

Recollect the Game: A Novel Treatment for Executive Functioning Deficits in Adults With ADHD

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ClinicalTrials.gov Identifier: NCT03437993

Recruitment Status : Not yet recruiting

First Posted : February 19, 2018

Last Update Posted : February 19, 2018

See [Contacts and Locations](#)

Sponsor:

McMaster University

Information provided by (Responsible Party):

McMaster University

• Study Details

- [Tabular View](#)
- [No Results Posted](#)

- [Disclaimer](#)
- [How to Read a Study Record](#)

Study Description

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Brief Summary:

Adults who have attention deficit hyperactivity disorder (ADHD) suffer from significant occupational, academic and social problems, many of which are believed to be a result of problems with executive functioning. Executive functioning refers to a group of neuro-psychological functions which include sustained attention, working memory, verbal fluency, as well as motor and mental processing speed. Individuals with ADHD have been shown to have deficits in executive functioning independent of IQ, co-occurring psychiatric disorders, gender, and ADHD subtype. "Recollect" is an application (App) based working memory training video game where participants conduct 3-different adaptive working memory tasks. In each of these tasks participants are presented with a set of stimuli to be remembered while playing a simple platform game where they help navigate an astronaut across the screen and dodge obstacles. Recollect has been designed for all age groups to an interesting, fun and effective brain-training activity. The memory tasks included in the game have been independently shown to improve working memory in a manner that transfers to untrained tasks.

The purpose of this study is to evaluate the effects of playing Recollect versus Tetris for 20 minutes per day, 5 days per week over a 4 week period, on executive functioning deficits in individuals who have Adult ADHD.

Condition or disease	
Adult ADHD	Other: Recollect, the gameOther:

Detailed Description:

The primary objective is to evaluate the effects of playing Recollect versus Tetris for 20 minutes per day, 5 days per week over a 4 week period, on executive functioning deficits in individuals who have Adult Attention Deficit Hyperactivity Disorder (ADHD). Consenting participants will be screened using the Mini International Neuropsychiatric Interview for DSM-5 (MINI) to confirm ADHD diagnosis. Participants will be asked to download either Recollect or Tetris on their own mobile device. Following a training/orientation session, they will

be asked to spend 20 minutes per day at least 5 days per week playing Recollect or Tetris over a 4 week period. At Week 4, study staff will check the time log on the Recollect/Tetris App to confirm how much time was spent playing the game. Participants will be asked to complete two ADHD symptom severity scales, as well as App-based neurocognitive testing at baseline (Week 0) and endpoint (Week 4).

Study Design

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Study Type : Interventional (Clinical Trial)

Estimated Enrollment : 40 participants

Allocation: Randomized

Intervention Model: Parallel Assignment

Masking: None (Open Label)

Primary Purpose: Treatment

Official Title: Recollect the Game: A Novel Treatment for Executive Functioning Deficits in Adults With ADHD

Anticipated Study Start Date : April 1, 2018

Estimated Primary Completion Date : March 31, 2019

Estimated Study Completion Date : June 1, 2019

Arms and Interventions

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Arm	Intervention/treatment
<p>Experimental: Recollect</p> <p>Recollect is a video game which incorporates scientifically supported renditions of N-Back, Item Span, and Multiple-Identity tracking tasks. These tasks are independently shown to improve working memory in a manner that transfers to untrained tasks.</p>	<p>Other: Recollect, the game</p> <p>"Recollect" is a working memory training game</p>
<p>Sham Comparator: Tetris</p> <p>Tetris is a video game which has not been shown to have any benefits in the improvement of executive functioning.</p>	<p>Other: Tetris</p> <p>App-based video game where shapes are rotated and placed to fit a grid</p>

Outcome Measures

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Primary Outcome Measures :

1. Change from baseline on The Behavioral Rating Inventory of Executive Functioning - Adult Version (BRIEF-A) [Time Frame: Change from baseline to week 4]

It is a validated, clinician-rated scale, measuring executive functioning. The scale includes 75 items that rates patient symptoms on a 3-point Likert scale (1 = behavior is never observed to 3 = behavior is often observed). Scores range from 75 to 225: Higher scores indicate greater impairment in executive functioning.

Secondary Outcome Measures :

1. Change from baseline on the Barkley Adult ADHD Rating Scale (BAARS-IV) [Time Frame: Change from baseline to week 4]

Self-report scale evaluating ADHD symptoms. Symptom count scores range from 1 to 27, with higher scores indicating more ADHD symptoms. Total scores range from 27 to 108, with higher scores indicating greater severity of symptoms.

2. Change from baseline on an App-based neuro-cognitive battery [Time Frame: Change from baseline to week 4]

A number of neuro-cognitive executive functioning tests, which will be administered via a smartphone application

Eligibility Criteria

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Information from the National Library of Medicine

Choosing to participate in a study is an important personal decision. Talk with your doctor and family members or friends about deciding to join a study. To learn more about this study, you or your doctor may contact the study research staff using the contacts provided below. For general information, [Learn About Clinical Studies](#).

Ages Eligible for Study: 18 Years and older (Adult, Senior)

Sexes Eligible for Study: All

Accepts Healthy Volunteers: No

Criteria

Inclusion Criteria:

1. Males and females aged 18 and older who own a mobile device such as a Smartphone or tablet.
2. Current diagnosis of Adult ADHD, at any stage of treatment.
3. Comorbid psychiatric conditions will be allowed.
4. Medication or psychotherapy must have been stable (no dose changes) for 4 weeks prior to study participation.
5. Must be able to read, write and understand English.

Exclusion Criteria:

1. Participant does not own a Smartphone or tablet.
2. No dose changes during the 4 week study period.
3. No initiation of new psychological therapy or counselling during the 4 week study period.

Contacts and Locations

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Contacts

Contact: Beth Patterson, MSc 289-396-4242 bpatter@mcmaster.ca

Contact: Jasmine Turna, PhD(c) 289-396-4242 turnaj@mcmaster.ca

Locations

Canada, Ontario

MacAnxiety Research Centre

Not yet recruiting

Hamilton, Ontario, Canada, L8S 1B7

Contact: Beth Patterson, MSc 289-396-4242 bpatter@mcmaster.ca

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Principal Investigator: Michael Van Ameringen, MD, FRCPC

Sponsors and Collaborators

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More Information

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Responsible Party: McMaster University

ClinicalTrials.gov Identifier: [NCT03437993](#) [History of Changes](#)

Other Study ID Numbers: Recollect_ADHD

First Posted: February 19, 2018 [Key Record Dates](#)

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Last Verified: February 2018

Individual Participant Data (IPD) Sharing Statement:

Plan to Share IPD: Undecided

Studies a U.S. FDA-regulated Drug Product: No

Studies a U.S. FDA-regulated Device Product: No

Keywords provided by McMaster University:

ADHD

executive functioning

game