Alzheimer’s Disease Supportive Services Program
Innovation Grant: 90Al003301
Healthy Brain Initiative “MindSet” Implementation Report
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I. BACKGROUND

Choice of Intervention

According to the Alzheimer's Association Facts & Figures for 2012, there are an estimated 5.4 million individuals living with Alzheimer’s disease in the U.S. and over 15 million unpaid family, friends, and neighbors who provide care to those with this disease. One in eight people, age 65 and older, roughly 13 percent of the U.S. population, has Alzheimer’s disease. Almost 18 percent of Florida’s population is over age 65. It is estimated that over 500,000 Floridians suffer from Alzheimer’s disease (2009 Florida State Profile). With over 3.3 million Floridians over the age of 65, the number of people who will develop Alzheimer’s disease or related disorders (ADRD) and the number of families who will be directly impacted with providing care will only increase. Because there is not a state income tax, Florida ranks 49th in general revenue spent on older adult issues, 41st in tax dollars spent on older adults, and 50th in public expenditure dollars (Tax Policy Center, 2005). It is therefore imperative that the State of Florida look at innovative ways to help older adults preserve function and rely less on state and federally supported institutional care. Recognizing the impact of Alzheimer’s Disease and related disorders (ADRD), the Department of Elder Affairs (DOEA), in partnership with three designated Memory Disorder Clinics (MDCs), chose to address issues affecting people with MCI or Early Stage Dementia (ESD), and their family caregivers, through an evidence-informed multi-component intervention.

With cognitive decline comes functional decline. Delaying the onset and progression of cognitive symptoms by months or years can have a positive effect on the independence and lifestyle of thousands of Floridians. Studies suggest that cognitive training has a positive effect on cognitive function. For example, the National Institute on Aging funded the Advanced Cognitive Training for Independent and Vital Elderly (ACTIVE) study of 2,802 seniors, aged 65-96, who received memory training over a five to six week period. Memory improvement was positive immediately after the training, as well as, two years later (JAMA, 2006). Others have shown that cognitive stimulation can be a cost effective intervention to improve cognition in ESD (BJP, 2006). These studies suggest that older adults gain some long-term benefit from cognitive training. In addition, evidence suggests that families coping with ESD benefit when their family members diagnosed with ESD receive early detection, early interventions and access to information to help plan for future needs (Gerontologist, 2005). Zarit, et al., suggest that when facing inevitable decline, persons with ESD and their care partners found it helpful to talk with peers. These peer-to-peer discussions also provided opportunities for those with ESD to state preferences about care and critical life changes that occur as dementia progresses (Gerontologist, 2004).

The term ESD refers to individuals who have mild impairment due to symptoms associated with ADRD. Individuals in the early stages often retain many of their cognitive abilities and require minimal functional assistance. Despite relative independence in Activities of Daily Living (ADLs), people with ESD often require supervision and continual assessment by family members to monitor their independence and safety. Many of these families find that the established service-delivery system has difficulty meeting their needs because they do not fit the traditional definition of impairment. These families are often turned away by support services because they do not have the functional impairments necessary to qualify.
Yet families affected by Mild Cognitive Impairment (MCI) or ESD have the greatest opportunity to be proactive in using compensatory strategies to maintain daily function, make healthy lifestyle choices, collect information on financial/legal planning, and obtain resources to help maintain health and independence. Individuals with MCI or ESD often retain insight into the changes in their abilities and have a desire to maintain an independent lifestyle. They are motivated to participate in activities that might make symptoms easier to manage. Partners are also looking for tools to manage symptoms, frustration and stress.

The transition period between normal cognitive function and severe cognitive impairment can be difficult for both the person with ESD and their care partner. While individuals with ESD often continue to maintain some independent function, they experience significant changes in their relationships and coping skills, having to adapt and adjust as their cognition changes. Family members, often referred to as “care partners” rather than care givers, are only beginning to see the effects of cognitive changes in the person with MCI or ESD on their lifestyles. Social contacts are reduced and isolation is increased for both the family care partner and the person with ESD. Even those who seek contact and support find it difficult to find the right outlet.

Understanding this data and a review of the available literature regarding interventions for ESD and MCI patients led to the discovery of an article by neuropsychologist, David Loewenstein Ph.D. (Loewenstein et al, Am J. Geriatric Psychiatry 12:4 July – Aug 2004). The article suggests that specific cognitive exercises could improve the perceived function of patients with ESD. This project partnered with Dr. David Loewenstein based on his article and his proximity to the proposed service area to assist with the development of cognitive exercises that could be translated into a classroom curriculum. The goal was to give families affected by ESD or MCI access to tools to improve management of ADRD and reduce caregiver stress. The cognitive exercises along with education about healthy aging make up the core of the MindSet curriculum. In addition, a MindSet support group was developed to allow individuals who had been through the class a chance to reinforce the techniques learned and provide opportunities for both individuals with ESD and care partners to talk with and learn from their peers. The groups provided support and education and served as respite for care partners while allowing participants with ESD the opportunity to continue an active role in the management of their care and symptoms, even after participation in the classroom activities.

The MindSet curriculum provides opportunities for individuals with MCI or ESD to become active in managing their symptoms. The classes teach both individuals with MCI or ESD and their partners, tools to manage information, focus attention, and use learning techniques to improve ability to perform tasks. The class also provides information on healthy aging and communication for both participants. The support group reinforces these tools and allows both individuals with MCI or ESD and their partners to discuss challenges of dealing with the impairments with their peers.

Goals:

The goals of the program are to provide educational programming designed to assist the person with ESD and the care partner with identifying resources and support to encourage proactive planning for future care. The primary objectives of the MindSet Project are as follows:

1. To provide early detection of cognitive problems such as ESD through free community memory screening available from the three MDCs.
2. To provide educational programs on memory enhancement training techniques for people with ESD or MCI within each of the three Memory Disorder Clinic services areas.
3. To create and enhance a monthly educational support group for project participants with ESD or MCI who attended the memory training classes.

4. To train volunteer class instructors in each service area and the remaining 12 state designated memory disorder clinics to maintain and facilitate the MindSet classes after the conclusion of the grant funding.

Overview:

DOEA partnered with three MDCs to address the priority area of ESD. The program was based on the research completed by Dr. David Loewenstein (Loewenstein et al, *Am J. Geriatric Psychiatry* 12:4 July – Aug 2004) to train both individuals with ESD and care partners to use a variety of cognitive stimulating and memory-enhancing techniques to improve their daily function.

The course targets individuals with memory or cognitive impairment and their care partners. For the purpose of the classes, individuals with memory problems were called “Students” and their care partners referred to as “Student Assistants.” Both students and student assistants learned skills during the classes that were aimed at helping students function better at home. Students learned skills and developed tools that targeted organization and attention. Student assistants learned healthy, supportive methods for assisting and encouraging the students. The student assistants also learned how to help the students use tools and exercises in everyday life to make routine tasks more manageable. For example, many students were in the habit of writing notes, but most did not have a system to keep notes organized. MindSet class sessions taught techniques to help the students get organized and become more self-sufficient in daily lives. The goal was to teach students how to manage information at home in order to reduce stress on the student assistants.

Student assistants played an important role in class sessions. They learned compensatory strategies for reducing caregiver stress and, at the same time, empowering their partner who has cognitive problems. It is important to note that student assistants also often complained of memory and cognitive problems. The student assistants served to assist with assigned homework and to encourage the practice of techniques learned, between class sessions. Practice between class sessions was essential to the program. Student assistants were given ideas for providing positive feedback and encouragement to students in and outside the classroom.

The main tool developed during the classes was the MindSet notebook. This notebook is best described as the “central hub” where all important information such as phone numbers, appointments, and resource information is organized in one special place. Based on Dr. Loewenstein’s work, students (with the help of the student assistants) created MindSet notebooks to help them easily access, remember, and recall important information. Though many students already maintained calendars at home, the MindSet notebook was an ‘enhanced’ technique of managing information that students were encouraged to maintain during the duration of the class.

Each of the six 90-minute classes consists of an introduction/review, lecture, exercise(s), wrap-up and homework. A general format followed to include cognitive exercise instructions and lectures to help educate the student and student assistants on topics related to ESD/MCI. There was also time in class for conversation and discussion about the course material, concerns about memory changes. A network of support and socialization was created between the participants. Students and student assistants had time to share and ask questions. During each class, students were taught specific exercises and given tools to use between classes. Homework assignments included:
• Keeping a daily notebook/calendar
• Practicing the Face-Name association exercise
• Practicing the prospective memory exercise
• Practicing the object location exercise

Project Partnerships

Sarasota Memorial Hospital Memory Disorder Clinic (SMHMDC), Lee Memorial Health System Lee Memory Care (LMHSLMC), and East Central Florida Memory Disorder Clinic (ECFMDC) are designated MDCs (MDCs) under the State of Florida’s Alzheimer’s Disease Initiative Program. Each of the MDCs has been in operation for at least 10 years. Together they provide a full diagnostic evaluation by physicians to approximately 1,000 clinic patients annually. Approximately 50 percent of the patients have been diagnosed with ESD or MCI. Each of these designated state MDCs provide on-going educational programs and host caregiver classes. These sites are well established within their communities as experts in the evaluation and care of dementia patients.

The SMHMDC serves the counties of Sarasota, Desoto, and Highlands in the west and central parts of the state. DOEAs estimates that over 22,000 people with Alzheimer’s disease live in that catchment area with 32 percent of its population over age 65 and almost 10 percent over 80. SMHMDC provides full evaluation to over 350 individuals per year. Clinic staff provides caregiver and community education to over 3,000 people annually.

LMHSLMC is located in Lee County. Lee County has 593,136 full-time residents, with another 250,000 seasonal residents. Approximately 59 percent of the admissions to LMHSLMC were from the Medicare over-65 population. Lee Memory Care saw approximately 600 patients per year, 50 percent had a diagnosis of ESD or MCI and the remainder fell into the more severe types of dementia. In addition to classes, caregiving support groups were held at various locations to accommodate many of the patients and their care partner.

The ECFMDC is a collaborative effort between the Health First Aging Services geriatric specialty clinics and the Florida Institute of Technology School of Psychology. The ECFMDC service area includes Brevard, Osceola, Indian River, St. Lucie, and southern Volusia counties. The clinic is located in Brevard County (population 561,977) where, according to the 2009 Florida County Profiles, 27.5 percent of the population is over the age of 60, and there are 17,314 individuals with probable Alzheimer’s. The clinic typically evaluates about 200 patients a year using the comprehensive medical evaluation and completes 200-300 free memory screens at off-site locations in the service area.

II. REACH

Audience

The project has served areas that cover portions of the east and west coasts of Florida, as well as central sections of the state. Each established MDC partner provides diagnostic evaluations to individuals with memory loss, as well as, free screenings in their catchment area. Each clinic was able to identify and reach the target population intended for the MindSet training. Clinic staff already provided extensive community education to a variety of groups on topics related to ADRD. These
ongoing educational activities served to further the outreach of the program. In addition, free community memory screenings provided opportunities to reach individuals not seen in the clinical setting for participation in the MindSet training.

Each clinic partnered with local agencies to provide outreach and eventually, training to those interested in offering the classes. Grant partners identified local agencies with experienced staff and other healthcare professionals interested in teaching the MindSet course in their area. The grant staff served as ‘master trainers’ and remained available to mentor trainers in the community. These community agencies are an excellent resource to sustain the project after the conclusion of the grant. For example, two local agencies in Sarasota County continue to provide classes and collect outcomes.

MindSet staff also trained the remaining twelve state-designated MDC coordinators to provide the MindSet classes in their own catchment areas in an effort to expand the MindSet Project throughout the State of Florida. Several MDCs have implemented the program in various parts of the state. Also, the MindSet curriculum is discussed at quarterly MDC Coordinator meetings as a way to encourage MDCs across the state to share their experiences with the class. The partner MDCs continue to provide mentoring and support to those clinics looking forward to implementing the curriculum in their areas.

Selection Criteria

Eligibility for participant enrollment in the MindSet class included the following criteria:

- Be 60 years of age and older.
- Include a care partner of the person with ESD or MCI is (although an individual with ESD or MCI who did not have a care partner individual would not be prohibited from participating).
- Reside in the catchment areas of the grant partners, or
- Meet the additional requirement for a screening with the Montreal Cognitive Assessment tool (MOCA) of a score 18 to 25 or a diagnosis by a physician of MCI or ESD.

Recruitment Strategies

Each site used a variety of methods to recruit participants for the classes. The MindSet brochure (Appendix A) was the primary print material developed and distributed. These brochures were disseminated at health fairs, and placed in primary care physician offices, hospitals, social service agencies, Alzheimer’s Association offices, senior centers, assisted living facilities, and other facilities that provide services and care to older adults.

Announcements were made in free calendar sections of newspapers, paid advertisements in local newspapers, and in established newsletters of organizations that target individuals and caregivers affected by ADRD. Advertisements attracted individuals outside of the MDCs’ clinical patient population. Many people responded to the advertisements for “MindSet for Brain Health.” The addition of the tag line, “for Brain Health” seemed to peak interest. However, not all respondents understood that the target audience was those who already had cognitive impairment. The influx of calls required screening to determine who was eligible for the class. The paid advertisements that
were specific and explained the nature of the classes and the target audience seemed to be the most successful. This indicates an interest by the general aging population in participating in learning more about brain health and cognitive exercise.

Due to the uniqueness of the program, unpaid press such as a feature article about one of the participants or a short interview for a local television station were utilized when available. Promotional visits were also made to many of Assisted Living Facilities (ALFs) and adult gated communities to promote the program to residents. Referrals were generated through community presentations, paid or unpaid print advertisements, and more rarely, from physicians’ offices not associated with the MDCs.

In addition to the direct referrals from the MDCs, the majority of the participants were identified through free memory screening events provided in the community. However, the memory screening events did not generate as many referrals as anticipated. Not all people who were screened became eligible for the MindSet program. Some individuals were found to be too impaired or not impaired enough to qualify for the MindSet class.

To increase the number of potential participants, some of the sites scheduled additional community memory screening events for the purpose of recruitment. Despite scheduling additional screening events, only a small percentage of those who responded to advertisements followed through with screenings. Despite increased time and effort spent on clarifying the class requirements on the phone, recruitment remained a challenge through the end of the project. Pre-scheduling classes and creating a waitlist of qualified participants was only partially successful. Most who were screened wanted to start a class right away. Additional attempts to recruit participants included moving the classes to where the students and care partners lived (i.e. assisted living facilities and gated communities.) Recruitment was an on-going challenge even though great efforts were made in community promotion and outreach.

It should also be noted that Florida traditionally experiences an influx of residents during the winter months due to the mild winter climate. Interest in the classes peaked during that time. However, the hot and humid summer months seemed to reverse the trends, and each of the sites expressed difficulty with recruitment during those times. Although classes were taught at most sites throughout the year, most of the classes were taught between November and April.

**Enrollment Process**

Each site had a goal of enrolling at least 106 students and student assistants (collectively). Once promotional materials were in place, class announcements were made and people began to call the clinics for information. A total of 234 persons with dementia and 167 caregivers enrolled in the program with 401 completing the entire project. Following are the steps for participant enrollment in the MindSet Project:

**Step 1:** As individuals called to inquire about the MindSet class, their names were added to a list of potential participants and they were each given an appointment to complete the participant screening. During the initial phone call, classes were described, including duration, and the required commitment to attending six classes with a partner. It was important to have the information scripted so that potential participants understood the criteria and the commitment level. Staff also explained the basics of the class and the reason for a care partner to be involved.
Step 2: Potential students were scheduled for screenings either at the MDCs or at community locations. If after screening, they did not meet the criteria for the MindSet class, they were referred to other agencies for appropriate resources, etc.

Step 3: Once people qualified for the classes, they were either scheduled for a class or their names were put on a call-back list for upcoming classes. The process time for enrollment was lengthy because the staff often had to make several attempts to contact each individual by phone to confirm class participation.

Once the person and care partner were signed up for the class, most sites found it necessary to make confirmation calls to remind them of the time and date of the class to ensure participants would be attending. One of the very time consuming tasks was giving directions to the location of the classes. Most sites made three attempts to schedule participants for a class. If they did not attend after the third attempt, their names were dropped from the list. Due to the nature of the individuals recruited, even though people were confirmed and scheduled to attend classes, this did not guarantee attendance. Sometimes, they would change their minds, forget about the starting dates of classes, did not attend due to some unexpected illness, or experience conflicts with travel schedules or other commitments. Time commitment to attending the classes appeared to be one of the primary challenges. Sites varied the classes, by scheduling three classes twice per week, two classes three times per week, or one class once per week, for six weeks. Sites had varying results with the schedules. All agreed, however, that the three classes in one week did not allow the students and student assistants’ adequate time to practice the exercises between classes.

In order to meet many of the requirements of the enrollees, space, and schedules were planned two to three months in advance. With advance planning, enrollees could select dates and times that fit into their busy schedules. Host sites were the following: senior centers, assisted living facilities, gated communities, and churches. The variety of sites nicely accommodated participants since they could select a location near their place of residence.

Challenges and Innovations

The following suggestions and recommendations may assist future projects in addressing participant recruitment challenges:

- Prior to promoting and scheduling classes, choose four to five host sites that are centrally located within a targeted zip code that have adequate parking. Develop partnerships with host sites to establish senior-friendly locations to host MindSet training, community memory screening events and informational meetings throughout the year.
- Connect with other community organizations, including senior centers, retirement communities, assisted living facilities, and faith-based organizations in a mutual partnership to provide MindSet training within those settings.
- Distribute MindSet material so that information reaches the intended audience and keeps the message consistent.
- Begin dissemination of promotional material in paid advertisements, as well as, working with special senior organizations to deliver the message about the classes.
- Begin the scheduling process by phone registration with a knowledgeable person so that questions can be answered regarding the requirements and time commitment of the classes. Setting screening appointments to determine eligibility at that time is also recommended.
- Clearly communicate with potential participants about class schedules, eligibility requirements, and fees (if any) for participation.

III. ADOPTION

Site Selection

The MindSet Project was a partnership between the Department and three of the fifteen legislatively designated Florida Memory Disorder Clinics. Each clinic agreed to oversee the development of the curriculum, manage the day-to-day operations of the program, and manage staff dedicated to the program. The areas served included southwest and east central Florida, consisting of large populations of older adults residing in the state.

Staffing and Training

The grant included funding for DOEA to hire a project manager at the state level. DOEA’s commitment to the grant included project staff supervision and financial staff assistance at no cost to the grant. The Department’s Caregiver Support Unit Manager was designated state project director, responsible for hiring and training the project manager into a position categorized as Other Personnel Services (OPS). As OPS positions are temporary, and provide no employee benefits, there is often frequent staff turnover. Staff turnover with the MindSet Project manager position resulted in inconsistent project management. However, the project director provided oversight of project activities during staff transitions.

The grant budget included funding for each of the three partnering MDCs to have one Full Time Employee (FTE) to manage the day-to-day activities of the program. Each site chose individuals with appropriate expertise. Sarasota Memorial Hospital MDC hired a licensed mental health counselor with experience in the field of curriculum development; East Central Florida MDC hired a licensed clinical social worker; and Lee Memorial Hospital MDC hired a registered nurse. Each site determined the staff qualification and developed a job description based on the skills of existing staff and the requirements of the agency hosting the project. Each new hire was familiar with community aging resources and available services, had public speaking and classroom experience, and had knowledge of ADRD. Each new FTE attended orientation sessions and were mentored and supervised by MDCs Clinic Coordinators. Each MDC committed to provide project site oversight and staff supervision without reimbursement as match to the grant. In some cases significant supervision and oversight of project development was required.

The orientation and training period of the MindSet staff initially involved understanding the complexities of a medical practice and becoming familiar with working with the families of those diagnosed with ADRD. Program staff spent time in the first 90 days learning about the MDC evaluation process, training to conduct the memory screenings, and becoming familiar with the disease process, and local community services. Due to the time constraints of the project, even during the initial orientation period, staff worked collaboratively with Dr Loewenstein, Dr. Scott Anstadt, the program evaluator, and the MDC clinic coordinators to develop the MindSet curriculum.
V. IMPLEMENTATION:

Approach:

The initial project timeline and work plan did not adequately account for project implementation start up activities, specifically, contract negotiation and contract development. For the MindSet Project, there was a six month delay, associated with this process. Consequently, this delayed hiring and training for partner site staff positions, consultation with the selected researcher, recruitment of program participants, and data collection and reporting. To address these delays, DOEA was granted a six month no-cost extension to allow sufficient time to meet outcome goals and complete grant related data and other grant deliverable reports.

Classroom

During curriculum development, participant recruitment began in all site areas. Individuals with MCI or ESD were screened using the Montreal Cognitive Assessment (MOCA-Appendix B), a memory screening tool available in the free domain and already in use by the MDC partnering sites. The first pilot classes went well. However, it became apparent that the classroom format needed revision to ensure that the materials fit uniformly into the 90 minute session format. The draft format required many adjustments to create a standardized format for each of the partners to teach. After a final version was edited by all sites, the MDCs partnered with the Training on Aging Academy at the University of South Florida to develop the final version into a professional format. The final product was printed to include a disk for easy printing and replication. Throughout the curriculum development process and until the final printing the first classes were basically a work-in-progress. Partners communicated regularly throughout the curriculum development process period to ensure consistency in the classroom format among the sites.

Each class series included pre and post testing of all participants. This information was documented by MDC grant staff and evaluated by Dr. Scott Anstadt of the Florida Gulf Coast University, the evaluator hired for the MindSet Project. Each participant signed a release form so that de-identified outcome measures could be reviewed. In addition to the MoCA screening, project survey instruments included the Zarit Burden Scale (Pre and Post Survey, Appendix E1-E2), the Memory Awareness Questionnaire (MSEQ-Appendix C) and Informant Questionnaire on Cognitive Decline (IQ CODE Pre and Post Survey, Appendix G1-G2) the AD8 (Appendix D) all standardized assessment tools, for the pre and post testing. Some of the surveys were modified with input from the evaluator for the specific population served. Student scores on Face-Name Association (Appendix F) exercises were also used in pre and post test scoring. All of the partner staff required training on each of the instruments prior to the first classes being taught. During the final class, participants complete a Mindset Project Satisfaction Survey (Appendix H1-H2).

Support Group

The MindSet support group was developed late in the first year of the grant cycle. The support group was a closed group with an open-ended format offered exclusively to MindSet graduates including students and student assistants. At some locations individual support group facilitators chose to allow non-participant family members and caregivers to participate in the group meetings. In Sarasota where a MCI/ESD dual support group already existed, non-MindSet graduates were referred to that group.
The format of the support group was 90 minutes, with the first 30 minutes devoted to a speaker for both the students and student assistants together. The remaining time was divided with a separate group for the students and one for the student assistants to allow time to discuss concerns independently and confidentially. The group activities relied on two facilitators who were committed to working with the program, and required securing speakers for each group meeting. This group continues to meet in at least one location with good attendance and interest by those involved.

Distance

As all staff members hired by the grant were new, the MDC coordinators at the three sites, along with the new hired staff had to work through the logistics of efficient and effective communication. The distance between locations limited face-to-face meetings. Phone conferences and e-mail were the primary source of communication throughout the development and editing of the initial curriculum. Despite the distance between sites, the partners worked out systems that allowed them to achieve the goal of collaborating on the curriculum and finalizing the product.

Curriculum Development

Surveys of participants who completed the MindSet Project indicated that participants wanted additional information about development and maintenance of cognitive function. Future projects should investigate the development of additional evidence-based cognitive exercises to fortify the curriculum and enhance the course offerings.

Prior to the application for funding, a partnership was secured with Dr. David Loewenstein, on whose work the application was based. However, partners did not have access to a complete review of Dr. Loewenstein’s cognitive exercises until after the grant was awarded. Upon review of Dr. Loewenstein’s material, it was determined that very few of the exercises could be translated into a classroom format. As a result, a small number of strategies were available for use in the classroom curriculum. As the initial proposal stated that the classes would be six sessions in duration, it was necessary to the curriculum development to include additional materials for class time. Additional material was developed to fill the time allotted for the class and ensure that there was valuable information for both the students and student assistants. The additional material was developed in collaboration with rehabilitation specialists who work with cognitively impaired individuals and with the MDC coordinators who have extensive experience working with patients and families. Lectures related to information on healthy aging, brain health, and communication was integrated into the curriculum to complement the cognitive techniques provided by Dr. Loewenstein.

As stated above, the curriculum was a work in progress that continued to be modified as early classes were taught. It was clear that much more time was needed to make revisions as the classroom teachers learned about what worked in the classroom. Although extensive work went into curriculum development, partners agree that the curriculum could be expanded to include additional cognitive exercises and material. The editing process was complicated by the shortened time line and the distance between offices. At times concerns and feedback surfaced too late for curriculum revisions. For example, the MSEQ Survey was very difficult to use. Because that measure had already become an approved part of the curriculum, it continued to be used despite its difficulties. The partners initially struggled with creating materials that supplied consistent 90 minute classroom activities. During the early classes, individual instructors created individualized ‘filler’ materials until the full curriculum was developed and agreed upon. The validated tools used evaluated student and
student perception of overall improvement in function, but did not evaluate the individual interventions such as association, focused attention, or object location.

The final product was presented to the University of South Florida Training on Aging Academy who produced the final manuals for distribution. Partner staff worked diligently to resolve issues of class format, timing, and presentation to create a consistent training program. The goal shared by all was to provide a product that provided participants with valuable information about memory and aging along with the cognitive exercises. Each partner brought ideas to the development process and the collaboration allowed the partners to overcome obstacles.

**Participant Eligibility Criteria**

The initial plan was to teach classes of 10 dyads, including student and student assistant. Due to recruitment difficulties, classes were rarely that size. This proved to be a benefit, as most instructors found the variability in students a potential challenge to manage in the classroom. Participants who enrolled in each of the class sessions often had too much variation in cognitive abilities; so slower or more cognitively impaired students had a harder time keeping up, and the faster, less cognitively impaired found the class less challenging.

It is suggested that the range for the MOCA scores initially selected was at times too broad and allowed for too much variability in the cognitive abilities of classroom participants. For future classes, narrowing of the range should be considered. Instead of 18-25, narrowing the range to 20-26 would allow for more homogeneity among students’ cognitive status and enable teachers to keep students engaged. Narrowing the eligibility range or segregating students by their MOCA scores is recommended for future classes. Additionally, the MindSet Project did not exclude individuals with ESD or MCI who did not have a care partner.

**Outcomes Measures**

Based on classroom observation, MindSet facilitators in general expressed that some of the evaluation instruments selected for the project, were difficult for participants to understand and to complete. The Zarit Burden Scale, AD8 and the MOCA were manageable and appropriate The Face-Name exercise was an integral part of the class and served both as a classroom exercise and outcome measure for students. However, the adapted MSEQ was very difficult for both students and student assistants to understand. It is recommended that the MSEQ not be used in future projects. The AD8 format was adapted for the curriculum and it has been suggested that the AD8 in its original format be used. Future projects may consider alternative instruments to measure outcomes and additional measures to ascertain the efficacy of specific interventions within the curriculum.

**Support Group**

The success of the support group fell with the recruitment and selection of the facilitators. Since this was not the typical support group, the facilitators needed to be familiar with not only the material taught in the classes, but also with community resources and services available to families affected by cognitive deficits. Facilitators needed to have a comfort level with difficult issues related to cognitive loss. They needed be comfortable helping families move to a traditional caregiver support group if the student could no longer benefit by attending the group due to cognitive problems.
V. EFFECTIVENESS

Intended Impact

The intended impact of the MindSet Project was to improve the caregiver’s perception of the function of the person with MCI or ESD, and to therefore reduce caregiver stress. The intention was to give the individual with MCI or ESD and the caregiver, tools and strategies to use at home to manage ongoing symptoms. The classroom provided tools and education on the progression of cognitive loss, safety, and preparing for the future. Both the classes and support groups were intended to be an opportunity to educate individuals with MCI or ESD and their care partners about the management of symptoms and community resources. The project also allowed for the expansion of services available at the community level for persons with dementia and their families.

Data Collection and Analytical Approach

The MindSet Project partnered with the Florida Gulf Coast University in the evaluation of the program. Dr. Scott P. Anstadt, Assistant Professor, Division of Social Work, College of Professional Studies, coordinated data entry and analysis of the information collected at each site (Appendix J). The evaluation used multiple process measures to provide formative feedback about the programmatic delivery of the project from the point of referral throughout the completion of the educational curriculum training sessions and support group participation. Outcome measures include both qualitative and quantitative components in order to capture the impact of the program on the individual. Under the direction of Dr. Anstadt, the MindSet Project was evaluated to determine if the participating MDCs were meeting participation, outreach and training goals. The project selected the MoCA to assist in the detection of mild dementia. The MSEQ was used to measure student subjective impressions of practical memory skills. The AD8 was used to determine the care partner’s perception of student function. The IQ Code was used to measure the care partner’s perception of partner’s memory related tasks, and the Zarit Burden Scale was used to measure pre and post caregiver stress. In addition, the Face-Name Recognition was used in both pre and post-testing and as a learning activity during class.

During the first class, simple objective data was collected through three scheduled “memory checks. Participants were presented with the faces of eleven individuals (10 slides - one with a couple). The participants were asked to name the individuals pictured and remember their names, using memorization skills. After a 10-minute period, participants attempted to recall the names. The second trial was attempted after 30 minutes. This Face-Name exercise was used as part of pre-testing. During subsequent classes, participants were taught association techniques that were reinforced with at-home activities. Post testing of the Face-Name exercise revealed improvements in most cases.

Where improvements were not expected in the MSEQ scores, there were statistically improvements in the MSEQ IQ code. In addition, the AD8 was used to assess the care partner’s perception of the student’s function at home. As anticipated there were improvements in the caregiver’s impression of the student’s function as a result of the intervention.
Although a modified MSEQ was selected by the project evaluator, upon implementation it was immediately noted that the tool was too difficult for participants to complete and complicated the initial classroom session. To address this challenge the project partners developed a PowerPoint presentation which was used as a step-by-step explanation of the survey questions. It is recommended that new projects consider not using the MSEQ.

Findings and Implications

There were a total of 258 student records between the three sites. 24 student records were removed from the data set as the participants did not complete the post-test measures and therefore could not be used for analysis. As a result, a total of 234 records were used for analysis (Appendix I).

Summary of Data Results:

The results of the Face-Name Recognition indicate when a particular exercise was repeated over the course of the classes, the improvement remained high. In this case, students retained an association between a visual cue and an auditory cue (Face-Name). This exercise also demonstrated the benefit of the student and student assistant interacting together for the purpose of completing the exercise and homework.

A larger number of students reported an increase in organizational skill improvement and list recognition than those that reported decreases. A larger number of students reported an increase in instrumental activities of daily living compared to those that reported a decrease.

Comparing perceived instrumental activities of daily living, it appears the reports of students and assistants agree, as the majority of both showed improvement in scores. The assistants reported a perceived improvement in function at home in the students and reported a reduction in their own levels of stress in caregiving.

It appears from the results that the course was helpful both to the students and the assistants who participated in improving daily practical skills and in reducing caregiver stress. Several questions have gone unanswered due to limitations in the current dataset. Future research should employ the use of matched samples so that students and their assistants can be identified as pairs. This would provide for advanced analyses to be conducted on perceived performance both between and within matched pairs. Although the majority of students showed improvement, it would be helpful to know the difference between those that did and those that did not based on level of cognitive function at time of participation. The reported range of MOCA scores in this sample was between 11 and 30 with 23.3 being the average score. In the future, the range may need to be reduced in order to key in on participants who may be best served by participating in this course.

Student Demographics

The number of students that participated at each site was split by approximately one-third per site (Appendix I, Figure 1). The reported gender was split almost evenly among the students (Appendix I Figure 5). 90 percent of the students were age 68 or older (Appendix I, Figure 6). In terms of ethnicity, the student sample was primarily non-Hispanic or Latino (Appendix I, Figure 2) which was mirrored in that reported race showed the sample to be approximately 94 percent White, non-Hispanic (Appendix I, Figure 3). 75 percent of the student sample reported having at least some college experience or above (Appendix I, Figure 7). Approximately two-thirds of the sample reported being a military
veteran (Appendix I, Figure 4). It was reported that 64 percent of the student participants had an assistant, which 53 percent of these students reporting this person to be their spouse (Appendix I, Figure 8).

**Student Performance**

Several measures were used to report on student performance from pre to post test. The first measure, the MSEQ, is a self-report, subjective rating of short-term memory. The MSEQ consists of two scores, A-score and C-score. The A-score is a measure of memory organizational skills while the C-score measures list recall. A greater percentage of students reported an increase in the A-scores (Appendix I, Figure 18). On the C-score, almost double the number of students reported an increased score compared with those who had decreased scores (Appendix I, Figure 17-18).

The second measure used, the AD8, is a subjective rating of an individual’s abilities to perform Instrumental activities of daily living (IADL). Results show that 39% of the sample reported a perceived improvement in IADLs (Appendix I, Figure 19) by the care partner with the average point increase and decrease being about equal (Appendix I, Figure 19).

The final measure used was the Face-Name Recognition instrument. The Face-Name Recognition instrument is a measure of one’s ability to recall visual and verbal associations after repeated trials. This exercise was used in pre and post testing, but also used as one of the training exercises. Association techniques were taught and practiced throughout the class sessions and students and student assistants practiced this exercise as part of their homework. In this sample, results show substantial increases in Face-Name Recognition over three trials (Appendix I, Figure 20).

**Assistant Demographics**

There were a total of 171 assistant records between the three sites. Four assistant records were removed from the dataset as the participant did not complete the post-test measures and therefore could not be used for analysis. A total of 167 records were used for analysis as a result.

The number of assistants by site shows approximately two-thirds was present in Sarasota (Appendix I, Figure 9). In looking at the distribution of gender in the sample, roughly two-thirds of the assistants were female (Appendix I, Figure 13). The age distribution of the assistant sample revealed 73 percent of the assistants as being 68 or older, a slightly younger sample than the students (Appendix I, Figure 14). In terms of ethnicity, the assistant sample reported primarily as non-Hispanic or Latino (Appendix I, Figure 10) which was again mirrored by a majority reporting their race as White, non-Hispanic (Appendix I, Figure 11). Over three-fourths of the sample had at least some college experience or higher with several having postgraduate experience (Appendix I, Figure 15). Appendix I, Figure 16, shows more than 80 percent of the assistants were spouses of the students.

**Assistant Impressions of Student Performance**

Student Assistants’ impressions of students’ need for assistance from pre to post test is reported on the Informant Questionnaire on Cognitive Decline (IQ Code) (Appendix I, Figure 22). The IQ Code is a self-report, subjective rating of perceived decline activities related to cognition. A reduced score in post testing shows a perceived improvement in student cognition. 96 percent of student assistants reported a perceived improvement in student function related to cognitive tasks Results show that just
over half of the assistants reported a perceived improvement in IADLs. Appendix I, Figure 23, reports on student performance on the Zarit-Burden. The Zarit-Burden is a subjective rating of the stress of caregiving. Results show a substantial decrease in the perceived stress related to taking care of their partners with the average point increase and decrease being about equal.

**Student and Assistant Satisfaction**

Satisfaction of both samples was measured using a satisfaction survey, which measured the delivery and construction of the course, the generalized effect on lifestyle, and components being taught. A Likert Scale measure based on a 5 point scale was utilized with 1 signaling low satisfaction and 5 signaling high satisfaction. Overall, for all sites, both students and assistants had similar levels of satisfaction concerning the program (Appendix I, Figures 23 and 24). Ratings were generally found to range from moderate to high satisfaction on all items. Delivery of the course by instructors was rated over 3.5 on a 5-point scale. The items rated the lowest, leaning more toward moderate satisfaction, by both students and assistants were improved memory, improved quality, and application to life.

**Challenges**

Early implementation challenges included project delays due to the state budget approval, contract development and negotiation processes. Hiring staff at the project sites, consulting with Dr. Loewenstein, and developing the curriculum and evaluation tools was significantly delayed. The condensed two-year grant period did not allow sufficient time to plan, implement, develop and deliver a training curriculum, and measure outcomes sufficiently. Curriculum development was more difficult than originally anticipated due to the limited number of Dr. Lowenstein’s learning activities that could be translated into classroom activities for the MindSet Curriculum. In the end, collaboration with speech and occupational rehabilitation specialists, and the experience and expertise of the MDC partners enabled the project to produce excellent materials that could serve as a basis for further work.

Groups that seek to use the MindSet materials should allot a minimum of six-months to prepare for implementation of future MindSet class. Project sites may also use this time to time to recruit, hire, and train staff and to develop project related materials, including local information regarding services and resources to compliment the curriculum. Additional time will also help start-up projects establish local partnerships for participant referrals, recruitment, and screening of participants, as well as consider program data collection and evaluation needs.

**Evaluation Challenges**

Once of the major challenges to program evaluation was the use of the Memory Questionnaire (MSEQ). Many students reported that the instrument was confusing, and difficult to complete. The student assistants spent a great deal of time intervening and explaining the nuances of the test to students.

To address this issue, an MSEQ PowerPoint presentation was developed and displayed on a large screen in the classroom to help explain the instrument to participants. The instructor reviewed sample questions with the entire class to assure understanding. This interaction and the further instruction on the pre-test/post-test tool was found to be helpful when delivered before administering the tests.
On several occasions following the class, students asked what the questionnaire measured. It was explained that the intent of the questionnaire was self-assessment of memory abilities of the student, by the student. How well the assessment achieved this goal is not clear as the level of confusion about the test implicates that questions were not fully understood, and likely not answered accurately.

In some instances, students wrote N/A in response to questions or coded the answer to a question as “0” on the pre-test and post-test and on the Satisfaction Survey. Thus no information was collected from those questions. Where N/A or “0” were not options for response to a question, some students left the answer space blank.

**Support Groups**

The project successfully developed support groups for program participants and caregivers with ESD/MCI that complimented the MindSet training and reinforced classroom lessons. The group included education, provided by an invited speaker, and two separate discussion groups that met for students and student assistants. The support group facilitators noted anecdotally that both students and student assistants found the support groups helpful. Participants developed a sense of camaraderie that served to help them maintain connections outside the group. The groups not only served to reinforce the strategies taught in class, they allowed for continued discussion of symptoms, frustrations, and stresses associated with cognitive change, and discussion of planning and community resources. Students discussed the tools they learned in class, and classroom puzzles and “brain games” were utilized to keep them engaged in cognitive activities.

**VI. Maintenance Section**

All fifteen Florida MDCs participated in a four hour training on how to implement the project across the state. A total of 60 individuals attended in a four or seven hour train the trainer class. These attendees included staff working at local lead agencies, Alzheimer’s Association, mental health providers, and private aging services agencies. All trainees received a training curriculum binder with all information contained on compact diskettes. Currently the MindSet classes are being offered at MDCs and other local organizations in parts of North Florida, as well as, Central, and South Florida including, Tallahassee, Orlando, Sarasota, West Palm Beach, and Miami.

The project will be sustained through Florida’s network of MDCs and local organizations continuing to provide the training to persons with MCI and ESD. DOEA’s efforts to sustain the project include making the training curriculum available on the DOEA Website for the general public. Program brochures will also continue to be distributed with both local contact information and state contact information to promote project training. Inquiries to the DOEA will be fielded through the Caregiver Support Unit and referrals made to the original project partners for additional project training and implementation technical assistance.

Funding sources for continuation of the project may include several primary sources. An agency interested in providing this training could seek public and private donations to facilitate future training. Organizations providing the MindSet training may consider charging a small fee for the training to cover the costs of classroom materials. In addition, developing support groups for persons with dementia and their caregivers could also sustain training efforts.
The Area Agency on Aging which oversees Sarasota and participated in some of the initial MindSet ADRC training was impressed by the project and offered to support the project. The Area Agency is providing Florida Alzheimer's Disease Initiative funding to two local vendors who participated in the train the trainers program. Classes are ongoing in that area. Other possible funding streams to support the MindSet Project include other State and Federally funded programs.

The DOEA will promote the Area Agency on Aging of Southwest Florida’s efforts to sustain the MindSet Project as a best practice, and support other area agencies in implementing the MindSet Project to expand services to persons with ADRD.

VII. BUDGET AND COST ANALYSIS

The project received a total federal award of $452,844 over two years from the Agency for Community Living for the Alzheimer’s disease and Supportive Systems Innovations grant. Total project expenses totaled $311,482 with $297,498 spent on direct service and $16,845 spent on administrative costs. An additional $179,174 of local match was spent on the project. Based on program expenditures and the project cost analysis, it is estimated that the MindSet project cost per participant is $1,182.

VIII. CONCLUSION

The MindSet Project provided training to over 400 individuals to help persons with MCI or ESD, improve function using cognitive exercise and to reduce caregiver stress. The MindSet curriculum and manual provide a tool to help organizations plan and implement training for individuals with ESD or MCI. The MindSet Project training will continue to be offered through Florida’s network of MDCs. Two of the original project partners will serve as a resource and mentors to organizations starting new MindSet Projects and will provide ongoing technical assistance for implementation. All project products including the training curriculum and project implementation report will be placed on the Department’s website. A limited number of manuals are available at the partner sites. Future inquiries regarding the project will be fielded through the Department’s Caregiver Support Unit and referred to on-line materials and original project partners for additional technical assistance. Future projects will need to consider class participation screening instruments or other outcome measurement tools and project evaluation needs in to meet the specific needs of their community to document project impact.

Despite the challenges associated with implementing a project designed to train individuals with MCI and ESD, there is a growing need for innovative training programs and support groups for persons with memory loss and their caregivers. The MindSet Project was successful in improving perceived function of daily activities in individuals with MCI or ESD, and reducing caregiver stress. Further development of this innovations project could allow for investigation of the efficacy of the specific interventions and yield important information and recommendations about future curriculum development.

IX. REFERENCES


Zarit S, Femia E, Watson J, et al. Memory Club: A Group Intervention for People with Early Stage Dementia and Their Care Partners *The Gerontologist*

**X. APPENDIX**

A. MindSet Project Brochure

B. MOCA Instrument

C. MSEQ Survey

D. AD8 Survey
   
   (1) Student Survey
   
   (2) Student Assistant Survey

E. Zarit Burden Scale
   
   (1) Student Assistant Pre Test
   
   (2) Student Assistant Post Test

F. Face-Name Exercise

G. IQ CODE
   
   (1) Student Assistant Pre Test
   
   (2) Student Assistant Post Test

H. Project Satisfaction Surveys
(1) Student Survey
(2) Student Assistant Survey

I. Project Evaluation

J. Demographic Information Data Form

(1) Student Survey
(2) Student Assistant Survey

K. MindSet Presentations

(1) Model for Cognition
(2) Supportive Communication
(3) Memory
(4) Safe, Healthy, Stimulating, Environment
Brain Health
Your Brain and Improve Exercise

A FREE class to exercise

Mindset

Appendix A

CLASS INFORMATION
Contact your local memory disorder clinic or support programs at (850) 414-2000 or Department of Elder Affairs Caregiver in your area. Please contact the Florida Department of Elder Affairs for more information regarding classes.
dealing with memory issues.

Opportunities to learn and meet others

and support

Strategies to improve communication

daily activities.

Tools for organizing information and

brain function.

Specific brain exercises that have

in length and will include:

Each class will be taught by a trained

instructor. The classes will be 90 minutes

Mindset Classes

In Your Area

Ask About Support Groups

Participation Comments

Very glad we were given opportunity to participate in this class. I feel more confident now because of this class. We set goals and hope to continue practicing and improving.

Who Can Benefit?

The classes are designed for individuals who have been tested and shown to help with cognitive impairment. Individuals with mild to moderate impairment are ideal. Other conditions such as a family care partner participation is highly recommended. Care partners will receive instruction on brain exercises that are beneficial for the class participants. These exercises are designed to improve memory functions over time.

Why Participate?

Mindset is a series of classes that help improve communication, memory, and problem-solving skills. The classes are taught by trained instructors. Each class offers tools for both you and your brain. Create healthy habits, exercise your brain, and enjoy the process.
APPENDIX B

Montreal Cognitive Assessment
(MoCA)

Administration and Scoring Instructions

The Montreal Cognitive Assessment (MoCA) was designed as a rapid screening instrument for mild cognitive dysfunction. It assesses different cognitive domains: attention and concentration, executive functions, memory, language, visuoconstructual skills, conceptual thinking, calculations, and orientation. Time to administer the MoCA is approximately 10 minutes. The total possible score is 30 points; a score of 26 or above is considered normal.

1. Alternating Trail Making:

   **Administration:** The examiner instructs the subject: "Please draw a line, going from a number to a letter in ascending order. Begin here [point to (1)] and draw a line from 1 then to A then to 2 and so on. End here [point to (E)]."

   **Scoring:** Allocate one point if the subject successfully draws the following pattern:
   1 - A - 2 - B - 3 - C - 4 - D - 5 - E, without drawing any lines that cross. Any error that is not immediately self-corrected earns a score of 0.

2. Visuoconstructual Skills (Cube):

   **Administration:** The examiner gives the following instructions, pointing to the cube: "Copy this drawing as accurately as you can, in the space below".

   **Scoring:** One point is allocated for a correctly executed drawing.
   • Drawing must be three-dimensional
   • All lines are drawn
   • No line is added
   • Lines are relatively parallel and their length is similar (rectangular prisms are accepted)

   A point is not assigned if any of the above-criteria are not met.

3. Visuoconstructual Skills (Clock):

   **Administration:** Indicate the right third of the space and give the following instructions: "Draw a clock. Put in all the numbers and set the time to 10 past 11".

   **Scoring:** One point is allocated for each of the following three criteria:
   • Contour (1 pt.): the clock face must be a circle with only minor distortion acceptable (e.g., slight imperfection on closing the circle);
   • Numbers (1 pt.): all clock numbers must be present with no additional numbers; numbers must be in the correct order and placed in the approximate quadrants on the clock face; Roman numerals are acceptable; numbers can be placed outside the circle contour;
   • Hands (1 pt.): there must be two hands jointly indicating the correct time; the hour hand must be clearly shorter than the minute hand; hands must be centred within the clock face with their junction close to the clock centre.

   A point is not assigned for a given element if any of the above-criteria are not met.
4. Naming:

**Administration:** Beginning on the left, point to each figure and say: "Tell me the name of this animal".

**Scoring:** One point each is given for the following responses: (1) lion (2) rhinoceros or rhino (3) camel or dromedary.

5. Memory:

**Administration:** The examiner reads a list of 5 words at a rate of one per second, giving the following instructions: "This is a memory test. I am going to read a list of words that you will have to remember now and later on. Listen carefully. When I am through, tell me as many words as you can remember. It doesn’t matter in what order you say them". Mark a check in the allocated space for each word the subject produces on this first trial. When the subject indicates that (s)he has finished (has recalled all words), or can recall no more words, read the list a second time with the following instructions: "I am going to read the same list for a second time. Try to remember and tell me as many words as you can, including words you said the first time." Put a check in the allocated space for each word the subject recalls after the second trial.

At the end of the second trial, inform the subject that (s)he will be asked to recall these words again by saying, "I will ask you to recall those words again at the end of the test."

**Scoring:** No points are given for Trials One and Two.

6. Attention:

**Forward Digit Span:** **Administration:** Give the following instruction: "I am going to say some numbers and when I am through, repeat them to me exactly as I said them". Read the five number sequence at a rate of one digit per second.

**Backward Digit Span:** **Administration:** Give the following instruction: "Now I am going to say some more numbers, but when I am through you must repeat them to me in the backwards order." Read the three number sequence at a rate of one digit per second.

**Scoring:** Allocate one point for each sequence correctly repeated, (N.B.: the correct response for the backwards trial is 2-4-7).

**Vigilance:** **Administration:** The examiner reads the list of letters at a rate of one per second, after giving the following instruction: "I am going to read a sequence of letters. Every time I say the letter A, tap your hand once. If I say a different letter, do not tap your hand".

**Scoring:** Give one point if there is zero to one errors (an error is a tap on a wrong letter or a failure to tap on letter A).
Serial 7s: Administration: The examiner gives the following instruction: “Now, I will ask you to count by subtracting seven from 100, and then, keep subtracting seven from your answer until I tell you to stop.” Give this instruction twice if necessary.

Scoring: This item is scored out of 3 points. Give no (0) points for no correct subtractions, 1 point for one correction subtraction, 2 points for two-to-three correct subtractions, and 3 points if the participant successfully makes four or five correct subtractions. Count each correct subtraction of 7 beginning at 100. Each subtraction is evaluated independently; that is, if the participant responds with an incorrect number but continues to correctly subtract 7 from it, give a point for each correct subtraction. For example, a participant may respond “92 – 85 – 78 – 71 – 64” where the “92” is incorrect, but all subsequent numbers are subtracted correctly. This is one error and the item would be given a score of 3.

7. Sentence repetition:

Administration: The examiner gives the following instructions: “I am going to read you a sentence. Repeat it after me, exactly as I say it [pause]: I only know that John is the one to help today.” Following the response, say: “Now I am going to read you another sentence. Repeat it after me, exactly as I say it [pause]: The cat always hid under the couch when dogs were in the room.”

Scoring: Allocate 1 point for each sentence correctly repeated. Repetition must be exact. Be alert for errors that are omissions (e.g., omitting "only", "always") and substitutions/additions (e.g., "John is the one who helped today;") substituting "hides" for "hid", altering plurals, etc.

8. Verbal fluency:

Administration: The examiner gives the following instruction: “Tell me as many words as you can think of that begin with a certain letter of the alphabet that I will tell you in a moment. You can say any kind of word you want, except for proper nouns (like Bob or Boston), numbers, or words that begin with the same sound but have a different suffix, for example, love, lover, loving. I will tell you to stop after one minute. Are you ready? [Pause] Now, tell me as many words as you can think of that begin with the letter F. [time for 60 sec]. Stop.”

Scoring: Allocate one point if the subject generates 11 words or more in 60 sec. Record the subject’s response in the bottom or side margins.

9. Abstraction:

Administration: The examiner asks the subject to explain what each pair of words has in common, starting with the example: “Tell me how an orange and a banana are alike.” If the subject answers in a concrete manner, then say only one additional time: “Tell me another way in which those items are alike”. If the subject does not give the appropriate response (fruit), say, “Yes, and they are also both fruit.” Do not give any additional instructions or clarification. After the practice trial, say: “Now, tell me how a train and a bicycle are alike”. Following the response, administer the second trial, saying: “Now tell me how a ruler and a watch are alike”. Do not give any additional instructions or prompts.
Scoring: Only the last two item pairs are scored. Give 1 point to each item pair correctly answered. The following responses are acceptable:
Train-bicycle = means of transportation, means of travelling, you take trips in both;
Ruler-watch = measuring instruments, used to measure.
The following responses are not acceptable: Train-bicycle = they have wheels; Ruler-watch = they have numbers.

10. Delayed recall:
Administration: The examiner gives the following instruction: “I read some words to you earlier, which I asked you to remember. Tell me as many of those words as you can remember.” Make a check mark (✓) for each of the words correctly recalled spontaneously without any cues, in the allocated space.

Scoring: Allocate 1 point for each word recalled freely without any cues.

Optional:
Following the delayed free recall trial, prompt the subject with the semantic category cue provided below for any word not recalled. Make a check mark (✓) in the allocated space if the subject remembered the word with the help of a category or multiple-choice cue. Prompt all non-recalled words in this manner. If the subject does not recall the word after the category cue, give him/her a multiple choice trial, using the following example instruction, “Which of the following words do you think it was, NOSE, FACE, or HAND?”

Use the following category and/or multiple-choice cues for each word, when appropriate:

<table>
<thead>
<tr>
<th>Word</th>
<th>Category Cue</th>
<th>Multiple Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACE</td>
<td>category cue: part of the body</td>
<td>multiple choice: nose, face, hand</td>
</tr>
<tr>
<td>VELVET</td>
<td>category cue: type of fabric</td>
<td>multiple choice: denim, cotton, velvet</td>
</tr>
<tr>
<td>CHURCH</td>
<td>category cue: type of building</td>
<td>multiple choice: church, school, hospital</td>
</tr>
<tr>
<td>DAISY</td>
<td>category cue: type of flower</td>
<td>multiple choice: rose, daisy, tulip</td>
</tr>
<tr>
<td>RED</td>
<td>category cue: a colour</td>
<td>multiple choice: red, blue, green</td>
</tr>
</tbody>
</table>

Scoring: No points are allocated for words recalled with a cue. A cue is used for clinical information purposes only and can give the test interpreter additional information about the type of memory disorder. For memory deficits due to retrieval failures, performance can be improved with a cue. For memory deficits due to encoding failures, performance does not improve with a cue.

11. Orientation:
Administration: The examiner gives the following instructions: “Tell me the date today”. If the subject does not give a complete answer, then prompt accordingly by saying: “Tell me the [year, month, exact date, and day of the week].” Then say: “Now, tell me the name of this place, and which city it is in.”

Scoring: Give one point for each item correctly answered. The subject must tell the exact date and the exact place (name of hospital, clinic, office). No points are allocated if subject makes an error of one day for the day and date.

**TOTAL SCORE:** Sum all subscores listed on the right-hand side. Add one point for an individual who has 12 years or fewer of formal education, for a possible maximum of 30 points. A final total score of 26 and above is considered normal.
MONTREAL COGNITIVE ASSESSMENT (MOCA)

VISUOSPATIAL / EXECUTIVE

Copy cube

Draw CLOCK (Ten past eleven) (3 points)

Points

NAME: 
Education: 
Sex: 
Date of birth: 
DATE: ________________

NAMING

MEMORY
Read list of words, subject must repeat them. Do 2 trials, even if 1st trial is successful. Do a recall after 5 minutes.

1st trial

2nd trial

ATTENTION
Read list of digits (1 digit/sec.). Subject has to repeat them in the forward order

Subject has to repeat them in the backward order

Read list of letters. The subject must tap with his hand at each letter A. No points if ≥2 errors

[ ] FBACMNAAJKLBFAKDEAAAJMOMFAA

Serial 7 subtraction starting at 100

4 or 5 correct subtractions: 3 pts, 2 or 3 correct: 2 pts, 1 correct: 1 pt, 0 correct: 0 pt

LANGUAGE
Repeat: I only know that John is the one to help today. [ ]
The cat always hid under the couch when dogs were in the room. [ ]

Fluency / Name maximum number of words in one minute that begin with the letter F [ ] ________ (N ≥11 words)

ABSTRACTION
Similarity between e.g. banana - orange = fruit [ ] train - bicycle [ ] watch - ruler

Points for UNCUED recall only

DELAYED RECALL
WITH NO CUE

Category cue
Multiple choice cue

Points

Optional

ORIENTATION
[ ] Date [ ] Month [ ] Year [ ] Day [ ] Place [ ] City

TOTAL

© Z.Nasreddine MD Version 7.1 www.mocatest.org Normal ≥26 / 30

Administered by: ____________________________

Add 1 point if ≥12 yr edu
This questionnaire addresses changes caused by thinking and memory problems. Please circle the response that best reflects how you feel about your cognitive problems (thinking and memory) over the last several years.

<table>
<thead>
<tr>
<th></th>
<th>Yes, a positive change</th>
<th>Yes, a negative change</th>
<th>No, no change</th>
<th>N/A, don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Problems with judgment such as problems making decisions, bad financial decisions, problems with thinking?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. Less interest in hobbies/activities?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. Repeats the same things over and over such as questions, stories, or statements?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Trouble learning how to use a tool, appliance, or gadget such as the VCR, computer, microwave, or remote control?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Forgets correct month or year?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. Trouble handling complicated financial affairs such as balancing a checkbook, doing income taxes, and paying bills?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Trouble remembering appointments?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. Daily problems with thinking and/or memory?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
This questionnaire addresses changes in your partner caused by thinking and memory. Please circle the responses that best reflect how you feel about your partner’s performance.

<table>
<thead>
<tr>
<th>1. Problems with judgment such as problems making decisions, bad financial decisions, problems with thinking?</th>
<th>Yes, a positive change</th>
<th>Yes, a negative change</th>
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</tr>
<tr>
<td>4. Trouble learning how to use a tool, appliance, or gadget such as the VCR, computer, microwave, or remote control?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Forgets correct month or year?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. Trouble handling complicated financial affairs such as balancing a checkbook, doing income taxes, and paying bills?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Trouble remembering appointments?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. Daily problems with thinking and/or memory?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
ZARIT BURDEN PRETEST

Name______________________ Date______________ Location_________________

After each question, circle the response that best describes how you feel.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Quite frequently</th>
<th>Nearly always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you feel that because of the time you spend with your relative that you don’t have enough time for yourself?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. Do you feel stressed between caring for your relative and trying to meet other responsibilities for your family or work?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. Do you feel angry when you are around your relative?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Do you feel that your relative currently affects your relationships with other family members or friends in a negative way?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Do you feel strained when you are around your relative?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. Do you feel your health has suffered because of your involvement with your relative?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Do you feel that you don’t have as much privacy as you would like because of your relative?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. Do you feel that your</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Question</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Quite frequently</td>
<td>Nearly always</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------</td>
<td>--------</td>
<td>-----------</td>
<td>------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>social life has suffered because you are caring for your relative?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Do you feel you have lost control of your life since your relative’s illness?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. Do you feel uncertain about what to do about your relative?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. Do you feel you should be doing more for your relative?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. Do you feel you could do a better job in caring for your relative?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Score**
ZARIT BURDEN POSTTEST – Student Assistant

Name______________________ Date________________ Location_________________

The questions below reflect how persons sometimes feel when they are taking care of another person. After each statement, circle the word that best describes how often you feel that way since taking the MindSet class. There are no right or wrong answers.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Quite frequently</th>
<th>Nearly always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you feel that because of the time you spend with your relative that you don't have enough time for yourself?</td>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. Do you feel stressed between caring for your relative and trying to meet other responsibilities for your family or work?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>3. Do you feel angry when you are around your relative?</td>
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<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Do you feel that your relative currently affects your relationships with other family members or friends in a negative way?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Do you feel strained when you are around your relative?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. Do you feel your health has suffered because of your involvement with your relative?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Do you feel that you don't have as much privacy as you would like</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Question</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Quite frequently</td>
<td>Nearly always</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------</td>
<td>--------</td>
<td>-----------</td>
<td>------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>because of your relative?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Do you feel that your social life has suffered because you are caring for your relative?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. Do you feel you have lost control of your life since your relative’s illness?</td>
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<td>2</td>
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<td>10. Do you feel uncertain about what to do about your relative?</td>
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<tr>
<td>11. Do you feel you should be doing more for your relative?</td>
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<tr>
<td>12. Do you feel you could do a better job in caring for your relative?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Score**
FACE-NAME RECORDING PAGE

Trial #1

Student Name_________________________ Date __________ Location__________________

1.______________________________________________________________

2.______________________________________________________________

3.______________________________________________________________

4.______________________________________________________________

5.______________________________________________________________

6.______________________________________________________________

7.______________________________________________________________

8.______________________________________________________________

9.______________________________________________________________

10.______________________________________________________________
FACE-NAMES RECORDING PAGE

Trial #2

Student Name __________________________________________ Date __________ Location ___________________
FACE-NAME RECORDING PAGE

Trial #3

Student Name_________________________ Date_________ Location_____________________

1.____________________________________________________________________

2.____________________________________________________________________

3.____________________________________________________________________

4.____________________________________________________________________

5.____________________________________________________________________

6.____________________________________________________________________

7.____________________________________________________________________

8.____________________________________________________________________

9.____________________________________________________________________

10.____________________________________________________________________

Appendix D
IQCODE PRETEST

Now we want you to remember what your partner was like 10 years ago and to compare it with what he/she is like now. Below are situations where your partner has to use his/her memory or intelligence and we want you to indicate whether this has improved, stayed the same or gotten worse in that situation over the past 10 years. Note the importance of comparing his/her present performance with performance 10 years ago. So, if 10 years ago your partner always forgot where he/she left things, and he/she still does, then this would be considered "not much change." Please indicate the changes you have observed by circling the appropriate answer.

Compared with 10 years ago, how is your partner at:

<table>
<thead>
<tr>
<th></th>
<th>Much improved</th>
<th>A bit improved</th>
<th>Not much change</th>
<th>A bit worse</th>
<th>Much worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Remembering things about family and friends (e.g., occupations, birthdays, addresses).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Remembering things that have happened recently.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Recalling conversations a few days later.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Remembering his/her address and telephone number.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Remembering what day and month it is.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Remembering where things are usually kept.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Remembering where to find things which have been put in a different place from usual.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Much improved</td>
<td>A bit improved</td>
<td>Not much change</td>
<td>A bit worse</td>
<td>Much worse</td>
</tr>
<tr>
<td>---</td>
<td>---------------</td>
<td>----------------</td>
<td>----------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>8. Knowing how to work familiar machines around the house.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Learning to use a new gadget or machine around the house.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Learning new things in general.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Following a story in a book or on TV.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Making decisions on everyday matters.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Handling money for shopping.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Handling financial matters (e.g., the pension, dealing with the bank).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Handling other everyday arithmetic problems (e.g., knowing how much food to buy, knowing how long between visits from family or friends).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Using his/her intelligence to understand what’s going on and to reason things through.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX G-2

**IQCODE POST TEST**

Name___________________ Date________________ Location________________

Now we want you to think about how your partner is doing since taking the MindSet class. Below are situations where your partner has to use his/her memory or intelligence and we want you to indicate whether this has improved, stayed the same or got worse in that situation since taking the classes. So if before taking the MindSet class your partner always forgot where he/she had left things, and he/she still does, then this would be considered "not much change." Please indicate the changes you have observed by circling the appropriate answer.

Since taking the MindSet class, how is your partner at:

<table>
<thead>
<tr>
<th></th>
<th>Much improved</th>
<th>A bit improved</th>
<th>Not much change</th>
<th>A bit worse</th>
<th>Much worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Remembering things about family and friends (e.g., occupations, birthdays, addresses).</td>
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<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Remembering his/her address and telephone number.</td>
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<td>4</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Question</td>
<td>Much improved</td>
<td>A bit improved</td>
<td>Not much change</td>
<td>A bit worse</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------</td>
<td>---------------</td>
<td>----------------</td>
<td>-----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>9</td>
<td>Learning to use a new gadget or machine around the house.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>Learning new things in general.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>Following a story in a book or on TV.</td>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Score**
MINDSET SATISFACTION SURVEY – STUDENT

Complete this form by checking the rating that best fits for each item in the survey with your impressions. If you cannot recall, or have no opinion, select the ‘neutral’ rating.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Neutral</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The course material was easy to understand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. The course material was easy to use.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Learning the information and exercises helped improve my memory.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Learning the information and exercises improved the quality of my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Practicing the skills in class was helpful.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. My partner helped me learn and apply course materials.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. The material was presented in a clear manner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I felt comfortable asking questions in class.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. The homework assignments were useful in helping me learn techniques.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. I have been able to apply the techniques to my everyday life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I would be interested in additional classes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. The lectures were informative.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. The techniques and activities were helpful:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. MindSet Notebook</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Face-Name Associations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c. Object Location Exercise</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d. Prospective Memory Exercise</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e. The Stroop Activity</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f. Puzzles</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Comments: ____________________________
MINDSET SATISFACTION SURVEY – STUDENT ASSISTANT

Complete this form by checking the rating that best fits for each item in the survey with your impressions. If you cannot recall, or have no opinion, select the ‘neutral’ rating.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Neutral</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>1. The course material was easy to understand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. The course material was easy to use.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Learning the information and exercises helped improve my partner’s memory.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Learning the information and exercises improved the quality of my partner’s life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Practicing the skills in class was helpful.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I was able to learn and apply course materials.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. The material was presented in a clear manner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I felt comfortable asking questions in class.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. The homework assignments were useful in helping me learn techniques.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. I have been able to help my partner apply the techniques to everyday life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I would be interested in additional classes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. The lectures were informative.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. The following techniques and activities were helpful:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. MindSet Notebook</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>b. Face-Name Associations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>c. Object Location Exercise</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>d. Prospective Memory Exercise</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>e. The Stroop Activity</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>f. Puzzles</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Comments:

Appendix H
Demographic Information – Student

Name________________________________________________________

Male □   Female □   Date of Birth________________________________

Address:_______________________________________________________

_______________________________________________________________

Phone________________________________________________________

Relationship to Caregiver:  Spouse □  Unmarried Partner □
Parent □   Child □   Other relative □   Non-relative □

Ethnicity: Hispanic or Latino □  Not Hispanic or Latino □

Race: White (Non-Hispanic) □  White (Hispanic) □
American Indian or Alaska Native □  Asian □
Black or African-American □
Native Hawaiian or Other Pacific Islander □
Person reporting some other race □  Person reporting 2 or more races □

Veteran Status: Veteran status □  Non-Veteran □

Age: <60 □  60-67 □  68-75 □  76-85 □  >85 □

Education: <High School □  High School □  Some College □
College Degree □  Post Graduate □

*******************************************************************************

FOR OFFICE USE ONLY

S Code: ________________________________
Site Code: 1□ (Lee)  2□ (Sarasota)  3□ (East Central)

Attendance: Class 1 □  Class 2 □  Class 3 □  Class 4 □  Class 5 □  Class 6 □
Mark the box if present

□ □ □ □ □ □
Demographic Information – Student Assistant

Name ________________________________

Male □ Female □ Date of Birth ____________________________

Address: ____________________________________________

Phone _____________________________________________

Relationship to Student: Spouse □ Unmarried Partner □
Parent □ Child □ Other relative □ Non-relative □

Ethnicity: Hispanic or Latino □ Not Hispanic or Latino □

Race: White (Non-Hispanic) □ White (Hispanic) □
American Indian or Alaska Native □ Asian □
Black or African-American □
Native Hawaiian or Other Pacific Islander □
Person reporting some other race □ Person reporting 2 or more races □

Veteran Status: Veteran status □ Non-Veteran □

Age: <60 □ 60-67 □ 68-75 □ 76-85 □ >85 □

Education: <High School □ High School □ Some College □
College Degree □ Post Graduate □

*******************************************************************************

FOR OFFICE USE ONLY

SA Code: ________________________________________________
Site Code: 1 □ (Lee) 2 □ (Sarasota) 3 □ (East Central)

Attendance: Class 1 Class 2 Class 3 Class 4 Class 5 Class 6
Mark the box if present □ □ □ □ □ □
MINDSET
A Model for Cognitive Fitness

MindSet Curriculum
ADSSP Innovation Grant
Florida Department of Elder Affairs
Keeping your brain fit – HOW?

- Mental Stimulation
- Interacting/Socializing with others
- Nutrition that is brain/body-healthy
- Do for others – have purpose
- Sleep
- Exercise
- Time out for yourself; de-stress
YOUR BRAIN

- Is an extremely complex organ that **YOU** have the capacity to influence and program!

You *can* Train your Brain
WHAT IS COGNITIVE FITNESS?

- When there is a balance in all aspects of brain function.
- The capacity to meet all of the many cognitive challenges of life.
- MENTAL
- PHYSICAL
- EMOTIONAL
WHAT CAN WE DO
TO ENHANCE
OUR COGNITIVE FITNESS??
STUDIES

- Nun Study of Aging & Alzheimer’s Disease
- National Institute of Health-ACTIVE
- Dr. David Loewenstein - a systematic program of cognitive rehabilitation can result in maintained improvement in performance on specific cognitive and functional tasks in mildly impaired dementia patients.
How do we build “mental muscle”?

- Cognitive Exercises in MindSet Class
- are the MAIN FOCUS:
  * Face/Name Association Exercise
  * Spaced Retrieval using distracters
  * Use compensatory strategies
  * Keeping a MindSet Notebook
  * Prospective Memory Exercise
  * Object location Exercise
Everyday ways to build MENTAL MUSCLE

- Like a gym workout, add a little *EXTRA WEIGHT* to your brain workout:
  
  **Do something CHALLENGING**
  * Take a class in an unfamiliar subject; learn to play chess;

  **Do something DIFFERENT**
  * Drive home a different route; write a letter instead of email; change your routine.

  **Do something NEW**
  * Learn how to play a musical instrument; learn a new language; take a trip to a place you’ve never been
INTERACTION WITH OTHERS

- It’s theorized that staying socially involved and active is good for brain health
- Be the first to say Hello!
- Keep in touch with family & friends
- Join social clubs or organizations
- Create a new group, organization or club
Every organ in the body is dependent on good blood flow, especially the brain!

A diet good for cardiovascular health is also good for the brain.

**Mediterranean Diet** - A diet rich in fruits, vegetables, whole grains, nuts, beans, seeds antioxidants, vitamins, and minerals that can help protect against cancer, heart disease, and Alzheimer’s disease, among other conditions.
NUTRITION

- **Omega 3 Fatty Acids:** help to decrease brain inflammation, maintain the fluidity of your cell membranes, lower the amount of lipids (fats such as cholesterol and triglycerides)

- **OMEGA 3 FOODS:**
  - Salmon
  - Flax seeds, flax seed oil
  - walnuts
NUTRITION

- **Antioxidants**: reduce damage caused by “free radicals”. Eating foods with high antioxidant value can help keep your body’s and brain’s cells healthy

- **ANTIOXIDANT-RICH FOODS:**
  - Blueberries, blackberries, raspberries
  - Broccoli
  - Garlic
  - Green Tea
  - Tomatoes
Whole Grains: have more fiber and micronutrients than refined grains. Better for cardiovascular system and brain health.

**WHOLE GRAIN FOODS**
- Oatmeal
- Whole-grain breads
- Brown rice
- Quinoa
DO FOR OTHERS

- Be of service to others
- Volunteer for a cause
- Give to charity
- Help someone in need
- Random acts of kindness

Wherever a man turns he can find someone who needs him. ~Albert Schweitzer
SLEEP

- A full night of sleep is critical for maximum brain functioning.
- 7-8 hours a night is recommended.
- Sleep problems are common in older adults and especially individuals with dementia.
SLEEP HYGEINE STRATEGIES

- Identify underlying conditions
- Go to bed and wake up at the same time
- Establish bedtime routines
- Limit daytime naps
- Exercise
- Limit/eliminate caffeine and alcohol
- Understand and manage medications
EXERCISE

- Physical Exercise increases blood circulation to your body and brain.
- Studies of seniors who walked showed significant improvement in memory than those who were sedentary.
- 30 minutes daily of exercise, four or more days a week is ideal
- Something is better than nothing!
EXERCISE

- A list of some suggestions for exercise:
  - Walking
  - Running
  - Ride a bike
  - Swimming
  - Weight training
  - Yoga
  - Stretching
  - Golf
  - Tennis
  - Aerobics
TIME OUT/DE-STRESS

- Taking steps to take time out for you is important for brain health.
- Meditation may possibly change the structure of the brain - people who meditate have a higher level of brain waves associated with advanced mental activity such as attention, learning and perception.
- Ten minutes in the am/ ten minutes in pm
TIME OUT/DE-STRESS

Some suggested ways to de-stress, take time out:

- Meditation
- Listen to music
- Yoga
- Practice breathing techniques
- Avoid negativity
IN SUMMARY ........

Remember, for an optimal MINDSET:

"Life is like riding a bicycle. To keep your balance, you must keep moving."

— Albert Einstein
Supportive Communication

MINDSET Curriculum
ADSSP Grant
Florida Department of Elder Affairs
COMMUNICATION IS A BASIC NEED OF HUMAN EXISTENCE

*It is how we:*

- SEND MESSAGES TO EACH OTHER
- TELL OTHERS OUR THOUGHTS AND NEEDS
- KNOW OTHERS THOUGHTS AND NEEDS
- KNOW WHAT IS HAPPENING AROUND US
Good/effective Communication depends on:

- GOOD HEARING and GOOD LISTENING
- EYE CONTACT
- FACIAL EXPRESSION
- TONE OF VOICE
- VOLUME of VOICE
- SHARED UNDERSTANDING OF LANGUAGE AND EXPRESSIONS
- A WAY OF REMEMBERING WHAT WE HEAR OR SAY
Challenges to Communication

- KNOWING WHAT YOU WANT TO SAY
- FORGETTING WHAT YOU WANT TO SAY
- USING THE WRONG WORDS
- FEAR OF SAYING THE WRONG THING
- DON’T UNDERSTAND/INSTRUCTIONS COMPLEX OR HAVE TOO MANY STEPS
- FRUSTRATION
- DISTRACTION
Tips for Effective Communication

- ACTIVE LISTENING
- ASK FOR CLARIFICATION
- TIMING AND SETTING
- EFFECTIVE SELF-EXPRESSION
Strategies to limit frustration

- **USE TOOLS** - (like the notebook, calendar etc.) to direct the individual to other resources if a question is repeated often

- **TAKE A TIME OUT** – answer the question in a few minutes

- **MANAGE EXPECTATIONS** – don’t expect individuals to be able do things they can no longer do
Understanding Supportive Communication

Barriers to effective communication are frustrating to both parties, so:

- TAKE A BREATHE
- MAINTAIN STEADY TONE OF VOICE
- CREATE A POSITIVE MESSAGE
- HAVE A SENSE OF HUMOR!
Supportive Communication

CLASS DISCUSSION:

- Identify some situations when communication is difficult.

- Have the class come up with some positive reinforcing phrases for student assistants to use in everyday conversation.
Stress

- INTERFERES WITH EFFECTIVE COMMUNICATION
- LOWERS OUR TOLERANCE FOR FRUSTRATION
- DISTRACTS US FROM BEING ATTENTIVE TO GOOD COMMUNICATION STYLES
Managing Stress

- TAKE A DEEP BREATH
- FOCUS ON WHAT YOU CAN DO
- SIMPLIFY YOUR LIFE WHEREVER YOU CAN
- AVOID OVER-STIMULATION
- DO THINGS THAT YOU ENJOY
- SHARE YOUR FEELINGS AND EMOTIONS
- DO PHYSICAL EXERCISE
Acknowledge and Validate

- Recognize
- Support
- Encourage
- Ask Questions
- Reassure
- Use compassion
Check your Voice

- Tone
- Volume
- Inflection
- Passive-aggressive words (them’s fighting words)
- Use kindness
Eliminate Confusion

- Repeat/Restate
- Ask Questions
- Reframe
- Check it out with each other
- Review
Memory & Aging

How Memory Works

MindSet Cognitive Rehab
Curriculum

ADSSP Innovations Grant

Florida Department of Elder Affairs
Normal Changes in Memory as We Age

- Slower recall
- More difficult to learn new information
- Word finding
- Lose mental flexibility (difficulty multi-tasking)
How We Remember

- **Encoding** - Learning new information

- **Storage** - putting new information into memory / filing it into the cabinet

- **Retrieval** - getting information out of memory / finding it in the cabinet
Why do we forget?

- **Encoding**
  - Selective Attention – we pay attention to selected information
  - We filter out or ignore most information

- **Storage**
  - We never really learn it/never stored
  - store inappropriately

- **Retrieval**
  - can’t get to the information
What is normal?

- Varies by education
- Varies by situation
- Varies by physical condition
- Statistics show . . . .
What affects memory?

- Physical problems/pain
- Medication
- Depression, grief, worry, anxiety/stress
- Vitamin/dietary deficiency
- Thyroid problems
- Alcohol use
Managing Memory

- **Law of Recovery** - we remember things seen most recently

- **Law of Vividness** - we remember things most vivid or unusual

- **Law of Frequency** - we remember things seen most often

- **Law of Association** – we remember things better when we attach new information to already stored information
Improving Memory

- **Pay attention**
  - More likely to remember something that has been given 8 seconds of attention

- **Repeat things/Rehearse**
  - More likely to remember things that we see more than once

- **Chunk**
  - More likely to remember manageable chunks of information
Improving Memory

- Use Cues
  - Mnemonic devices
  - Associations

- Use External Aids
  - GET ORGANIZED/establish routines
  - Take notes
  - Appointment books/Timers
  - Old tricks
Living Right

- Reduce alcohol intake/stop smoking
- Treat depression/anxiety
- Reduce stress
- Eat right & exercise
- Exercise your brain
- Avoid Injury
  - wear helmet while biking
  - wear a seatbelt
Healthy Memory

- Physical Fitness
- Mental Fitness
- Sense of control
Setting up a Safe, Healthy and Stimulating Environment

MindSet Curriculum
ADSSP Innovation Grant
Florida Department of Elder Affairs
A HOLISTIC APPROACH TO HEALTH:

MIND

BODY

SOUL
Setting up a Safe, Healthy and Stimulating Environment for:

MIND

- Practice cognitive exercises
- Continue to learn/try new things
- Maintain a daily routine
- Avoid negativity
- Keep a positive attitude (Attitude of Gratitude)
- Use good communication skills
- Stay social and involved with friends/family
Setting up a Safe, Healthy and Stimulating Environment for:

**BODY**
- Exercise
- Relaxation
- Healthy Eating
- Medication Management
- Get enough Sleep
- Keep/maintain doctor appointments
- Avoid/limit alcohol, tobacco, junk foods
Setting up a Safe, Healthy and Stimulating Environment for:

**SOUL:**
- Stay connected with spiritual beliefs/organizations
- Practice gratitude
- Volunteer to help/be of service to others
- Practice random acts of kindness
- Daily prayer and meditation
- Breathing exercises
YOUR HOME ENVIRONMENT

MAKE IT SAFE:

- Maintain good lighting/use night lights
- Remove objects that can be tripped over
- Use non-skid on slippery surfaces
- Install alarm systems and fire alarms
- Furniture that is safe, w/o sharp edges
- Have emergency phone numbers close by
- Locks on doors
- Keep keys in a safe place
YOUR HOME ENVIRONMENT

MAKE IT HEALTHY:

- Do away with clutter
- Keep nutritious foods on hand
- Keep toxic chemicals out of reach
- Use a pill reminder system
- Keep doctors phone numbers handy
- Use Awareness – be extra aware of your surroundings at all times
YOUR HOME ENVIRONMENT

MAKE IT STIMULATING:

- Set up a dedicated “puzzle room” or place to practice cognitive exercises learned in class
- Invite friends over to participate in a game or activities that use the mind
- Plant garden
- Read, practice word puzzles
- Listen to music,
- Get involved in activities outside of the home
- Learn new things, take classes
- Join groups
- Ideas from class?
A BALANCED MINDSET IS THE KEY

While creating a stimulating environment in the home is good, be sure not to over-stimulate.

Relaxation and quiet time are important to rejuvenate the mind, body and soul.

REMEMBER THAT A BALANCED MindSet IS THE KEY!
Review

- Dedicate specific time and space to set up stimulating activities like cognitive exercises, word searches, and puzzles
- Dedicate space, place, and time to exercise safely
- Follow a daily routine or a schedule
- Avoid over-stimulation in order to avoid frustration and fatigue
- Get together with other couple for card and other games (a little competition can be fun)