INTELLECTUAL AND SOCIAL ENGAGEMENT THROUGH THE LIFE SPAN: A FIRST LOOK AT THE SENIOR ODYSSEY PROGRAM

Jeanine M. Parisi, Lauren N. Norris, Joseph R. Miles, Daniel G. Morrow, and Elizabeth A. L. Stine-Morrow
University of Illinois at Urbana-Champaign

RATIONALE

The engagement hypothesis of cognitive aging suggests that age-related declines in intellectual functioning may to some extent be buffered by a lifestyle marked by social and intellectual activities (e.g., Schoolder et al., 1999, 2001), so that healthy minds are engaged minds. However, in the presence of cultural stereotypes, engagement in mentally demanding tasks is associated with youth, with the aged assumed to be either disinterested or unable to participate in intellectually stimulating activities (e.g., Riley & Riley, 1994). As a result, opportunities for elders to engage in cognitively stimulating activities may be restricted. These culturally defined limitations may actually exacerbate biologically based age-related declines in mental mechanics.

We are in the process of developing the Senior Odyssey program designed to promote social and intellectual engagement so as to promote cognitive functioning and mindful engagement with the world. Modeled on the Odyssey of the Mind program (odysseyofthemind.com), Senior Odyssey involves seniors in sessions devoted to solving well-defined and ill-defined problems. As a model of cognitive intervention, it engages cognition:

- on many dimensions (i.e., speed, WM, decision-making).
- on a regular basis over time.
- in the context of creative activity so as to be inherently motivating.
- in the context of collaboration so as to provide environmental support in terms of cognitive process and motivation.
- in the context of friendly competition, which provides rewards for effective solutions.

PROGRAM FRAMEWORK

Stable teams of 5 to 7 elders work together over an Odyssey “season” in sessions of collaborative problem solving. The typical season involves around one long-term problem selected by the team and numerous spontaneous problems. The Senior Odyssey season culminates in a tournament at which each team presents its solution to the long-term problem and competes in the solution to a novel spontaneous problem.

- Spontaneous Problems

  Spontaneous problems are fast-paced and encourage participants to think on their feet. They are presented in cycles of problems of different types that increase in difficulty throughout each session. These activities encourage active problem solving in a collaborative context so that participants typically have to consider what others in the group have done and build on that. Problems are designed to engage speed of processing, WM, inductive reasoning, spatial reasoning, and divergent thinking, and the difficulty of the problems is tailored to the ability of the group. Following is a phase is illustrated by:

  T J M A M J A

  Name something that destroys something else.

- Long-term Problems

  Long-term problems are open-ended with no single perfect solution. Problems are designed so that participants of varying ability levels can solve the problems in some way. Each team develops and tests solutions so it can present its most compelling and creative option. The solution is staged in the context of a theatrical presentation. For example:

  Idiom Inspiration: Create and present an original humorous performance that includes a minimum of four idioms, three of which will be selected from a list and the fourth created by the team.

  Fantastic Art: Create and present a performance that includes works of art that come alive when no one can see them and return to their original state when others are around. The team will make four works of art: two will be replicas of works by artists from a list, and a two will be original works created by the team.

  Balancing Act: Design, build, and test an asymmetrical structure made of balsa wood and glue that is wider at its top than at its base. The structure will be tested by balancing and supporting it as much weight as possible.

  Odys-SEE-ing Sounds: Present a humorous performance that includes ten different sound effects performed “live” for the audience. Six of the sound effects will be produced by two team-created devices; the others will be created in any manner the team wishes.

  King Arthur: Present one of the legends of King Arthur and the Knights of the Round Table as popularly described. Include a legendary character and an original, team-made tapestry, a coat of arms and a flag.

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Contact Information: calv@uiuc.edu

IMPLEMENTATION

PHASE 1: Three small groups (N =16, M = 68 years, range = 52-81 years) of seniors participated in one 2-hour session of the program to assess the appropriateness of the problems chosen, feasibility with this age group, and attitudes toward the program.

On a five-point scale (1=strongly disagree; 5=strongly agree), participants reported that they had a good time (M=4.7, SD=.45); understood directions given for the problems (M=4.4, SD=.51); thought the activities chosen were enjoyable (M=4.5, SD=.81), and did not believe problems should have been included that were either easier (M=6.9, SD=.70) or more challenging (M=2.31, SD=3.195). Participants varied in terms of life satisfaction, mindfulness (M), and need for cognition (NC). These dispositions were especially enjoyable for those lower in NC (p<.85). Individuals higher in NC and M would have preferred the inclusion of easier problems (p<.52 and .48, respectively), suggesting the importance of keeping activities within a region of proximal learning (Metcalfe, 2000; Miles & Stine-Morrow, submitted).

PHASE 2: Four groups were recruited from the surrounding community to participate in a 4-week Senior Odyssey program, in which groups met once a week for approximately one hour. Pre-test and post-test measures of cognitive ability and engagement were administered in the weeks immediately prior to and after the program.

- Retention

  With the exception of the group at the Retirement Apartments, attrition was low, suggesting that participation can be sustained over several weeks.

- Satisfaction with the Program

  On a five-point scale (1=strongly disagree; 5=strongly agree), participants reported that they had a good time throughout the program. Generally, problem difficulty appeared to be appropriate. However, Adult Day Care participants, who showed lower levels of cognitive performance overall, would have preferred some easier activities, suggesting that further adjustments in problem difficulty will be needed for this population.

- Measures of Cognition and Engagement

  We found for each of the senior Odyssey programs:

  GROUP N AGE GOOD EAS CHA EFF
  M SD M SD M SD M SD M SD
  Comm-Dwelling 5 70 4.4 0.9 2.6 1.3 2.8 0.4 3.4 1.3
  Retirem Apts 3 74 5.0 0.0 3.0 1.7 2.6 1.5 4.3 1.7
  Retirem Comm 6 84 4.5 0.6 2.5 1.0 2.5 0.8 3.7 1.2
  Adult Day Care 6 78 4.8 0.4 4.2 1.3 2.6 1.1 4.2 0.4

REFERENCES