

“Mindgym”

An Aughton-Ormskirk U3A “Memory” programme

1. The evolution of the programme

Early in 2008 we were surprised by the number of members using different types of brain trainers (many of them given as Christmas presents by offsprings!), and we were left to wonder, which, if any, was the more cost-effective.

In February 2008 a leading U.K. medical journal compared five different games and gave the highest approval to a computer based programme called “Mindfit”. The fact that it was endorsed by a world renowned neuroscientist, Baroness Professor Susan Greenfield (Professor of Neuroscience at Oxford University) gave added credence. With a “bright ideas” grant from Age Concern, we purchased 20 copies and 20 members were invited to give their first impression. (This was not a structured research trial). Throughout 2008 over 100 members purchased their own copies of “Mindfit” – an indication of the level of interest in the subject.

Not all neuroscientists agree on the benefit of brain trainers but an article published in April 2009 in the Journal of American Geriatrics Society (and revisited in “New Scientist”) concluded that computerised brain exercises can improve memory and attention in the over 65’s.

The jury may still be out on the benefits of brain trainers, but the experience in Aughton-Ormskirk U3A raised the profile of ‘memory and memory training’ as a worthwhile study subject.

Concomitant with this we were able to identify within our U3A, enthusiastic individuals with relevant professional experience. We also benefited from the support of outside agencies concerned with health and wellbeing – the Directorate of Health and Wellbeing, Lancashire County Council and the Director of Mental Health Strategy Development, East Lancashire NHS. Subsequently we were able to attract a significant community grant from the Central Lancashire NHS which also came with their support.

2. The Nature of the Programme

The programme is in no way related to, nor dependent upon any computer based brain training of any type. It is completely ‘stand alone’. It is characterised by the following:-

2.1 The Knowledge Base

Prior to registering for the programme, participants attend three ‘instruction’ sessions.

.... A lecture by Baroness Professor Susan Greenfield’s (Professor of Neuroscience, University of Oxford) overview of the benefits of learning in later life as well as how we can affect our cognitive functions when we take appropriate steps to do so. This made an immediate and lasting impact.

.... A lecture by Dr. Sylvia Dillon – “Memories are made of this” – how the memory works and how it maintains its ability.

Both of these lectures were made available to members on DVD to help reinforce the learning.

- A pre-course seminar to respond to issues raised in the lectures.
- A publication "Science of the Brain" was made available for over 100 members who registered for the programme. "Neuroscience" is a well illustrated introduction to the subject (for young readers) produced by the British Neuroscience Association and European Dana Alliance for the Brain – dedicated to a better understanding of the nervous system in health and disease. [They were distributed free of charge].

For further details of the Theoretical basis of the programme see page 5 "Memory Course Content".

2.2. Applied Studies

The teaching/learning sessions consisted of interactive group sessions that required a consistent commitment of attendance and involvement on four consecutive weekly sessions.

For details of content see page 5 for "Memory Course Content"

2.3. Research

Pre-course, we searched the scientific/medical literature (149 papers in all!) but were unable to find details of research directly applicable to our situation. Mindful of the need to be at the leading edge of the knowledge of the subject we engaged with the Dept. of Clinical Psychology, University of Liverpool with the result that:

- We benefit from the advice and involvement of a senior academic.
- Throughout each run of the programme we have the hands on involvement of a post graduate Masters student, able to sustain the literature search, able to stand in as a facilitator should it be necessary.
- The research study will assess the effectiveness of the course in terms of change in:
 - ... psychological wellbeing
 - ... attitude
 - ... behaviour towards memory abilities and the management of memory problems.
- The experience of the programme will result in a published paper "Investigating the effectiveness of a psycho-educational memory course for older adults".

A further study is being designed with the collaboration of another University which will evaluate the "wellbeing" that is derived by other activities of our U3A.

All research projects will be with the approval of the University Ethics committee.

It should be noted by other U3A groups considering implementing a "Mindgym" programme that the Research element is not essential to the introduction of the scheme.

3. The “Mindgym” Team

We list the details to help other U3A groups to identify the type of skills and experience among their members that could be of use in offering a course. Our Team consisted of:

3.1 Facilitators

Dr. Sylvia Dillon – a former Senior Consultant Clinical Psychologist with experience in both university teaching and consultancy.

Ann Stark – a former Occupational Therapist with experience in helping patients with memory problems.

As part of our succession planning we have now involved, in the delivery of the programme, Norma Seddon (formerly Head teacher of a large children’s hospice school with its variety of clinical/psychological challenges.

Norma Seddon – Principal of Children’s Hospital School.

3.2 Admin Team

Wendy Craddock – a former bank manager
Ann Haskell – a former teacher and mathematician

For details of administrative function see page

3.3 Project Co-ordinator – Dr. Alex. McMinn – formerly International Medical Education Consultant with U.N. Agencies.

The Team meets frequently to evaluate each activity and make the necessary adjustments.

3.4 Post Graduate Research Assistant – Zeshan Khawaja.

4. The Future

4.1 New specialists will be introduced to re-emphasise some of the issues already explored. For example, a Physiotherapist will deal with the vital role played by physical exercise in maintaining brain health.

A nutritionist will deal in greater detail with diet and nutrients needed for brain health. (We are already involved in a research project on the role of “Flavinols” in brain health (found in dark chocolate and red wine – we had no difficulty in finding volunteers for this investigation!).

4.2 Many handouts have been produced for the participants. Early in 2010 we will collate and evaluate with a view to making them available to other U3A groups.

5. The Response

Within our own U3A there is a growing interest in the programme, generated in part by the enthusiasm of those who have already participated.

6. Conclusion

Throughout the government White Paper, “The Learning Revolution” there is repeated emphasis on the role of informal adult learning on the wellbeing of individuals and communities. We have sought to respond to this, as well as to the challenge of the significant numbers of our cohort who succumb to cognitive decline. U3A groups have the opportunity to respond to the challenge, be involved in a fascinating study and to emphasise that the complete range of activities U3A groups offer contribute to physical and mental wellbeing as well as creating the social environment. (There is so much evidence to show that older people with a strong network of family or friends benefit from the opportunities for social activities and therefore enjoy a better quality of life.

In sharing this experience with other U3A groups our hope is that we will learn from each other in future development of the course and that posterity will gain in the longer life from the enriched minds and greater wellbeing.

Helpful Reading

Daily Telegraph – Training Your Brain – part 1

Sunday Telegraph – Training your Brain – part 2

Edited Versions of “teach yourself training your brain” – www.pressoffers.co.uk/brain

Memory Course Content

Session 1

Introduction – Understanding our Memory

Memory systems and processes
The psychology of memory and its biological basis
Sensory input, attention
Short term/working memory
Long term memory, retrieval, recall and recognition
How these systems are related to memory problems
Attitudes to memory
Coping strategies

Session 2

Maintaining memory and preventing dementia

The importance of blood supply to the brain
Blood vessels and the thickness of blood
Explanation of thrombosis, embolism, aneurism and high blood pressure
How blood supply problems contribute to vascular dementia
Ways to keep the vascular system healthy
The importance of diet, exercise, stopping smoking, weight control and maintaining low blood pressure
Chronological, biological and psychological age

Session 3

Managing memory problems

Alzheimer's dementia and possible contributors
The need for activity to make and use connections in the brain
The brain in a constant state of change – plasticity
Reminiscence – reinforcing long term memories
The role of sleep in memory

Session 4

Confidence in our Memory

Sleep interruptions and stress
Anxiety and its effect on memory
Understanding and reducing anxiety
The importance of social contact and activity
Revisiting what we have learnt

University of the Third Age (U3A – Aughton and Ormskirk

Memory Course for Older People – 2009

As we get older, having an active mind and a reliable memory can help maintain our sense of psychological well being. It was from this premise that Dr. Alex. McMinn, our Founding Chairman, suggested that we, as U3A members could be pro-active in keeping our brains working and our memory in good shape. He set up a steering group to consider what could be done and the *MindGym project was conceived.

The “Memory Course for Older People” is one part of the MindGym project. The course has been designed and run by two U3A members, Sylvia Dillon a clinical psychologist and Anne Stark a retired occupational therapist.

The course aims to provide information about memory systems and to reduce anxiety about memory problems. Having mild memory problems as one gets older is natural, as natural as it is for our eye sight to fail, and just as we can help our eyesight with the use of spectacles, we can help our memory by understanding how it works and by using memory aids. Common problems such as losing keys, not being able to find the car in a large car park, forgetting names and finding that we can go upstairs and forget what we went for – are problems that can happen at any age, but often are more frequent as we get older.

The course raises awareness of ageist attitudes to memory and how different memory systems and processes can be related to different types of memory problems. Members are introduced to the research that shows that Vascular Dementia can be prevented by altering ones lifestyle with respect to blood pressure, smoking, diet and exercise. Although Alzheimer’s Dementia cannot be cured, research shows that being mentally active can delay the onset of dementia problems, supporting the old adage, “Use it or lose it”. The course also considers the importance of sleep and the effect of anxiety on memory.

The course consists of 4 weekly sessions of one and a half hours each session and accommodates 12 people at a time. There has been a tremendous interest in the course and though we have run the course twice we have a long waiting list for future courses. Is the course effective? Does it increase well being? As there does not appear to be a similar course elsewhere and we would like to know the answer to these questions, we have arranged for the course to be evaluated by a trainee on the University of Liverpool Clinical Psychology Doctorate programme.

Sylvia Dillon
4.08.09

Information Bulletin

Keep dancing and eat dark chocolate

A pioneering memory course could lead the way to improved memory

The first sign of ageing is usually the day we realise our sight is not what it was and spectacles are needed for reading. Later we might notice a bit of arthritis, or that we don't hear quite as well as we did. These things, Dr. Sylvia Dillon says, are annoying but don't frighten us too much.

However, the first time we go upstairs and forget what we went for, we worry that our memory is beginning to go and that often causes fear.

A new course, pioneered and led by Dr. Dillon, a clinical psychologist and Anne Stark, an occupational therapist, both members of our U3A, aims to conquer fear by helping participants to learn how memory works and how improvements can be made. This will be achieved by studying and discussing a body of scientific evidence, interpreted into laymen's language, which participants might want to use to help improve their memories.

The course, already over subscribed, will be offered three times in May, July and an autumn date yet to be announced, and could lead to further sessions. At a launch presentation in April, members packing St Michael's Church Hall, Aughton, were introduced to the idea that the brain can be prepared for the natural ageing process and coping mechanisms can be developed to help retain memory.

Anne Stark explained that her work as an occupational therapist had led her to believe that it is important to be mentally and physically active in our lives for as long as possible in order to age well.

Those who had attended Dr. Dillon's previous lecture on memory were reminded that common fears include:

- *Why can I remember a person's face but his or her name?*
- *Why can I remember everything I did at school but I can't remember what we were talking about at U3A last week?*
- *Why do I remember better in the morning than in the evening?*
- *Why can't I focus clearly on what people are talking about when I am in a group?*
- *How do I cope with my own panic?*
- *How can I help myself to sleep?*
- *How can I get my blood pressure down?*

Dr. Dillon's advice to those who attended her lecture was to "keep dancing and eat dark chocolate"!

Course Administration

Wendy Craddock
Ann Haskell

- The role of the course administrator is to relieve the leaders of the day to day management of the course by:
 - Providing forms to register interest in pre-course meeting and to apply for the memory course.
 - Organising a warm, friendly welcoming venue for meetings with dates to suit leaders.
 - Collating details of applicants.
 - Collecting resources for the course-flip chart, clip boards, pens, paper, plastic folders and hand outs of course notes.
 - Identifying dates and groups of 12 candidates for courses.
 - Checking by telephone that the group are available and confirming in writing.
 - Telephoning reminder the week before the course.
 - Answering queries and updating people who had requested the course but not been allocated a course.
 - Providing refreshments for meetings.
- Pre-course meeting
 - Stressing the importance of attending each of the four sessions.
 - Helping answer questions
 - Explaining that a small subscription would be required to cover costs (*but this is really to promote a desire not to miss sessions once started*).
- Course
 - Arranging venue to course leader's specification, considering participants hearing or sight needs.
 - Placing chairs in a circle with an individual's name, file, stationery and course notes.
 - Welcoming attendees and providing lapel name badge.
 - Collecting subscriptions and updated attendance register.
 - Attending weekly post course evaluation and implementing changes.