The Torch

Edition 36

Build up to the JEEMT long Cane Rally 2024

The long-awaited Long Cane Rally is just around the corner! To kick things off, we'll delve into the history of the white cane, followed by captivating articles that tie into this incredible event.

Stay connected with us on Facebook, Instagram, and our website to discover all the exciting things we have planned for you. Be sure to join the event page on Facebook as well.

Don't forget to sign up for our newsletter to stay informed about the latest developments.

Warm regards,

John and Esther Ellerman Team

History of the white cane

In 1921, James Biggs, a photographer from Bristol, England, became blind following an accident. Because he was feeling uncomfortable with the amount of traffic around his home, he painted his walking stick white to be more easily visible.

In 1930, the late George A Bonham, President of the Peoria Lions Club (Illinois) introduced the idea of using the white cane with a red band as a means of assisting the blind in independent mobility.

The Peoria Lions approved the idea, white canes were made and distributed, and the Peoria City Council adopted an ordinance giving the nearer the right-of-way to cross the street. News of the club's activity spread quickly to other Lions clubs throughout the United States, and their vision handicapped friends experimented with the white canes. Overwhelming acceptance of the white cane idea by the blind and sighted alike quickly gave cane uses a unique method of identifying their special need for travel consideration among their sighted counterparts.

Also in 1931, in France, Guilly d'Herbemont recognized the danger to blind people in traffic and launched a national "white stick movement" for blind people. She donated 5,000 white canes to people in Paris.

The white cane now universally acknowledges that the bearer is blind

Souce: QLD Blind

Mental Health Tips for Those Who are Blind or Visually Impaired

May is Mental Health Awareness Month. We know that vision loss can cause a lot of grief, which we've talked about before on the blog, but what about keeping your mental health in check on a regular basis?

Today we're sharing some tips and tricks so that you can feel your best mentally, even with vision loss and blindness.

1. Take Care of Your Physical Body

This can go in a lot of different ways but there are a lot of things you can do to take of your physical body that supports your mental health! From eating healthy to getting enough exercise, taking care of your physical self is so important for mental health, especially if your vision loss is caused by something like diabetes.

2. Get Outside

There are so many benefits to getting outside from making sure you're getting enough Vitamin D to the mental health benefits. We know there can be extra challenges that might arise if you are blind or visually impaired (especially if you aren't confident in your orientation and mobility skills or have not received that training yet) but that doesn't mean you can't step outside and get some fresh air!

3. Talk to a Professional

We can all use some extra support sometimes during life. This can be especially true when dealing with vision loss or disability in general. There is no shame in talking to a professional counselor. You can even find low cost options on Open Path Collective or if you are interested in working with a therapist who specializes in physical disability, you can check out Therapy Den. A therapist can help you work through stressful events in life or even if you just need to check up on your mental health as a person who is blind or visually impaired. There is no wrong time to seek help.

4. Get Social

Similar to our tip about getting outside, there are so many benefits to getting social! Whether it is through a phone call, a Facebook group, or meeting up with a friend – they are all a great option to feel less isolated and alone.

5. Prioritize Sleep

Sleep is essential for not only our mental health but also just our health in general! It is especially important to get on a regular sleep schedule if you struggle with something like non 24 sleep wake disorder. Melatonin is a great natural option if you're struggling to sleep but be sure to check with your doctor before giving it a try!

6. Keep a gratitude journal

This tip comes from our very own Social Worker (we offer a wide range of social work services to our on-campus clients!) but keeping a gratitude journal can be a simple step to changing your mindset and helping your mental health. A gratitude journal can be as simple as writing three things you are grateful for each day no matter how small!

7. Self-Care

Another tip from our social worker, schedule 2 hours of self-care a week. Self-care can mean a lot of different things but as our social worker, David, puts it "self-care is anything a person wants to do for themselves that is not work or school. This can include a walk in the park, yoga, reading a book, watching a movie, etc. The point is to avoid stressful situations and do something you enjoy".

Source: WS Blind

Voiceye–Accessible Code

Similar looking to barcodes used on products at the grocery store, VOICEYE encodes large amounts of data into a small, printed square. Using a free app available on your smartphone, scanned VOICEYE codes can be translated and decoded in a variety of ways: print, voice, braille, or translation.

Recently while visiting Seoul, Korea, ABILITY's Lia Martirosyan spoke with Michael Park, VOICEYE's chief executive and president, who explained how the magic happens.

Lia Martirosyan: Can you give me a brief overview of VOICEYE?

Michael Park: In 2006, VOICEYE started out as code printed into the bottom of civil complaint documents that were issued by the government through the Internet. Since these

documents had the potential to be forged, VOICEYE stored the origin data and digital signature of the issuing organization in barcode, so that you would know it wasn't forged.

VOICEYE codes have been printed on various certificates, written judgments, prescriptions and utility bills by entities such as universities, our Ministry of Public Administration and Security, our Supreme Court, and also newspapers, magazines, books and leaflets, which are intended for people with low vision. This gives everyone equal access to the printed material. In the process, VOICEYE developed printed text data that could be stored into a small code and combined with Text to Speech Technology, which can read printed text out loud.

Martirosyan: What's the difference between VOICEYE code and the Quick Reference (QR) code that Japan's Denso Wave created?

Park: Many people think VOICEYE and QR are the same, but they're not. While they're both twodimensional barcodes, VOICEYE has 10 times the capacity of QR and can contain various types of data. For example, if we generate code with 1,000 bytes of data, QR needs 5 square cm to contain it, while VOICEYE only needs 1.4 square cm due to its high density.

Most QR codes only contain a URL for a web page, but scanned VOICEYE codes show the full data. Also VOICEYE provides various types of data formats, including leaflets, schedulers and business cards, which can be used online or offline.

Martirosyan: I understand, I'm guessing VOICEYE has a patent?

Park: We have a number of them for encoding/decoding twodimensional barcode, as well as outputting code through voice synthesis. Technology patents have not only been taken out in Korea, but also in the US, the European Union and China.

Martirosyan: What feedback are you getting from the Korean market?

Lia with Voiceye CEO and Representative at a conference booth. Right, voiceye in use with a mobile phone, hovering over text.

Park: The Korean government has adopted VOICEYE code for those who have low vision, so they have the same access as people without disabilities. It's been stated in our disability discrimination acts, as well as in our disabled person welfare laws, that VOICEYE code should be printed on government documents, certificates and any signs that are distributed to the public. So our code has been widely adopted to enhance accessibility for those who have low vision. Also, many government offices provide a mobile application that can scan VOICEYE code.

Martirosyan: This is great, when did you start marketing your product internationally?

Park: We've been targeting overseas markets for a few years now. At the moment, we have distributors in the US, UK, Canada, Japan, France, Thailand, China, Saudi Arabia, Jordan and Chile. These countries have been promoting our technology for use in government, schools and business. However, unlike in Korea, other countries have no regulations or laws that urge them to use VOICEYE code for information accessibility. So, results may be slow, but we have many inquiries and many projects in the works.

Martirosyan: We've been working closely with Viewplus, your US distributors, to make our printed editorial audible. How do people who are blind know where to find the code on a product?

Park: There's a standardized location of VOICEYE code at the right top corner of a paper, making it easy for those who have low vision to know where to find it. In Korea, most customers print VOICEYE code into this standardized location; we encourage overseas customers to do that as well, so that there's a global standard. Moreover, VOICEYE has been providing stands for smartphones in order to scan codes more easily for those who have low vision. Once you place your smartphone on the stand and align it with the right top corner of a printed piece of material that has our code, you can conveniently scan and decode it.

We're developing a scanning indicator mobile application that helps move to your smartphone's location. It can detect even a portion of a VOICEYE code, and then reveal the whole code. We're almost finished with it and will upload it to the Mac App Store and the Google Play in the coming months.

Martirosyan: Good to know! Have you done any focus groups with individuals who are blind?

Park: In Korea, we test all VOICEYE products with the Seoul National School for the Blind and the Hanbit School of the Blind before we release the products on the market. We've also gotten feedback and inquiries from people who use VOICEYE decoding devices and smartphone apps through community sites online.

Martirosyan: How do companies embed VOICEYE onto their printed pages?

Park: Generally, VOICEYE provides plugin software for MS Word, Adobe InDesign and QuarkXPress, which can edit printed materials to generate VOICEYE codes. Customers purchase a license to use VOICEYE Maker and install it. Then the customer can generate VOICEYE codes containing whole text data that can be embedded on each page; code will be printed at the right top corner, which as I mentioned, is starting to become a global standard.

If customers want to generate codes within their system without plugin software, we provide a type of library to generate and print code automatically. This consists of a library for the server and the client, which can be interlocked with a reporting tool. Generating code can be stored as an image file so customers can add it to existing files.

Martirosyan: Can you embed music into the code?

Park: An MP3 file is so big that it can't be stored into something the size of VOICEYE code, but we can decode a few parts of an MP3 file in a few seconds. This could be used for a simple greeting or brief voice message.

Martirosyan: Can you have a URL link within the code directing to a full piece of music?

Park: Why not? VOICEYE code can contain a URL link address. Once customers scan the code, a linked web page will open and the music will be played online.

Martirosyan: What future developments should we expect?

Park: Recently, we've created many assistive technology products using Optical Character Recognition (OCR). VOICEYE code can compensate when OCR technology is difficult to recognize or might have errors due to a document's format.

As far as I know, our code is the only technology on the market that can read and deliver this level of correct, printed data to customers with smartphones. We also have a business called Phone Marketing to provide new services with VOICEYE for people without disabilities. We're making various types of data, including text, business card, leaflet, audible menu, scheduler and sheet music, which will combine codes with Near field communication (NFC) technology to create a new business model. You constantly have to innovate to meet customer's needs and give them top of the line service.

For more info visit: voiceye.com

Source: Ability Magazine

An Interview with Shakila Maharaj on Making the Visual World Accessible

I recently had the opportunity of exploring the concept of making the visual world accessible to the blindness community through the use of audio description. It was the subject of a podcast episode with Shakila Maharaj, the managing director of ShazaCin Accessible Media, who is one of the foremost proponents of audio description in South Africa.

For those who aren't aware of audio description, it is an additional audio track that gives information of what most people are able to see. It is used in movies, television, live theatre, ballet, as well as in heritage and art spaces. It is a powerful tool that can help people like me gain access to a world of information that we could otherwise not know.

Shakila and I discussed ways in which audio description is moving beyond the blindness community to serve as a tool for people learning a new language, sighted people who want to engage with visual media while they are busy with another task, and those who use the audio track as a way to gain additional information and reaffirm what they take in visually.

Shakila also broke down the process of creating audio description and we discussed the emerging possibilities of using artificial intelligence (AI) in the creation of the audio tracks. We included links to how to access Shakila's audio content on the DescribeAT app that ShazaCin has developed for digital devices.

I would love to see more examples of audio description being used in South Africa, by our national broadcasters, those sharing visual content and advertising products on platforms including social media, and also in movie theatres and live productions. It would truly make the visual world more

accessible to the 1.4 million South Africans living with visual impairments and give us a greater sense of belonging in the world.

To hear our conversation and learn about the art and science of audio description, listen to the episode at: Iono FM

And, in the latest A Different Way of Seeing podcast, I chat to Vhutshilo (Vee) Masibigiri on her work in the diversity, equity and inclusion space. It was another fascinating conversation that I'll share with you next time.

Source: Lois Strachan

Your Vision Can Predict Dementia 12 Years Before Diagnosis, Study Finds

The eyes can reveal a lot about the health of our brain. Indeed, problems with the eyes can be one of the earliest signs of cognitive decline. Our latest study shows that a loss of visual sensitivity can predict dementia 12 years before it is diagnosed.

Our research was based on 8,623 healthy people in Norfolk, England, who were followed up for many years. By the end of the study, 537 participants had developed dementia, so we could see what factors might have preceded this diagnosis.

At the start of the study, we asked participants to take a visual sensitivity test. For the test, they had to press a button as soon as they saw a triangle forming in a field of moving dots. People who would develop dementia were much slower to see this triangle on the screen than people who would remain without dementia.

So why might that be?

Visual issues may be an early indicator of cognitive decline as the toxic amyloid plaques associated with Alzheimer's disease may first affect areas of the brain associated with vision, with parts of the brain associated with memory becoming damaged as the disease progresses. So vision tests may find deficits before memory tests do.

There are several other aspects of visual processing that are affected in Alzheimer's disease, such as the ability to see outlines of objects (contrast sensitivity) and to discern between certain colours (the ability to see the blue-green spectrum is affected early in dementia), and these can affect people's lives without them being immediately aware it.

Another early sign of Alzheimer's is a deficit in the "inhibitory control" of eye movements, where distracting stimuli seem to hold attention more readily. People with Alzheimer's seem to have an issue ignoring distracting stimuli, which may show up as eye-movement-control issues.

If dementia makes it harder to avoid distracting stimuli, then these problems could increase the risk of driving accidents – something we are currently investigating at Loughborough University.

Recognising faces

We have some evidence which suggests that people with dementia tend to process new people's faces inefficiently. In other words, they don't follow the usual pattern of scanning the face of the person they are talking to.

In healthy people, this would be from eyes to nose to mouth. We do this to "imprint" the face and remember it for later. People can sometimes sense when the person they are talking to does not do this.

In fact, some doctors working with people with dementia will recognise that someone has dementia when they meet them. People with dementia can sometimes seem lost, because they do not purposefully move their eyes to scan the environment, including that of the face of the people they have just met.

It would follow that you would then later be less able to recognise people as you have not imprinted their features. So this early issue in not recognising people you have just met could be related to ineffective eye movement for new faces, rather than being a pure memory disorder.

Can eye movement improve memory?

However, as visual sensitivity is related to memory performance (even using non-visual tests), we are also testing whether getting people to do more eye movements helps to improve memory. Previous research on the matter is mixed, but some studies found that eye movement can improve memory. Perhaps that explains why we found that people who watch more TV and read more have better memory and less dementia risk than those who do not.

While watching TV or reading, our eyes flick back and forth over the page and TV screen. However, people who read often also tend to have been in education longer. Having had good education provides brain reserve capacity so that when connections in the brain are damaged, the negative result is less.

In other studies, eye movements from left to right and right to left done quickly (two eye movements per second) were found to improve autobiographical memory (your life story). However, some studies suggest this beneficial effect of eye movement only benefits right-handed people. We are not sure why this is.

Despite these exciting findings, treatment for memory problems using deliberate eye movements in older people has not been done that much yet. Also, using deficits in eye movements as a diagnostic is not a regular feature, despite the possibilities in eye movement technology.

One of the bottlenecks may be access to eye-tracking technologies, which are expensive and require training to use and analyse. Until cheaper and easy-to-use eye trackers are available, using eye movements as a diagnostic tool for early-stage Alzheimer's is not possible outside the laboratory.

Source: Science Alert

Beneficiary News

We would like to extend our congratulations to **Francois**, son of **Don Wessels**, who received his Western Province colours for discus under 15.