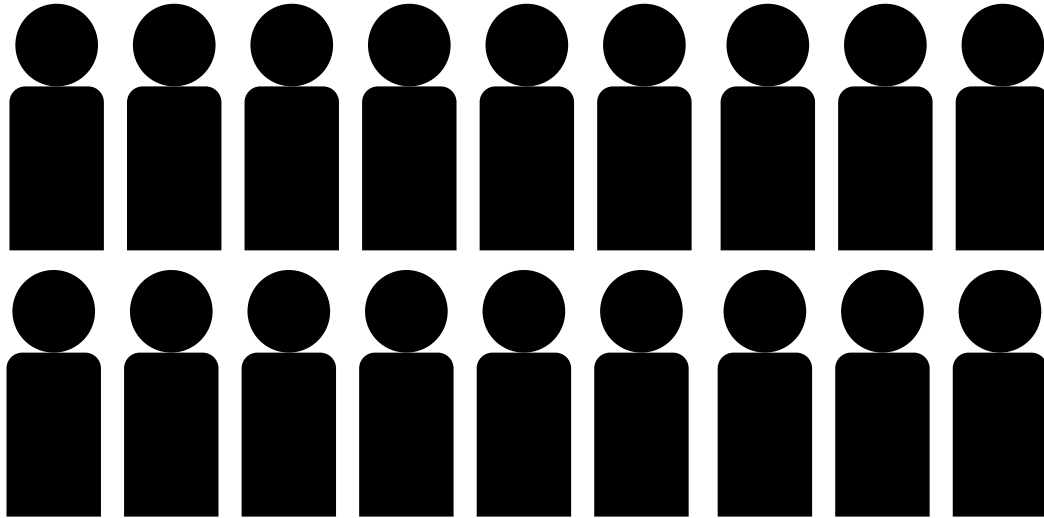




Incorporating Childhood Games into The Memory Club Program

Sofia de Oliveira, Gabriella Fiorentino, Braden St.Jacques, & Nicholas Roschewsk

30 Million People Worldwide are Affected by Alzheimer's



$\frac{2}{3}$ of Those People Live in Developing Countries





Our Project

To incorporate participant's childhood games into the Memory Club Program; to decrease anxiety and enhance their quality of life by improving their overall cognitive function.

Goal



The Memory Club

The Memory Club is a program for elderly people who experience memory loss issues



Discussion



Game



Art and Craft



Approach & Methods

Research
Games

Identify
Games and
Arts&Crafts

Identify Additional Games

Evaluate
Games

Develop
Criteria

Apply &
Refine
Criteria

Rank and
Pair Games

Plan Lesson

Complete
Lesson Plan

Observe

Data
Collection

Feedback

Evaluate
success of
Game

Propose
Suggestions
for the
Future

Assess
Results

Pre Test

Post Test

Compare
Results

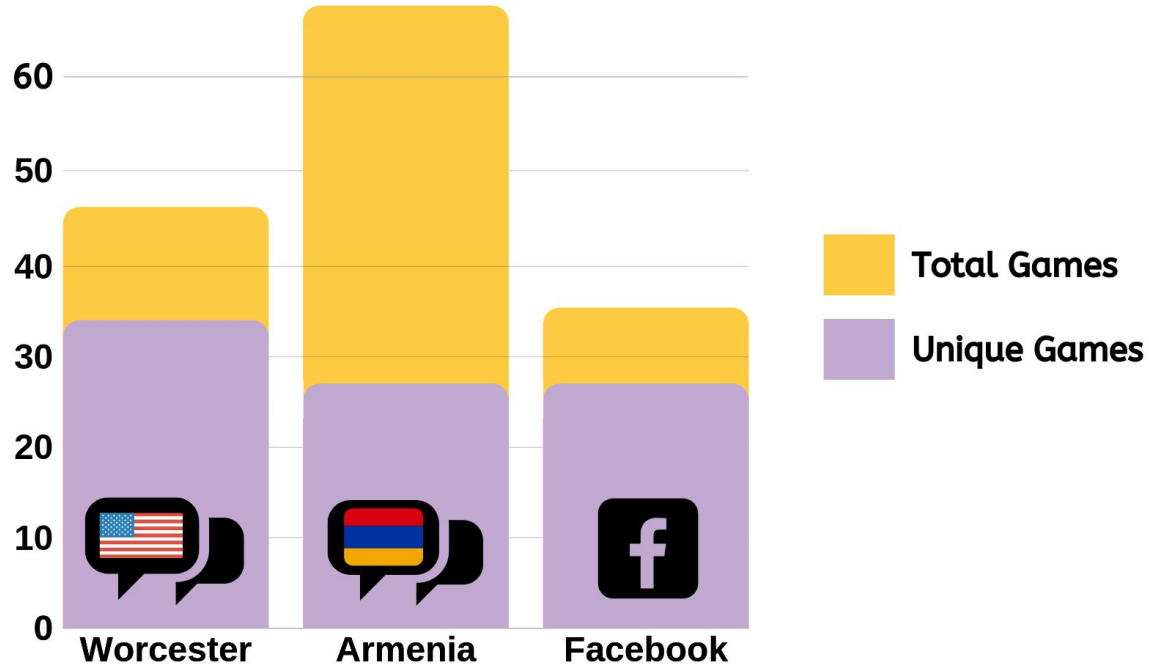
January & February, 2019

March, 2019

April, 2019

May, 2019

Community Outreach was the Most Successful Way to Identify Armenian Games



Research Games

Evaluate Games

Assess Results

Identify Games and Arts&Crafts

Identify Additional Games

Develop Criteria

Apply & Refine Criteria

Rank and Pair Games

Plan Lesson

Complete Lesson Plan

Observe

Data Collection

Propose Suggestions for the Future

Pre Test

Post Test

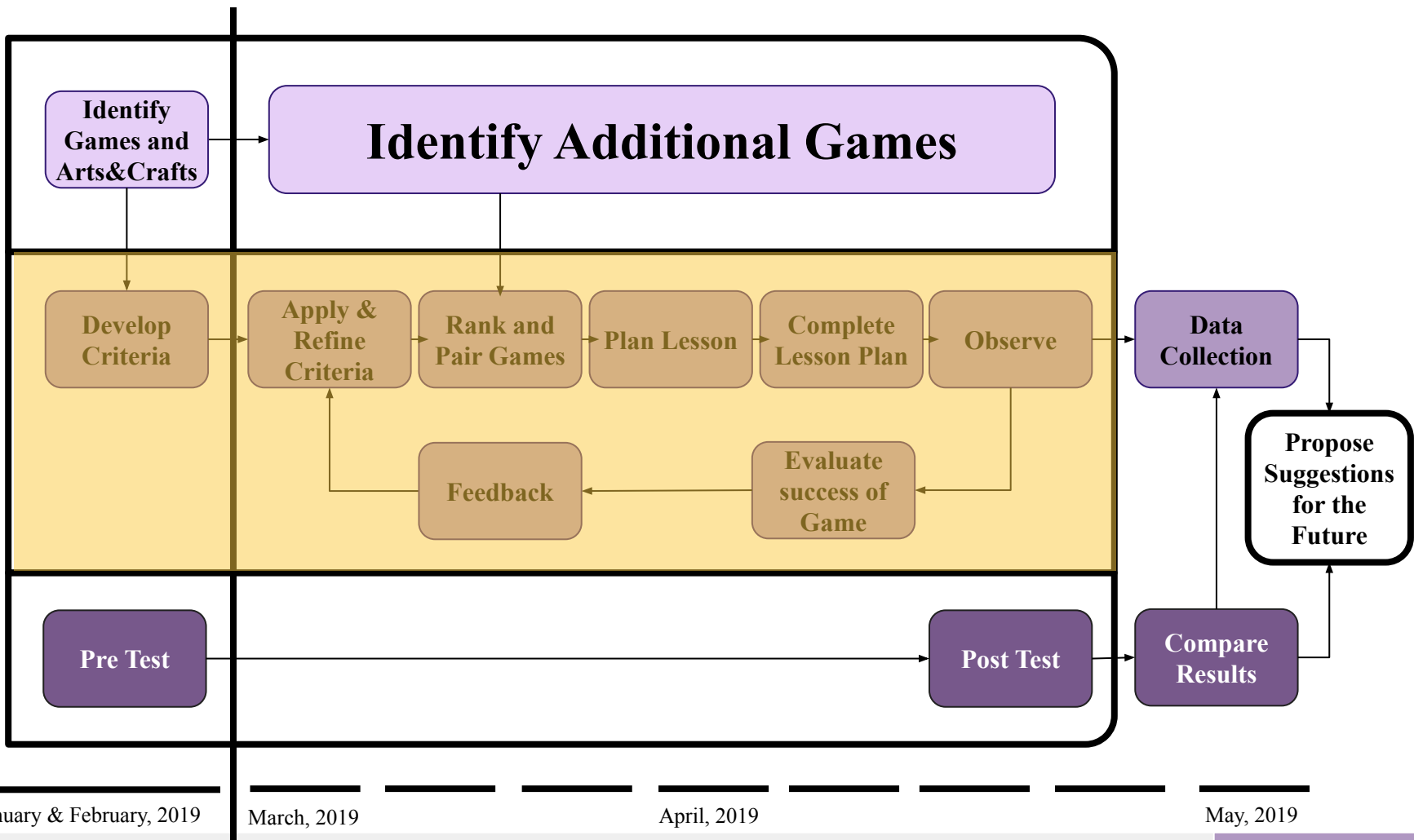
Compare Results

January & February, 2019

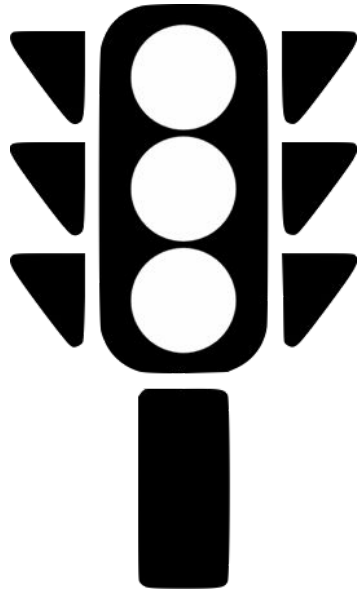
March, 2019

April, 2019

May, 2019



Games that Passed Through the Filters Were Ranked Using the Scaled Items

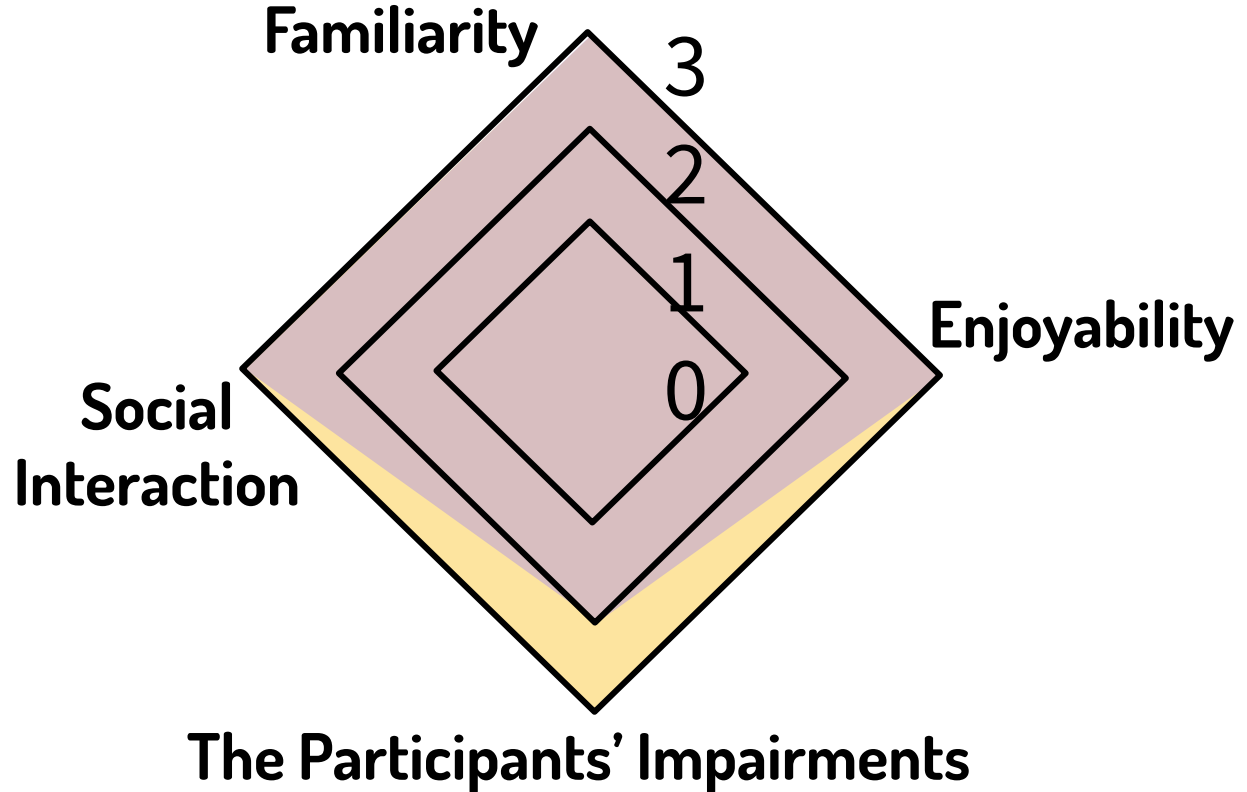


Filters

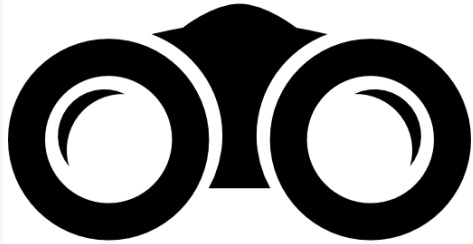


Scaled Items

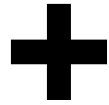
Games Were Paired with Arts and Crafts in a Complementary Fashion to Maximize Benefits



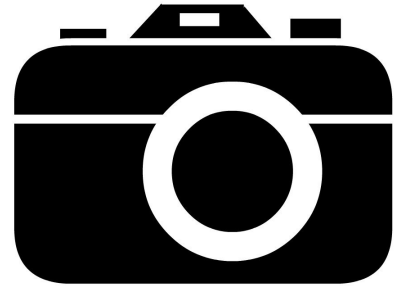
Data was Collected Using Three Different Methods



Observations



Survey



Photographs

Research
Games

Evaluate
Games

Assess
Results

Identify
Games and
Arts&Crafts

Identify Additional Games

Develop
Criteria

Apply &
Refine
Criteria

Rank and
Pair Games

Plan Lesson

Complete
Lesson Plan

Observe

Data
Collection

Feedback

Evaluate
success of
Game

Propose
Suggestions
for the
Future

Pre Test

Post Test

Compare
Results

January & February, 2019

March, 2019

April, 2019

May, 2019

Changes in Cognitive Function and Anxiety Were Measured By Two Standardized Assessments



**Montreal
Cognitive
Assessment
(MoCA)**



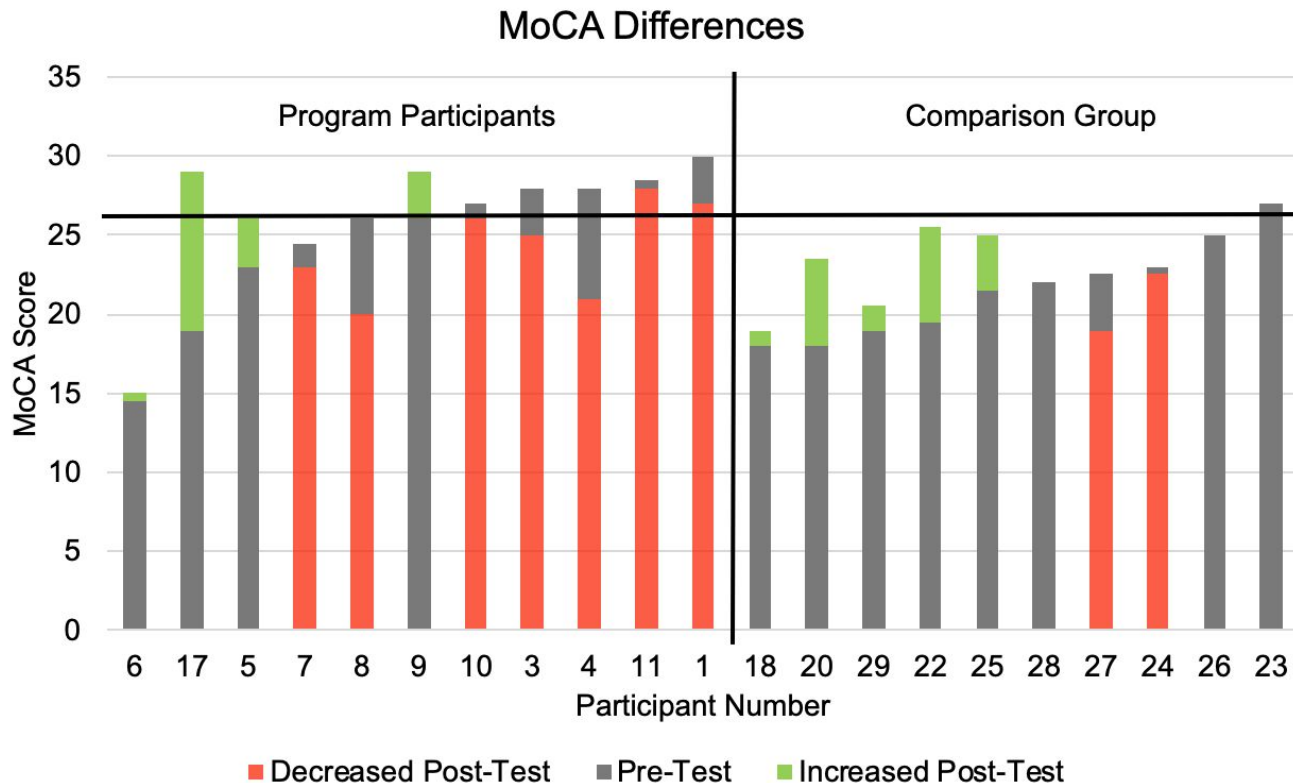
**Geriatric Anxiety
Scale 10 Item
(GAS-10)**



Test Results

Results of the MoCA Test Were Opposite the Predicted Outcome

Avg: -0.5



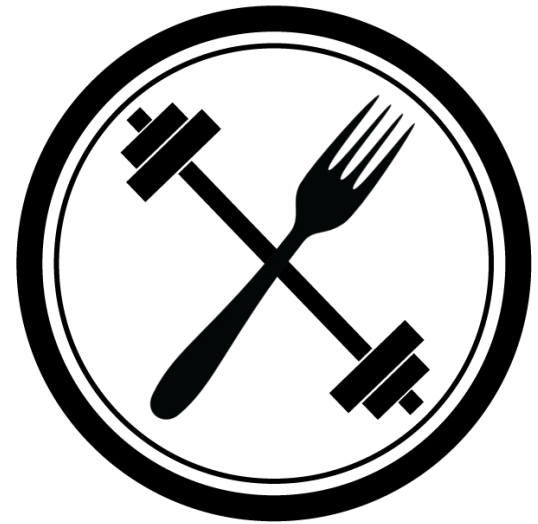
Several Factors Contribute to Unreliable MoCA Test Data



Timing of Test



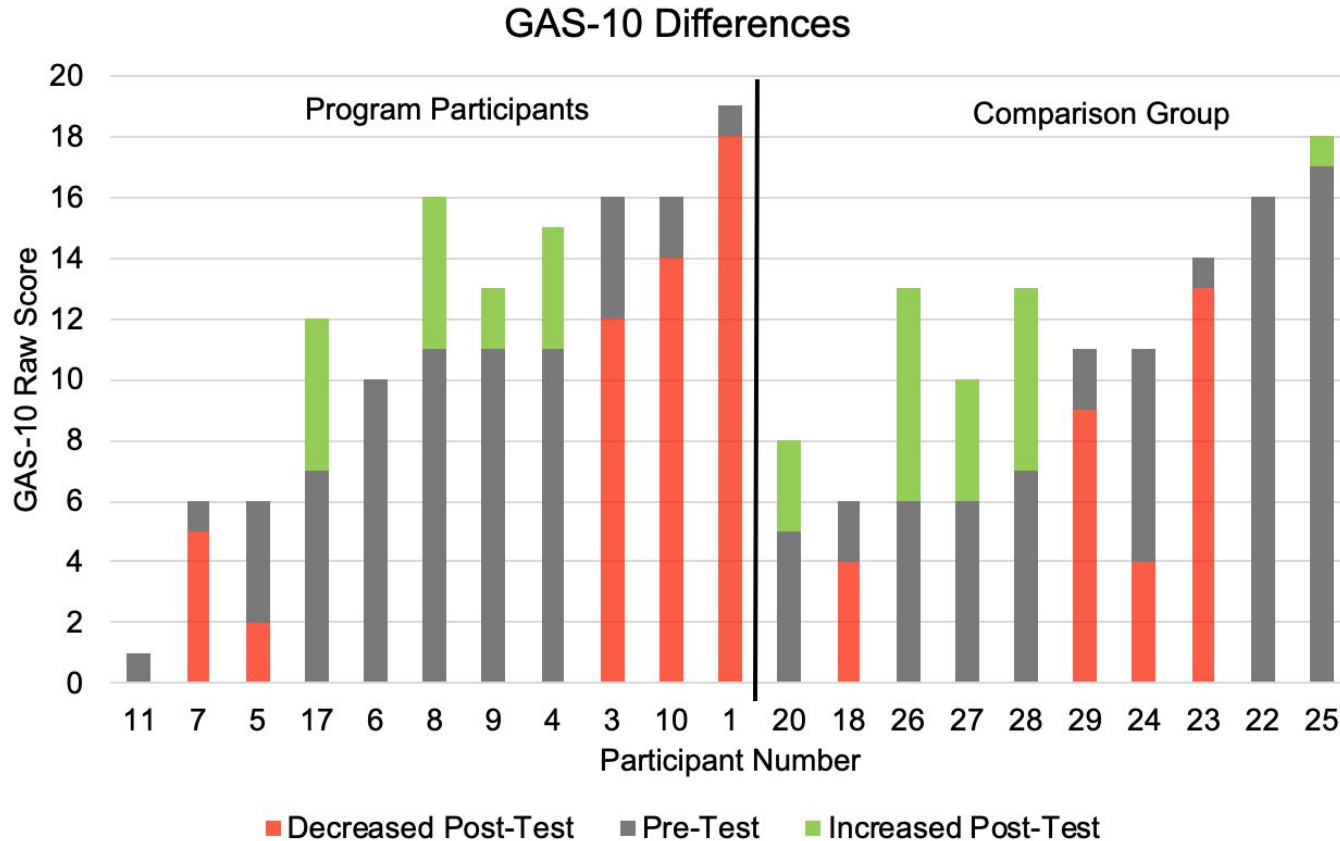
**Inconsistent
Scoring**



Lifestyle

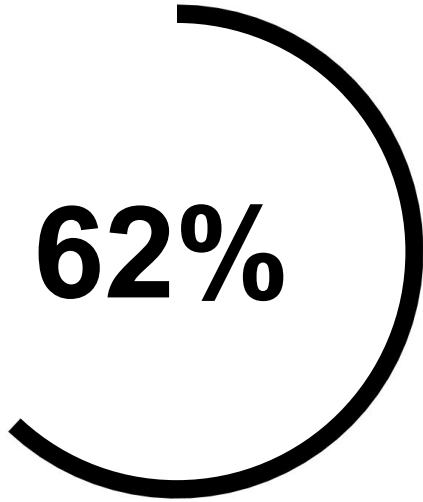
The Results of the GAS-10 Were as Expected

Avg: -1

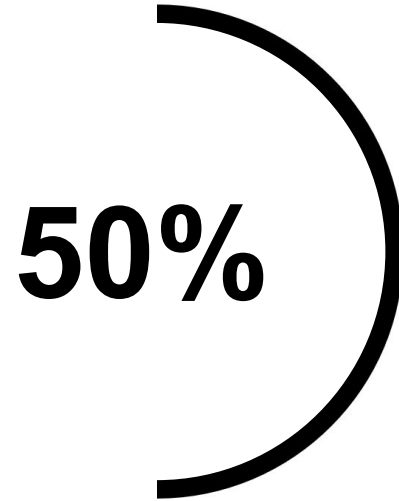


Avg: 0.9

Participants of the Memory Club Had A Larger Reduction in Anxiety than the Comparison Group



Participants



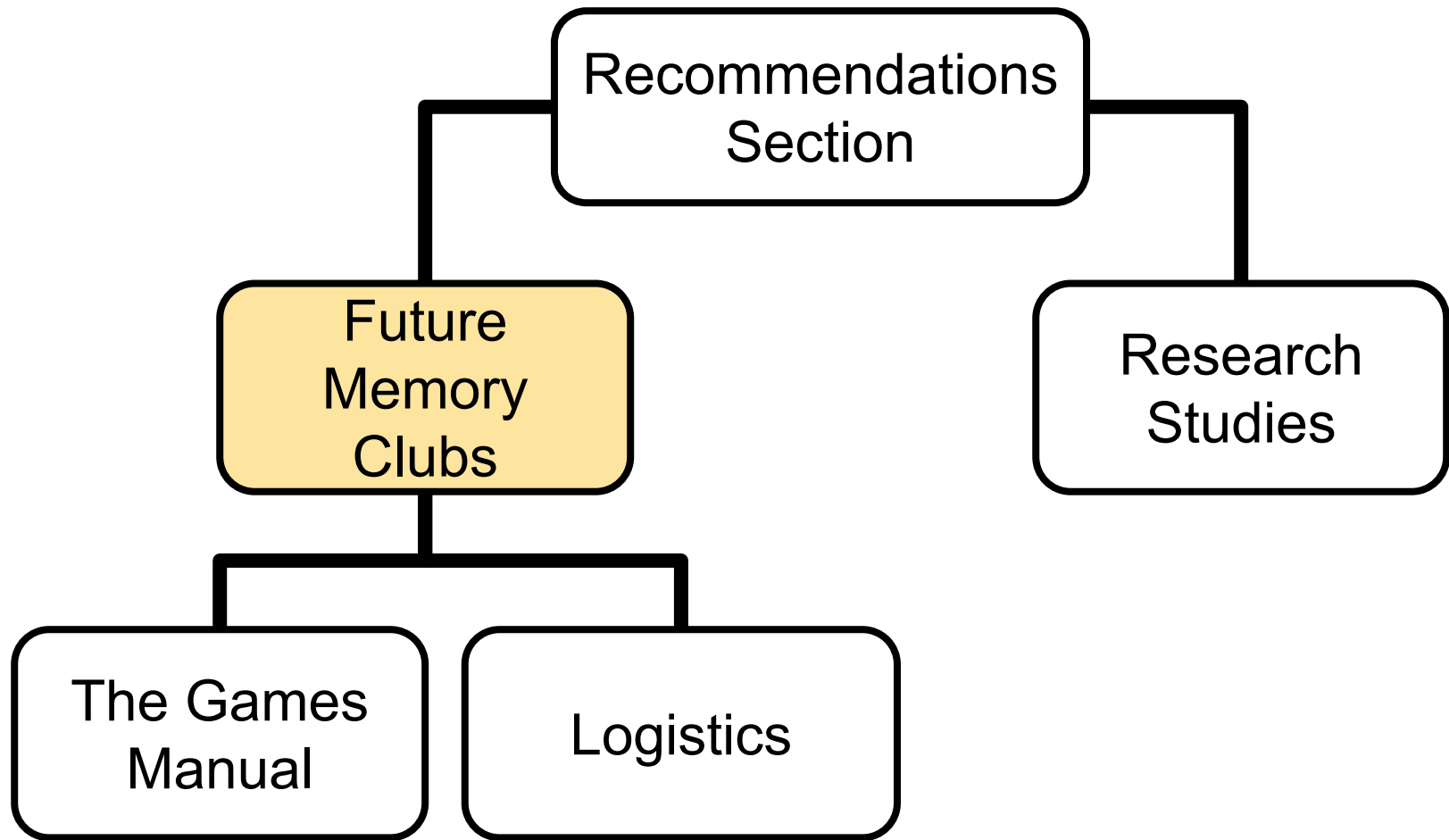
Comparison Group



Findings, Conclusions, & Recommendations

The Memory Club Was a Success Despite Scoring Challenges

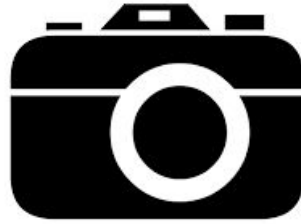




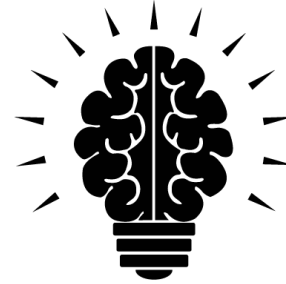
The Games Manual Condenses All of Our Findings and Recommendations into One Location



Game Title & Description



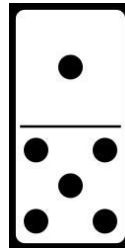
Pictures



Cognitive Function

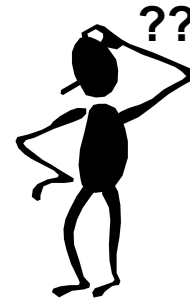


Instruction & Rules



X 4

Materials & Amounts



Cognitive Difficulty

Successful Games Have Two General Traits: Competitive and Familiar



Familiar

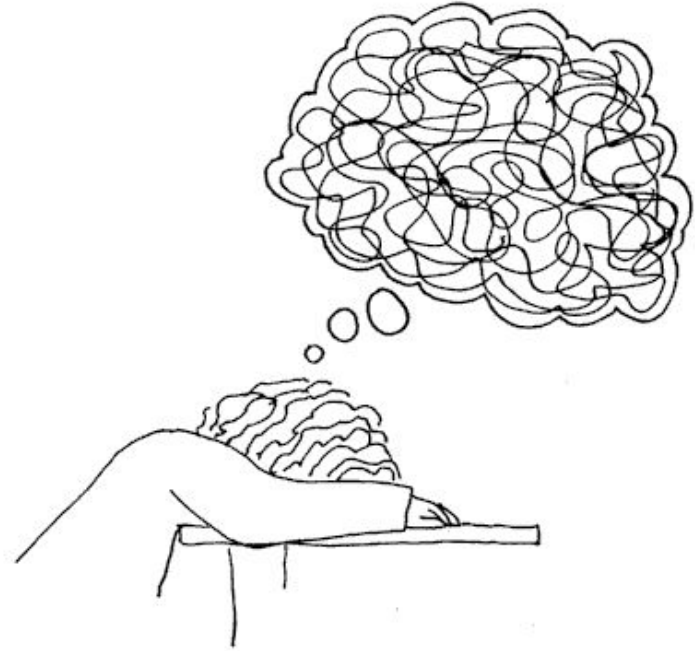


Competitive

Unsuccessful Games Have Two General Traits: Not Familiar and Too Complex



Unfamiliar



Too Complex

Checkers, Lotto, Dominoes, Broken Telephone, Hidden Figures, Zelena, and Puzzles Should be Implemented

Staple Games	Backup Games	Unsuccessful Games
<ol style="list-style-type: none">1. Lotto2. Checkers3. Dominoes4. Zelena5. Jigsaw Puzzles	<ol style="list-style-type: none">1. Halamola (Hidden Figures)2. Broken Telephone	<ol style="list-style-type: none">1. Concentration2. Backgammon3. Tag Saruh

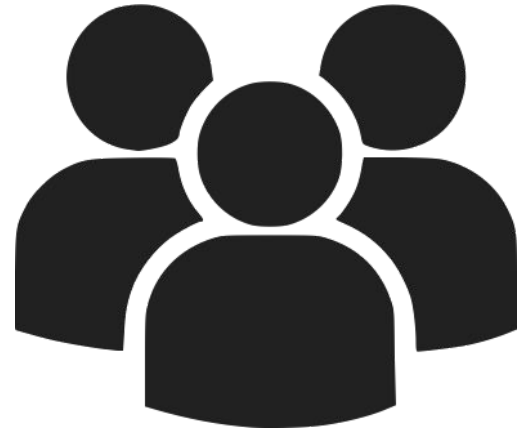
Aspects of the Program To Be Included in Future Memory Clubs



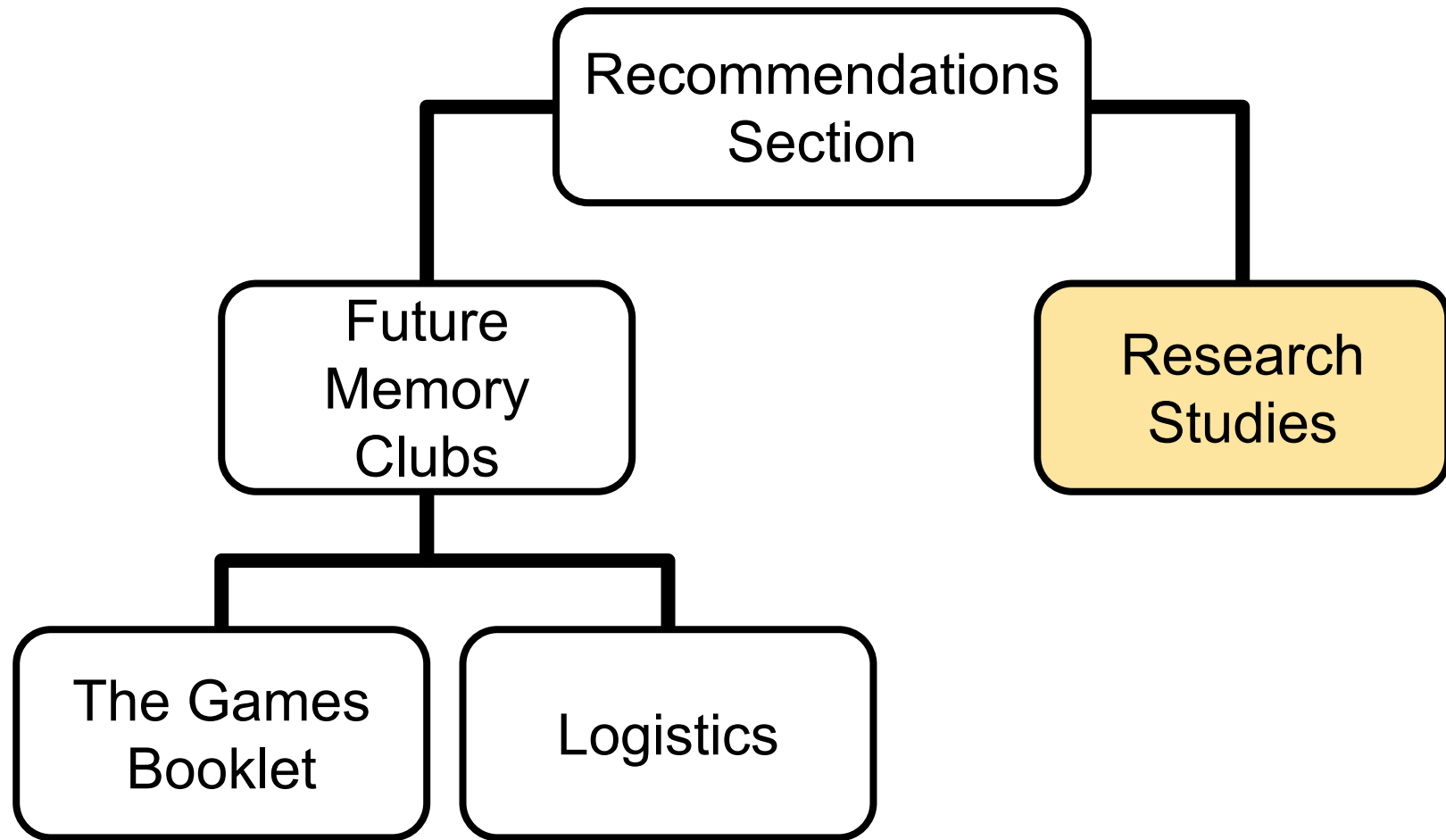
**Structure of the
Program**



**Games Available at
the Facility**



Volunteer Program



Changes Should be Made for Future Research Studies of the Memory Club



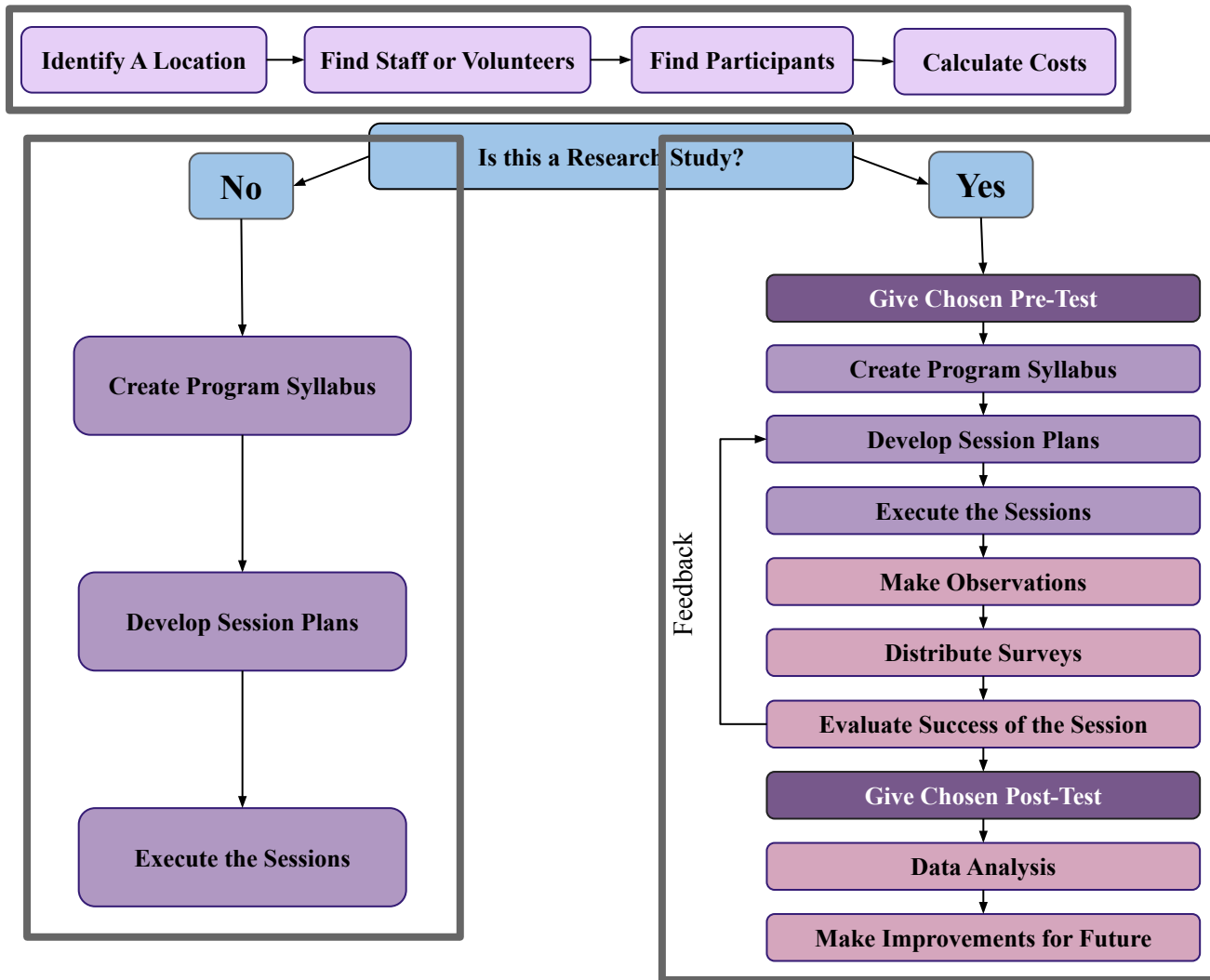
**Minimal Social
Interaction**



**Elimination of
other Memory Club
Elements**



Standardized Scoring



Thank You to All Who Supported Us Along the Way!



**Armine Hovannisian
Hasmik Jinanyan
Arevik Antonyan
Orran Staff**



**Michael Aghajanian
Holly Ault
Paula Quinn**



Dr. Jane Mahakian



Thank You For Your Time!