



Behavioural & Psychological Needs of Juveniles in Correctional Spaces: A Therapeutic Architectural Approach Towards Rehabilitation and Social Reintegration

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Abstract- Juvenile correctional facilities should promote protection, rehabilitation, education, emotional wellbeing, and social reintegration rather than functioning as prison-like institutions focused solely on security and confinement. Many existing facilities lack therapeutic spaces, recreational areas, vocational training, natural light, ventilation, and quality environments, negatively affecting juveniles' behavioural and psychological development. This research examines how therapeutic architecture can support emotional healing, behavioural change, skill development, and successful rehabilitation through human-centred design. The study evaluates key architectural elements, including spatial planning, counselling spaces, educational facilities, landscaping, recreation, and vocational training, and their impact on juvenile wellbeing. Using a qualitative and analytical approach, including literature review and comparative case studies of the Pandit Jawaharlal Nehru Udyog Kendra (Yerawada, Pune) and the Nepal Juvenile Observation Home, the research identifies the limitations of conventional correctional environments. The findings demonstrate that therapeutic, child-sensitive, and rehabilitation-oriented design enhances emotional wellbeing, reduces stress, improves social interaction, encourages positive behaviour, and supports successful reintegration into society. The study concludes that architecture is a powerful rehabilitative tool capable of creating safe, humane, and healing environments for children in conflict with the law.

Keywords- Therapeutic Architecture, Juvenile Correctional Spaces, Behavioural Psychology, Juvenile Rehabilitation, Healing Environment, Child-Friendly Design, Environmental Psychology, Vocational Rehabilitation, Correctional Architecture.

I. Introduction

Juvenile correctional spaces should provide care, education, rehabilitation, and opportunities for social reintegration while supporting the emotional and psychological needs of children in conflict with the law. However, many existing facilities prioritize security and confinement, creating environments that can increase stress, anxiety, and social isolation, ultimately affecting rehabilitation.



This research explores how therapeutic architecture can create safe, humane, and rehabilitation-focused environments by integrating well-planned spaces, natural elements, counselling facilities, educational and vocational areas, recreational spaces, and therapeutic landscapes. The study aims to demonstrate that thoughtful architectural design can promote emotional wellbeing, positive behavioural change, personal growth, and successful reintegration of juveniles into society.

1. Problem Statement

Juvenile correctional facilities deal with complex psychological, emotional, and social situations. Juveniles need not only supervision but also emotional support and rehabilitation. However, many existing institutions heavily rely on planning approaches that focus on security and confinement. These environments often lack recreational areas, counseling facilities, therapeutic landscapes, and emotionally supportive infrastructure. Issues like overcrowding, rigid layouts, poor environmental quality, and prison-like experiences can negatively impact the mental health and behavioral stability of juveniles. Additionally, limited vocational and educational options diminish opportunities for personal development and future reintegration into society. Unlike modern therapeutic environments where architecture supports emotional health and recovery, juvenile correctional spaces have not been fully recognized as places for rehabilitation. This gap causes a disconnect between rehabilitation goals and actual experiences within correctional institutions. Consequently, it is essential to develop therapeutic and child-sensitive architectural approaches that can promote emotional healing, behavioral change, vocational engagement, and social reintegration while ensuring safety and supervision.

2. Aim and Objectives Aim

The goal of this research is to create a therapeutic and rehabilitation-focused architectural framework for juvenile correctional spaces. This framework should support psychological healing, behavioral change, vocational growth, recreational activities, and social reintegration through humane and emotionally supportive environments.

Objectives

The objectives of the research are: - To study the behavioral and psychological needs of juveniles in correctional environments - To examine how architectural designs affect emotional wellbeing and behavioral growth - To identify spatial limitations in current juvenile correctional institutions - To incorporate recreational, vocational, educational, and counseling facilities into rehabilitation spaces - To develop child-sensitive and humane areas that reduce prison-like characteristics - To explore architectural principles that promote emotional healing and rehabilitation - To create safe but non-restrictive planning strategies that balance supervision and emotional comfort - To



suggest a rehabilitation-focused architectural framework that supports long-term social reintegration

II. Concept Overview

This research proposes a therapeutic architectural approach for juvenile correctional spaces that prioritizes rehabilitation over punishment. The concept aims to turn correctional environments into emotionally supportive areas that encourage interaction. Here, architecture plays an active role in healing and improving behavior. The framework stresses the need for therapeutic landscapes, recreational areas, vocational training spaces, counseling centers, educational facilities, and socially interactive zones. Rather than isolating individuals in prison-like settings, the concept promotes openness, communication, emotional comfort, and supervised social interaction. The design approach aims to reduce stress, improve emotional stability, build confidence, and support psychological recovery through thoughtful spatial organization. Key elements of the therapeutic framework include natural lighting, ventilation, sensory comfort, landscape connectivity, and planning at a human scale. The concept also values vocational and recreational engagement as vital tools for rehabilitation. It includes workshops, activity spaces, sports areas, art rooms, meditation spots, and communal zones to foster learning, communication, creativity, and social involvement. In summary, this concept seeks to create humane correctional environments that align rehabilitation infrastructure with the psychological and emotional needs of juveniles.

III. Methodology

The research uses a qualitative and analytical methodology that focuses on rehabilitation-centered architectural planning and behavioral environments in juvenile correctional spaces.

1. Research Approach

This study uses a comparative and observational research method that combines literature review, case study analysis, environmental psychology evaluation, and architectural assessment. It investigates the link between built environments and rehabilitation outcomes by examining spatial quality, emotional effects, recreational facilities, and therapeutic planning strategies.

2. Data Sources

The study relies on both primary and secondary data sources. Primary Data - Observations from live case studies - Spatial analysis and zoning studies - Architectural documentation - Observations of user behavior - Analysis of environment and circulation Secondary Data - Research papers and academic journals - Juvenile justice



policies and guidelines - Environmental psychology research - Literature on therapeutic architecture - Government reports and institutional studies - International frameworks for rehabilitation

3. Case Studies

Pandit Jawaharlal Nehru Udyog Kendra, Yerawada, Pune

This case study was chosen to understand the current planning conditions in Indian juvenile rehabilitation systems. The study examined spatial organization, security systems, rehabilitation spaces, environmental quality, and their behavioral impact.

Nepal Juvenile Observation Home

This case study highlighted an international example of relatively humane and interaction-focused rehabilitation environments, emphasizing visual openness, communal interaction, and therapeutic planning.

4. Design Analysis Framework

The architectural evaluation framework was developed based on principles of therapeutic architecture, behavioral studies, and rehabilitation needs. The analysis includes: - Spatial zoning and circulation - Human-centered planning - Recreational facilities - Vocational and educational resources - Counseling and therapy spaces - Integration with the landscape - Natural lighting and ventilation – Emotional and psychological comfort - Balance between privacy and supervision - Security and safety systems - Child-friendly planning methods The framework evaluates how architectural environments affect emotional wellbeing, social interaction, rehabilitation success, and behavioral growth in juveniles.

IV. Design Application

The proposed therapeutic framework impacts the layout and organization of juvenile correctional facilities. The design aims to support rehabilitation, emotional recovery, and behavior development through clear zoning and spaces that encourage interaction. The entrance and administration zone serves as a controlled yet welcoming area connecting juveniles with counselors, staff, and rehabilitation services. Residential zones aim to lessen institutional features by using natural light, ventilation, visual openness, and emotional privacy. Recreational and activity spaces are placed at the center to promote communication, physical activity, teamwork, and emotional engagement. Vocational training areas, including carpentry workshops, art rooms, tailoring units, pottery spaces, and digital learning environments, fit into daily rehabilitation routines. Counseling and therapy spaces are located in quieter areas to ensure psychological comfort and privacy. Therapeutic landscapes, such as courtyards, healing gardens, shaded paths, and sensory spaces, help reduce stress and enhance emotional wellbeing. The circulation system is planned to allow supervision while



reducing rigid, prison-like movement patterns. The overall layout aims to create humane, emotionally supportive, and rehabilitation-focused correctional facilities.

Advantages and Impact

The proposed therapeutic architectural framework provides several benefits that enhance rehabilitation outcomes in juvenile correctional settings. One key advantage is the improvement of emotional wellbeing through access to therapeutic landscapes, recreational areas, and supportive spaces. Incorporating counseling facilities and activity-based environments helps lower stress, aggression, anxiety, and emotional isolation. The framework also promotes social interaction and communication through communal spaces and planning strategies that focus on interaction. Vocational infrastructure supports skill development, confidence building, and opportunities for future reintegration. Natural light, ventilation, landscape integration, and child-friendly planning enhance overall comfort and create healthier rehabilitation environments. Additionally, safe but non-oppressive security systems enable supervision while reducing the psychological pressure often found in prison-like settings. Overall, the framework changes juvenile correctional spaces into rehabilitation-focused environments that support healing, learning, emotional recovery, and positive behavior changes.

V. Discussion

The research shows that architecture greatly impacts emotional wellbeing, social interaction, behavior, and rehabilitation outcomes in juvenile correctional environments. Planning focused on institutional surveillance can negatively affect emotional comfort and rehabilitation effectiveness, while humane and therapeutic settings support emotional healing and behavior change. The case studies indicated that recreational areas, vocational infrastructure, counseling spaces, natural landscapes, and interaction-focused planning positively affect rehabilitation experiences. Well-planned infrastructure that incorporates therapeutic design principles creates emotionally supportive environments that foster communication, confidence building, stress reduction, and social reintegration. The research further highlights that architecture should not just serve as physical infrastructure but as an active rehabilitative tool capable of influencing psychological recovery and positive behavior change.

VI. Conclusion

Juvenile correctional spaces should be environments for healing, emotional support, education, vocational growth, recreation, and personal development rather than just detention facilities. Since architecture directly affects emotional experiences and behavior, therapeutic design strategies can greatly improve rehabilitation outcomes and



social reintegration. Combining child-friendly planning, recreational infrastructure, vocational facilities, counseling spaces, therapeutic landscapes, and emotionally supportive areas creates humane correctional environments that foster emotional recovery and behavior transformation. The research suggests that therapeutic architecture can play a vital role in future juvenile justice systems by turning institutional spaces into places of dignity, opportunity, emotional healing, and positive social change.

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