**SUMMER 2009**

**SMILE—~A~WHILE**

*PrimeTimes recognizes that there’s always room for a smile—occasionally even a laugh out loud—among the serious topics we address. If you have a humorous story about the lighter side of aging, send it in and we may publish it in future issues of the newsletter.

**POST TURTLE...** While suturing a cut on the hand of a 75 year old rancher, whose hand was caught in a gate while working cattle, the doctor struck up a conversation and the topic got around to one of the political candidates. The rancher said, “Well ya know, that candidate is a ‘Post Turtle’.”

Not being familiar with the term, the doctor asked him what a “post turtle” was. The rancher said, “When you’re driving down a country road you come across a fence post with a turtle balanced on top, that’s a ‘post turtle’.”

The rancher saw a puzzled look on the doctor’s face so he continued to explain with his obvious wisdom collected over some time. “You know they didn’t get up there by themselves, they don’t belong up there, and they don’t know what to do while they’re up there, and you just wonder what kind of dummy put them up there to begin with.”

**AGE-RELATED CHANGES IN MEMORY: WHY DOES IT HAPPEN?**

By: Russell Vaden, Ph.D., Assistant Professor of Educational Psychology, Coastal Carolina University

Dinner parties are wonderful events. Good food, good company, good conversation. I recently attended a large dinner gathering at a friend’s home with several people whom I had not before met. Inevitably, as with most social events, the conversation that might began with the question— “What do you do?” Upon disclosure of my profession and my scholarly interests in cognition and memory, I received from those dinner party guests a litany of case-specific questions: How can my wife and I improve our memory? Why do I forget things now at 52, when I used to be sharp as a tack? What happens in our brains as we get older that makes us remember things from long ago, but at the same time we forget our shopping list? When will I “find” the memory I lost?

Of course, for a minute or two, I provided the quick, standard answers to those dinner party questions as we transitioned from dinner to dessert. But, for the remainder of the evening, I inwardly reflected on the growing interest that people in the 50-something population have regarding their own cognitive changes. I became acutely aware that night of the intense interest that most of us have regarding the cognitive changes that we naturally make during our lives. If many, people feel it is an inevitable, change is seen as inevitable. For many, it is even welcomed. But for all, change is better accepted when accompanied by explanation. People generally seem to enjoy knowing the evidence of how and why their changes in thought and memory are so prominent.

As we all are aware, we are complicated creatures. We never stop changing. The development of our abilities extends even into our senior years. We experience significant growth and decline across all of the primary dimensions of our lives, within a constant pattern of movement and change. Given that understanding, it is interesting to consider the specific ways in which our cognitive abilities—primarily memory—shift and change across the later years. Also noteworthy are the pieces of evidence from scientific studies that...
Age-Related Changes in Memory . . . . Continued from page 1
explain the reasons and rationale behind the particular changes that we make. People tend to become more positive and comfortable with their cognitive changes when explanations for those patterns are readily available. As the guests at the recent dinner party demonstrated, people have a genuine desire to learn more about the phenomena in their own lives in order to better embrace the changes that they observe. Based on that trend, this article provides a brief listing of a few evidence-based conclusions about how the cognitive changes in middle and older adulthood occur as a by-product of some of the obvious physical changes that occur in the body at that same time.

SENSORY CHANGES
There is much evidence which suggests that the decline of sensory processing may be partly responsible for changes in memory and other complex cognitive acts during middle and late adulthood. For instance, a person's ability to focus on a particular visual stimulus and maintain its optical image in order to solve a problem with that visual information experiences its sharpest decline between ages 45 and 59. Evidence also suggests that the retina of the eye becomes much less sensitive to light levels and printed text at around that same age. Also, the sense of hearing, a person's sensitivity to pitches, ability to distinguish between specific sounds, and the skill of auditory acuity (e.g., distinguishing sounds that are near or far) also have been shown to begin their most significant decline during the 45 to 60 age range. Tactile sensitivity – although much less is known about its functional changes – has been observed to begin its most significant decline during the 45 to 60 age range. This decline in sensory processing has been linked to changes in memory. The primary theory regarding this issue is that the less efficiently we process information when it is encountered in our daily interactions with our environment (i.e., exposure to visual, auditory and tactile information), the less likely it is to be encoded and stored into our short-term and long-term memory banks. If the forerunners of our cognitive processing (i.e., our five senses) are not functioning properly, then our deeper levels of cognition – such as our problem solving and our memory – are not as effectively engaged. The bottom line is that if we don't see, hear, or touch something with clarity, then we are not likely to remember it later.

CARDIOVASCULAR CHANGES
Because most people are aware that there are cognitive symptoms associated with cardiovascular illnesses, and that cardiovascular health is linked to cognitive health, it should be no surprise that cardiovascular changes during middle and late adulthood are correlated with the typical changes in memory function that are observed during those same life stages. During middle adulthood, many people find that fatty deposits and scar tissue begin to slowly accumulate in the blood vessels, thereby reducing blood flow to vital organs, including the brain. Between ages 45 and 55, most adults learn that their metabolism rates shift rapidly, contributing to instabilities in the ways that cholesterol can impact the body's ability to regulate brain chemicals via cardiovascular functioning. Blood pressure is an obvious concern for most adults entering their fifties, as the consistency of blood pressure measurement is known to rapidly decrease within that decade, significantly destabilizing the rate at which blood flow impacts the tissue regeneration in the brain.

Obviously, this decline in cardiovascular functioning has been linked to changes in memory. Considering that the organic structure of the brain is rather dependent upon vascular health, it stands to reason that specific cognitive functions that are influenced by the brain would be significantly altered when those types of alterations occur in blood flow patterns. Generally, when blood flow activity in the brain is decreased, scientists have observed delays in cognitive processing time, decaying of problem-solving within the short-term memory, and a general deficit in retrieving previously stored information from long-term memory. This redirects our attention to the theory that as the efficiency of oxygen transport within the blood system decreases, so do our memory and problem-solving abilities.

If you have comments or questions about articles in this issue, want to submit a letter to the editor, ask a question or make a comment, or if you would like to suggest appropriate subjects for consideration in future issues of PrimeTimes, the PrimeTimes staff wants to hear from you. If you want to be added to the PrimeTimes mailing list, just call, fax or write to let us know.

LOCATION:
The Office of Lifespan Studies
Atlantic Center
642 Century Circle
Conway, S.C. 29526

MAILING ADDRESS:
OLS - Atlantic Center
Coastal Carolina University
P.O. Box 261954
Conway, S.C. 29528-6054

E-MAIL ADDRESS:
rockdot@coastal.edu

TELEPHONES:
Rocco Cartiano, 843-349-4116
Research Associate
Fax 843-349-2184

The SUMMER 2009 Lifelong Learning course for June and July 2009 are listed in the summer schedule. Classes in art and photography, computer technology, history, literature and writing, music, personal growth and development are available. Classes are scheduled in Conway at the Foundation Center, in Litchfield at the Waccamaw Center and North Myrtle Beach at the J. Bryan Floyd Center.

What a GREAT WAY to spend some of those nice summer days with subjects you have an interest in and meeting those with similar interests while doing so.

Check the Osher Lifelong Learning Institute Web site at www.coastal.edu/olli for more information or telephone 843-349-4001 or 843-349-4030.

Age-Related Changes in Memory . . . . Continued from page 4
concerning strategies and behaviors for improving quality of cognitive functioning during adulthood are encouraged to explore the following resources:


Russell Vaden may be reached at rvaden@coastal.edu. To read Vaden’s first article in PrimeTimes, Winter 2009 issue, “MEMORY: Through the Years”, please go to www.coastal.edu/caar and click on PrimeTimes listed on the left; ALL previous issues of PrimeTimes can be found here.
Catholic Charities - Pee Dee provides many supportive services for seniors to help sustain independent living in this growing population. These services help make it possible for seniors to continue living full, independent lives in their communities. Our programs provide assistance that maintains a person’s dignity, and advocates for social justice through an array of community-based services and referrals.

Today, Catholic Charities – Pee Dee have seven successful Services for Senior programs. Our Geriatric Care Management service is broad and comprehensive. These services are available to individuals and families. A modest fee is charged in order to cover part of the cost; however, a sliding scale is available for those in need. This program provides case management, advocacy on behalf of the participant, a comprehensive assessment to create an individualized care plan, referral and coordination of services in all areas of a participant’s life, close collaboration with other service providers to coordinate and monitor care, and re-evaluation of service needs on a regular basis.

We partner with the South Carolina Department of Human Services and the United States Department of Agriculture to provide supplemental food and nutritional education to a limited number of residents of Horry County who are age 60 and older. A monthly food package is provided to participants.

Catholic Charities – Pee Dee is excited to offer other special services unique to our charity, such as Financial Advocacy and Money Management, Medication Application Service (MedAppS), Moving Management for Seniors, Telephone Reassurance Program, and our Wisdom Programs. The Financial Advocacy and Money Management programs provide budget preparation and financial maintenance service for seniors, age 55 years and older, who are competent to make financial decisions but are not able to manage routine finances. Sorting and bill paying, balancing checkbooks, screening mail and financial advocacy are all of the services of this program which promotes healthy living by helping people access needed medicines, at an affordable cost, in the dosages prescribed by their physicians to maintain their health.

Moving management for seniors provides moving management, consulting and coaching services. We specialize in working with seniors and their adult children. We are skilled in making necessary arrangements, locating appropriate housing including retirement or assisted-living communities, locating needed resources, arranging the actual move, anticipating needs, helping with decision-making and smoothing the actual transition in every way possible. Telephone Reassurance Program is an outreach and support program that checks-in with senior adults at home on a regular basis.

The goal of the Telephone Reassurance Program is to allow seniors to remain in their home longer by checking in with them and through conversations ask about their safety, nutrition, and if they have taken their medications. Our Wisdom program helps seniors celebrate aging as a time for reflection and mentoring. Workshops and support groups are offered which enable seniors and their family’s opportunities to share and celebrate through memories, perspectives and gifts of the older generation. This program focuses on meditation, creativity and healing; giving recognition to seniors throughout the region.

Catholic Charities – Pee Dee is located at 407 Blossom Street in downtown Conway. We are dedicated to helping people of all faiths and cultures through programs that focus on those with the greatest need.

We invite you to learn more about us and our services by calling 843-488-2112, or visit our Web site at www.supportcatholiccharities.org.

Trisha Moody-Walker can be reached at tmoody-walker@catholiccharities.org.

Catholic Charities, PeeDee

By Trisha Moody-Walker, Client Advocate, Senior Care Liaison

Most of the agencies, businesses or organizations featured are connected to our cognitively active individuals. The importance of strategic planning for cognitive preservation and health.

Based on the Mankato Nun study, some useful “mentally active” strategies for cognitive preservation are suggested here:

• Frequent Use of Language: Frequent and complex use of language – both spoken and written expression – have been shown in research to result in higher brain weight and fewer incidences of cognitive impairment or characteristics of Alzheimer Disease. Psychologists and speech therapists often recommend the regular engagement in activities such as journaling/diary writing, puzzle completion (i.e., crossword, word search, logic game), poetry composition, conversation with others, and even talk-aloud problem solving (e.g., saying the steps to a process out loud as you do them).

• Regular Engagement in Intellectual Activity: Consistent engagement in intellectual activity may be a preservation tool. Nuns in the study who had been teachers for many years demonstrated significantly fewer symptoms of brain decomposition and atrophy than their peers who had worked in service positions for most of their lives. This seems to strengthen the belief that stimulating the brain with intellectual activity helps to keep the neuronal connections healthy and alive. Psychologists frequently recommend regular involvement in activities such as reading (either silently or aloud), researching favorite topics, learning a new skill or craft, teaching a skill or craft to others, or creating elements of visual or performing art.

• Persistent Physical Exercise: People who engage in regular exercise – primarily of the cardiovascular variety – have been shown to demonstrate much lower likelihood for developing problems with memory and reasoning in their senior years. Physiologists generally recommend 20 to 30 minutes of moderate physical activity per day in order to sustain optimum physical health, and this suggestion appears to be beneficial for maintaining positive brain functioning as well. Numerous studies (including the Mankato Nun investigation) have documented the use of simple physical activity as an intervention against cognitive decline.
Vitamin “D” earns an “A” . . . . . Continued from page 1

Age-Related Changes in Memory . . . . . Continued from page 3

A second option would be to spend more time in the sun because sufficient ultraviolet ray exposure reduces the need for vitamin D from dietary sources. The vitamin is formed when skin is exposed to sunlight; however, the amount of vitamin D synthesized depends on many factors. These include: the season (summer sunlight provides more vitamin D production than winter), where one lives (many days it is impossible to have sunlight exposure in northern latitudes), and skin color (darker skinned people require much more sun to make vitamin D because their extra pigment blocks UV rays). For this reason some vitamin D researchers recommend 10 to 15 minutes of sun exposure prior to sunscreen use. Keep in mind that researchers are not recommending “excess” sun exposure because sunburning would increase skin cancer risk. Too, although sunscreen blocks 95 percent of vitamin D production, application of sunscreen is still recommended for more than casual sun exposure. One other interesting note is that is impossible to “overdose” on the natural form of vitamin D from sun exposure.

The third option, and likely the most practical one, would be through supplementation. Because many foods are not good sources of vitamin D and exposure to sunlight is not always feasible, some experts believe supplementing with vitamin D-3 or cholecalciferol rather than the less potent vitamin D-2 should be considered. Researchers are now suggesting that 800 to 1500 IU of vitamin D-3 might be needed to prevent osteoporosis. However, this recommendation is not set in stone and many researchers agree that an adequate level of vitamin D intake is not a magic bullet for osteoporosis prevention; it is only one of the factors that contribute to healthy bone health.

Disaster Schemes Can Cause Additional Heartache

Natural disasters, such as the recent wildfires, can often bring out the best in people, as strangers reach out to help others in need. Unfortunately, the aftermath of a crisis also brings out persons who take advantage of those who have already been victimized.

“In the wake of damage that will be left behind by the recent fires, the Myrtle Beach area is particularly vulnerable to fly-by-night contractors who attempt to take advantage of an already tragic situation,” said Kathy Graham, Better Business Bureau (BBB) president.

Some of the most common “post-disaster” scams involve home and property repairs. The BBB offers the following tips to home and business owners who have suffered property damage in the wake of the recent wildfires:

• Although you may be anxious to get things back to normal, avoid letting your emotions get the best of you. Don’t be pressured into making an immediate decision.
• Any promises made orally should be written into the contract.
• Check with your insurance company about policy coverage and specific filing requirements.
• Be wary of door-to-door workers who claim to have left-over repair materials from a job “down the street,” or who do not have a permanent place of business.
• Be leery if a worker shows up on your doorstep to announce that your home is unsafe. If you are concerned about possible structural damage in your home, have an engineer, architect or building official inspect it.
• Be wary of door-to-door workers who claim to have left-over repair materials from a job “down the street,” or who do not have a permanent place of business.
• Prepare a written contract agreement with anyone you hire. It should specify the work to be done, the materials to be used, and the price breakdown for both labor and materials. Review it carefully before signing.
• Any promises made orally should be written into the contract, including warranties on materials or labor.
• Never pay for all repairs in advance, and do not pay cash.
• Review all documentation before signing on the dotted line and before making any payment.
• Disaster victims should never feel forced to make a hasty decision or to choose an unknown contractor. When in doubt, contact the BBB.

The Better Business Bureau of Coastal Carolina, Inc. is a private, nonprofit membership-based organization of businesses in the Coastal Region of North and South Carolina that are dedicated and pledged to ethical business practices. The BBB can be reached at 843-488-0238 or www.bbb.org.

Readers who are interested in gaining more information

continued on page 5

continued on page 11
Sure, many readers of heart and is used to screen for heart disease (I'm a device that measures the electrical activity of the heart, also referred to as an ECG or EKG.) Our EXSS students will now gain “hands on” experience in conducting stress tests and interpreting an ECG.

With regard to research, in 2008 the laboratory completed a rather large study of muscle strength, balance and falls in middle age and older men and women. This study has so far led to four research presentations at the Southeast Regional American College of Sports Medicine Annual Meeting, a presentation at the national meeting of the American College of Sports Medicine, and a presentation at the national meeting of the American Physical Therapy Association. Also, a book chapter was published in Fall 2008 using data obtained from this study.

Other exciting news related to the EXSS program is the recent hiring of Will Lyerly, an exercise physiologist from the University of South Carolina. Lyerly will be joining the faculty in the fall 2009 semester and brings to the facility a wealth of experience in research, teaching and the certification process by the American College of Sports Medicine. Also, a book chapter was published in Fall 2008 using data obtained from this study.

Vitamin “D” earns an “A” . . .

By all accounts, exercise will help you to stay healthy and live longer. Of course, there are different means of exercise. There is the indoor variety that includes working out in a gym and perhaps using specialized equipment to work different muscles, including your heart. Exercise can also be accomplished outdoors, in nature, and one can reap the benefits of not only exercising their bodies but also enjoying our beautiful natural areas.

By Christine Ellis, Waccamaw RiverKeeper, a program of Winyah Rivers Foundation, and Jeremy Neal, Senior, Health Promotion Program, Coastal Carolina University

By all accounts, exercise will help you to stay healthy and live longer. Of course, there are different means of exercise. There is the indoor variety that includes working out in a gym and perhaps using specialized equipment to work different muscles, including your heart. Exercise can also be accomplished outdoors, in nature, and one can reap the benefits of not only exercising their bodies but also enjoying our beautiful natural areas.

Paddling is one of those types of outdoor exercise activities. Paddling, also referred to as canoeing or kayaking, exercises the cardiovascular system as well as many parts of the muscular system. Depending on how intense the paddling activity is, one can get a moderate or a vigorous workout that will not only get the blood pumping but also work the muscles of the legs, arms, chest, back and abdomen.

A good cardiovascular workout is one of the keys to good health. The heart, a muscle, gets stronger and more efficient with exercise, resulting in improved blood flow to the body. A healthy heart reduces the risk of cardiovascular disease including myocardial infarction (heart attack).

In addition to a cardiovascular workout, paddling works our skeletal muscular system. The leg muscles help to stabilize the body in the canoe or kayak. The arm, chest and back muscles help in stroking the paddle through the water to move the canoe or kayak in the desired direction. The abdominal muscles get their workout from the twisting movement of stroking the paddle from each side of the canoe or kayak.

Beyond its potential for a good workout, paddling is easy to learn, enjoyable in the doing, and gets you outside in the fresh air and surrounded by nature. Paddling is a growing hobby/sport that accommodates all kinds of people - young and young at heart. Paddling enables one to enjoy all that nature has to offer. Sharon Thompson can be reached at thompson@coastal.edu. She is a frequent contributor to PrimeTimes and her articles can be found in previous issues by visiting coastal.edu/caar and clicking on PrimeTimes.
Investing in a Time of Chaos
By Norman F. Whitley

I remember a joke used by comedians many years ago to exaggerate the mushrooming use of credit cards in U.S. society. It went something like this: “If you can’t afford it, that’s okay, just charge it to Visa. When the bill comes from Visa, pay it with MasterCard and when the bill comes from MasterCard, pay it with Discover and when…”

It was a joke. No one really thought anyone could do such a thing, let alone the U.S. Treasury, our paragon of financial security. Yet that is precisely what the U.S. is doing, paying down our debt with more debt as a means of stabilizing a financial system built on an illusion of nonexistent wealth that suddenly evaporated. The consequences of the financial implosion have been painful for Americans who, in less than a year, have seen their home values plummet, retirement savings halved, their children’s education funds evaporate, their credit lines dry up and their jobs lost or in peril. Undergirding it all is a persistent feeling of fear and insecurity that undermines the stability of their everyday lives. This is no joke. This is life in America today, and the sporadic thrashing about by our political leaders trying to navigate this uncharted waters has not done much to quell the fear and restore confidence.

Nevertheless from time-to-time we see glimmers of hope that we may be at the beginning of a recovery, even though these glimmers are frequently doused by intervening specks of a worsening disaster. Are we at the bottom? Are we on our way to recovery or is there still a lot more pain to endure? Are actions by our government helping or hurting? Do we need more stimulus or contracts with a cool breeze? Are we upping investment funds evaporate, their credit lines dry up and their jobs lost or in peril. Undergirding it all is a persistent feeling of fear and insecurity that undermines the stability of their everyday lives. This is no joke. This is life in America today, and the sporadic thrashing about by our political leaders trying to navigate this uncharted waters has not done much to quell the fear and restore confidence.

The overriding message for investors is to avoid panic. There is likely to be a continuation of volatility and uncertainty for some time to come. Don’t be stampeded by fear into taking actions that will permanently harm your financial security. Some investors are using the rallies, when they come, to selectively trim their stock portfolios and raise cash that they may need during the next several years. Others who already have a large cash position and a long-term investment horizon are likely to see the benefits for their portfolios for the watershed because of the benefits for the community and for the long-term health of the river.

Nevertheless from time-to-time we see glimmers of hope that we may be at the beginning of a recovery, even though these glimmers are frequently doused by intervening specks of a worsening disaster. Are we at the bottom? Are we on our way to recovery or is there still a lot more pain to endure? Are actions by our government helping or hurting? Do we need more stimulus or contracts with a cool breeze? Are we upping investment funds evaporate, their credit lines dry up and their jobs lost or in peril. Undergirding it all is a persistent feeling of fear and insecurity that undermines the stability of their everyday lives. This is no joke. This is life in America today, and the sporadic thrashing about by our political leaders trying to navigate this uncharted waters has not done much to quell the fear and restore confidence.

The overriding message for investors is to avoid panic. There is likely to be a continuation of volatility and uncertainty for some time to come. Don’t be stampeded by fear into taking actions that will permanently harm your financial security. Some investors are using the rallies, when they come, to selectively trim their stock portfolios and raise cash that they may need during the next several years. Others who already have a large cash position and a long-term investment horizon are likely to see the benefits for their portfolios for the watershed because of the benefits for the community and for the long-term health of the river.

Nevertheless from time-to-time we see glimmers of hope that we may be at the beginning of a recovery, even though these glimmers are frequently doused by intervening specks of a worsening disaster. Are we at the bottom? Are we on our way to recovery or is there still a lot more pain to endure? Are actions by our government helping or hurting? Do we need more stimulus or contracts with a cool breeze? Are we upping investment funds evaporate, their credit lines dry up and their jobs lost or in peril. Undergirding it all is a persistent feeling of fear and insecurity that undermines the stability of their everyday lives. This is no joke. This is life in America today, and the sporadic thrashing about by our political leaders trying to navigate this uncharted waters has not done much to quell the fear and restore confidence.

The overriding message for investors is to avoid panic. There is likely to be a continuation of volatility and uncertainty for some time to come. Don’t be stampeded by fear into taking actions that will permanently harm your financial security.

Norm Whitley publishes a free monthly online investment newsletter and teaches classes for Coastal Carolina University’s Osher Lifelong Learning Institute. He can be reached at nwwhiteley@coastal.edu or nwwhiteley1@verizon.net