Drawers with height 7” and 1’8” wide and 2’ in depth is provide to store small utensils, two drawers are provided. Below of height 1’ and 1’8” width and 2’ in depth wide for large utensils. The drawers shutters are finished with matt laminate, has S.S material baskets within it and channels used are also of S.S material. A double door cabinet is provided exactly below the sink which is 2’3” in height and 2’ in width and 2’ in depth to store gas cylinder and utensils in. The cabinet has matt finished laminate shutters with auto hinges working mechanism. Next to counters is provided with breakfast counter table which is 2’6” of height, 5’6” width and 2’6” depth. Also it has two breakfast stools of 3’ height 1’6” width and 1’6” depth. Above conter and breakfast is provided with two windows respectively. Wall DA contains a French window of 3’ in height and 3’ in width. The window sill level is at 4’ from the floor level. The whole window is divided into two parts so that if needed a person can provide shutters to it also. In between both the window is provided with overhead cabinet of 1’6” height and 2’11” width and 1’6” depth with frosted glass shutters fitted in 1” aluminium frame. This overhead cabinet is hydraulic having aluminium profile handles which are very comfortable in use and are concealed handles.

5. CONCLUSION:

On the basis of findings of the present study following conclusions can be drawn. The findings revealed that most of the respondents residing in small space faced problems of lack of clearance space, storage, ventilation and size of furniture. Considering the problems faced by the users of small spaced residents a design is proposed which aims to eliminate all the problems faced by the users. It is hoped that the users will be satisfied with the design proposed and it will prove beneficial to them.

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