

The beautiful game and the beautiful mind

June 23 2014, by Amy Reichelt



The World Cup stimulates not only passion and nationalism, but reminiscence. The heroic 2-3 effort of the Socceroos against the Netherlands was the centre of many conversations this week, but will also be remembered for years in the future. My homeland, England's, World Cup efforts are probably best not being raised in discussion.

Memory for particular events has always fascinated me – why are certain events remembered in more detail than others? Are these specific memories less susceptible to be forgotten over time?

People certainly have stronger memories for events that have an emotional aspect, and memories for sporting events can be particularly robust and vivid. Although you might struggle to recall what you did last weekend, when it comes to sport, particular events can be remembered with incredible precision.

For people suffering from [Alzheimer's disease](#) and [dementia](#), the loss of memories has a devastating impact on their health, well-being and sense of self. As of 2013, there were an estimated 44.4 million people with dementia worldwide. Every week, 1,700 new cases of dementia are diagnosed in Australia. Alzheimer's disease is the most common form, affecting up to 70% of all people diagnosed with dementia.

Alzheimer's disease is characterised by damage to the brain in the form of [amyloid plaques](#) that form outside neurons, and [neurofibrillary tangles](#) made of dysfunctional [tau protein](#) inside neurons. This two-pronged attack prevents neurons from communicating with each other effectively across synapses and starves the neurons of nutrients. This results in the death of neurons, leading to loss of brain matter.

With fewer neurons, encoding new memories is less effective. [Short-term memory](#) loss is one of the first symptoms of Alzheimer's disease. Alzheimer's patients often formulate ways of disguising this kind of [memory](#) loss, putting it down to forgetfulness and using memory aids such as making lists. But as the [disease](#) progresses to deeper parts of the brain, [long-term memory](#) is also lost.

These long-term memories include fundamental knowledge about patient's past – the names of their close family and significant events such as details of their wedding. The loss of these intrinsic memories not only devastates family members, but creates frustration and distress in Alzheimer's patients, leading to depression and withdrawal.

The beautiful game

Recently, the project [Football Memories](#) in Scotland has shown that discussing soccer with other fans can help stimulate the recollections of some people who suffer from dementia. Soccer is an international sport, uniting communities with shared passion. Sports like soccer act as a

thread running through the lives of many people, tying together important events in a fan's life and connecting them to other enthusiasts.

Using visual cues with [dementia patients](#) – such as team photos, can stimulate avid discussion and also stir the recollection of memories that may otherwise be overlooked. Recollected memories are highly detailed – remembering specific matches, goals and incidents. Moreover, these memories contain important information regarding the circumstances and features surrounding the recalled sporting events – locations, time of year, the people you were with and how you were feeling at the time.

For dementia patients, group sessions and one to one discussions with other fans can stimulate extensive discussion and forge friendships across these shared interests. The memories have a robust emotional component and their vivid features provide dementia patients with a sense of empowerment, camaraderie and passion. Also, the recall of specific memories may strengthen the connections between remaining functional neurons (known as [neuroplasticity](#)) easing subsequent recall.

Although these projects have not extended to Australia yet, this kind of passionate, image driven discussion can be integrated into conversations by carers of those affected by dementia. These interactions could greatly enhance the sense of self that is lost in those suffering from dementia.

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