Temporal discounting and attention-deficit/hyperactivity disorder in childhood: reasons for devising different tasks

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Abstract

INTRODUCTION: Temporal discounting (TD) describes how a certain reward is seen as less valuable the more its delivery is postponed. There are two main types of TD tasks, hypothetical and real, both of which use monetary rewards. Over the last few years, however, variants of these tasks have been adjusted to assess clinical groups of children showing impulsivity as found in attention-deficit/hyperactivity disorder (ADHD).

OBJECTIVE: To review and discuss studies conducted over the last 10 years on the use of TD tasks in the assessment of pediatric patients with ADHD.

METHOD: For this literature review, articles were non-systematically selected from PubMed, MEDLINE and SciELO databases to include experimental studies on the use of at least one TD paradigm to assess and distinguish ADHD and non-ADHD groups.

RESULTS: Of the studies assessed, 76.19% used hypothetical tasks, followed by real tasks (28.57%), and, finally, tasks using different types of reward, such as toys or rewarding activities (14.28%).

CONCLUSIONS: Although assessed in few studies, real and alternative tasks appeared to be effective in differentiating clinical groups and suitable for investigating hot executive functions in childhood.