


# Chapter 7


## The Interplay of Bilingualism and Psychomotor Development in Children: Enhancing Cognitive and Physical Growth

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## ABSTRACT

*Early childhood development is crucial for establishing cognitive, physical, and social skills. Bilingualism significantly influences this, particularly in psychomotor development, which integrates physical movement with cognitive processes. This chapter explores how bilingual children's dual-language experience enhances their psychomotor skills. Psychomotor development involves motor skills and cognitive abilities like attention, memory, and executive functions. Bilingualism enriches this connection because managing two languages demands considerable mental effort. Bilingual children often show superior attentional control and working memory, vital for psychomotor tasks such as coordinating movements and following complex instructions. This advantage is evident in physical activities like sports or dance, where they display better attention regulation and task-switching efficiency. Bilingualism shapes the neural mechanisms underlying attention and memory, particularly in the prefrontal cortex, which is responsible for higher cognitive functions and motor planning*

## INTRODUCTION

The early developmental stages of children are fundamental for fostering the cognitive, physical, and social capacities that shape lifelong learning and adaptability. Recent research highlights how bilingualism, long valued for its linguistic and cultural advantages, also plays a significant role in enhancing psychomotor development during early childhood. For instance, integrating motor games with bilingual activities in kindergarten settings has shown promising results in supporting both language acquisition and psychomotor skills (Sanz Garrido, 2020). This dual engagement encourages children to coordinate complex motor tasks while simultaneously managing two linguistic systems, laying a strong foundation for multitasking and executive function development.

Beyond the classroom, equitable bilingual teaching models that embed psychomotor activities within the arts have emerged as effective strategies for reinforcing the interplay between movement and cognitive growth (Martínez de Sarasa Buchaca, 2023). Such approaches use dance, drama, and visual arts to stimulate motor skills while nurturing bilingual proficiency, offering a holistic developmental environment. This intersection of creative expression and bilingual education demonstrates that psychomotor tasks, when interwoven with language learning, can amplify children's capacity for embodied cognition—a key aspect of early childhood growth.

However, the relationship between bilingualism and psychomotor development is not without complexity. Research suggests that while bilingualism can sharpen

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