

Gender Differences Necessities in Interior Design

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Abstract:

Interior Design has an important role in the realization of human needs within the internal spaces. These requirements vary depending gender differences, whether these basic as physiological, biological and psychological.

Problem: the lack of awareness of gender differences in designing for various gender needs for doing activities. Do women prefer some indoor designs without the other? Moreover, is it associated with psychological composition for women? Is the man bearing the harsh conditions in his work to make him more endurable when changing environmental conditions such as temperature and the level of sound and lighting...etc.? In addition, how are man's body and woman's ability adapting to different positions? and how is this relates to the type of activity practiced in the internal spaces? Therefore, the interior designers have to take into account the differences between the sexes and *miscellaneous* requirements in the interior design for wellbeing in internal spaces through variable control in properties of interior design elements. Thus, psychological needs vary as physiological needs between men and women. Nevertheless, is there a difference in feeling with comfort and satisfaction of the interior design elements between men and women? The determination of psychological and physiological differences between men and women may be the first steps to know the methods and requirements of comfort and well-being of both sexes. A view to identifying the gender requirements and how it relates to physiological and psychological entity for them in the design of the interior spaces and through the analytical study of the differences between the sexes, as well as a questionnaire study. **Significance:** explaining how to fit the interior elements to differences between both women and men. By clarify the strong differences in the physical and psychological entity affect the comfort requirements. In addition, interest in the achievement of what fits with that of individual species in terms of space and the dimensions of the appropriate spaces and its contents as well as the technological methods used and the requirements of psychological comfort. The study serves those who seeking to understand gender differences and to use it as a starting point to illuminate the debate on gender specific outcomes with internal comfort and wellbeing.

Keywords:

Gender requirements
psychological comfort
physiological comfort
Interior wellbeing
Masculine interior
Feminine interior

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Introduction

Although researches on gender and design are rich, it remains marginalized, at best, in traditional planning and design approaches. Much of the literature reminds readers that the planning and design fields have been and continue to be dominated by male practitioners contributing to the androcentrism, centered or focused on men, often to the neglect or exclusion of women – of the field. This has exacerbated the treatment of women as a “specialized subgroup” and diminished, if not invisibilized the role the built environment plays in both perpetuating and creating gender inequality. (Daniel 2013) Often the “average male” is used for design prototyping although there are biological differences between men and women that result in different ergonomic

needs and comforts.

Gender, gender differences, and how gender plays out in the built environment are complex matters. As designers, they are required to look to multiple disciplines to analyze and understand the need, the challenges, and the possible solutions to support the design process (Daniel 2013).

Interior Design has an important role in the realization of human needs within the internal spaces. These requirements vary depending on the differences between men and women, and specified in the anatomical, physiological and psychological differences.

The human needs change with time so the primitive man lived in caves where no request except drink and food and here we are now in our age are facing a multiple humanity needs caused by technological development, and human

constantly pursuit of everything that give him comfort and ease of use.

The completeness of well-being or a part of it claims achievement of human comfort requirements in internal spaces, these requirements which don't depend only on age and health status of the users but also the gender as women have a special requirements differ from men.

The differences in comfort requirements between the male and female exceed the Provide adequate spaces to practice their own internal activities, to the details of the interior design and its elements. Moreover, become more convenient with the women's ability such as rising up some things or the use of heavy mechanism does not fit her physiological ability, or when designing a bookcase or shelves it should be convenient in its height with the women's length.

So, making design for male's room will defer from room design for female in all elements of interior design, and in colors, forms and lightening.

Therefore, the interior designer has to achieve all the gender requirements taking into account the differences between the sexes and know its details, both anatomical and physiological as well as psychological to be able to formulate suitable spaces for the human activities inside.

Gender differences are, put simply, certain physical and mental distinctions between male and female humans. Over the years there have been many arguments and studies relating to this subject and, although some gender differences are proven and some still controversial, they should not be confused with sexist stereotypes. No one can really tell whether these gender differences are caused by nature or environment-learned, but the fact is that some amount of sex differentiation takes place immediately as the male or female begins to develop within the womb. Some differences (such as reproductive organs) are congenital, while others obviously environmental (such as given names).

Contrary to the beliefs of feminists or bisexuals, several studies have proven that are expressed differences between males and females programmed within the DNA from the moment of conception. (Difference Between Male And Female Structures (Mental And Physical) 2014)

▪ **Physical differences :**

- **Brain** differs according to sex: while it was well known that a difference in size between male and female brains exists, there is now evidence that there are significant differences

in the size of certain structural parts of the brain, according to gender (Zaidi, Gender Differences in Human Brain: A Review 2010) Their brains show anatomical, functional and biochemical differences in all stages of life. These differences begin early during development due to a combination of genetic and hormonal events and continue throughout the lifespan of an individual, (Zaidi, Gender Differences in Human Brain: A Review 2010), Also, an average male brain has approximately 4% more cells and 100 grams more brain tissue than an average female brain. However, both sexes have similar brain weight to body weight ratios. (Difference Between Male And Female Structures (Mental And Physical) 2014) and are involved in Ways of practice activities in the internal spaces and their behavior And hence the identification of various design needs in internal spaces for living with comfort.

- Men are over 30% **stronger** than women, specifically in the upper body. A woman who is the same size and same age as her male counterpart is generally only 80 percent as strong. (Steenerson 2013)
- The **centre of gravity** is slightly lower in women than in men because women tend to be proportionally larger in the pelvis and smaller in the shoulders. (Stander n.d.)
- **Differences in intake and delivery of oxygen** translate into some aspects of performance besides Female lung capacity is about 30 percent less than in males: when a man is jogging at about 50% of his capacity, a woman will need to work at over 70% of her capacity to keep up with him. Age difference will alter those numbers. (Difference Between Male And Female Structures (Mental And Physical) 2014)
- **The cardio vascular system** (blood circulation system) of men and women on average differ as follows:
 - Men have ± 80% larger heart then women
 - Men have ± 40% more blood volume in the body then women
 - Men have ± 11% more red blood cells in the body then women
 - Men have ± 11% more hemoglobin in the body then women (OMNIBUS n.d.)
- Men have larger hearts and lungs, and their higher levels of testosterone cause them to produce greater amounts of red blood cells. So women's blood contains more water (20 percent fewer red cells). Since red cells supply oxygen to the body, she tires more easily and is

more prone to faint. (Sex differences in human physiology n.d.)

- In addition to Women generally have a greater body **fat percentage** than men and Men and women have different levels of certain **hormones**; for example, men have a higher concentration of androgens such as testosterone, while women have a higher concentration of estrogens. (Difference Between Male And Female Structures (Mental And Physical) 2014)
- Women have better night **vision**, see better at the red end of the light spectrum, and have better visual memory, And men have better distance vision and depth perception, and usually better vision in lighted environments. (Difference Between Male And Female Structures (Mental And Physical) 2014)
- Women are more **sensitive to sound** than men. (Difference Between Male And Female Structures (Mental And Physical) 2014)
- Men's **skin** has more collagen and sebum, which makes it thicker and oilier than women's skin. (Difference Between Male And Female Structures (Mental And Physical) 2014)
- all these Previous differences are not all, but most of them, and science discovers days after the other more accurately differences between men and women which affect on the comfort requirements in practicing of various activities in the internal spaces.
- **Psychological differences :**
 - Women develop psychological stress faster than men during competition
 - Women are much more dependent on personal care than men
 - Women are much easier to motivate than men
 - Women are more difficult to work with in a group than men
 - Women lose their fear for losing faster and will hope for success much faster than men.
 - Women are easier motivated by their own achievements than men.
 - Women's emotional patterns vary according to their menstrual cycle. (OMNIBUS n.d.)
 - It is generally accepted that women's perception of safety and security differs from men. (Garland n.d.)
- **Behavioral differences:**

There are some proven behavioral differences between men and women. Moreover, the most common are:

 - Men are more physically aggressive.
 - Men masturbate more.

- Women are less likely to successfully commit suicide, but more likely to attempt it.
- Men have more positive attitudes about sex than women do.
- Men are more prone to taking risks.
- Women express their emotions more readily and experience a greater intensity of emotion. (Gender Equality: Are the Sexes Equal? n.d.)

Four meta-analyses were conducted to examine gender differences in personality in the literature (1958-1992) and in normative data for well-known personality inventories (1940-1992). Males were found to be more assertive and had slightly higher self-esteem than females. Females were higher than males in extraversion, anxiety, trust, and, especially, tender-mindedness (e.g., nurturance). There were no noteworthy sex differences in social anxiety, impulsiveness, activity, ideas (e.g., reflectiveness), locus of control, and orderliness. Gender differences in personality traits were generally constant across ages, years of data collection, educational levels, and nations. (Feingold Nov 1994)

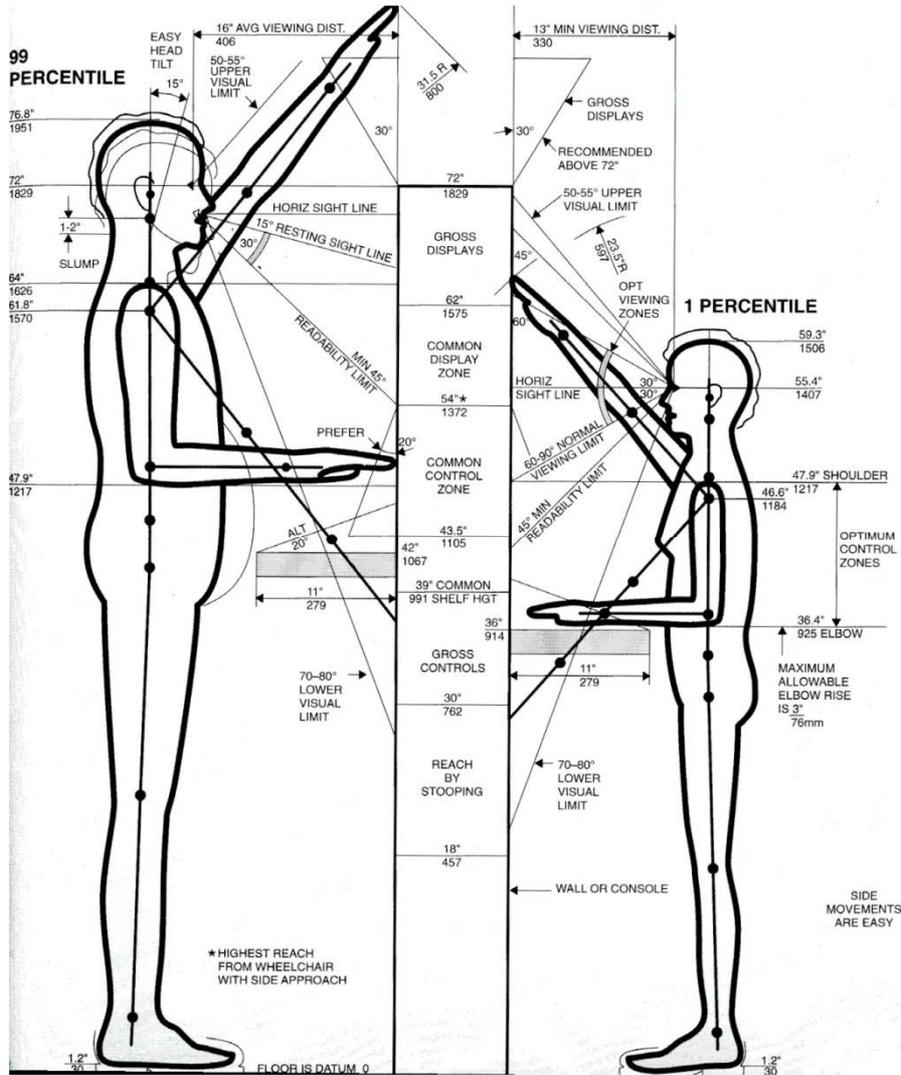
▪ **Ergonomic Differences:**

While the ideal of workplace comfort and safety is neutrally codified, these defaults for standards of measurement and production still create situations of discrimination. Despite significant sex-based differences in anthropometry and biomechanics, ergonomics and other allied scientific fields have often used an average male for designing and design testing.

The February 2012 issue of *Ergonomics* was dedicated to gender, women's work, and ergonomics. Edited by the Gender and Work Technical Committee of the International Ergonomics Association (IEA), it reveals that very limited attention has been paid to sex and gender in ergonomic studies and thus there have been real oversights in how sex and gender factor into workplace health and safety.

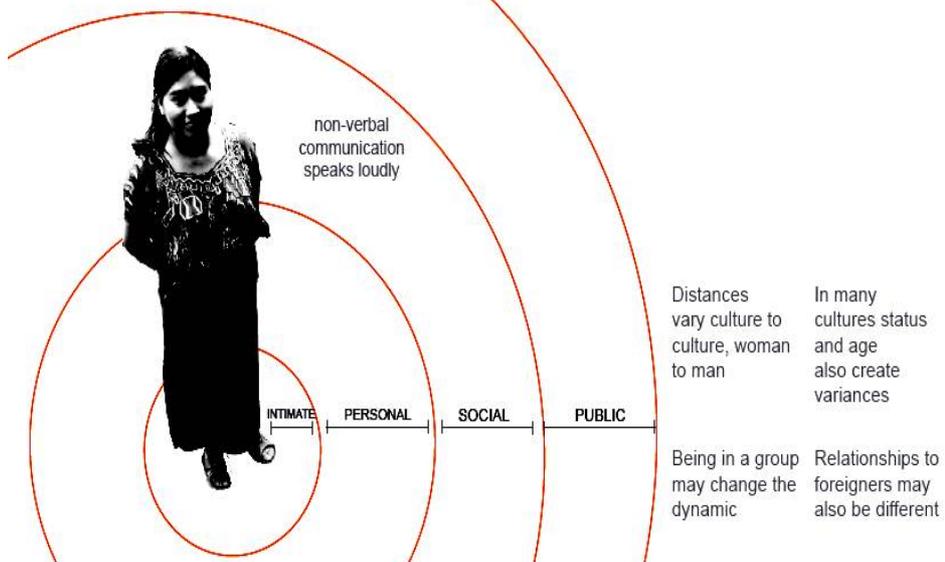
▪ **Proxemics - The Anthropology of (Gendered) Space – Differences :**

In the field of study of the relation of human being by the surrounding environment, comes the importance of studying of behavioral considerations which deals with issues concerning the behavior in the designed environment, and through these considerations the proxemics will be which is the field that determined the affiliation and the psychological and social correlation of the individuals towards the space surrounding them. (Daniel 2013)



Ergonomic Differences between Women and Men (Daniel 2013)

Proxemics and Informal Space (Hall)



Gender, Proxemics, and the Design Process

In this regard, Designers have to take into account the Distances vary culture to culture, woman to man. Also, in many cultures status and age also

create variances. And being in a group may change the dynamic, In addition to Relationships to foreigners may also be different.

INTIMATE	PERSONAL	SOCIAL	PUBLIC
6 inches (close) 6-18 inches (not close)	1 - 2.5 feet (close) 2 - 4 feet (not close)	4 - 7 feet (close) 7 - 12 feet (close)	12 - 25 feet
Not considered proper to use in public by adult, middle-class Americans	Small protective bubble	For business and more formal interactions	Formal distance
i.e. In crowded areas this creates discomfort, no eye contact is made	i.e. A husband and wife can share this space	i.e. Desks of important people are large enough to hold people at far phase of social distance	i.e. The distance between an individual, like a President

(Daniel 2013)

- **Fitting The Interior Design to Gender Differences:**

Many interior designers believe that there is no big difference between interior design for women and men. Comfortable and functional, harmonious and modern interior design ideas have a universal appeal, they explain. Still, if a man and a woman like one interior design style and have one favorite color, their design and room decorating ideas, solutions and realizations can be very different.

Interior design for a couple should find interesting and appealing to both, a woman and a man, interior design ideas, attractively blending their tastes and personal preferences. Modern room design ideas should offer peace and comfort, balance and harmony, luxury and elegance, bringing more joy and optimism into men and women interior spaces. (Interior Design Ideas, Textures and Colors for Men and Women n.d.)

Modern interior decorating ideas are often versatile and suitable for guys and girls. It is more difficult to create interior decorating with the gender differences in min. According to scientific researches, guys and girls see interiors very differently, and one of modern interior design trends offer guys and girls oriented decorating ideas in an attempt to please men and women. (Striking Gender Differences in Modern Interior Design and Decorating for Guys and Girls 2015)

Modern interior decorating ideas should reflect the fact that guys eyes are more sensitive to small details and moving objects, while girls more

sensitive to changes in color. A new study by the City University of New York proved again that men and women see differently the world, and color design is more important to women, while too many small home accessories and too much ornamentation can be disturbing to men. (Striking Gender Differences in Modern Interior Design and Decorating for Guys and Girls 2015)

The scientists found that in most cases women demonstrate higher sensitivity to smell, sound and color than men. The scientists compared the visual abilities of men and women who were older than 16 with normal vision and who were wearing glasses or contact lenses.

They found that boys needed a little long wavelength colors to see the same colors as the girls. It means that women enjoy monochromatic color schemes and interior decorating ideas for women should include rich color palette with more than one color. Men are unable to describe the small differences in color shades. (Striking Gender Differences in Modern Interior Design and Decorating for Guys and Girls 2015)

Calling something 'masculine' or 'feminine' doesn't mean that particular room or decor style is only for men or women — it means that the space being described has qualities we associate more with one gender than another. (His and Hers: Analyzing "Masculine" and "Feminine" Decor n.d.)

- **'Masculine' interior :**

- We know that most men get scared when hearing the word “decorating”. Still, a **man** needs to decorate his “cave” so whether he replaces this term with the word “planning” or “designing” the idea remains the same. A man’s room needs to be first well planned and organized. The man cave can be anything from

an office, a study to the basement of your home. It is a space where a man can relax and enjoy himself, where he can read, write or share beers with his friends. When decorating a man's room you have to think of quality and comfort. If you want to furniture to last more than just a couple of year, maybe you should consider buying vintage furniture. The style suits a man and the quality it offers or superior to the one offered by current manufacturer standards. The furniture you choose then needs to be comfortable. (A man's room vs a woman's room: interior design tips and ideas 2008-2016)

- **Men** like solid design, functional furniture, strong contrasts and comfortable colors, deep tones, like rich red wine colors burgundy and beaujolais, forest green, navy, black and brown. Leather, wood and heavy fabrics are their favorite materials that manifest strength and comfort. (Interior Design Ideas, Textures and Colors for Men and Women n.d.)
- Simple interior decorating color schemes, comfortable well-defined colors and solid materials are the best interior decorating choices for **guys**, who prefer comfortable and relaxing rooms. (Striking Gender Differences in Modern Interior Design and Decorating for Guys and Girls 2015)
- There are a few items that a man's room needs. One of them is the sofa. Something covered in leather and with a timeless look would be perfect. The shelving is also important.
- a man's room also needs some wall decorations. These need to be personal things, such as collections, trophies or a particular item that the user really likes. (A man's room vs a woman's room: interior design tips and ideas 2008-2016)
- Dark colors, rough-hewn logs, dead animals. Masculine, gloomy, stylishly foreboding, big wood beams. Lots of texture is preferred for men. (His and Hers: Analyzing "Masculine" and "Feminine" Decor n.d.)
- **'Feminine' interior :**
- If a man can have his own space, a woman has the right to do the same thing. If for the man the key words were quality and comfort, for a woman there words are style and elegance. Not every woman falls in the same category that describes them as delicate creatures that love the color pink and usually stay home taking care of the children. Each woman is different and thus needs to personalize her space in her own way (A man's room vs a woman's room: interior design tips and ideas 2008-2016).

- Comfortable design ideas, attractive furniture, cheerful and colorful or neutral and elegant room colors, soft home furnishings, luxurious, rich or delicate fabrics and charming decorative details create pleasant environment for **women**. (Interior Design Ideas, Textures and Colors for Men and Women n.d.)
- Enriched with monochromatic tones interior decorating color schemes, moving elements and shimmering surfaces make rooms more beautiful and interesting for **girls**. (Striking Gender Differences in Modern Interior Design and Decorating for Guys and Girls 2015)
- Soft, comfy things (like a tufted headboard), gold, delicate prints, light colors. floral printed pillows, tiny curios, an abstract painting in lovely light colors, a vase with flowers on it, are preferred for women. (His and Hers: Analyzing "Masculine" and "Feminine" Decor n.d.)
- A young woman's bedroom should be fresh and cheerful. It should reflect her age as well as her character, just like her cloths do. This means it should not look like an old person's home but neither like a little girl's room. A balance needs to be found between these extreme situations. The walls should have a happy color. This way the whole room will be cheerful.
- Usually, young women tend to choose colors such as pink, lavender or light blue. These are all pastel colors with a fairy feel. Still, some women prefer something a little more vibrant and intense. In this case, a nice color choice would be green. It's a very fresh color and it doesn't have to look pale if you opt for a less pastel version. Now that the walls are fresh and beautiful, let's discuss the furniture.
- The furniture in a young woman's bedroom should be contemporary. In addition, because the room needs to be airy, small-sized furniture would be a good idea. This way a casual look can be created while also being considerate to the special needs of the user. In order to solve the storage problem, multi-functional drawers, open shelves and unusual storage units or chests are all great ideas. And for the rest of the bedroom decor, it all depends on the woman's personality. (How to decorate a young woman's bedroom n.d.)

Whether the interior design for men or women, the space should be decorated with the color that the human likes best. It needs to reflect his personality and character. figure out his style and choose furniture and accessories that represent him. and include there items such as favorite books,

magazines, some paint and brushes.

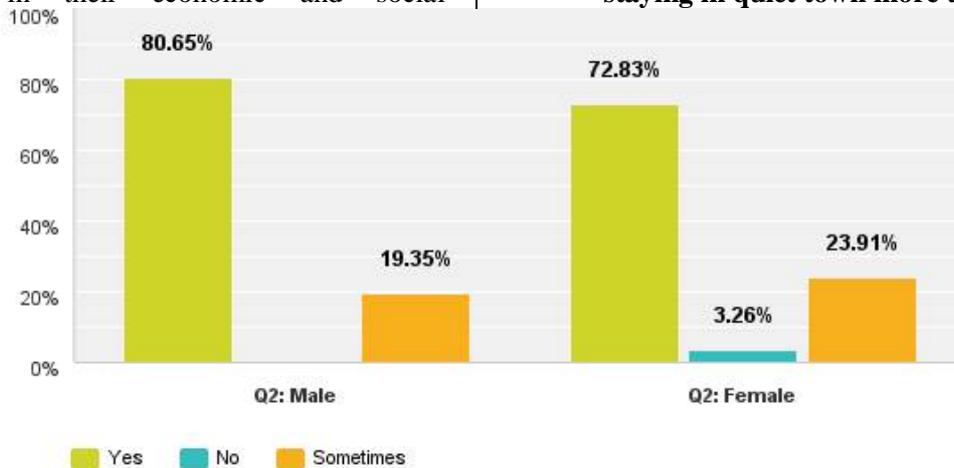
▪ **Questionnaire study :**

The sample of the Questionnaire study is composed of random of 125 people from Egypt, including male & female taking in to account the similarities in their economic and social

circumstances and variation in their gender, age, careers.

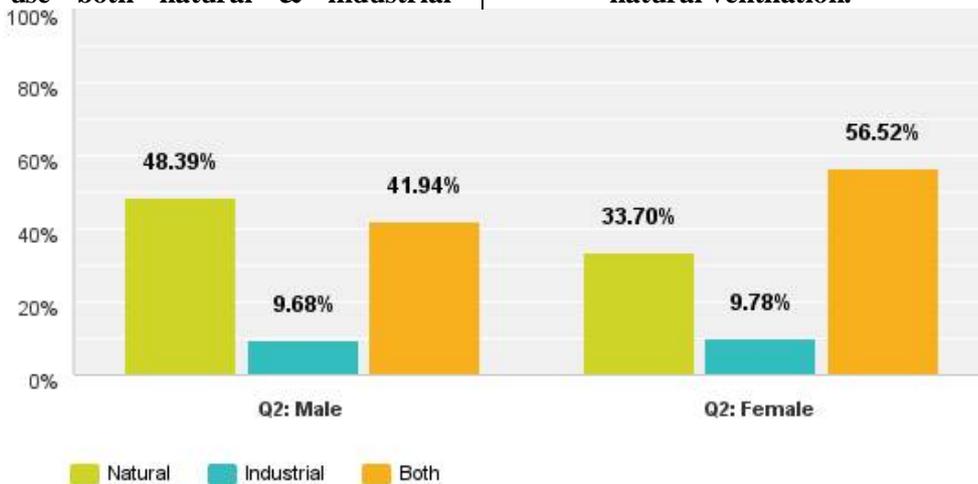
The general results of the questionnaire study are:

- 1- The selected sample of male keen on staying in quiet town more than female.



- 2- The selected sample of females prefer the use both natural & industrial

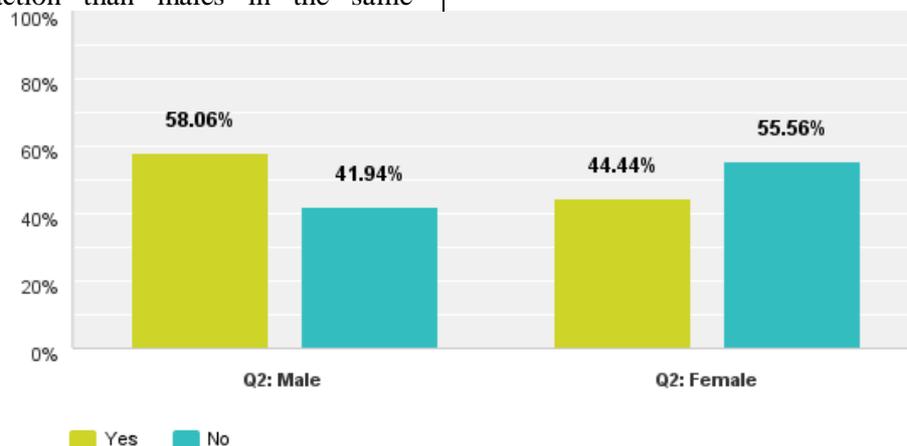
ventilation More than males who prefer natural ventilation.



That may be associated to larger size of Hypothalamus - 2.5 times bigger in males than females - that is area in the hypothalamus, which among other things manages memory, controls body temperature - might make females express more dissatisfaction than males in the same

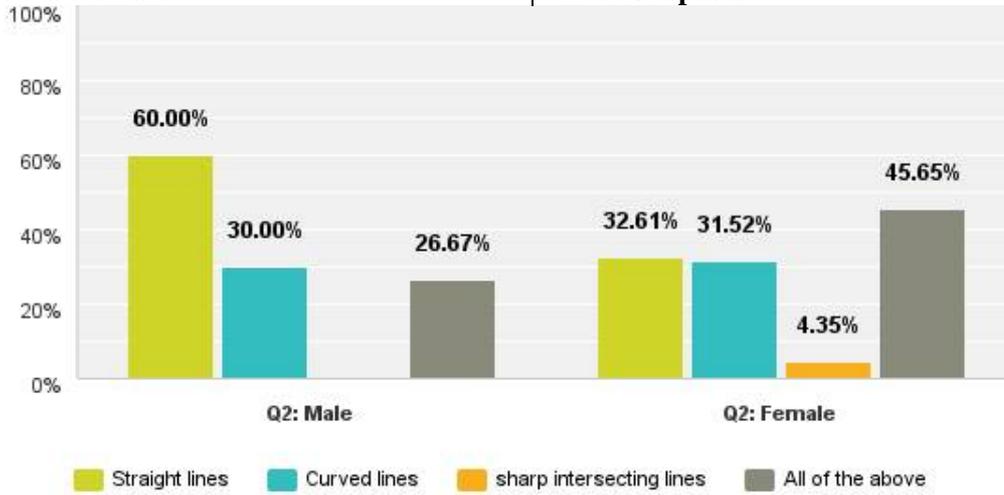
thermal environments . (Female Brain versus Male Brain 2012)

- 3- And when asked about if the use of natural ventilation only may access to thermal comfort inside the spaces?



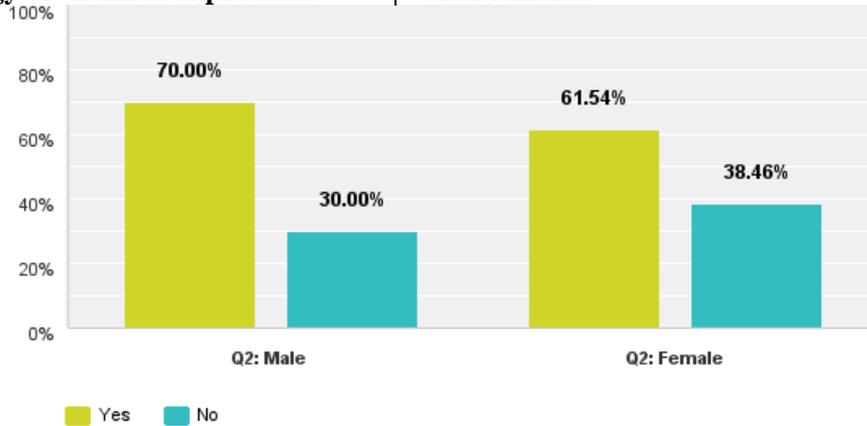
The selected samples of males who consent that the use of natural ventilation only may access to thermal comfort inside the spaces are more than female.

4- The selected sample of males prefers to use the Straight lines in interior spaces, while females prefer to use all the design lines in interior spaces.



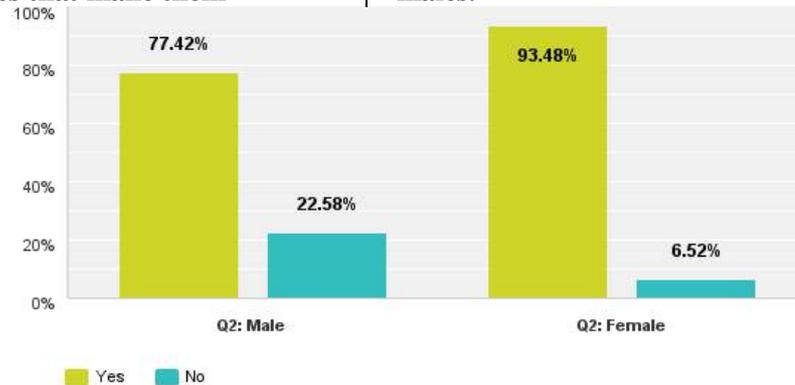
5- The selected sample of males prefers to use the latest technology in all kinds of products

that they deal with it in interior spaces more than females.



6-The selected sample of females prefer use some of the accessories that make them

psychologically attached to the place more than males.



That may be associated to larger size of insula cortex which is a portion of the cerebral cortex that processes feelings. "A women's gut feeling"brizendine says. (Female Brain versus Male Brain 2012)

Conclusion

- Designers are trained to observe beyond what

an average community member sees. The culture-based biases like gender differences and culture-based differences like proxemics challenge our ability to see beyond what they know or benefit from personally. Particularly in unfamiliar cultures, seeing beyond our own experience is critical to understanding. So the

interior designers have to take into account the differences between the sexes and miscellaneous requirements in the interior design for wellbeing in internal spaces through variable control in properties of interior design elements.

- Therefore, the designer should select the convenient materials and technological methods that are fitting in well with woman ability when designing her own interior space.
- Designers have a real responsibility to create opportunities for women by ensuring that the design, construction, and maintenance planning is thoughtful to men and women's ergonomic capabilities.
- Designers have to take into account the Distances vary culture to culture, woman to man. In addition, in many cultures status and age also create variances. And being in a group may change the dynamic, In addition to Relationships to foreigners may also be different.
- Whether the interior design for men or women, the space should be decorated with the color that the human likes best. It needs to reflect his personality and character. Figure out his style and choose furniture and accessories that represent him. Moreover, include there items.
- Designers have a real responsibility between the sexes and miscellaneous requirements in the interior design for wellbeing in internal spaces through variable control in properties of interior design elements
- Questionnaire study clarified that males are keen on staying in quiet town, consent that the use of natural ventilation only may access to thermal comfort inside the spaces, prefer to use the latest technology in all kinds of products that they deal with it in interior spaces, males prefers to use the Straight lines in interior spaces more than females.
- While females prefer the use both natural & industrial ventilation in internal spaces, prefer to use all the design lines in interior spaces, prefer use some of the accessories that make them psychologically attached to the place more than males.

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