

The Influence of Unbuilt Environment on the Users of Built Environment

Prof. Sushama Parashar¹, Disha Agarwal²

Assistant Professor, B.K.P.S. College of Architecture, Pune

Fourth Year student, B.K.P.S. College of Architecture, Pune

Email: sushamaparashar@gmail.com, d97agarwal@gmail.com

Abstract: *According to the WHO, there is an extensive need to promote active, healthy lifestyles and curb the burden of the lifestyle related and non communicable diseases. A healthy and active lifestyle of people across the globe is found to be inextricably linked to social and environmental factors. Open spaces designed for health and well being can affect both social and environmental determinants of a disease by improving its connections with these two factors. Using landscape interventions in built environment, helps adopt a preventive approach and will create a healthier society and place a lower demand on struggling healthcare centers.*

Keywords: Landscape, Wellbeing, Lifestyle disorders, Wellness, Built environment

I. Introduction

This paper outlines the influence of un-built environment on the users of built environment. Globally a significant proportion of people live in cities today, and inevitably, the urban living affects the population health. Health is critical, to our ability to function within society. It is therefore important to understand how we are affected by this era of chronic “lifestyle” diseases.

Using principles from sensory, therapeutic and healing gardens, elements of landscape have an ability to reduce stress, treat depression and facilitate active and healthy life free of NCD’s (Non-Communicable Diseases). Man has always been in awe of built forms because he can prove his creativity. He rarely realizes the impact on un-built spaces that is created due to built forms. These take shape as buildings while the un-built spaces are either left as natural forested lands or are shaped up to cater to the infrastructure and entertainment needs. It is increasingly recognized that place and space have an impact on human health and well-being and that health-related lifestyles of individuals are likely to be affected by their environment, whether built or un-built.

Open space or an un-built space is also often referred to by the narrower term ‘green space’. Green spaces can be defined as ‘any vegetated land with or without water bodies within or adjoining an urban area’. This includes natural habitats, green corridors such as rivers banks, parks, gardens, playing fields; children’s play areas, and the countryside immediately adjoining a town.

This paper aims at studying ones perception about un-built environment and their well being in that space. According to World Health Organization the living conditions in an urban environment is the key to the health and well-being of its

inhabitants. The lack and poor quality of open space in urban neighborhoods can be a serious restriction for the wellbeing of the inhabitants as it does not support healthy life-styles, which includes spending time out of doors participating in exercising, playing or for congregation. An activity performed out of doors, importantly reduces the exposure to indoor air, which is often vitiated due to smell and insufficient proportion of oxygen. It has been proven that outdoor spaces are the green lungs of a city benefitting the users by secreting endorphins... the feel good hormone.

There is also a confirmed relation between spending time out of doors and a range of chronic lifestyle diseases including obesity, diabetes type II, high blood pressure, coronary diseases, asthma, back and joint pains and other NCD’s (Non Communicable diseases). Finally, this paper discusses the effect of green spaces on human health and well-being (e.g., stress, visual acuity, hormone balance, creativity) within the built environment, rather than program-based or sector-specific space types (e.g., health care facility waiting rooms, elementary school classrooms, or storefront pedestrian promenades) due to variations in built/un-built environment.

II. Materials and Methodology

The research methodology adopted was divided in three phases according to the questionnaire method, observation and data collection (secondary means). The aim was to answer the following questions:

How does an open space build an impact on people using it on regular basis? (First methodological phase);

What do people actually do in open spaces? (Second methodological phase)

What is the users’ opinion about an open area? How do they perceive it? How do they feel there?; What is their life style? How do they assess their well-being and health status? (Third methodological phase)

Each methodological phase explores a certain layer of space: the first phase describes the physical qualities, the second phase tackles the behavioral-social aspects, and the third phase investigates its perceptive layer.

The study is limited to open spaces like parks, gardens, hills etc. in Pune City.

Spatial, demographic and socio-economic aspects were considered as all these three are closely related to lifestyles,

which can be beneficial or harming to general health. The main indicators of built environment are its residential density, variety of land use, accessibility of services, walking and cycling opportunities, urban green space, safe spaces for children play, for sitting and socializing.

The questionnaire consisted of general questions and the sample included all the users who visited these open areas on regular as well as irregular basis. It was conducted in person at the specific location on weekends and weekdays.

A total number of 30 people were interviewed, 15 males and 15 females inclusive of all age groups. A project description and assurance of anonymity was provided to the interview. Consent was obtained verbally. Interview was canvassed in different locations within each green space (e.g. hills, play areas, gardens etc.) approaching individuals engaged in a spectrum of activities (e.g. meditating, walking, jogging, playing, sports, etc.).

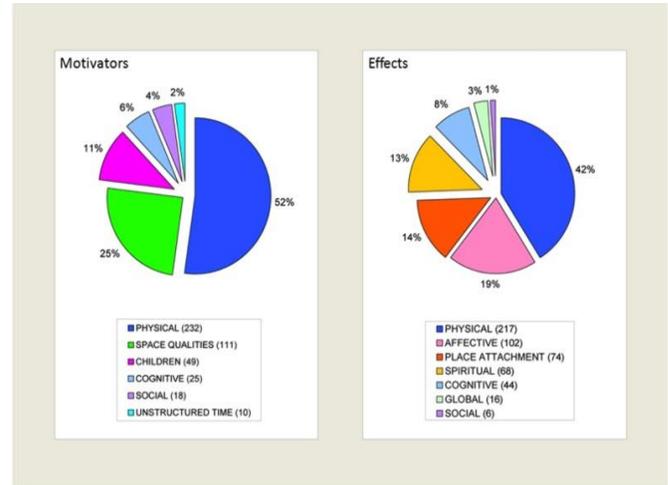
III. Results and Tables

The interpretation of the results was obtained by the questionnaire conducted and addresses the question of: “whether and how an open space affects its users?” while open space design cannot directly affect the health related behavioral patterns of eating, smoking, alcohol consumption, drugs intake, etc., they may however influence the time spent outdoors, and the physical activity of children and the elderly, who depend upon the proximity of green spaces to their homes.

Therefore data interpretation focuses on the questions, addressing the amount of free time spent for recreation, type of outdoor activities and the perception of residential area, health status and general well-being of the users. Due to the fact that open space is not the only behavioral pattern indicator which supports or harms public health, it was also necessary to reflect on correlations with other research variables, which might be significant for this matter.

The physical activity of the inhabitants was assessed by the question “Recreational sport exercise in free time”, which includes intensity (very intensive sport exercise, moderate exercise and walking) and duration (expressed in minutes per day), and the frequency (number of days per week). It was found that people walking, running, practicing exercise or any other kind of physical activity in an open space were less prone to non-communicable diseases or if already affected had managed their good health indicators. People suffering from different types of NCD’s expressed their perception and views about the open space that they rejoiced visiting.

A secondary method of data collection was also conducted. Different research papers related to health, well being and open space were referred to understand and analyze the effect of an open space on its users.



(source: ijerph)

The pie diagrams are a Relative endorsement of visit motivation and derived effects from the use of urban green space. Domains associated with visit motivation (**left**) and derived effects (**right**) are depicted along with the number and percent of comments associated with each domain.

It was analyzed that frequent open space users like parks, gardens and hills were more likely to report healthier than those who visited it on an irregular basis and that nature was perceived differently by each individual irrespective of age group or gender, that contributed in some way or the other in improving ones health and life style.

It has been reported that physical attributes and the spatial qualities of a space are an important motivators for the users, whereas children form an important user group. The users prefer using these spaces for social interaction as well as for cognitive functioning and prefer minimum structure of their time.

The effects of use open space were seen on better physique and health, some reported attachment and affinity to an open place, whereas some reported spiritual connections to a certain place. Better cognitive functioning, social interaction and global awareness are some of the effects experienced by regular users of open spaces.

IV. Conclusion

In order to comprehensively interpret the role of residential landscapes for life styles of their users, it is essential to connect the physical, social and symbolic spatial variables, which reveal the invisible links between the structure of space, behavior and perception. By highlighting the determinants, which impact users’ health related life styles, the results of this research contribute knowledge to the hypothesis that variations in open spaces affect in different manner on the lifestyle of its users.

Acknowledgement

Foremost, I would like to express my sincere gratitude to my dissertation guide, Mrs. Sushama Parashar and Dr. Abhijit Natu

for their continuous support and guidance in completing this research paper.

Besides my guides I would also like to thank our college librarian Mr. Salvi, for providing me with best reference books related with my paper topic.

References

i. *Gayle Souter-Brown Landscape and Urban Design for Health and Well Being : using Healing, Sensory, and Therapeutic gardens, 2015.*

ii. *Katarina Ana Lestan , Ivan Eržen , and Mojca Golobič The Role of Open Space in Urban Neighbourhoods for Health-Related Lifestyle International Journal of Environmental Research and Public Health; Department of Landscape Architecture, Biotechnical Faculty, University of Ljubljana, Ljubljana, 2014.*

iii. *William Browning, Hon. AIA, Catherine Ryan , Joseph Clancy; 14 Patterns of Biophilic Design Improving Health & Well-Being In The Built Environment Terrapin Bright Green, 2014.*

iv. *David Miller, Jane Morrice GreenHealth : Contribution Of Green And Open Space To Public Health And Wellbeing James Hutton Institute, OPENSpace Edinburgh University, University of Glasgow, Heriot-Watt University, Biomathematics and Statistics Scotland, 2014.*