

# Children's Bedroom : Designing Interior Based on their Preferences

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**Abstract:** *Childhood is a period of rapid and continual growth where physical, mental, social, emotional and language development takes place. Also there has been a great variation between the children of the same age group. As a child grows he has a need for privacy, a place to play and to keep things. Therefore, the child's bedroom should be planned according to his/her likes and dislikes and requirements. Conventional furniture's "one size fits all" is uncomfortable and hazardous for a child. The furniture will grow with the child implies that it will offer various options for storage and flexibility without compromising over the basic functional needs and interior of the environment. Hence, the children should be provided with their personal space according to their interest by which they can acquire healthy growth. Therefore the furniture should be so designed that it grows up with the child and modular furniture fits in this concept. Thus, the present study was undergone with to find out the preferences of the children for their rooms for both the gender and suggest designs for children's room for both the gender. Descriptive research design was used in this study. The sample comprised of 60 respondents (out of which 30 were male child and 30 were female child) who were parents of the children and children aged between 5-12 years. The present paper aims to present the preferences of the children and the design will be prepared and presented based on the choice of the children. Considering the basic requirement, an attempt is made in the present study to propose several options for bedroom interior design for children which will include proposed floor plan design, proposed four wall elevation and proposed electrical layout of the room.*

**Key Words:** *preferences of children, children bedroom, designing*

## 1. INTRODUCTION:

The design and layout of the physical environment which includes the building, interior finishes outdoor spaces, room arrangement and selection of equipment has a profound impact on children's behaviour. Quite unlike adults, children figure out how to behave in most situations through instantaneously reading the environment. Children also read the environment differently than adults, not as background but as something to interact with, (Stoecklin, 1999). The design must support active experimentation and risk taking without being unsafe for children. The physical environment and equipment must be arranged to minimize hazards and errors.

A child is the most endearing member of the family. Every parent wants to give the best to his child. Of all the rooms in the house, those for the children are the most fun to decorate. One cannot ignore the importance; a child's room has in his development. He begins very early to have a sense of possession, to know which things and places are his own. As he grows he has a need for privacy, a place to play, to keep things (Hardy, 1955). Also importantly, these sense of possession and belongingness increase.

The main aim for carrying out this research was to determine the requirements for healthy bedroom furniture for pre-school children, which arouse their motivation as well as confidence and also affect their development positively. Since, designing for children is a completely different endeavour; choosing the right furniture for children and the design criteria for this chosen furniture should be analysed in accordance with the characteristics of the children.

For, children have a great amount of energy; they have to spend this energy in a safe and healthy environment. According to Sinnot, the first of the two vital facts to remember when designing for children is that children use built environment differently than adults. They run rather than walk and use parts of the environment as play equipment (Sinnot, 1985).

Children's bedroom is a space, which builds up a foundation for the future. That is its essential quality. It is a room, which takes the broadest demands as a starting point that is made on contemporary habitats, because the child has to live fully in preparation for tomorrow and the present has its roots in their immediate environment where their identity takes shape. A child is the most active member of the family. A child's room is much more than a room "it is a

palace, a jungle, a sailing ship, a rocket, or may be a refuge.” These are the definitions of beauty for the child as he dreams and which constantly change as the exposure to different things increases. Thus a child needs a room, which grows with him. As a child’s personality unfolds, he may need a special place of his own for his treasures. It may be a drawer, a closet or anything (Bhagchandani,2005).

For a child their first 10 years are considered as the formative years where he has a sense of belongingness and it is important to know how responsible, creative and self expressed the children can be in an environment that is built according to their size and scale.

Children need their own space to move about. They are considered as living in an environment, which is not similar to adult life, even though they are being reared by them. To install the habit of work is very important at this stage of life. Children are proud having their own room and have definite ideas on a subject. Therefore, the children needs to be practical and at the same time fun and flexible to adjust.

The furniture should be so designed that it grows up with the child i.e. scaled to the child but useable for many years. Modular furniture just fits in this concept. When planning a child’s room, parents may find it necessary to make a few compromises, using only temporary pieces and changing to better things later. Modular furniture is a challenge to this concept. It is designed to provide a variety of configurations based on the room size and preferences of the user, while also ensuring safety and sound construction of the furniture. Traditional “one size fits all” furniture is uncomfortable and often hazardous. Many of the injuries can be prevented if not eliminated with the help of furniture, which is planned keeping in mind the general ergonomics principles (Bhagchandani, 2005).

Ergonomists suggest that parents and teachers make sure the youngsters sit at an appropriate workstation adjusted to the correct height. At an early age, child needs to learn to position correctly. Learning good posture will benefit them when they are young as well as throughout the lifetime. Conventional furniture is comparatively heavy and not designed ergonomically. Moreover, it is standardized for all the users. Whereas modular furniture can be customized according to the needs of the users. This encourages us to challenge our ideas for conventional furniture. Over an extended period of time, all non-adaptive sitting positions strain the body. However, with variation in dimensions, one can avoid these strains.

Modular furniture is designed to fit different decors as well as practical needs of the child. This means that the child has the liberty to experiment with his own room and explore the creative aspects of his personality. The furniture will grow with the child implies that it will offer various options for storage and flexibility without compromising over the basic functional needs and décor of the environment (Bhagchandani, 2005).

If one has a large family it may be difficult to provide bedroom to every children. If it is possible, however, there are few benefits that a child will gain by it. In fact, a child that has his or her own bedroom will be better able to handle responsibility, will become more confident, will start expressing themselves and will mature faster than one that doesn’t have their separate bedroom. Having a separate bedroom allows a child to pick and choose what they want on their walls and in their room. It can also give a child a higher sense of self-esteem, something that is important in their formative years. Having their private room will also give the ability to keep their things safe from the younger siblings. It also gives the feeling of privacy as they grow up. Having their own room can also give them a great sense of pride when friends visit their home.

Hence the children should be provided with their personal space according to their interest by which they can acquire healthy growth and get privacy which can be effective.

## **2. OBJECTIVES:**

- To find out the preferences of the children for their rooms for both the gender.
- To suggest designs for children’s room for both the gender.

## **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 respondent age, educational level and family variables of the respondents type of family, size of family and family income. Dependent variable comprised of the preferences of the children for their rooms for both the gender. The sample of the study comprised of 60 children (out of which 30 were male child and 30 were female child) from the Vadodara city. The purposive sampling method was used to select the samples. 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 preferences of the children for their bedroom. The respondents were asked to respond to 2 point continuum in terms of “yes”, “no” and the scores from 2 through 1 were given to the respondents respectively. To obtain the preferences of bedroom design, the score range was divided on equal interval basis. The data were analysed using descriptive statistics such as percentage, frequency and weighted mean.

#### 4. FINDINGS:

*The findings of the study are as follows:*

##### **Section I Background Information:**

###### **Age of the child:**

**For boys:** The age of the respondent ranged between 5 to 12 years with a mean age of 8.9 years. It was found that little less than half i.e. 43.33% of the respondents were aged between 5-8 years and little more than half i.e. 56.67% of the respondents were aged between 9-12 years.

**For girls:** The age of the respondent ranged between 5 to 12 years with a mean age of 9.06 years. It was found that less than half i.e. 40% of the respondents were aged between 5-8 years and more than half i.e. 60% of the respondents were aged between 9-12 years.

###### **Education of the child:**

**For boys:** It was found that few i.e. 20% of the respondents were studying in Sr kg -1<sup>st</sup> std, less than half i.e. 40% of the respondents were of the class from 2<sup>nd</sup>- 4<sup>th</sup> std and less than half i.e. 40% of the respondents were studying in 5<sup>th</sup> - 7<sup>th</sup> std.

**For girls:** It was found that few i.e. 20% of the respondents were studying in Sr kg -1<sup>st</sup> std, less than half i.e. 36.67% of the respondents were of the class from 2<sup>nd</sup>- 4<sup>th</sup> std and less than half i.e. 43.33% of the respondents were studying in 5<sup>th</sup>- 7<sup>th</sup> std.

###### **Medium of School:**

**For boys:** It was found that few i.e. 16.67% of the respondents were studying in Gujarati medium and more than three fourth i.e. 83.33% of the respondents were from English medium.

**For girls:** It was found that very few i.e. 6.67% of the respondents were studying in Gujarati medium and majority i.e. 93.33% of the respondents were from English medium.

###### **Type of Family:**

**For boys:** It was found that more than one fourth i.e. 36.67% of the respondents were living in nuclear family and less than three fourth i.e. 63.33% of the respondents were living in joint family.

**For girls:** It was found that more than one fourth i.e. 36.67% of the respondents were living in nuclear family and less than three fourth i.e. 63.33% of the respondents were living in joint family.

###### **Family Income:**

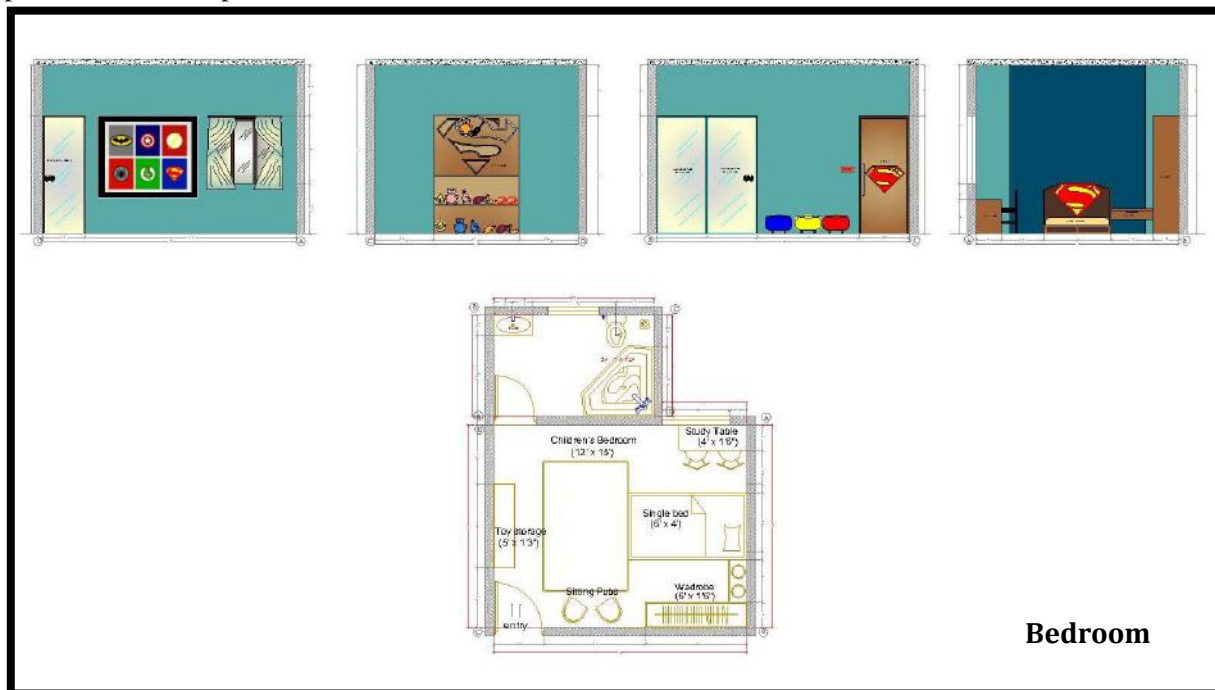
**For boys:** It was found that little less than one fourth i.e. 26.67% of the respondents were having monthly family income between RS. 20,000- RS. 30,000. Very few i.e. 13.33% of the respondents were having monthly family income between RS. 30,001- RS. 40,000. Little more than one fourth i.e. 26.67% of the respondents were having family monthly income between RS. 40,001-RS. 50,000. More than one fourth i.e. 33.33% of the respondents were having family income RS. 50,001 and above.

**For girls:** It was found that few i.e. 16.67% of the respondents were having monthly family income between RS. 20,000- RS. 30,000. Little less than one fourth i.e. 26.67% of the respondents were having monthly family income between RS. 30,001- RS. 40,000. Few i.e. 20% of the respondents were having family monthly income between RS. 40,001-RS. 50,000. More than one fourth i.e. 36.66% of the respondents were having family income RS. 50,001 and above.

##### **Section II Preferences of the Children:**

**For boys:** The overall data based on children's preferences for the bedroom's wall revealed that little more than half i.e. 56.67% of the respondents wanted bright coloured wall and less than half i.e. 43.33% of the respondents wanted light coloured wall. More than one fourth i.e. 33.33% of the respondents wanted superhero themed wallpaper, little more than one fourth i.e. 30% of the respondents wanted radium ceiling sticker, 40% of the respondents wanted space themed ceiling. 53.33% of the respondents wanted matt finished flooring, and 73.33% of the respondents wanted tiled as well as rug in small part of their room. 73.33% of the respondents wanted theme based door and 33.33% of the respondents wanted single slider window. The overall data based on children's preferences for the bedroom's bed revealed that 43.33% of the respondents wanted single bed, 60% of the respondents wanted slider wardrobe, and 73.33% of the respondents wanted their study table of wooden material. The overall data revealed that 76.66% of the respondents wanted their chair of wooden material. 36.66% of the respondents wanted their toy storage having open shelf, 56.66% of the respondents wanted theme based fan. The overall data based on children's preferences for the bedroom's attached bathroom revealed that 43.33% of the respondents wanted cartoon shaped bathtub, 63.33% of the respondents wanted bathtub of ceramic material, 46.66% of the respondents wanted sensored shower and little more than half i.e. 53.33% of the respondents wanted hand operated shower. Majority of them (83.33%) wanted western styled W.C, 43.33% of the respondents wanted oval shaped basin, 76.66% of the respondents wanted basin of ceramic material, 53.33% of the respondents wanted LED light in their bathroom, 36.66% of the respondents wanted sensory tap in their bathroom, 76.66% of the respondents wanted matt flooring in their bathroom, 63.33% of the respondents wanted ceramic tiles in their bathroom, 36.66% of the respondents wanted tiled wall in their bathroom. Little more than half i.e. 53.33% of the respondents wanted plain ceiling in their bathroom. More than one fourth i.e. 36.66% of

the respondents wanted oval shaped mirror. All of the respondents wanted towel rack and soap case in bathroom. Little less than half i.e. 43.33% of the respondents wanted sash curtain for partition in the bathroom. Half i.e. 50% of the respondents wanted plain vanity. 73.33% of the respondents wanted automatic toothpaste dispenser squeezer, 60% of the respondents wanted specific coloured tumbler, 40% of the respondents wanted cartoon shaped tumbler, 60% of the respondents wanted specific coloured stool, and coloured bucket.



### Boy's bedroom – option 1

#### *Proposed designed for children bedroom (boys)*

This design for boys bedroom of age 5-8 years is proposed considering the observation made during the study. The bedroom design is proposed keeping in mind the anthropometric measurements of boys of age 5-8 years. The bedroom is designed developed with the combination of different areas required by children. The specification of the designed are as followed.

### Wall A

The main wall of the bedroom the wall contains the bed, the side unit and the wardrobe. The bed is made up of wooden material. It is designed with the superman theme back rest with the height of 3'-0" ,depth 6'-0" and width 4'-0".The bed sitting height is 9" included mattress of 6". Behind the bed there is dark blue theme based wallpaper which is highlighted with the wooden based bed panel. Single bed has attached side drawers with 7" height, depth 9" and width 3'.Drop down ceiling is 9".

### Wall B

The wall B contains the main door, the wardrobe and small 3 pubs. The main door of 7' height and 3' width is designed with the superman theme design in center. The wardrobe is placed next to the pubs. The wardrobe is made up of wooden material with sliding glass doors of height 7'-0" , depth 1'-6" and width 6'-0".

### Wall C

The wall contains the open toy storage of wooden material with height 7'0" and width 5'-0" and depth 1'-6".

### Wall D

The wall contains the door to the bathroom, a photo frame based on super hero, a study table and a casement window. A casement window is of height 4'-0" and width 4'-0" .The study table and the chair is made up of wooden material and they are placed below the window. The size of study table is of height 2'-6" , width 4'-0" and depth 2'-6".

### Attached bathroom

#### Wall A

The wall contains the door to the room and the superman theme bathtub. The door is of height 7'-0" and width 2'-6". The bathtub is made up of ceramic and designed with superman shaped in corner. The height of bathtub is 2'-6" and width is 4'-0".

#### Wall B

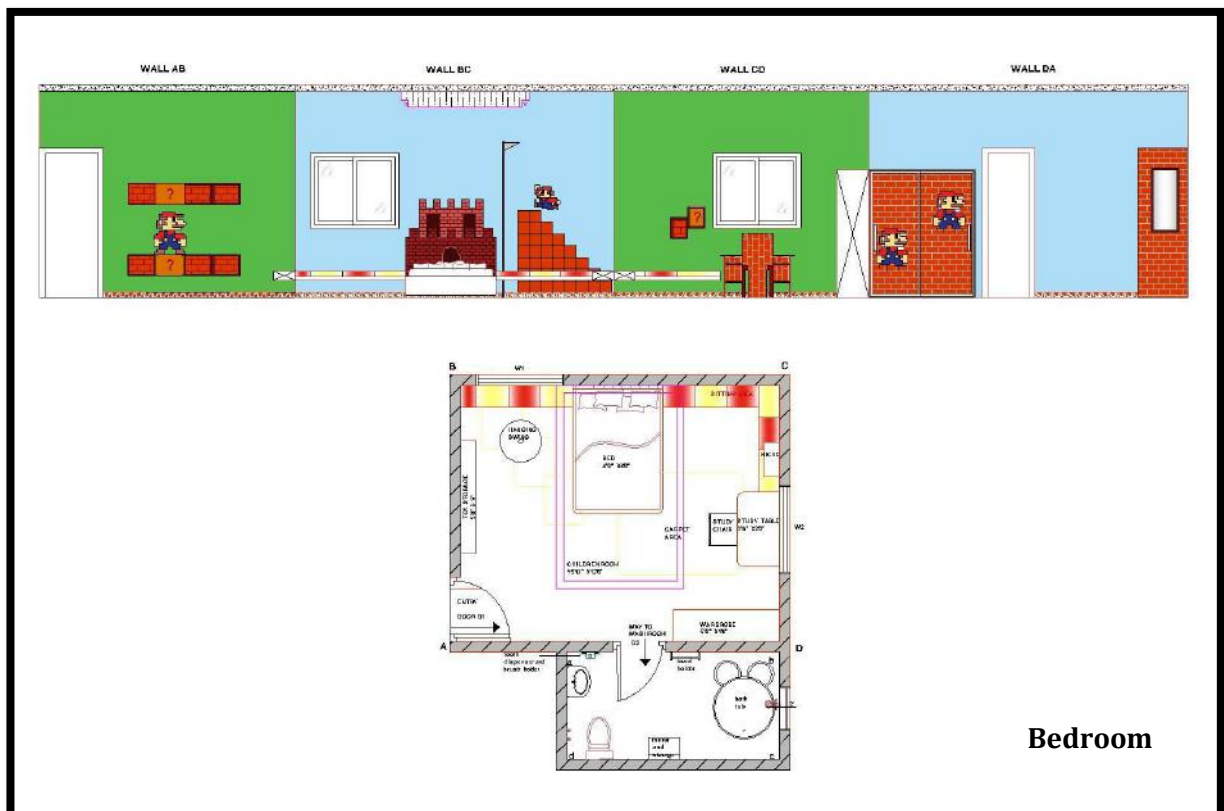
The wall contains the bathtub as it placed in corner connecting wall A and Wall B.

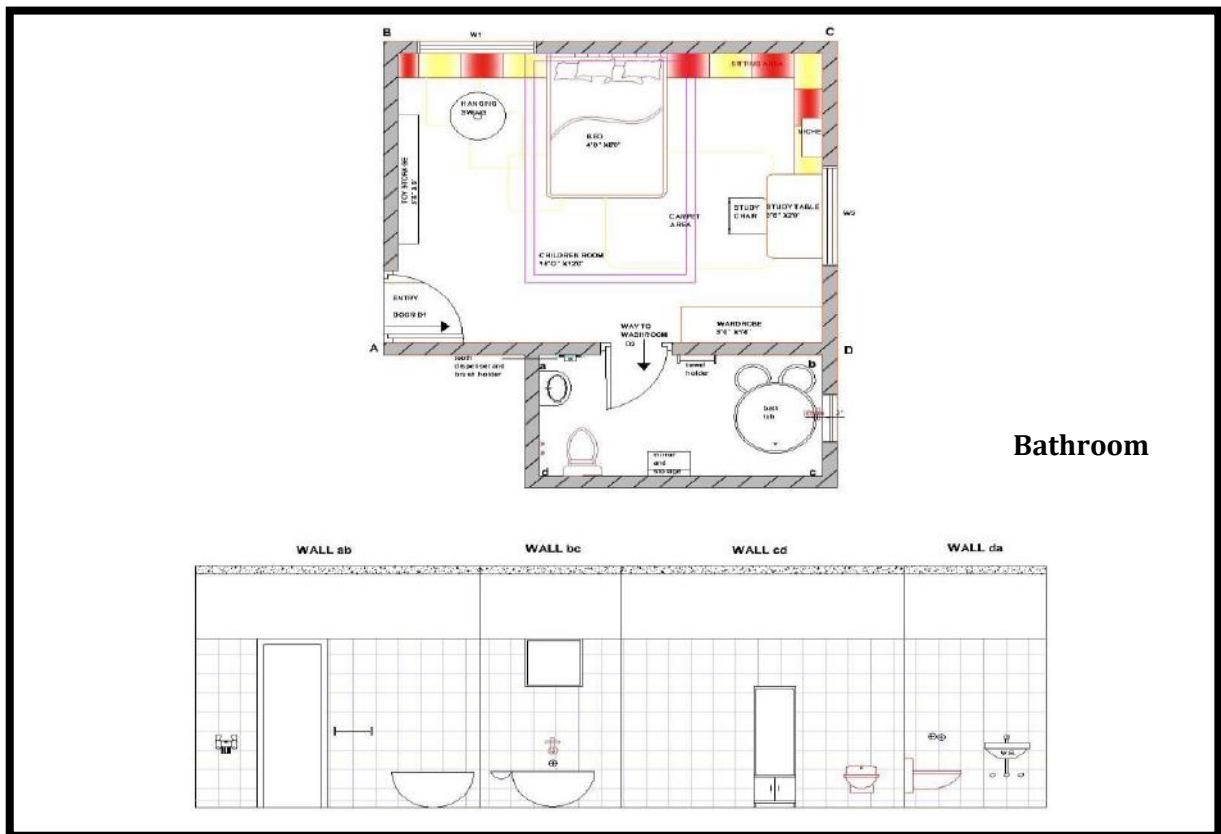
#### Wall C

The wall contain basin, window with attached exhaust fan and WC with flush plate above it. The basin is made up of ceramic and is rectangular in shape. It is placed on a countertop made up of artificial stone of black colour. The height of countertop is 2'-10" , width is 2'-6" and depth 2'-6". The mirror is placed above the basin. The WC is placed above 1'-4" above the floor. It comprises of a concealed water tank with the flush plate placed above it.

#### Wall D

The wall contains the basin and the drawers below the basin. There are two drawers below the countertop made up of wooden material.





Bathroom

### Boy's bedroom – option 2

#### *Proposed design for children's bedroom (boys)*

The design for boy's bedroom of age 9-12 years is proposed considering the observations made during the study. The bedroom design is proposed keeping in mind the standard anthropometric measurements of boys of 9-12 years. The bedroom design includes all the necessary areas and furniture required by the children. The room is designed with "Super Mario" theme. There is bed, study table, storage of toys, books, and a wardrobe and a swing and a sitting ledge in the bathroom there is interesting bath tub. The specification of the designs is as follows.

**Wall AB:** On wall A there is a door which is the entrance of the room. And an open toy storage having 8 storage sections of 1'4" x 1'. The depth of that storage is 1'. The material of that storage is wood. The theme is created by wall paint. There is glossy paint and satin paint used on wall.

**Wall BC:** On wall B there is a window. The frame of window is of wood and it is a slider window. Wall is painted according to the theme. There is a bed on that wall. The back rest of the bed is on this wall. The back rest is in the shape of Mario house and having graphics according to that. And a sitting ledge is there on the whole wall excluding the bed, and it is continuous on the perpendicular wall (wall CD). The seat of ledge is having two colors yellow and red which makes it interesting and attractive. The ledge is of wood and it is fixed in the wall.

**Wall CD:** On wall C there is a study table which is of wood. The chair is also of wood and having two grooves on both sides of the back rest to hang the bag. The study table is having storage to put books and some drawers to store some items. The chair and table are also having mica sheet according to the theme. There are two niches in that wall.

**Wall DA:** On wall D there is a wardrobe according to the theme. The wardrobe is of 5'-00" x 1'-6" x 6'-00" size. There is a door of attached bathroom on this wall.

There is a carpet covering the area of bed and study table, and some small carpets are arranged in a cross direction creating an interesting and joyful feeling. There is a swing over these carpets and facing towards the window, so one can see outer view and have some relaxing time and also can play.

#### **Attached bathroom**

**WALL AB:** Wall A is having the entrance door. A toothpaste dispenser-brush holder is on one side of the door and on the other side there is a bath tub which is of Mickey Mouse shape.

**WALL BC:** There is ventilation and faucets on this wall. The bath tub is operated by this wall.

**WALL CD:** There is a mirror and a small storage on this wall. The WC is also on this wall. And it is western style.

**WALL DA:** There are faucets of WC on this wall and a basin is on this wall.

**For girls:** The overall data based on children's preferences for the bedroom's wall revealed that 63.33% of the respondents wanted light colored wall 43.33% of the respondents wanted bright colored wall, 40% of the

respondents wanted barbie themed wallpaper, 20% of the respondents wanted radium ceiling sticker, 26.66% of the respondents wanted space themed ceiling, 23.33% of the respondents wanted plain ceiling, 23.33% of the respondents wanted false ceiling and wooden stripes in their bedroom. The overall data based on children's preferences for the bedroom's flooring revealed that half i.e. 50% of the respondents wanted matt finished flooring and less than half i.e. 40% of the respondents wanted glossy finished flooring. Less than half i.e. 40% of the respondents wanted flooring of rubber and marble tiles, 60% of the respondents wanted tiled as well as rug in small part of their room, 66.66% of the respondents wanted theme based door and 33.33% of the respondents wanted plain door. The overall data based on children's preferences for the bedroom's window revealed that 43.33% of the respondents wanted casement window, 40% of the respondents wanted single bed, 80% of the respondents wanted slider wardrobe, 70% of the respondents wanted their study table of wooden material, 66.66% of the respondents wanted their chair of wooden material. The overall data based on children's preferences for the bedroom's toy storage revealed that 36.66% of the respondents wanted their toy storage having open shelf, 63.33% of the respondents wanted theme based fan . The overall data based on children's preferences for the bedroom's attached bathroom revealed 43.33% of the respondents wanted circle shaped bathtub, 36.66% of the respondents wanted bathtub of stone and ceramic material, 23.33% of the respondents want sensored shower and 76.66% of the respondents wanted hand operated shower, 80% of the respondents wanted western styled W.C. Little less than half i.e. 43.33% of the respondents wanted circle shaped basin, 76.66% of the respondents wanted basin of ceramic material, 60% of the respondents wanted LED light in their bathroom, 46.66% of the respondents wanted sensored tap in their bathroom, a high majority i.e 90% of the respondents wanted matt flooring in their bathroom. Half of the respondents wanted ceramic tiles in their bathroom, 46.66% of the respondents wanted tiled wall in their bathroom, 50% of the respondents wanted plain ceiling in their bathroom, 40% of the respondents wanted circle shaped mirror. All the respondents wanted towel rack and soap case in bathroom. More than one fourth i.e. 33.33% of the respondents wanted sash curtain for partition in the bathroom, 66.66% of the respondents wanted vanity that has steps to climb, 56.66% of the respondents wanted automatic toothpaste dispenser squeezer. More than three fourth i.e. 83.33% of the respondents wanted specific coloured tumbler, 23.33% of the respondents wanted cartoon shaped tumbler, and 83.33% of the respondents wanted specific coloured stool and bucket.





**Girl's bedroom – option 1**

***Proposed design for children's bedroom (girls)***

This design for girl's bedroom of age 9-12 years is proposed considering the observations made during the study. The bedroom design is proposed keeping in mind the standard anthropometric measurement of girls of age 9-12 years. The bedroom design is developed with the combinations of different areas required by children. The specifications of the design are as follows.

***Bedroom***

***Wall A***

The main wall of the bedroom is wall A. The wall contains bed and dressing unit. It consists two mirrors of 7'-0" height and 3'-0" wide. The bed is made up of wooden material with height of 3'-0", depth 6'-0" and width of 3'-6". The bed sitting height is 1'-5" including mattress of 6". The bed head is of 2'-0" below mattress. The bed head has 6" raised cushioning. Behind the bed there is Barbie themed wallpaper height 5'-10". Single bed has attached side drawers 7" height, depth of 12" and width of 3'-0" on both the sides. Behind side drawers there are mirrors on both the sides of 7'-0" height. On the left hand side of the wall, Niche is allocated. Drop down ceiling is 8" in height.

***Wall B***

The wall contains door of 7'-0" height and 2'-6" width which leads to attached toilet. The wall also has Toy storage of wooden material with height 6'-10" depth 1'-0" and width 4'-0". Drop down ceiling is 8" in height.

***Wall C***

The wall consist main door of bedroom of 7'-0" of height and width of 3'-0". Wardrobe is placed next to the main door of height 7'-0", length of 6'-10" and depth 2'-0". Loft is placed above the wardrobe of height 2'-0", length of 6'10" and depth of 2'-0" and the door is having slider opening. Drop down ceiling is 8" in height.

***Wall D***

The wall contains a casement window of height 4'-3" and width 5'-0". The sill level of window is at 2'-9" from the floor level. The study table is placed just below the window so that fresh air and natural light is available for studying. The size of study table is of height 2'-6", width 5'-0" and depth 1'-6" so that fresh air is available for studying. Wooden material is used for study table and chair. Low sitting is provided next to the study table. The low sitting is made up of wooden material with height 1'-9", depth 1'-7" and width 5'-5". Drop down ceiling is 8" in height.

***Attached bathroom***

***Wall A***

Wall A contains ventilation of height 2'-0" and width 2'-0". The sill level of ventilation is at 5'-0" from the floor level which includes louvers, fixed glass and exhaust fan.



**Wall B**

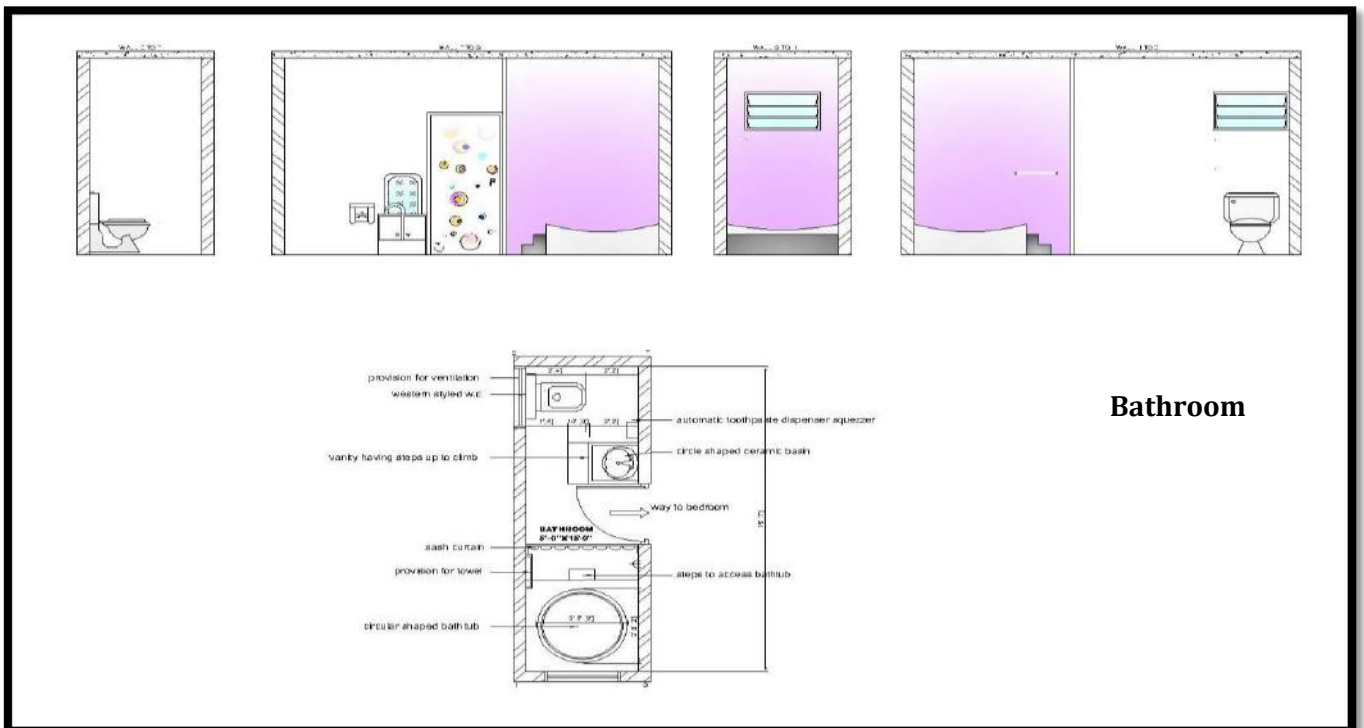
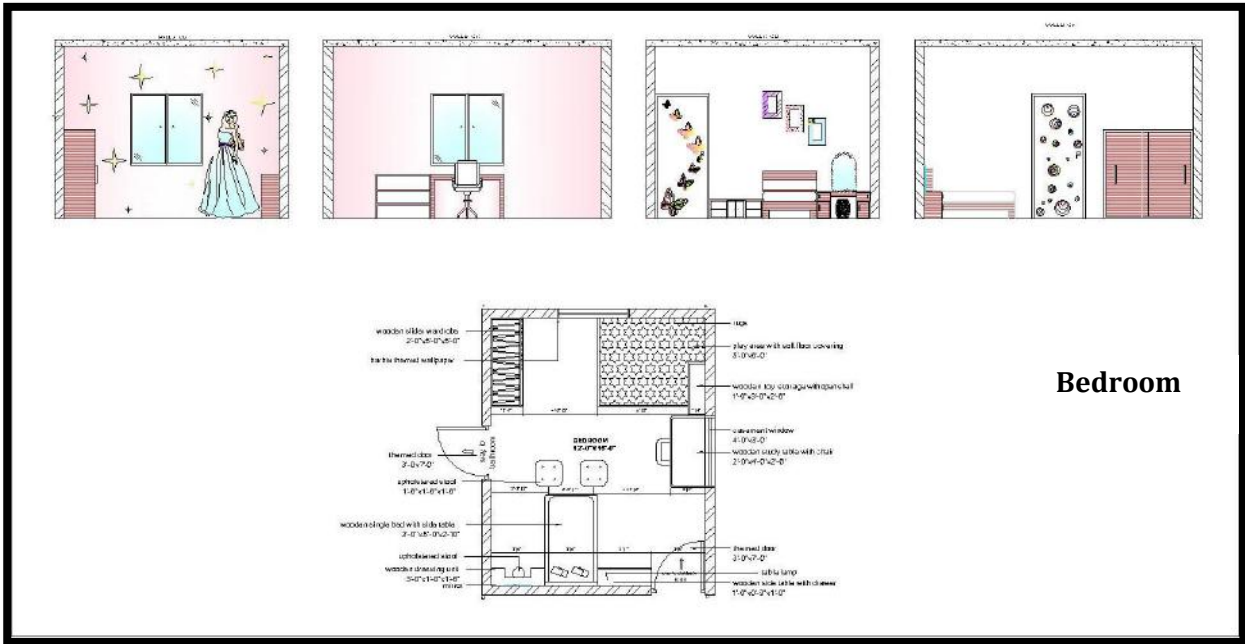
From the floor level, the height of normal tap is 2'-0", the height of mixer tap is 3'-6" and the height of shower is 7'-6". The size of the butta is 2'-0" X 1'-0". 4 mm grooves are placed in butta. The toilet seat is placed at the height of 1'-6" and the flush tank is placed at the height of 3'-3" from the floor level.

**Wall C**

The sink is placed next to the toilet at the height of 2'-6" from the floor level and the height of the sink is 6". The sink is made up of ceramic material. The basin is circular in shape. The height of the mixer tap is 3'-6" from the floor level. Vanity is placed below the basin which is of height 2'-6", width 4'-7" and depth 1'-9". Mirror is placed at the height of 3'-0" and length is 4'-7". The height of the mirror from the floor level is 4'-0".

**Wall D**

The wall contains the door having height 7'-0" and width 2'-6". The wall besides the door is highlighted with butta of 2'-0" X 1'-0" size and 4mm horizontal grooves are provided.



**Girl's bedroom – option 2**

## **5. CONCLUSION:**

Children need their own space to move about. Preferences vary from child to child so certain designs were proposed according to their needs and preferences and keeping in mind the gender of the child. Also four wall elevations are suggested for their visual clarity. It is hoped that children and their parent will get an idea from the drawings about the type of room desired by the child.

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