Usage of walking paths for Stress Management in urban areas
(With reference to Colombo district, in Sri Lanka)

Dilakshi R. De Silva

Abstract: In 20th Century, increasing of Environmental Stress could be identified as a negative impact of the continuous spread of global urbanization. At present, environmental stress has increased in town of Asian region. One of the impacts of environmental stress is the destroying the sustainable life styles of urban people. Environmental Psychologist who studied about the eco urbanism concepts and town Planners have studied managing the environmental stress when they prepare the environmental Plans. Environmental psychologists such as Frank Lloyd Wright (The Living city Concept) and Le Corbusier (Garden City Concept) emphasized the importance of using parks and Open Space in towns. Walking paths were created to spend time with no urban environmental stress. In this study, the researchers have studied the significance of these walking paths for the stress management. The Objectives of current research are to identify why people use Walking path areas and to find out how Walking paths areas help stress management among urban People. In this research, data was collected by using questioner method as a quantitative research methods and interview method as a qualitative research method. Three Walking paths which are situated in Sri Jayewardenepura Kotte, Kiribathgoda and Gampaha were used as the study area. The Sample included 300 participants as 150 Females and 150 males. Each Walking path had 50 Females and 50 males. Data analyses were done using statistical analysis methods. The main finding of the research was 90% people are using these walking paths to reduce their employment, living and urban environmental stress daily. In addition, the beauty of these gardens caused them to spend these leisure times. 10% People are using to jogging on this Walking paths to improve their mental and physical health. People use and spend their leisure time on walking paths as a way of stress management. Attractive eco environmental system re-created traditional environment, cultivated areas, and opportunity to grouping help managing stress among people in urban areas.

Key Words: Environmental Stress, Urban Environment, Stress Management, Walking path, New Urbanism

Introduction

By about the end of 19th century the attention towards the Physical environment was drown. The Concept of Environmental Studies by the geologist as well as environmentalists. Yet discussions on the importance of te study of environment through an angle of psychological vision were developed. Especially at the peaks hours of Industrialization how the urban environment, affect the physical and mental health of human was discussed in length. As introduced by the association of mental health DSM iv vide their report, environment has reported to be realized after researchers that the speed of environmental zones in faster. In 1972 researchers had been carried out on the fact that the urban areas being stressors. By the 21st century this situation has affected the Asian region to the construction of towns, there for in a manner, that their is a control of stress has become a central study of the environmental psychology. In this study realization of how the

Walking paths latest adage to the modern rural urban development of Sri Lanka, affects the management of stress.
Theories

Scientist and town planners have emphasizes the ways of using strategies during the town planning for the stress management of the urban environment. Here by mainly can be identified.

1. Sustainable Development
2. Low Carbon Development
3. Public Participation
4. Regional cooperation

Two main theoretical concept were considered in this study.

1. Frank Lloyed Wright – The Living City Concept
2. Garden City Concept – Le Corbusier and Ebenezer Howard

Through the Living city concept, The way Which the town should build for resist to the industrialization and the social influence. Has indicate in “the Living city concept” by Frank Lloyd Wright. It is emphasized in this theory the harmony and humanity is more important during the process of building of the town. He has introduce the organic architecture. It can be describe as follows planning a town including environmental sceneries is called as organic architecture. He has described beautiful landscape, Museums, Walking areas, culture effectiveness are most important in a town. Broadere city concept of Frank is equal to the utopian Plan. He explain urban area should expand plarge sphere from the urban center. In here Open space architecture has introduced as master controller. This area can be used to solve the human problem. Those theoretical factors have stated in Books like ‘Disappearing city’ (1932) ‘The Living city” (1958)

“Garden city Concept” has introduced by Le Corbusier and Ebenezer Howard as a town Planning concept. This concept is a improvement of utopian Idealism. In this theory Open park Space and Green Belt are main concepts introduced by above two planners. Above Concept Garden and surrounded by pares and open space concept by Le corbizier. Further Ebenezer Howard have started that Built around a central garden with open park space and Green belt interspersed thought the town. He emphasizes there should have green belt in residential areas. This factor is described by following picture.
He emphasized that the Social problems that can be immerged in urban areas are also affecting to the movements of people from urban areas to the sub urban or rural areas. Open park space and Green belt concept which are discussed in these above two theories. And those are the main theoretical factors of this research.

**Conceptual Analysis**

**Environmental Stress**

Stress is a normal physical response to events that make you feel threatened or upset your balance in some way. According to the environmental psychology environmental stress is the mental stress that occur due to the environmental stressors.

Environment affect to the behavioral patterns of the persons interalia to the other. Environmental Stress increase because of the environmental stressors like Noise, Crowing, Pollution, Traffic, Heat, Air, Unsafety and Substabdered housing, Crime etc.
Urban Environment

According to the geographical analyze an urban center is the place that centralize over 20,000 population. Here by we can identify physical factors that build up the urban environment. These are population density, transportation, Economical centers, Markets etc. According to the environmental psychological studies, We can identify environmental Stressors like Noise, Heat, Crowding, Air Pollution, Traffic, Crime, Substandard housing etc mainly in the urban environment.

Stress Management

Stress Management is not only a main concept of the psychology but also a main concept of the personal Development. The person who can’t reduce the stressors, is important managing the daily stressors for his or her better life. To managing stressors,

- Relaxation
- Deep muscular Relaxation
- Meditation
- Listening Classical Music
- Walking
- Gardening
- Drawing

Are can be introduce as the therapy techniques of the psychology. Here by, it can be introduce the usage of walking paths as one of the factors that can manage the stress in urban areas.

Walking paths

In the concept of eco urbanism, have started that we have to pay our attention on open space, Walking area, Walking paths during the process of planning an environment that have healthy mental and physical condition. Urban Planners have eco psychological concepts which can be used in the process of urban planning.

Urban planners have described the ways of using eco psychological concepts in urban planning and they have emphasized about the ‘walking Space’ during their concepts as

- Frank Lloyd Wright – The living city
- Ebvenezer Howard – The Garden City
- Leis Mumford – The Culture of cities
• Kate Duavy – The New Urbanism

New Urbanism

In the concept of ‘New Urbanism’ introduced by Kate Dvany, have paired attention on following principals.

• Compact Walkable Neighborhood with clearly defined centers.
• Diverse mix of activities occur in close proximity
• Civic Building situated in prominent Location
• Essay access to parks and Public places

Methodology

Collecting of data of this study is done by using social Sciences research methods.

Primary data – Mainly, we gained Quantitative and Qualitative data in the process of collecting primary data. Interview method was used for the collecting of Qualitative data and Questionnaire method as used for collecting Quantitative data. In the method of interview mainly used confront Interview method.

Secondary data – secondary data was gained using Books, Reports and also Internet articles.

Sample and study area

Mainly three urban areas of Sri Lanka that using famous and main walking paths near to the towns are selected as the study area. as well as it was selected as the sample was represent as follows.

<table>
<thead>
<tr>
<th>Name of the urban area</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombo</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Gampaha</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Kiribathgada</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>

Problem

The problem of this study is in the usage of walking paths affect to the stress management of the urban environment?
Objectives

Main objective of this study is the identifying the way of affecting usage of walk paths to the stress management of the urban environment.

Further sub objective of this study is identifying whether the personal environment is affecting to the usage of walking paths related to the urban areas.

Data Analysis

When the analyzing of the data gained through the sample of people who are using the walking paths it is clear that, higher percentage of 33% is allocated for the people who are in middle age 40 - 55. Advantages of walking paths have being mostly gained by the people who passed 40 years. And also they are close to retirement of the Government Service. It is indicate in figure 01.

![Figure No.01](image1)

Among Categories of persons that using walking paths, 20% of people are engaged in the executive Grade of the government sector. And 33% of the people are the Businessmen. Who are handing their own business. The percentage of those is higher than others. It indicate in figure 02.

![Figure No.02](image2)
In figure No.03 the period of engaging the employment of the people. About 33% people have engaged their employment about 5-10 years.

![Job Period Diagram]

Figure No.03

According to this sample, majority of the users of the walking paths is engaging their occupation more than 12 hours a day. The percentage of this category is 33%. Figure No.04 indicates it as follow.

![Working Hours Diagram]

Figure No.04

33% percentage of people are coming to walking paths with their family members and Further 33% is coming with their Friends. Future No.05 is indicate this factor.
50% percentage of the sample are using walking paths about $\frac{1}{2} - 1$ hour daily. Figure No.06 show it.

According to the research data purpose of some people to use these walking paths is existing their mental health. Their percentage is 83% and 6%. It show by the figure No.07
According to this sample, majority of the users of the walking paths have headache, laziness, sleepiness and anger. Figure No.08 is indicating their percentages.

![Symptoms](image)

**Figure No.08**

Entire sample was questioned, whether the mental fitness is being gained by walking paths? All the answers were ‘yes’. It's percentage as 100%. Figure 09 is indicating this factor.

![Is there any mental healthy After Using walking path](image)

**Figure No.09**
Conclusion

According to the objectives of this research able to gain several conclusions regarding this research.

Urban people there is a huge competition to fulfill their daily needs. Figure Number 02 and 03 are evidence to prove this factor. Most of the sample, are engaging more 12 hours with their occupation. They have used walking paths to manage their daily stresses that they face day to day life and job environment.

When consider age category 40-55 able to started they have used these walking paths to manage isolation of the life and monitory of the job.

Businessmen who have their own large scale Businesses are facing harassments due to the stress more than other employers.

As another Conclusion, in relationship with the natural environment is affecting to manage these kind of stressors of these walking paths.

According to the Entire data sample, 90% percentage is using Walking paths. For the manage the stressors that have to face in job environments and urban stressors. They always willing to have relax mental condition. The other 10% who use exercising are also wish mental fitness while having physical fitness.

References

1. Diagnostic and statistical manual of mental Disorder (DSM iv) Published bu the American Psychiatric Association, Washington
5. www.britannica.com/topic/garden-city-urban-planning