

CHALLENGES FACED BY SELECTED INTERIOR DESIGNERS WHILE PRACTICING SUSTAINABLE INTERIOR DESIGN

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ABSTRACT

This environment is being irreversibly degraded day by day due to prevalence of human activities aimed towards economic development, industrialization, growth of human population and improving man's standard of living by satisfying their wants and desires. The inevitable outcome of this development and human evolution is becoming the major reason for environmental pollution. The growing trends in population as well as building and construction sector in recent years has an immense impact on environment as well as quality of life, which has led to issues related integrally with increased demand on natural resources. As this sector is growing rapidly, preserving the environment possess host of challenges. The environment of the existing residential as well commercial establishments can create a sizeable impact on the global environment as well as of the users. Hence, there is an urgent need to protect, conserve and sustain the world's natural environment, through a paradigm shift from "environmental irresponsible" to "environmentally responsible" design which minimizes the issues related to environment deterioration as well as impaired quality of life of the occupants. Hence, there is a need to design interiors which minimizes the issues related to environment deterioration as well as impaired quality of life of the occupants. There are various challenges which hamper the practices of designers such as lack of awareness among the end users about the importance of sustainable design strategies as well as education and knowledge about the concept delays in design implementation, as the designer takes long to make the client understand. Moreover, high initial capital investment is one of the major hindrance in practicing sustainable interiors along with lack of financial incentives and rewards also adds the challenges which the

designers face. Apart from these there are many other challenges which came into the frame during the study which had the major impact on the practice which has led to the slow acceptance and practice of sustainable interior practice. The purpose of the study was to identify the challenges faced by selected Interior designers while practicing Sustainable Interiors. The study was conducted among sixty practicing Interior designers from Ahmedabad city, who were chosen on the basis of purposive and snowball sampling technique. The outcomes of the study revealed that majority of the respondents found that lack of technical knowledge among the clients and the related agencies was found to be a major barrier faced by little more than three-fourth (76.67%) of the respondents to a high extent amongst all other barriers. Moreover, one-third of the respondents (66.67%) pointed out that lack of interest on the part of clients hindered the practices which led towards Sustainable Interior Design. The findings of the present research would be beneficial to educational institutions, government and non-government organizations, practicing architects, and Interior designers to meet the challenges, overcome the same and popularize the concept of Sustainable Interior Design.

Keywords: Sustainability, Interior design, Sustainable Interior Design, Challenges

Introduction

The concept of sustainable development is a rapidly growing in the area of focus for many Interior designers, offering a wide array of current opportunities and exciting possibilities for the future expansion (Cane, 2007). One of the leading contributors to the depletion of our natural resources is the construction and infrastructure industry, to overcome which sustainability has to be pondered for reducing the carbon footprint, and lowering operating costs of the particular establishments. Magadi (2006), states that profound effects of global warming, species extinction, pollution of air and water, resource depletion, and population growth demand in India, the second most populated country in the world, address the need for ecological responsibility.

Interior designers are beginning to address environmental issues as they acknowledge the importance of Sustainable Interior Design. While some Interior designers have started

using environmentally sustainable design criteria in their design solutions. Moreover, through enhancing the state of practice it will provide a strong base to develop education strategies for sustainable interior design. (Kang and Guerin, 2009)

According to World Commission on Environment and Development, (1987);

Sustainable development means “Meeting the needs of the present generation without compromising the ability of future generations to meet their own need”.

According to Hyllegard, Ogle, and Dunbar, (2006);

“Sustainable development has been defined as the development that addresses current needs while remaining adaptable enough to ensure that the needs of the future can be met”.

The terms sustainable and sustainability have both grown increasingly popular in our culture, and are often used in reference to the natural environment which focuses on responsible management of natural resources (McLean, 2009).

Indian Green Building Council (2008), has stated that the building sector in India is growing at a rapid pace and contributing immensely to the growth of national economy. The sector has gradually embraced sustainable design and construction practices in the past decade and has enabled India to be on the international map of green buildings along with sustainable built-in environment.

Guerin and Kang (2009) defined Sustainable Interior Design as a practice in which all system and materials are designed with an emphasis on integration into a whole for the purpose of minimizing negative impacts on environment, occupants and maximizing positive impacts on environmental, economic and overall life cycle of the building.

Due to globalization and increasing industrialization, the negative impacts of building construction and traditional Interior design practices are left on natural environment which are irresistible. In most cases, they leave a lingering effect along after the building lifecycle is complete and even also on the occupants of the building (Cargo, 2013). The trends in building and construction of recent years suggest that it needs a new moral compass to

guide people into the twenty-first century—a compass that is grounded with the principles of meeting human needs sustainably.

Although Sustainable Interior Design has become a major issue in Interior design practice, according to literature found the frequency with which Interior designers make sustainable choices in real practice is still limited (Kang and Guerin, 2009; Kusumarini et al., 2011; Cargo, 2013).

Steig (2006), stated five distinct phases of practicing Sustainable Interior Design while describing the ‘Sustainability Gap’ as the disparity that exists between the principles of Sustainable Interior Design and the reality of practice. The distinct phases of practice includes (i) Environmental connection, (ii) Knowledge (iii) Process, (iv) Practice and (vi) Commitment. The interconnections and association within these phases cannot be taught to the practitioners, it has to be developed from within the designers through their personal drive to protect the natural environment.

Society has begun to recognize the interconnectedness of buildings, people and community in the creation of sustainable built-in environment. The clients and Interior designers are beginning to understand their role and impact on the environment. As a result they are seeking interiors that demonstrate Sustainable Interior Design Practices (Mazarella and Lipener, 2011; Cargo, 2013).

In recent years, Interior design practices has seen a dramatic shift with design strategies, which is now focusing on providing healthy and sustainable environments for indoor occupants. Jones (2008), stated that this interest in environmental responsibility is what has sparked the context and need of Sustainable Interior Design.

There are various past practices, motivations and perceptions which encourages the Interior designers to work towards Sustainable Interior Design, but on the contrary there also exists some barriers which hinders the smooth flow of designing the sustainable interiors. Project capabilities, transition to sustainability, and lack of sufficient knowledge and skills associated with Sustainable Interior Design Practices are some of the barriers faced in practicing Sustainable Interior Design (Bacon, 2011). Moreover, Khaleel (2013) reported, that cost of sustainable materials along with the unavailability of the materials, project

programing, lack of experiences, and lack of experienced team workers were the major barriers reported which caused hindrance in implementation of Sustainable Interior Design. Gaining proper insight about perceived barriers has potential to aid Sustainable Interior Design Practices and Interior design profession in general.

Therefore, the objective of the study was to trace various challenges faced by the Interior designers while practicing Sustainable Interior Design in Ahmedabad city.

Objectives of the study

- To study the demographic characteristics of practicing Interior designers from Ahmedabad city.
- To assess various challenges faced by Interior designers while practicing Sustainable Interior Design.

Methodology

The research design for the present investigation was descriptive in nature conducted on 60 practicing Interior designers selected purposively from Ahmedabad city of Gujarat state. The tool to collect data was questionnaire which contained a summated rating scale to find out various facilitators responsible for Sustainable Interior Design Practices among the selected Interior designers. The responses on the scale of challenges were subjected to scores. The response structure used to find out various challenges faced while practicing Sustainable Interior Design was in terms of “To High Extent”, “To Moderate Extent” and “To Low Extent”. The scores from 3 through 1 were ascribed to the responses. The possible maximum and minimum scores was divided in three categories having equal intervals. The high scores on the scale indicated high extent of influence of the particular challenge faced while practicing Sustainable Interior Design among the selected Interior designers. The scale was subjected to establishment of content validity and reliability. The tool prepared was validated from a panel of 11 experts from different departments, faculty and the Universities. The reliability coefficient derived for the scale was 0.83.

Major Findings

1) Personal variables of the respondents

a) Background information of the Interior designers from Ahmedabad city

This section deals with personal information regarding selected Interior designers of Ahmedabad city. It contains information regarding their age, gender and Educational qualification.

- (i) **Age and gender of the respondents:** The findings revealed that nearly one-half (48.3%) of the respondents were in the age group of 31 – 41 years. Very few of the respondents i.e. 16.7 percent were from the age group of 21 – 30 years. The minimum age of the respondent was found to be 23 years while the maximum age was 53 years. The mean age of the respondents was found to be 38.27 years. The findings further also highlighted majority i.e. 71.7 percent of the respondents were male and remaining i.e. 28.3 percent of the respondents were female. (Fig.: 1)
- (ii) **Educational qualification:** The data pertaining to the educational qualification of respondents, revealed that slightly more than one-third (35%) of respondents were holding Bachelor's degree in Interior design, whereas very few (15%) of the respondents had done their Master's degree in Interior design. Moreover, less than one-fourth (20%) of respondents had done their diploma in Interior design and remaining of them had their qualification in the field of architecture and civil engineering (B.Arch., B.E. Civil).

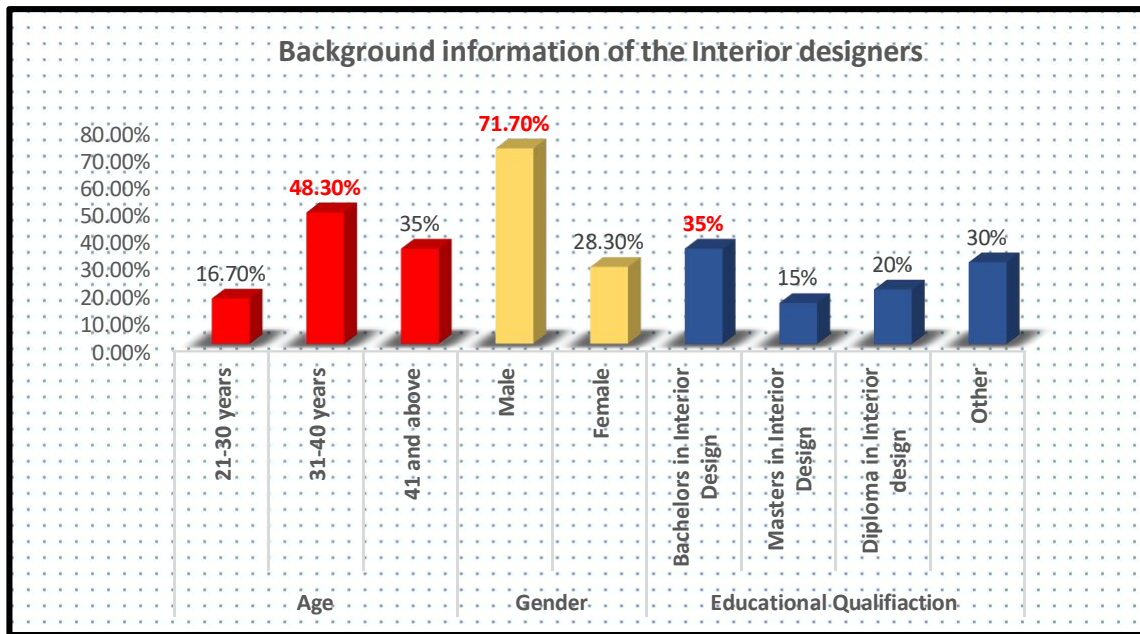


Figure 1: Distribution of respondents according their background information

2) Situational variables of the respondents

It contains information regarding their work experiences, kinds of projects undertaken by them and sources of information through which they were informed about the Sustainable Interior Design.

- (a) **Duration of time working as an Interior designer:** The findings revealed that around one-third of the respondents (33%) had been working since 16 years and more in field of Interior design, little less than one-fourth (23.3%) of respondents had been working since 11 – 15 years, slightly more than one-fourth (26.67%) of respondents had been working since 06-10 years while very few of them i.e. 16.67 percent had work experience of less than 5 years.

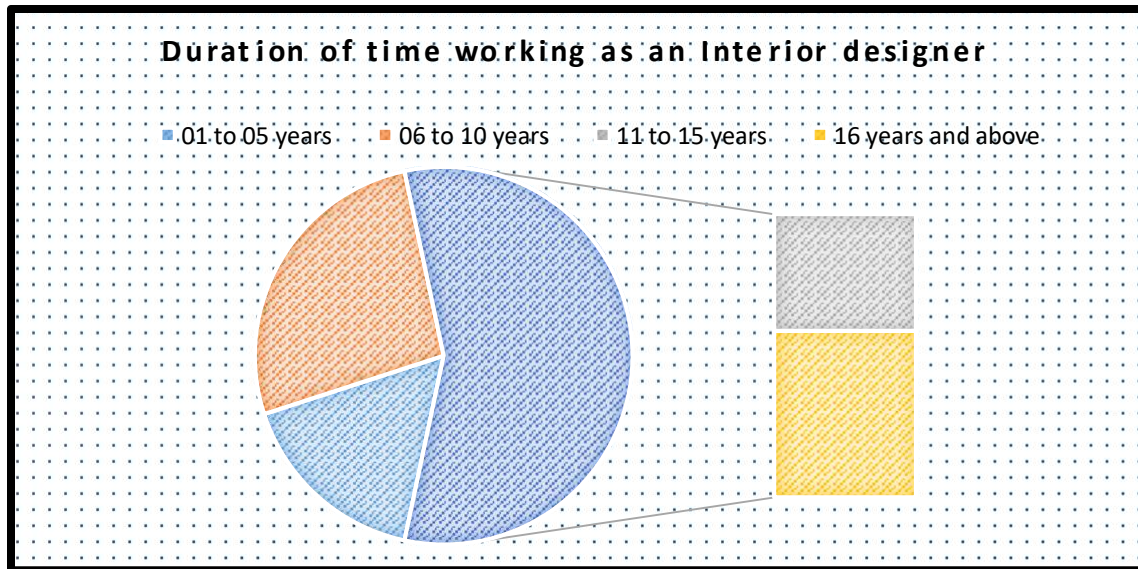


Figure 2: Distribution of respondents according their duration of time working as an Interior designer

(b) Number and kinds of Interior design projects undertaken by the respondents:

The findings analyzed that more than one-half (55%) of the respondents had taken up commercial projects ranging from 01 – 25 in number. One-fourth of the respondents (25%) had taken up more than 50 commercial projects. Moreover it was also revealed that less than one-fourth (20%) had taken up commercial projects ranging from 26 - 50 in number.

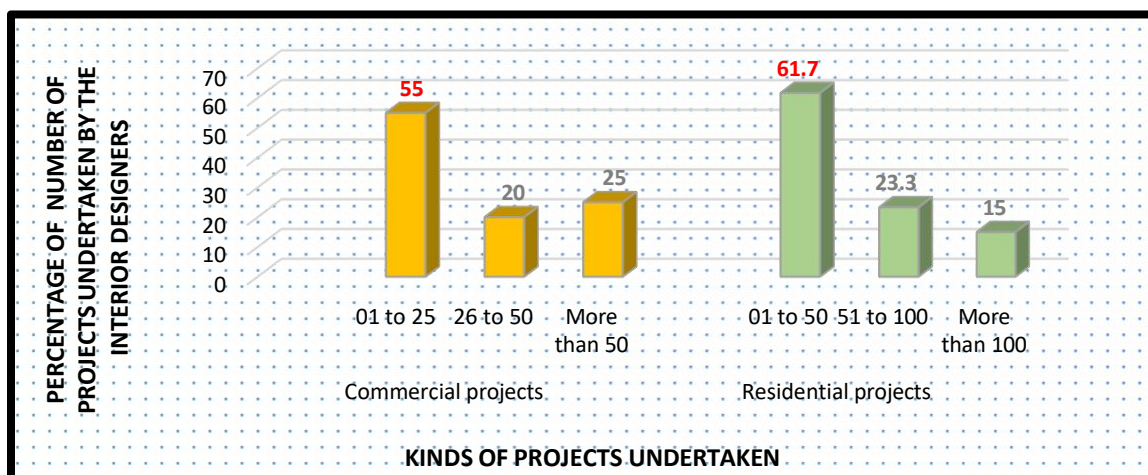


Figure 3: Distribution of respondents according to number and kinds of Interior design projects undertaken

3) Findings related to various challenges faced while practicing Sustainable Interior Design

The findings revealed various challenges faced while practicing Sustainable Interiors. The challenges were categorized into 'Lack of technical knowledge', 'Cost', 'Certification process', 'Lack of availability of funds and materials', and 'Lack of interest on the part of clients'. The responses were sought and scores were interpreted in terms of 'To high extent', 'To moderate extent', and 'To low extent', which were ascribed the scores of 3 through 1.

The computed weighted mean for each challenge faced while practicing Sustainable Interior Design revealed that 'Lack of technical knowledge' among the clients and related agencies was the most challenging factor faced by the Interior designers of Ahmedabad city. (Fig.: 4).

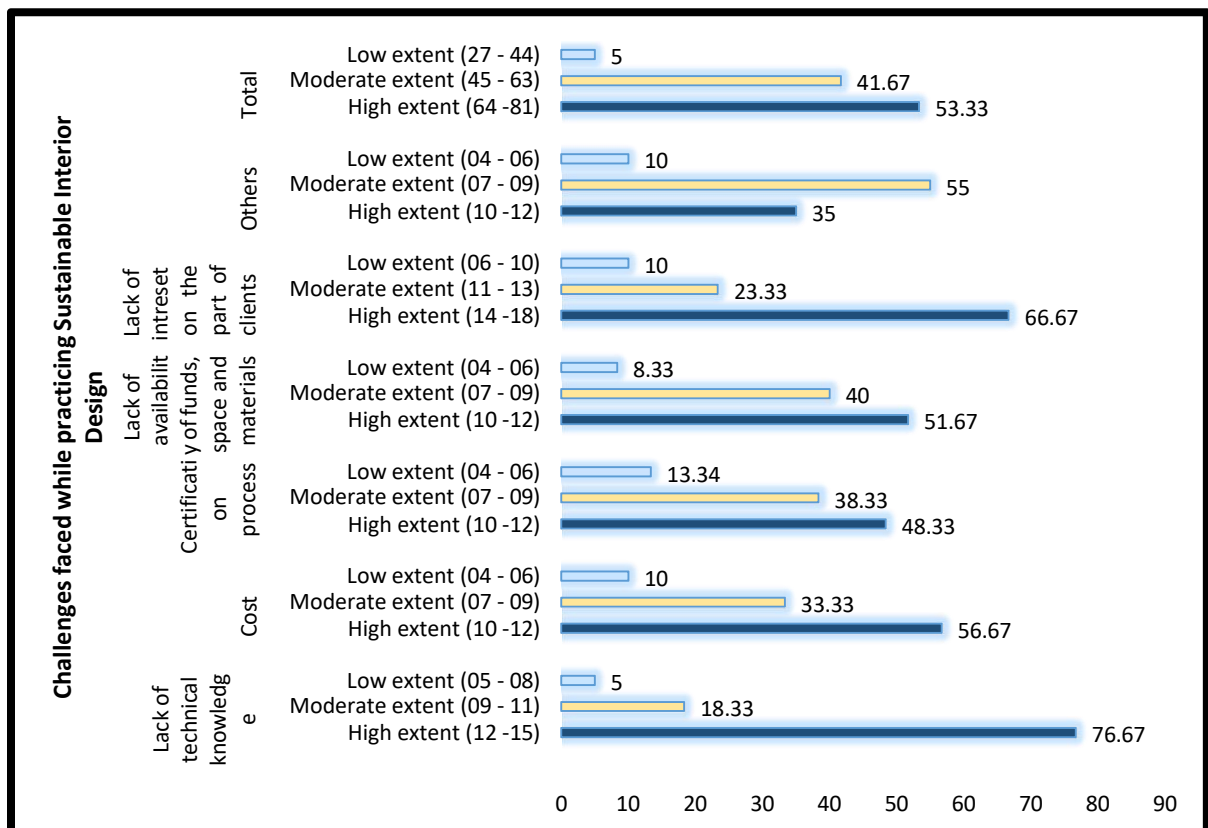


Figure 4: Percentage distribution of respondents according to Extent of challenges faced while practicing Sustainable Interior Design

4) Lack of Technical knowledge as a challenge faced by practicing Interior designers from the Ahmedabad city

The findings revealed in Table 01, depicted the data regarding the factors which directed the Lack of technical knowledge on the path of client as well as the related agencies. It was reflected that nearly two-third (65%) of the respondents found that the clients lacked in the education and knowledge which was required regarding the concept of Sustainable Interior Design which hindered their practices to a high extent. Moreover, little less than two-third (60%) of the respondents found lack of training/education about sustainable interiors among the Interior designers as a barrier with a high extent, as well as more than one-half (56%) of the respondents sought that lack of technical understanding about sustainable interiors on part of skilled personnel also hindered their Sustainable Interior Design Practices to a high extent. Further the findings also indicated that less than one-half (43.3%) of the respondents stated that unawareness about several codes, labels, tools and standards for sustainable interiors also moderately impeded the adoption of Sustainable Interior Design Practices into their respective projects. Additionally, more or less same percent of respondents also found lack of experienced personnel in the field of Sustainable Interior Design also delayed their practices to a moderate extent.

Table 1: Frequency and percentage distribution of respondents according to the extent of challenge faced by them with regards to Lack of technical knowledge while practicing Sustainable Interior Design

Sr. No.	Lack of Technical knowledge	Respondents (n=60)						Weighted Mean (1 - 3)
		To High Extent		To Moderate Extent		To Low Extent		
		f	%	f	%	f	%	
1.	Lack of training/education about sustainable interiors among the interior designers.	36	60.0	21	35.0	03	05.0	2.55
2.	Lack of technical understanding on the part of skilled personnel.	34	56.7	21	35.0	05	08.3	2.48
3.	Lack of experienced personnel.	30	50.0	25	41.7	05	08.3	2.42
4.	Lack of education and knowledge about the concept among the clients.	39	65.0	19	31.7	02	03.3	2.62
5.	Unaware about several codes, labels, tools and standards for sustainable interiors.	32	53.3	26	43.3	02	03.3	2.50
	Total weighted mean							2.51

In addition to the above there were some other challenges which were traced namely, lack of legislative support, demotivation among Interior designers as they don't get certification and recognition for sustainable interior projects, and practicing sustainable interiors with deadlines of project completion and last minute changes in design which also hindered the respective practices of the respondents.

Conclusions and Implications

Sustainable interiors is accepted worldwide in recent past, but there is still vast community that is either unaware of Sustainable Interior Design concept, indifferent to its cause, or unconvinced of its advantages. However, efforts are not enough and a greater push is required to make interiors of the real estate more sustainable. To convince clients, designers and other related professionals about practicing Sustainable Interior Design, it is necessary to make them understand the numerous advantages of practicing the same. The green approach is simply 'responsible design'. Having a responsibility to sustain life and land with every design decision made. Sustainable interior design pulls away from changing trends and synthetic culture, returning to a more traditional, local and natural way of living.

To combine these elements and accomplish a design solution that offers a practical, functional, stylish and ethical interior, alongside the occupant's requirements can be quite an interesting as well as challenging task. Based on the findings of the present study, it can be concluded that Lack of technical knowledge amidst the clients as well as related agencies is the biggest challenge faced by the Interior designers while practicing Sustainable Interior Design. Moreover it also gave an insight that the main challenge for all Interior designers is to find ways of bringing together the local and the global, to create designs that suit modern, technologically and economically developed societies. This may involve 're-designing' their own designs, a completely new way of working. Designers now have a responsibility to create indoor environments that reflect environmental awareness, environmental protection and sustainability of building itself. Interior designers must now question the effects of their work not only on the natural environment, but also in view of human health; along with the considerations of the effects of their work on humanity.

In that challenge always lead to a new perspective. The holistic approach is to acknowledge that as humans we are only visiting the earth, we are not the owners. Together these offer a more intelligent method, one that respects our future. To bridge the gap the training should be given to students with green and sustainable design attitude which would result in quite a good outcome. For years the markets have been engaged in a consumer driven culture, but now its high time to create awareness amidst the consumers regarding the purchase. Media has helped quite a huge role to begin and grasp the seriousness of the manmade actions, making way for sustainable building methods and raised public awareness.

To upscale the practice one needs to create the awareness among the latter. The positive approach of the design industry towards the sustainability along with environmental conservation, will for sure lead the human race in acing the context of Sustainable interiors globally.

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