international DESIGN JOURNAL
Print ISSN 2090-9632
Online ISSN 2090-9640

Designing Recreational Spaces to suit Autistic Children

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Abstract:

Autistic children in early and late childhood suffer from the lack of welcoming parks or other recreational areas that are sufficient to accommodate them. By involving them in the recreational area, we help them integrate with their peers of the same age group, take their behaviors into account, and reduce the social and psychological gaps that exist between children with autism and normal children.

Developing building codes and design standards to accommodate people with physical disabilities has taken precedence over those with sensory and cognitive disabilities in many countries. Consequently, there are no design standards that take into account the requirements of autistic children available to architects and urban engineers to refer to during the design process.

The research will focus on how to meet the needs of autistic children by designing parks dedicated to them as a step to understand their requirements and contain their behaviors within recreational spaces, which will later help researchers on how to integrate them with normal children within one recreational space.

To solve this problem, the research first used the inductive approach to identify the needs and requirements of autistic children through scientific and medical research that addressed this topic and personal interviews with experts to support the research study. After that, the analytical approach was used to examine and evaluate some international examples of designing recreational spaces for children with autism in order to ensure that the design meets their needs and takes their behavior into account. Finally, the deductive approach was used to reach a guide that helps the urban designer create safe and comfortable recreational spaces for children with autism, and finally the results and recommendations. Meeting user needs and making them comfortable is the primary objective of urban design, particularly garden design. Thus, a successful and efficient design is one that enables garden users to engage in their varied activities in a comfortable, safe, and easy manner. In order to satisfy users' needs and ensure their comfort and safety, it is critical for the urban engineer to develop and refine the design in response to their feedback, whether it be positive or negative. Therefore, a portion of the population that struggles to articulate the appropriate response should be the focus. The urban designer must look for and speak with experts to determine the areas where the garden design is lacking in order to meet their needs in accordance with certain standards, guaranteeing their safety and comfort and allowing them to practice their activities inside the garden and assimilating into society.

Research problem: The building codes and design standards the designer uses only cover the needs of people with physical disabilities; there are no design standards for creating recreational spaces that are suitable for people with cognitive or sensory disabilities, so there are no spaces that cater to the needs and requirements of children with autism.

Research objectives: Determine the requirements and needs of children with autism and how to deal with their behaviors. Develop a guide for designing recreational spaces that meet the requirements and needs of children with autism.

Research Methodology: In order to accomplish this goal, the research used the following methods: the inductive approach, which involved identifying the needs and requirements of children with autism and studying their behavior through scientific researches that addressed these topics and was backed by in-person interviews with specialists; the analytical approach, which involved studying and analyzing some international and Arab urban examples of design projects specifically created to meet the needs and requirements of autism patients and take their behavior into account; and the deductive approach, which aimed to reach a guide to help urban designers when creating gardens for children with autism.

Paper History:

Paper received November 1, 2024, Accepted January 4, 2024, Published on line March 1, 2025

Keywords:

Urban Design- Recreational Spaces- Autism Patients.

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CITATION Amr Zeina (2025), Designing Recreational Spaces to suit Autistic Children, International Design Journal, Vol. 15 No. 2, (March 2025) pp 189-196