Strength-based Interventions for FASD

Fetal alcohol spectrum disorder (FASD) is a preventable brain injury caused by alcohol use by the mother during pregnancy. Children with the disorder often experience social, behavioural, or learning difficulties; many interventions focus on these weaknesses and attempt to improve them. This research project focuses instead on the strengths of the child, and attempts to further develop them. These strengths often include motor skills and working with computer technologies.

What is the purpose of the study?
➢ To improve motor skills and brain functions such as learning and memory in children with FASD

How will the study be done?
➢ Children will participate in one or both of the following:
  i) An activity program based on their strengths in motor skills, or on areas they want to improve upon
  ii) A neurofeedback training program using computer games. In this program, the child plays a video game while wearing a special headset that allows scientists to observe brain activity. When a child becomes excited, anxious, or distracted, scientists can change how the video game appears on the screen. Their ability to play or see the game on the screen will be interrupted until they can re-focus or calm down.

➢ Children will be tested before and after participating in the study for motor skills, learning and memory, and other brain functions.

Why is this study important?
➢ Improved motor skills in the children participating in the study may carry over into other parts of their lives; they may increase participation in physical and social activities in school and daily life
➢ Children participating in the study may have greater success in physical activities, allowing them to lead active lifestyles; increased physical activity is linked with lower risk of chronic disease and with mental health benefits as well.

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