

**BAR-ILAN UNIVERSITY**

**The Correlation Between Social Interaction  
and Helping Behavior among Children with  
and without SLD and ADHD and Their  
Interaction with a Virtual Player**

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## Abstract

The study focuses on the social aspect of children with specific learning disabilities (SLD) and/or Attention Deficit and Hyperactivity Disorder (ADHD), who experience objective and accompanying social difficulties. It aims to examine the correlation between social interactions and helping behavior as demonstrated by interaction with a virtual player, in a specially designed computer game (Co-Op world) that was programmed to characterize helping behavior, and compare these traits to those of children with typical development (TD).

The study included 120 children (43 SLD/ADHD and 77 TD) ages 9-11 years ( $M=10.73$ ,  $SD=0.90$ ). They participated two 30-minutes sessions, where they filled out self-reported questionnaires and played the game. Results showed no difference between the study groups in overall scores of self-reported social interactions or helping behavior. However, data from the computer game revealed different results: initially, the SLD/ADHD group exhibited higher selfish and lower altruistic helping behaviors compared to the TD group. Within the entire sample, a correlation was found between the all sample social skills and the self-reported helping behaviors, as well as the helping behaviors according the computer data. Also, as the SLD/ADHD group social interactions increased, selfish helping behavior decreased and altruistic helping behavior and percentage of assistance to the virtual player increased. This, compared to the TD students: as their social interaction increased, their inner-sustaining and receptive-giving helping behaviors decreased and altruistic increased. The grouping variable served to moderate the correlation between social skills and computer game scores, and demonstrated that correlation between self-reported social skills and game data was significantly higher for the SLD/ADHD group.