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The Role of Architectural Design in Enhancing Social Intelligence and Psychological Well-being in Children: An Analysis of Elementary Schools

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Abstract

The early years of a child's life play a fundamental role in shaping their personality, social development, and mental and psychological well-being. In this context, the design of a school's physical environment can be a significant factor in enhancing children's social intelligence and happiness. Therefore, educational design should not be limited to creating mere physical spaces for learning but must also actively foster social skills, psychological vitality, and Emotional Intelligence (EI) in children. Given that the development of social intelligence and well-being in children aged 7 to 12 is heavily influenced by the quality of educational spaces, this article aims to analyze the architectural design components that enhance social intelligence and happiness in elementary schools. The research employs a qualitative and mixed-method approach, combining documentary studies, analysis of successful domestic and international case studies, contextual analysis, and integration with environmental psychology theories in a qualitative-descriptive manner. The study strives to propose an effective model by creating spaces for interaction and group learning. The results indicate that architectural design, when approached with a human-centered perspective and an understanding of child psychology, can significantly impact the social and psychological well-being of future generations. Findings reveal that factors such as biophilic design, color, spatial flexibility, legible forms, natural light, collaborative and play spaces, open and semi-open areas, and informal interactive spaces enhance social interactions, a sense of belonging, creativity, and student vitality. Additionally, aligning spatial design with children's psychological and behavioral needs—such as safety, mental tranquility, and participation—was identified as another key component. Finally, a combined model of environmental and non-environmental factors is proposed, serving as a guide for architects, urban designers, educational administrators, and policymakers in designing future-oriented schools.

Keywords: Architectural design, Social intelligence, Psychological well-being, Elementary schools.

1 | Introduction

After home, school is the second most influential social environment for children's cognitive, emotional, and social development. Children spend a significant portion of their most sensitive and formative years in this

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space, where the foundations of their personality intellectual, social, and physical growth are shaped. Schools can be considered extended homes where children spend a considerable part of their lives.

According to a study conducted in the United States, children spend an average of 1,195 hours per year in learning environments—equivalent to 23% of their waking hours (approximately one-fourth of their annual life). Thus, a substantial portion of a child's life is spent in educational spaces [1]. Given the considerable time children spend in learning environments, examining how these spaces are designed to optimize student engagement and learning potential is of critical importance.

Children aged 7-12 years are in a developmental stage and highly influenced by their surroundings; thus, exposure to a suitable environment can help them achieve a high level of social awareness and intelligence. Educational psychologists often examine various factors such as family, teachers, teaching methods, textbooks, and school management when studying learning processes. Environmental psychologists, however, recognize the school's physical space as a dynamic and influential factor in students' educational and behavioral development, highlighting the significant impact of architectural design on children's physical, cognitive, and social abilities [2].

Therefore, school design should facilitate a future where children can experience social life with greater success and tranquility. Consequently, creating well-designed school environments that support children's holistic development is essential. Designers must always consider this influence when planning spaces for children [1].

School design should align with children's needs, preferences, and ergonomics, creating a lively and engaging atmosphere. Incorporating green spaces can enhance independence, self-confidence, and a sense of security in children, reducing aggression while boosting social intelligence [3]. Although the physical school environment is just one component of learning, it remains one of the most critical. A well-designed space significantly shapes personality development [4].

An effective learning environment, alongside other educational factors like teachers and curricula, plays a vital role in enhancing social intelligence and children's happiness. Strengthening social intelligence fosters "social awareness," reducing harmful behaviors and disregard for social norms. Social intelligence directly impacts individual traits, social knowledge, and interpersonal skills, improving overall learning outcomes [5].

Thus, early education—or subconscious environmental influences—must nurture social intelligence. Schools, as primary social environments, are ideal for this development. Enhanced social intelligence leads to greater happiness, transforming schools into safe, supportive spaces. It also mitigates antisocial tendencies, fostering peaceful coexistence [6].

Another key aspect of successful architectural design is understanding users' characteristics and meeting their physical and psychological needs. For children's spaces—such as schools and kindergartens—studying their behavior, preferences, and creative stimuli can inspire architects in layout planning, color selection, lighting, and furniture design [3].

Therefore, designing schools that support children's comprehensive growth is imperative. To create an optimal environment—aligned with psychological and physical traits to enhance social intelligence and mental well-being—physical parameters (spatial dimensions, required facilities, safety standards, etc.) must be considered as foundational elements [2].

The components and elements that shape school architecture—such as proportions, scale, spatial organization, acoustics, color, lighting, outdoor spaces, and more—can profoundly impact students [2]. A well-designed school environment facilitates learning and fosters joy and vitality for children and adolescents, while a poorly designed one may lead to depression and lethargy, negatively affecting learning outcomes, active participation, social awareness, and overall well-being.

Hence, designing schools that cater to the specific needs of children aged 7–12—particularly in enhancing social intelligence and happiness—is of paramount importance. However, many existing school buildings

either were initially designed for other purposes (and their repurposing fails to meet even basic structural requirements for child development) or were constructed as elementary schools but lack psychological considerations due to:

I. Standardized, copy-paste designs prioritizing rapid construction over pedagogical needs,

II. Clients' lack of awareness regarding the psychological impact of space on children,

III. Urban and economic constraints (high land costs, unsuitable plot sizes, poor accessibility, etc.).

Key issues in current school design:

I. Lack of understanding of spatial indicators that influence child development.

II. Clients' insufficient awareness of how environmental psychology affects children.

III. Poorly executed designs that neglect developmental needs.

A school's physical environment, when aligned with environmental psychology, children's behavioral needs, and innovative design approaches, can significantly enhance happiness, motivation, and social intelligence. Despite its importance, many school designs fail to intentionally incorporate architectural elements that strengthen social interactions and mental well-being.

2|Theoretical Foundations and Research Background

2.1| Basic Definitions

Definition of intelligence: Intelligence, or Intelligence Quotient (IQ), refers to cognitive ability [7]. It is defined as an "innate and general cognitive capacity"—an individual's collective aptitude for purposeful action, logical thinking, and effective interaction with their environment. "Manifest intelligence is nothing more than an accumulation of learned facts and skills; innate intellectual power consists of an individual's propensity to engage in activities that lead to learning, rather than inherited learning capacities" [8].

Social intelligence: Social Intelligence (SI) is one of the most critical forms of intelligence governing interpersonal relationships. It measures a person's skill in establishing, maintaining, and expanding effective communication. Cultivating social intelligence enables better negotiation, conflict resolution, and understanding of others' needs. Toshio Yamagishi defines social intelligence as:

The ability to comprehend oneself and others, and to apply that understanding in interactions. Distinct from IQ, social intelligence involves perceiving others' emotions, thoughts, and behaviors—and responding appropriately. It is honed through face-to-face interactions and lived experience, closely linked to mindfulness and Emotional Intelligence (EI) [7]. SI predicts leadership efficacy, professional performance, and life satisfaction [8].

Emotional intelligence: EI is defined as a functional trait, self-perception, and behavioral competency [9]. Widely valued as a skill, EI enhances communication management, problem-solving, and workplace relationships. It centers on:

I. Self-awareness: Recognizing and regulating one's emotions.

II. Empathy: Anticipating others' reactions in given contexts.

EQ has become vital for high-level tasks and innovative thinking. Self-control cultivates mastery, while social initiative strengthens organizational culture and productivity. EI empowers humans to drive innovations that deepen organizational-client bonds [10].

2.2|Theoretical Framework of the Research

The theoretical framework of this study is based on the connection between educational environment architecture and the development of social and EI in children aged 7 to 12. Environmental psychology

theories, such as Garrett Lange's perspective on behavior and environment, demonstrate that physical spaces can facilitate or enhance social behaviors. The core premise of this framework is that educational spaces are not merely venues for knowledge transfer but also platforms for nurturing social relationships, psychological vitality, and emotional/social intelligence [11]. Additionally, Maslow's hierarchy of needs—particularly belongingness, safety, and self-actualization—provides a foundation for understanding children's psychological needs in educational settings [12]. In this study, children's social intelligence encompasses components such as: 1) Participation, 2) empathy, 3) conflict resolution, and 4) understanding social dynamics.

These elements are profoundly influenced by architectural features, including: 1) Natural light, 2) Spatial flexibility, 3) Warm color schemes, 4) Open spaces for play/interaction, and 5) Visual connectivity with nature [7].

The biophilic design theory emphasizes the use of natural materials, greenery, and sensory engagement with nature, asserting that such connections reduce stress and enhance social engagement [13]. Meanwhile, experiential learning principles necessitate open, flexible, and customizable spaces that align with children's psychological and behavioral needs [14]. Contemporary educational design approaches—like collaborative learning and active learning environments—further inform this framework, as fluid, adaptable spaces foster creativity, group interaction, and play [15].

Key Environmental Components Identified: Form and legibility, color psychology, natural lighting, spatial flexibility, biophilic design, safety and security, vitality (e.g., social interaction, imaginative play, belongingness). These components operate at both physical and perceptual levels, fostering positive interactions, psychological well-being, group participation, and joyful experiences in schools.

2.3 | Research Background

Given the growing importance of educational environments in shaping children's social and psychological skills, recent research on primary school architecture with a focus on enhancing social intelligence demonstrates increased attention to educational space quality as a factor influencing children's cognitive, emotional, and social development.

In this context:

I. Esmaeili et al. [16] developed a conceptual model showing that spatial flexibility ("flexible architecture") in courtyards and corridors improves students' social behaviors.

II. Similarly, Akbari Moghadam and Mohammadzadeh [7] identified semi-open, flexible classroom designs as a key factor in boosting participation and creativity among children.

Numerous studies in Iran over the past decade have examined the relationship between primary school architectural design and the enhancement of children's psychological, social, and behavioral qualities. The findings reveal significant insights:

I. Esmaeili et al. [16] demonstrated the crucial role of transitional spaces like courtyards and corridors in promoting social behaviors among students.

II. Akbari Moghadam and Mohammadzadeh [7] highlighted how open and semi-open classroom designs foster collective participation as a foundation for creativity.

III. Mirzagoltabar et al. [13], through two distinct studies, emphasized the importance of integrating indoor and outdoor school spaces to improve learning quality and children's spatial experiences.

IV. Khalili Khah et al. [17] employed factor analysis (R) to identify nine key factors influencing creative vitality, including spatial observability, imagination stimulation, safety provisions, socialization opportunities, play-friendly design, experiential pote, and environmental flexibility.

Ahmadi Feyzabad [18] proposed optimal school design indicators such as: 1) Effective ventilation systems, 2) Modern safety equipment, 3) Green spaces, 4) Natural lighting solutions, and 5) Culturally responsive spaces.

This body of research collectively underscores the multidimensional impact of school architecture on child development, with particular emphasis on spatial configurations that support both cognitive and socio-emotional growth. The studies employ diverse methodologies, from conceptual modeling to empirical factor analysis, providing robust evidence for design considerations in educational environments.

Table 1. Research background on primary school design.

Row	Researcher	Research Title	Components / Factors
1	Katiraei et al. [19]	Explaining the relationship between environmental components of primary schools and EI with emphasis on children's stress management	Diversity of physical components mediated by environmental factors: psychological security - physical comfort, sense of belonging to the environment, child-centered environmental legibility, creative vitality influencing purposeful playability and functional sociability
2	Esmaeili et al. [16]	Conceptual model explaining the impact of flexible architecture on social behavior of students in school yards and corridors	Variability, changeability, and adaptability
3	Rajabi et al. [20]	Design solutions for children's play spaces based on identification of environmental and non-environmental factors affecting emotional and social intelligence of children	The flexibility of the physical environment, spatial diversity, suitable decorations and furniture, and view of the natural environment
4	Akbari Moghadam and Mohammadzadeh [7]	Designing a creative primary school in bojnord city	Open and semi-open classroom design interior design to enhance students' sense of participation with each other to increase creativity
5	Mirzagoltabar et al. [13]	Impact of connection between indoor and outdoor spaces in primary school design to enhance learning quality and development for children aged 7-12	Principles and architectural design processes of learning environments with environmental psychology, nature, and open environment approach
6	Dehari et al. [21]	Challenges of designing primary school grounds in north macedonia	School green areas, suitable furniture, and materials as integral parts of outdoor learning to strengthen children's connection to nature while being calming and motivating
7	Khalilikhah et al. [17]	Design components of creative vitality in primary schools of Tehran using r-type factor analysis	Familiarity and environmental legibility; surveillance and visibility; experience and imagination, nostalgia; natural effects and motivational aspects; safety and physical comfort; flexibility and diversity; sociability and presence; vitality; playability and event ability

Table 1. Continued.

Row	Researchers	Research Title	Components / Factors
8	Ahmadi Feyzabad [18]	Analysis and review of optimal primary school designs	Flexible space, natural light and proper ventilation, green and open spaces, modern equipment and technology, safety and security, spaces for social and cultural activities
9	Mirzagoltabar et al. [13]	Impact of connection between indoor and outdoor spaces in primary school design to enhance learning quality and development for children aged 7-12	Open space, natural and artificial green
10	Malek et al. [15]	Principles of educational space design with a focus on improving performance of children with learning disorders	Form, color, lighting, functionality, layout and furniture, connection with nature, quality of security and psychological comfort
11	Rezaeian et al. [22]	Designing a dynamic model for primary schools	Flexibility
12	Falzon and Conrad [23]	Designing primary school grounds for nature-based learning: A review of the evidence	Green learning spaces
13	Gray and Downie [24]	Designing thriving school ecosystems: The synergy of biophilic design, wellbeing science, and systems science	Biophilic design

These studies demonstrate that educational architecture design (schools) is not limited to functional aspects alone. They establish a framework for designing schools that aim for children's holistic development, which must address not just physical dimensions but also psychological, social, and cognitive aspects of childhood. Such comprehensive design directly impacts children's social intelligence, psychological well-being, and vitality.

2.4 | Case Studies

Considering the influential components discussed, several international and domestic examples have been examined below.

Table 2. International and domestic examples.

Image	Project Name and Year	Strengths	Weaknesses	Analysis
 	Ecole Maternelle Pajol, 2011	1) Inspired by the rainbow with the use of bright, cheerful, and energetic colors, even in the restrooms, 2) Playroom, rest area, and dynamic courtyard, 3) Use of various material textures, and 4) Flexible classroom furniture.	1) Safety concerns due to multiple floors and stairs, 2) Limited quiet and secluded spaces for concentration, 3) Difficulty in visual control and supervision by educators, and 4) Complex circulation paths and wayfinding.	The colorful and play-based design of ecole maternelle pajol offers an engaging and motivating environment but needs better balance with calm and simpler spaces to address children's psychological needs. Flexibility and ease of management by staff remain key challenges.

Table 2. Continued.

Image	Project Name and Year	Strengths	Weaknesses	Analysis
	Bromlands Primary School, 2015	1) Integration with surrounding green landscape, 2) Flexible and inviting indoor and outdoor learning spaces, 3) Use of natural light reflection, 4) Soft, natural color palette, 5) Annual assembly hall, dining room, play areas, and open spaces for children, and 6) Landmark concept and blurring the boundaries between landscape and architecture.	1) Complexity in the design and execution of multifunctional spaces, 2) Insufficient natural lighting in some areas, and 3) Complex access and circulation routes.	By emphasizing natural light, natural materials, flexible spaces, and play-based design, it creates a healthy and stimulating environment supporting children's mental health and social-cognitive development, though more attention is needed for quiet spaces and maintenance.
	Madrid Primary School, 2016	1) Minimalist spatial use and integration, 2) High flexibility, 3) Use of natural materials such as beech wood, and 4) Attention to all five senses.	1) Small spaces with thick, monochrome walls, 2) Modular, integrated furniture, 3) High maintenance and repair costs, 4) Unsuitability for different age groups.	The smart, human-centered design creates an excellent setting for creativity, interaction, and active learning. However, maintenance costs and supervision needs pose challenges. More secluded spaces and simplified structures could improve usability and user satisfaction.
	Kedec Kindergarten, 2010	1) Integration of open and enclosed spaces, 2) Creating a suitable and dynamic environment for children, 3) Use of a vibrant and joyful color palette, 4) Adequate natural light, and 5) Flexible furniture.	1) Lack of quiet spaces, and 2) Poor sound control.	Based on developmental psychology and human-centered architecture principles, it provides a suitable and health-promoting environment. However, more attention to quiet zones and better acoustic management could improve overall quality.

Table 2. Continued.

Image	Project Name and Year	Strengths	Weaknesses	Analysis
 	Shiraz Medical Preschool, 2019	1) Conceptual design inspired by Lego to engage children, 2) Bright colors to foster creativity and motivation, 3) Inspired by Iranian architecture with the presence of a porch and central courtyard featuring consoles and terraces of varying depths to reduce monotony and mass heaviness, 4) Collaborative spaces adjacent to classrooms with natural light through glass ceilings, and 5) Rich views through tall windows, glass hall, and green roof.	1) Lack of private and quiet spaces, 2) Noise pollution during busy hours, and 3) Limited flexible design for future expansion and modifications.	Creative design rooted in local culture and children's needs provides a good foundation for active learning. To enhance quality, improvements in quiet areas, sound management, and flexibility for future changes are necessary.
 	Hagh Panah Primary School, 2019	1) Simple movement organization avoiding complexity, 2) Readable and comprehensible form and space, 3) Use of green color to induce calmness, vitality, and creativity, and 4) Child-scale dimensions and proportions.	1) Noise pollution, 2) Lack of more private spaces, and 3) Low flexibility for future changes.	The simple, child-focused design fosters calmness and concentration, but improvements in acoustics, the creation of private zones, and increased design flexibility are needed to enhance performance.

In the study, an attempt was made to achieve a local and human-centered model for school construction by utilizing the achievements of the above examples. It was found that local architecture, semi-open spaces (porches, terraces, and inner courtyards), the use of local materials, forms in harmony with the humid climate, interactive spaces, open spaces for playing and learning, natural light, cheerful colors, and flexible movement paths, as well as the use of natural landscapes around the school, can provide a suitable platform for the formation of social relationships and the emergence of positive emotions in children, which have been among the key design strategies. These results are in line with previous research in the field of environmental psychology (such as the theories of Roger Barker and James Gibson), which emphasize the role of the environment in the formation of behavior and the development of social skills.

3|Research Findings

3.1|Influential Components on Social Intelligence and Vitality of Children Aged 7-12

After reviewing the theoretical framework and previous studies, a thematic classification of the factors affecting social intelligence was developed. This classification is shown in *Fig. 1*.

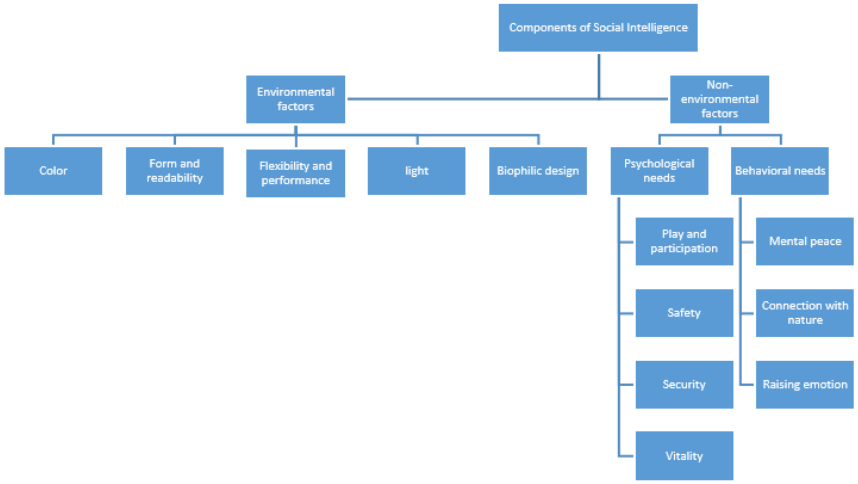

Fig. 1. Components of social intelligence.

According to *Fig. 1*, it can be concluded that the design of the primary school environment, especially in the age range of 7 to 12 years, plays a key role in promoting social intelligence and increasing children's vitality. The research findings can be explained at two macro levels:

Environmental components

The following components were identified as key factors in architectural design affecting children's social intelligence and vitality:

I. Color: In all the cases studied, including Ecole Maternelle Pajol in France and the Madrid School in Spain, the intelligent use of vibrant, diverse, and purposeful colors has been very effective in creating a happy, interactive, and creative environment for children.

II. Flexibility of spaces: The design of open, semi-open, and changeable spaces, in cases such as the Bromelands School or schools in Slovenia and Madrid, provides a place for diverse group experiences, participation, and effective social communication.

III. Connection with nature (biophilic design): Various cases show green spaces, natural elements, natural light, and proper ventilation. According to the article by Falzon and Conrad [23] and the Swiss school BUR Architekten, have a direct impact on children's psychological well-being, social interactions, and vitality.

IV. Readability and spatial form: The use of forms that are understandable to children, clarity of spaces, visual signs, and recognizable layouts, such as the Arhitektura Jure Kotnik project in Slovenia, plays a role in promoting children's sense of security, participation, and trust.

V. Play spaces and social participation: Most of the examples studied have spaces for interaction, group games, and shared physical activities that act as platforms for the development of children's social and EI.

Non-environmental components

In addition to physical factors, spaces should be designed to meet the psychological and behavioral needs of children. Indicators such as:

I. Social participation and interaction: Designing open and flexible spaces in schools facilitates group interactions and strengthens children's communication skills.

II. A sense of belonging and psychological peace: Using warm colors, natural light, and personalized spaces increases students' sense of ownership and psychological peace.

III. Possibility of free and exploratory play: Multipurpose, nature-based spaces provide children with the opportunity for creative play and learning through discovery.

IV. A sense of physical security and comfort: A safe, risk-free design that is appropriate for children's physical dimensions enhances the feeling of security and comfort in the school environment.

Non-environmental factors are among the features that can be strengthened with intelligent design. Based on the research objectives, the study of selected case studies has played an important role in extracting effective design indicators for promoting social intelligence and increasing children's vitality. The analysis of these schools shows that the quality of the educational environment plays an effective social and psychological role not only in the learning process but also in the development of children. The present study was conducted with the aim of designing an elementary school. The findings showed that the physical environment of the school if designed correctly, can be significantly effective in promoting social intelligence and increasing children's vitality.

In the study, an attempt was made to achieve a local and human-centered model for school construction by utilizing the achievements of the above examples. It was found that vernacular architecture, semi-open spaces (porches, terraces, and inner courtyards), the use of native materials, forms in harmony with the humid climate, interactive spaces, open spaces for play and learning, natural light, cheerful colors, and flexible movement paths, as well as the use of natural landscapes around the school, can provide a suitable environment for the formation of social relationships and the emergence of positive emotions in children, which were among the key design strategies.

These results are in line with previous research in the field of environmental psychology (such as the theories of Roger Barker and James Gibson), which emphasize the role of the environment in the formation of behavior and the development of social skills. Since the research approach was a combination of theoretical foundations of child-centered architecture, the psychology of social development, and knowledge of the climatic and cultural context of the region, in the research process, first, the components affecting social intelligence and vitality were extracted from scientific sources, then successful case studies were examined. Finally, a design appropriate to the project context was presented. From a theoretical perspective, the present study, utilizing the foundations of developmental psychology, childhood sociology, and architectural design principles for educational spaces, showed that several factors such as spatial flexibility, color, natural light, access to open spaces, the possibility of group interactions, and participation in creative activities play a decisive role in the social learning process of children.

Finally, the findings of this study show that school design can help promote social intelligence, self-confidence, group interactions, and mental and physical vitality of children by relying on environmental psychology approaches and child-centered architecture principles. This approach can provide a model for reviewing the school system in Iran. From a practical perspective, the design proposed in this study includes multipurpose spaces, flexible classrooms, collaborative open spaces, art workshops, educational gardens, and an open library, each of which can be a platform for the development of communication skills, problem-solving, group participation, and the expression of positive emotions.

4 | Research Suggestions

According to the research findings, the following suggestions are made for architectural designers, educational institutions, and education policymakers to improve the design of elementary schools to promote children's social intelligence and vitality:

I. Design based on the child's lived experience: Architects and urban designers should consider children not only as users of space but also as active subjects of spatial experience. Using methods such as participatory design with children can have more desirable results.

II. Integrating social intelligence components in spatial design: It is suggested that elementary schools be designed with spaces that allow children to express and practice participation, dialogue, group problem-solving, and informal interactions.

III. Increasing the use of natural elements in interior and exterior design: The use of plants, natural materials, extensive skylights, and built-in green spaces is recommended to promote mental vitality and reduce stress in children.

IV. Designing open and flexible spaces: Designing spaces that have multiple functions (such as combining play and education spaces), changeable classrooms, movable furniture, and group and individual spaces can meet diverse learning needs and help children's participation and self-confidence, creativity, and social adaptation.

V. Strengthening visual and graphic components: Using cheerful colors, legible forms, and graphic guideboards helps children's spatial understanding and identity in space.

VI. Reviewing existing school design standards: Redesigning schools that lack social interaction spaces or environmental vitality, based on the findings of this study, can lead to improved learning quality and social behaviors.

VII. Increasing interaction between indoor and outdoor spaces: Using open courtyards, semi-open multipurpose spaces, and large windows with views of green spaces helps to enhance children's connection with nature and others.

VIII. Pay attention to color, light, and natural materials: Using cheerful and energizing colors on the walls, sufficient natural light, and materials such as wood and natural fabrics, furniture, and flooring, along with adequate natural light, increase children's enthusiasm and vitality, help them focus and calm their minds, improve their mood, and reduce children's anxiety.

IX. Integrating play and education: Designing spaces that enable learning through play, interaction, and sensory experience is conducive to the development of children's social intelligence.

X. Creating dedicated spaces for play and interaction: Designing diverse spaces for group games, interpersonal interactions, and artistic or cultural activities that help develop children's emotional and social intelligence.

XI. Integrate educational spaces with informal spaces: Create a fluid connection between educational spaces, play spaces, libraries, and rest areas in order to break the classic dry boundaries and provide a flexible and inspiring environment

XII. Pay attention to biophilic design: Incorporate green spaces, natural elements, open landscapes, and easy access to the outdoor environment in school design in order to create a sense of connection with nature, reduce stress, and increase social interactions.

XIII. Use diverse and safe furniture and materials: Choose natural, harmless, and resistant materials that are both aesthetically and safely suitable for children.

XIV. Recommendation for educational policymakers: It is essential to update school design guidelines and adjust them based on environmental psychology approaches and evidence based on modern research.

Conflict of Interest

The authors declare that they have no conflict of interest regarding the publication of this manuscript.

Data Availability

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

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This research received no external funding.

5 | Conclusion

Finally, it can be said that school is not only an educational space but also a dynamic social platform for the formation of children's personalities, skills, and happiness. Intelligent design of the space can lead to greater interaction, reduce anxiety, and promote self-confidence and a sense of belonging in students.

The present study is a step toward the connection between architecture and child-centered psychology and can be the basis for new policies in school design. In addition to providing a local model for elementary school design, it can be used as a design model in other areas by adopting its principles. It is suggested that in future research, a long-term field evaluation of the impact of these designs on children's behavior should also be carried out.

The research findings show that school architectural design if based on developmental psychological principles and localized in the socio-climatic context, can tangibly lead to the promotion of social intelligence and increased children's vitality. Combining environmental design principles with a deep understanding of children's psychological and behavioral needs can lead to the creation of schools that provide not only an environment for education but also a platform for children's emotional, social, and happiness growth. The results can serve as a basis for developing a model for the architectural design of future-oriented elementary schools in Iran. These results emphasize the need for policymakers, architects, and educational planners to pay attention to designing environments with high interaction, spatial diversity, naturalism, and purposeful coloring.

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