

NED University of Engineering & Technology



## Final Year Project Showcase Batch-2017 Year 2022

Department: Architecture and Planning				
Programme: Architecture and Planning				
1	Project Idea	The primary objective of the research is to explore the impact of physical environment on the subconscious mind of the users and to identify the issues of the teenagers that have experienced trauma and how they respond to particular environments. The idea is to provide them a facility that would encompass sensorial experience and explore how human senses can be a tool to cure the defined target group. The idea is to design a space that will encompass all healing variables as well as architectural form of therapies that will impart a sense of comfortability, safety and security, and a sense of retreat.		
2	Process	Research Phase I Design Phase II		
3	Outcome	The final outcome needed to be a combination of different therapies identified by the experts but in an architectural manner that make the person feel contemplative and engage the person with the environment by incorporating mindful healing variables. Thus, an architectural typology is to be designed where there are spaces for contemplation, spaces for physical development and spaces for diagnose and assessment, all under one roof. This provides an insight for the development of a hybrid typology where there can be clinical assessment and contemplative spaces and thus the Therapeutic Contemplation Centre was finalized as the project for these traumatized adolescents which will not only focuses on their physical development but also on their mental development and boost their confidence, by providing them a combination of open and closed spaces and conceptual nodes that follow the treatment pattern prescribed by the experts.		
4	Evidence (Theoretical Basis)	Integrating trauma-informed care ideas into design with the purpose of creating physical settings that promote safety, well- being, and healing is what trauma-informed design is all about. Individual trauma is caused by an event, a series of events, or a set of circumstances that an individual perceives as mentally and physically harmful or life threatening, and that has long- term negative effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being especially that of adolescents. Trauma-informed design helps to elevate the spaces which house these young traumatized individuals such as institutions. The research tends to showcase how trauma-informed designs can transform these spaces and help boost the well-being of their inhabitants. The research methodology includes the		



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		interviews from the experts, doctors as well as the young individuals from Karachi, and the literature reviews as well as field survey helped in the collection of facts and figures that will aid in studying the existing condition and needs of the adolescents. The research tends to identify possible design solutions and strategies to set out parameters of a mindful healing environment by incorporating all the treatment patterns (relaxing the individual, physical assessment and proposed therapies), identified by the experts in an architectural manner. The objective of mindful design is to create spaces that encourage a sense of tranquility, safety, dignity, empowerment, and well-being for all people who enter them by engaging them with space through the efficient use of spatial layout, visual interest, light and color, materiality & interweaving of landscape with the internal spaces that expresses a person's tendency to communicate with nature, which has a variety of physical and mental health benefits, including reduced stress, better sleep, lower blood pressure, and increased immunological function. The overall idea of the research and design was to provide therapeutically designed spaces with the principles of trauma- informed design that provide safety, well-being, and home-like environ ment for the target group. The design provides a facility which incorporates both a clinical facility to diagnose and therapy spaces with connection to nature that is needed in any treatment pattern to fulfill the needs of a traumatized individual.
5	Impact on Sustainability of Urban Regions or SDG-11 "Sustainable Cities and Communities"	<ol> <li>Accessibility for pedestrians (students/teachers/staff) to approach school as well as to provide students the facility for cycling to school. As it was a long distance to cover with only walking.</li> <li>Inclusion of different strata of society, proving them a complex where they can interact and exchange ideas and become more social which will help to release their trauma and fear, in a place where they are close to nature and different challenging activities</li> </ol>
6	<b>Competitive Advantage or Unique Selling Proposition</b> (Cost Reduction, Process improvement, Attainment of any SDG (Sustainable Development Goal), increase of market share or capturing new market or having superior performance over a competitor. In summary, any striking aspect of the project that compels the industry to invest in FYP or purchase it. Some detailed description is required in terms of how, why when what. You can select one or more from the following dropdown and delete the rest of them). Please keep relevant options, delete the rest of them, and correct the sequence	
a	<b>Attainment of any SDG</b> (e.g. How it is achieved and why it is necessary for the region)	<ul> <li>SDG#03, Good Health and Well Being:</li> <li>3- Physical Activity (Healthy Lifestyle); Cycling and jogging tracks which connect different ends of the site are proposed to promote healthy lifestyle in the neighborhood.</li> <li>4- Child Mental Health; Consulting unit with therapy rooms are provided so that adolescents of neighborhood can</li> </ul>
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		easily consult with the psychiatrists and psychologists to
		maintain their mental health.
		SDG#06, Clean Water and Sanitation:
		5- This goal can be reached by filtering of Gutter Baghicha
		sewage water on site, which can then be used for irrigation
		and harvesting to increase yield and crops as well as to
		water the plants and grass as there is water scarcity in the
		region.
		SDG#08, Decent Work and Economic Growth:
		6- This module will assist in the creation of jobs in the
		markets by assigning various tasks to foremen, laboratories, packing and sorting personnel, technical
		teams and supervisory personnel, workers, and sellers.
		The module can be repeated in any area where there are a
		bunch of schools or colleges located and promote
		employment and opportunities for all.
		SDG#11, Sustainable Cities and Communities
		7- Accessibility for pedestrians (students/teachers/staff) to
		approach school as well as to provide students the facility
		for cycling to school. As it was a long distance to cover with
		only walking.
		8- Inclusion of different strata of society, proving them a
		complex where they can interact and exchange ideas and
		become more social which will help to release their trauma
		and fear, in a place where they are close to nature and
		different challenging activities.
		SDG#13, Climate Action
		9- Use of Rammed Erath as the building material and
		reduction in the use of concrete to reduce carbon footprint
		and which is also energy efficient process. The thick
		insulated rammed earth walls reduces the amount of heat
		travel from outside to inside in summers and traps heat in
		winters.
		<b>10-</b> Use of dumped marble powder found near the site which becomes cold when reacts with water. The material is used
		on roof to reflect heat and on different surfaces for therapy of the adolescents which also helped in cost reduction.
		Use of Rammed Erath as the building material and reduction.
b	Any Environmental Aspect (e.g. carbon reduction, energy-	in the use of concrete to reduce carbon footprint and which is
	efficient, etc.)	also energy efficient process.
		Use of dumped marble powder found near the site which
	Cost Reduction of Existing	becomes cold when reacts with water. The material is used on
С	Product	roof to reflect heat and on different surfaces for therapy of the
		adolescents which also helped in cost reduction.
	Process Improvement which Leads to Superior Product	The current design industry does not take into consideration
		the actual need of the target group and build such designs or
	or Cost Reduction, Efficiency	replicates the designs to fulfill the requirements of the project.
d	Improvement of the Whole	For instance they would build a trauma center for any
	Process (e.g. What is the issue is	traumatic patient without taking into consideration the
	current process and what improvement you suggests)	importance of nature and other activities in the process. In
	improvement you suggests)	case of materials they would always think of concrete rather
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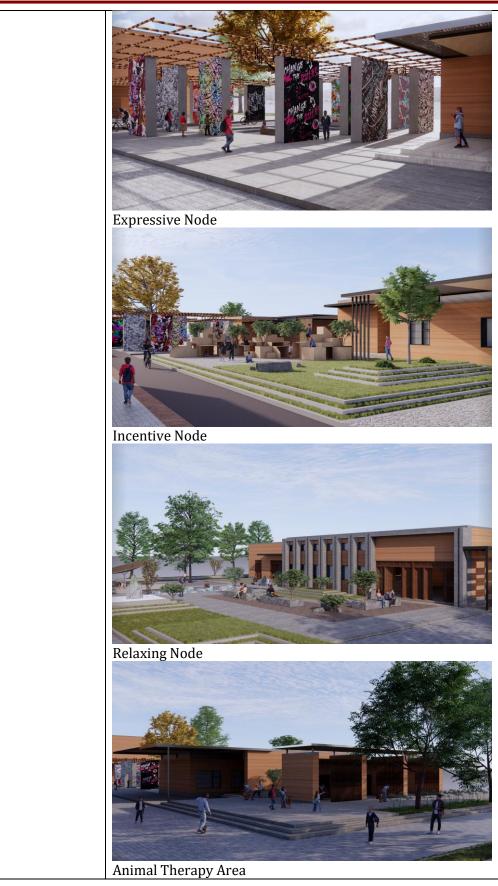
		than materials which are cost effective as well as easily available. Thus, I suggest use of rammed earth as a natural material that improves the quality of the building as well as the program of the project was also designed by understanding and catering the needs of the end user group.
7	<b>Target Market</b> (Industries, Groups, Individuals, Families, Students, etc) Please provide some detail about the end-user of the product, process, or service	The projects caters the Students of School & College(adolescents) as the main target group, with supporting service groups i.e. psychologists, psychiatrists for assessment and therapy, teachers and attendants to support different therapies and other staff.
8	<b>Team Members</b> (Names along with email address)	Abdul Basit (AR-17035) <u>abdul.basit6870@gmail.com</u> , <u>basit4006929@cloud.neduet.edu.pk</u> <u>abdy.ab66@gmail.com</u>
9	<b>Supervisor Name</b> (along with email address)	Rabela Junejo, Sarah Ather Khan, Fahmida Bano Shaikh,Wajiha Siddiqui <u>Rabelajunejo@cloud.neduet.edu.pk</u> , <u>sarahkiran@gmail.com</u> , <u>wajiha.siddiqui@uok.edu.pk</u> , <u>shaikhfahmida@gmail.com</u>
10	Pictures (If any)	<image/> <image/>

Relationship of built and open spaces



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