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DEVELOPMENT OF PERCEPTION IN THE PROCESS OF VISUAL ACTIVITY IN PRESCHOOL CHILDREN

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ABSTRACT

Perception plays a central role in the cognitive, emotional, and social development of preschool children. Visual activity—a broad term that includes drawing, modeling, construction, and working with visual images—serves as one of the most powerful tools for stimulating perceptual growth. This article examines the mechanisms of perceptual development in early childhood, highlights the role of visual activity as a developmental medium, and presents pedagogical strategies that enhance perceptual skills. The analysis is based on contemporary developmental psychology, neurocognitive research, and early childhood education practices.

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Introduction

Preschool age is marked by rapid changes in sensory and cognitive functions, particularly in the child's ability to perceive and interpret visual stimuli. Perception, defined as the process of organizing, identifying, and interpreting sensory information, forms the foundation for later academic skills such as reading, writing, mathematics, and scientific reasoning. Among the multiple domains of perceptual development, **visual perception** holds a unique place, as around 80% of a child's learning in early years is mediated through visual channels [1].

Visual activity is a natural component of children's daily lives. Drawing with crayons, assembling puzzles, constructing buildings from blocks, observing pictures, and engaging in creative modeling are more than just recreational tasks. They actively shape children's perceptual acuity, spatial awareness, fine-motor coordination, and symbolic thinking. Understanding how visual activity contributes to perceptual development is essential for educators, parents, and psychologists seeking to optimize early childhood learning environments [2].

Perception evolves from basic sensory functions. In preschool age, children gradually refine their ability to distinguish shapes, colors, sizes, textures, and spatial relationships. According to J. Piaget, children during the preoperational stage (ages 2–7) rely heavily on visual cues to make sense of their environment. Perception becomes more differentiated, stable, and intentional as children gain experience interacting with objects [3].

Neuroscientific studies show that visual perception develops through active engagement with visual stimuli. Repeated manipulation of objects, exposure to artworks, and problem-solving tasks enhance the formation of neural pathways associated with visual discrimination, attention, and memory. The brain's plasticity in early years allows visual activity to significantly influence perceptual development by strengthening synaptic connections [4-7].

KEY CONTRIBUTIONS OF JEAN PIAGET



Fig 1. Theoretical Basis of Perceptual Development in Preschool Age

L. S. Vygotsky emphasized that perception develops through culturally mediated activities. Visual activity acts as a semiotic tool that introduces children to social symbols, representations, and meanings. Through guided participation, children learn to perceive not only physical attributes but also cultural and aesthetic qualities embedded in visual forms.

Visual Activity as a Medium for Perceptual Development

Drawing is one of the earliest and most accessible visual activities. When a child draws, they observe, analyze,

and reproduce visual characteristics of objects. This process develops:

- visual differentiation (distinguishing details),
- proportional perception (sizes, distances),
- color recognition,
- visual memory, and
- symbolic representation.

Furthermore, drawing encourages children to transform three-dimensional reality into two-dimensional representations, strengthening spatial reasoning.

Working with clay, playdough, or other plastic materials fosters tactile-visual perception. Children explore the shape, volume, and structure of objects through their hands. Modeling enhances:

- shape perception,
- volume understanding,
- kinesthetic feedback integration,
- visual-motor coordination.

It helps children develop a holistic perception of objects by integrating both tactile and visual sensory input.



Fig 2. Construction Play

Building with blocks, LEGO, or other construction sets promotes spatial perception. Construction activities help children understand:

- spatial orientation (left-right, above-below),
- symmetry and balance,
- geometric relationships,
- pattern recognition.

Construction tasks also stimulate logical thinking, planning, and problem-solving.

Working with Illustrations

Picture books, posters, and visual materials play an essential role in perceptual training. When children examine illustrations, they learn to focus on relevant details, identify relationships between elements, and derive meaning from visual compositions. This promotes visual attention, selective perception, and interpretive skills.

Key Components of Perceptual Skills Developed through Visual Activity

1. Visual Discrimination

Children learn to distinguish similarities and differences between objects. This skill forms the basis for reading letters, recognizing numbers, and identifying symbols.

2. Visual Memory

The ability to remember visual forms is strengthened through repeated drawing and observation tasks. Visual memory supports handwriting, reading fluency, and general learning performance.

3. Visual-Motor Integration

Coordinating visual information with motor actions is crucial for writing and other fine-motor tasks. Visual activity naturally improves hand-eye coordination.

4. Spatial Perception

Understanding spatial relationships between objects is developed through construction tasks and drawing. Spatial perception is essential for mathematics and geometry readiness.

5. Color and Shape Perception

Preschool children gradually develop stable concepts of color shades, shapes, and structural composition. Visual activity enhances aesthetic sensitivity and creative expression.

Pedagogical Strategies for Enhancing Perception through Visual Activity

1. Structured and Free Creative Tasks

A balanced combination of guided tasks (e.g., draw a house, complete a pattern) and free drawing allows children to develop both accuracy and creativity. Structured tasks refine perceptual precision, while free tasks stimulate imagination and personal expression.

2. Use of Varied Materials

Introducing children to diverse materials—paints, clay, natural objects, colored paper—broadens sensory experience and stimulates multi-modal perception.

3. Integration of Problem-Solving Activities

Teachers can enhance perception by including tasks that require comparison, classification, sequencing, and pattern completion. Such cognitive operations deepen perceptual analysis.

4. Incorporating Observation Exercises

Simple activities like observing leaves, fruits, toys, or artworks help children practice focused visual attention. Teachers can guide observation by asking questions about details, colors, shapes, and textures.

5. Encouraging Verbalization

When children describe what they see or create, they strengthen the link between visual and verbal processing. This supports conceptual development and improves perceptual clarity.

Role of the Educator in Supporting Perceptual Development

Teachers play a crucial role in structuring visual activities so they contribute meaningfully to perception. An educator must:

- provide rich visual environments,
- encourage exploration,
- guide children's attention to important details,

- design developmental tasks based on age and ability,
- give constructive feedback,
- promote reflective thinking about visual experiences.

Supportive interaction helps children move from spontaneous perception to more intentional and analytical forms.

Conclusion

Perceptual development during preschool years is a foundational process that shapes children's readiness for academic and everyday challenges. Visual activity, as a natural and motivating form of interaction with the environment, offers rich opportunities to foster visual perception, motor coordination, spatial reasoning, attention, and creativity. When thoughtfully organized, visual tasks serve not only as artistic activities but also as powerful developmental tools.

The integration of drawing, modeling, construction, and visual observation into early childhood education creates a comprehensive environment where perception evolves systematically and holistically. Educators and parents who recognize the developmental potential of visual activity can better support children's cognitive growth, aesthetic awareness, and overall learning success.

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