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AN OVERVIEW ON ASSESSMENT AND DEVELOPMENT OF EXECUTIVE FUNCTION (EF) DURING CHILDHOOD

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ABSTRACT

The difficulties surrounding the evaluation of executive function (EF) in children and teens are discussed in this review article, as well as the developmental pattern of executive functions throughout childhood. EF is defined first, followed by a description of the cognitive and behavioral deficits associated with cognitive deficits (EDF). A developmental model of EF is suggested, which includes four distinct but interconnected executive subdomains (selective attention control, mental abilities, goal planning, and information processing), all of which work together to allow "executive control." The characteristics that make up conventional EF measurements, as well as the issues with test interpretation, are addressed. The ecological validity of EF tests and neurological assessment techniques is investigated, and additional measuring methods are given to allow a more complete and reliable EF evaluation. The maturity of executive domains is mapped based on developmental and normative research. Attentional control seems to develop quickly in early life, beginning in infancy. Cognitive flexibility, goal planning, and information processing, on the other hand, go through a crucial phase of development between the ages of 7 and 9, and are reasonably mature by the age of 12. At the start of adolescence, there is believed to be a transitional phase, following which "executive control" is expected to develop. Longitudinal studies combining structure and function neuroimaging are needed to validate our present knowledge of EF development and to further improve our understanding of thinking abilities.

KEYWORDS: Cognitive, Development, Evaluation, Executive Function.

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