

## Computerized Cognitive Training and Psychological Resiliency among Adolescents with Learning Disabilities

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**Abstract :** The goal of the study was to examine the effects of Computerized Cognitive Training (CCT) with and without cognitive mediation on Executive Function (EF) (planning and self-regulation) and on psychological resiliency among adolescents with Attention Deficits Hyperactive Disorder (ADHD) with or without Learning Disabilities (LD). Adolescents diagnosed with Attention Deficit Disorder and / or Learning Disabilities have multidimensional impairments that result from neurological damage. This work explored the possibility of influencing cognitive aspects in the field of Executive Functions (specifically: patterns of planning and self-regulation) among adolescents with a diagnosis of Attention Deficit Disorder and / or Learning Disabilities who study for a 10-12 grades. 46 adolescents with ADHD and/or with LD were randomly applied to experimental and control groups. All the participants were tested (BRC- research version, Resiliency quaternaries) before and after the intervention: mediated/ non-mediated Computerized Cognitive Training (MINDRI). The results indicated significant effects of cognitive modification in the experimental group, between pre and post Phases, in comparison to control group, especially in self-regulation (BRC- research version, Resiliency quaternaries), and on process analysis of Computerized Cognitive Training (MINDRI). The main conclusion was that even short-term mediation synchronized with CCT could greatly enhance the performance of executive functions demands. Theoretical implications for the positive effects of MLE in combination with CCT indicate the ability for cognitive change. The practical implication is the awareness and understanding of efficient intervention processes to enhance EF, learning awareness, resiliency and self-esteem of adolescents in their academic and daily routine.

**Keywords :** attention deficits hyperactive disorder, computerized cognitive training, executive function, mediated learning experience, learning disabilities

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