

## Stem Cell Worx Health News

This month's edition of Stem Cell Worx News covers:

- **Health Benefits Associated With In-Person Connectedness Verses Online.**
- **Miracle Cure for Sight Loss.**
- **New Science Provides Promise For Treating Diabetes.**

### 1. Health Benefits Associated With In-Person Connectedness verses Online

Social connectedness has a huge impact on one's physical health and emotional well-being.

This was very apparent from the blue zone study on centenarians who live in Okinawa, Japan. Okinawans are supported by their moai, a small tight-knit social circle that is there through one's ups and downs. Moais are social support groups. They provide support for social, financial, health, and/or spiritual interests. **Moai** means "meeting for a common purpose" in Japanese and originated from the social support groups in Okinawa, Japan. The face to face social support that the moai provides reinforces and shares healthy behaviors. The result? Japan has the greatest percentage of people aged 100-plus per its country's population in the world.

Current estimates put the figure of total centenarians worldwide at around 450,000. By 2050 this figure is expected to be 2.2 million worldwide. In terms of actual numbers, the United States has the largest number of centenarians with the latest data available showing 72,000 are aged 100 years or more.

For the UK, the Office of National Statistics reports around 9,000 centenarians live in the U.K. This is a 90-fold increase since 1911, a 7% plus increase since 2005. At the current rate, the UK's centenarian population could reach over 40,000 by 2031. In many parts of the industrialized world people over 90 are the fastest growing segment of the population.

Other countries with large centenarian populations include:

- Spain
- Australia
- Germany
- France
- Japan
- Canada

Scientists look to these older populations to discover what the driving forces are to live a long, healthy, active life with a strong emotional state of mind intact. The debate and studies continue but some key influences have been determined. These include genetics (approximately 30% DNA and cell line repair), diet and exercise, medical and biological advancements and social connectedness. In this edition of Stem Cell Worx News we delve into the positives and negatives associated with physical verses online social connectedness.

As technological developments and social media interactions soar around the world the associated risks it brings cannot be ignored. It is fact that an online experience cannot outweigh the benefits of having real human interaction.

Not only is touch important but so is in-person conversation. Kinetic energy is felt in the presence of others and being touched and touching someone else are also fundamental modes of human interaction.

An experiment done by researchers at the University of Chicago and Harvard found that negotiators who shook hands were more open and honest, and reached better outcomes. Shaking hands causes the centers of the brain associated with rewards to activate. You are literally conveying warmth. This is why nothing replaces an in-person interview, important meetings and celebrations being had in person.

The high tech giants know this and they are working on being able to incorporate and transpose human touch into our digital devices in the future.

René Siegel, president and founder of High Tech Connect, a consulting firm sums it up: “Video conferencing can produce many of the benefits of face-to-face interaction (Siegel estimates it at about 80% as effective), “but it still doesn’t replace someone literally walking in and shaking my hand,” she says.

I recently face timed my Mom who lives in New Zealand. As much as I loved seeing her face beam through my phone, nothing replaces human touch and my immediate thought was “I wish I was there to hug her.”

While all age groups acknowledge the benefits of being able to connect via an online device, there must be balance. Here we share some important findings and tips that can help us curb our online addictions so we can focus on having more in person interactions and relationships as growing evidence shows in person results in healthier, more positive connections, outlooks and lifestyles.

## **Survey Findings**

### **1. The Total Feeling Calculation**

A book, Silent Messages, by Albert Mehrabian, who was a major figure in the study of non-verbal communication in the 1970s, introduced this equation about contradictory feedback.

Total feeling =  
7% verbal feeling  
+ 38% vocal feeling  
+ 55% facial feeling.

In other words, “the degree of liking conveyed by the facial expression will dominate and determine the impact of the total message.”

An interesting point is a lot of this is done unconsciously. People’s pupils dilate when they are happy or excited, and constrict when they are sad. As you look into someone’s eyes, you absorb this emotional information and respond. It is harder to hide reality in person and this is especially the case when someone is being too guarded (which can be disguised a lot more online, even when you are peering at a person via a face time screen).

## **2. Talk In Person Not Just Through A Screen**

When you speak to someone in person and look at them, it immediately portrays you are interested. It gives the other person a good vibe and is referred to as a “whole person” conversation. This is something that is not so easily reciprocated online.

In the in-person/whole person conversation if things go quiet for a while you look and search deeper, you take that in-person moment to read your friend more closely. You look into her/his face or pay attention to her/his body language. Or you simply allow the silence. It’s a powerful physical interaction and one that humans value and need.

Many people refer to this when they talk about a turning point in a relationship. They say the moment their relationship grew stronger was at the point where they were in each other’s company and could share a moment of silence together. That moment allowed them both to feel each other’s energy, it was a time to reflect and build trust in each other’s presence, without saying a word. Those moments are precious.

## **3. Don’t Become Lazy – Make the Effort For In-person Connection**

Studies show there is a much stronger brain connection when an interaction occurs in person compared to one online.

Online interactions are much more casual than physical interactions as they allow humans to not be so attentive to each other’s signals. Online conversations take less effort. There is less emotional involvement. This is why so many online bullies and trolls only have a war of words with someone via online messaging yet they would never say or do the same thing to that person in their actual presence.

A Rilling, Sanfey, Aronson, Nystrom, & Cohen) in 2004 showed a difference in brain activation strength between our reactions to human beings in person compared to computers.

Italian neuroscientist Giacomo Rizzolatti (and colleagues) developed the idea of “mirror neurons”. When we see a person in the flesh, the brain instantly fires up and kicks into gear with the same action. When your conversation partner smiles, a part of your brain smiles too. These signals are not nearly as strong via an online conversation. The power of the emotion and physical attributes are missing.

An example of this was a mother, Sharon Seline, who often exchanged text messages with her daughter, who was away at college. One afternoon, they “chatted via text” and Mom asked how things were going. Sharon’s daughter answered with a number of positive statements followed by emoticons of smiles and hearts. Later that night, her daughter attempted suicide. The signs of depression were there, but were masked a lot more via the online texting. Had there been face-to-face communications, the sharing and telling of her daughter’s emotional state would have been a lot more evident.

Social media interactions make visitors feel connected without the difficulties and complexities involved in face-to-face interactions. In person human interactions require more emotional involvement, cognitive effort and brain activation. This makes it all too easy for someone to take to and hide behind their device, especially when they are feeling low, tired or just a little unmotivated.

#### **4. Stress Levels Decrease When You Take A Break From Facebook**

This month (April 2018) research from the University of Queensland was released. The Queensland study looked at the effects of a person’s stress levels and well-being when they took a short break from Facebook.

The study involved two groups of Facebook users, with one group instructed to stay off Facebook for just five days and the other group used Facebook as normal. The researchers collected saliva samples from the 138 participants at the beginning and end of the study to measure changes in their cortisol levels

Dr Eric Vanman of the School of Psychology reported on the findings: 'Taking a Facebook break for just five days reduced a person's level of the stress hormone cortisol.'

Dr Vanman's own personal experience of quitting Facebook from time-to-time prompted the idea for the study as he found it helped him.

He said that although Facebook had become an essential social tool for millions around the world and had many benefits, it can also be taxing.

#### **5. Social Connectedness and One’s Health and Well-being**

Strong social ties can have a direct and positive impact on one’s health. Research has shown that higher levels of perceived social connectedness are associated with lower blood pressure rates, better immune responses, and lower levels of stress hormones, all of which contribute to the prevention of chronic disease.

In contrast, the lack of social connectedness, social isolation and loneliness is considered a risk factor for multiple chronic diseases, including obesity and high blood pressure. Lack of social connectedness can increase stress levels and lead to behavior that increases health risks, such as increased tobacco and alcohol use, or reduce healthy behaviors, such as eating well, exercising, and getting adequate sleep. Isolation and loneliness can increase depressive symptoms such as stress, fear of negative evaluation, anxiety and anger, and diminish optimism and self-esteem. A further consequence of feeling socially isolated is cognitive decline and dementia. (*Annals of Behavioral Medicine, Volume 40, Issue 2, 1 October 2010*).

It is important to note there are exceptions and loneliness is not a clear cut state. For example, some tightly knit families who spend a lot of time together can have high levels of stress. Loneliness is synonymous with perceived social isolation, not with objective social isolation. People can live relatively solitary lives and not feel lonely, and conversely, they can live an ostensibly rich social life and feel lonely so it is a complicated dynamic.

### **Tips For Improved In-Person Social Connectedness Rather Than Looking At Your Online Device**

- Focus on being engaged with life and your community.
- Give back to the world by volunteering, have a special relationship with a grandchild or share your passions by leading a program or by attending a program, community group or activity.
- Start a conversation with a person such as a team colleague, work colleague, someone you see in your community.
- Go to the local Gym. Go for a walk. Make a point of doing certain activities on a regular basis.
- Call that friend or family member you haven't seen for a while and make definite plans to catch up with the time and date marked firmly in your schedule and follow up with a note to express your desire to see them. When a friend or family member has a birthday or important event in their lives, don't just send them a text message. At least call and talk, and better still arrange to see them in person to celebrate and have fun talks and times.
- Jot down the number of activities you enjoy, and the people or groups you enjoy being around and being part of. Think about whether they make you feel excited and give you enjoyment in your life. Put some effort into those activities and relationships.
- Become more disciplined with your online time by limiting it and scheduling it in.
- Remember the number of likes or friends you have on a social media platform doesn't account for real, true friendships, the one's you value the most.
- If you have a family, ensure your computer is placed in a shared area of the home. Have all phones and online devices also placed in a central part of the home before you go to sleep away from the bedrooms where they are accessible in the morning.
- Download apps and monitoring software to ensure your children cannot go on certain forums and sites.
- Be extremely careful about what you share on the internet and on all social media forums. Remember what is displayed online can often never be taken back. Think before you publish

- personal photographs or opinions – ask yourself why am I telling my social circle this? Do I really want this online? What am I doing this for? Is my ego getting the better of me? Why does this friend, family member or person need to know where I am, what I am thinking, what I am doing?
- Before posting anything online ask yourself: “Would I say this to this particular person if they were standing in front of me right now?”
  - Make it a rule that if you are under the influence of drugs, medication or alcohol, do not text or post online.
  - Trust people in person way more than online. Always remember it is so much safer to speak to a person about a private matter in person.

## **2. Stem Cell Treatments Provide Life Changing Results**

### **Miracle Cure for Sight Loss.**

Read how patients regained eyesight after breakthrough for macular degeneration using a stem cell patch.

<http://www.stemcellworx.com/blog/miracle-cure-for-sight-loss/>

### **New Science Provides Promise For Treating Diabetes.**

Cell health is at the forefront of a number of the new developments for treating diabetes. Read the latest breakthroughs here:

<https://www.sciencealert.com/new-breakthroughs-diabetes-research-treatments-2018>