## Are you ever too old to improve your playing?

I've heard it said many times that "I'm too old to learn to play bagpipes" or "I'm past the age of improving my playing". I do not accept the validity of these two, or other similar, statements. I believe that age is not the barrier to improving that we allow ourselves to believe.

I base this belief on both my life I experience and as a musician. It is further supported by a very readable book, by Dr. Norman Doidge: "The Brain That Changes Itself". The ability of an aged brain to adapt, change and learn is often way under-estimated.

I'll unpack that below to make the points:

We can ignore those players who aren't bothered to try and improve, although I wonder how many are of that mind set because they believe they can't improve.

Of course, there is a little more complex than this short piece will contain.

## First and foremost, we believe that age stops us from being able to learn and improve.

There are times we have that reinforced by people around us. We see younger people learning quickly and conclude that our own slower progress must be due to age. There is reason to believe that older minds learn differently and may learn new things at a different speed, but the belief that it is an obstacle is a major issue in itself.

Older people don't practise like younger people. The younger person that advances quickly typically does practise, even though it may appear not. The trick is in the effectiveness of their approach to practice. Everybody, young and older, can gain significant advantage from practising in an effective way.

Mature people are often distracted from practising by life events – one of the kids are sick, I'm working late again tonight or the new wildlife documentary is on the TV. These are life's realities that restrict practice, but are not because of some characteristic of the older brain. If you practice, even in small amounts, **and do it effectively**, you can learn and improve.

## A fear of stepping outside of a comfort zone.

We all know mature players who have been playing bagpipes for 20 years and upwards. They tend to show fear and doubt about trying to do something different. By definition, "if you ain't changing, you ain't improving". If you're prepared to trust what you're being taught and make the changes required, you can and will improve.

Mature age people seem to want to build the house before the foundation slab has dried. This is a case of more haste, less speed. A young person tends to accept whats being asked of them and just do exactly that. Many folks who learn later in their lives are impatient to play and so don't stop to take the proper foundation steps to learning and improving. As an example, we might ask you to play the first bar of a tune and stop, so we can focus on and exercise particular things. Most often, an older player won't stop, they will play the entire part and the

value of that moment will have been largely lost. Not surprisingly, in this manner, a rickety, unreliable, "not quite right" house gets built.

## Physical disability.

This point naturally assume a body that physically works. Arthritis, crushed fingers, carpal tunnel syndrome and physical damage to the brain are examples of things that could hinder or even totally prevent someone from learning or improving. However, too often I hear "My fingers don't move as fast as they used to" and similar comments as reasons for not being able to learn. Finger nimbleness comes largely from the ability of the brain to send the right messages to the fingers, which is not as much of an age restriction as we often believe.

We are developing a methodology for teaching our members which we believe is effective in overcoming many improvement obstacles, particularly relating to finger technique. It is a particular way of engaging deeply with your brains during lessons, and which you can take away for your own practice. It will make your practice sessions more effective in a shorter space of time. Note that the methodology involves all our brains working as hard as each other's – so in essence a kind of a "mutual frying". This technique is as applicable to the more mature brain as to the younger one.

To sum up, before you disrespect yourself and say you are too old to improve. Take note of what we say each week, look for ways and opportunities to do exactly that and improve.

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Systems Neuroplasticity in the Aging Brain: Recruiting Additional Neural Resources for Successful Motor Performance in Elderly Persons

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Functional imaging studies have shown that seniors exhibit more elaborate brain activation than younger controls while performing motor tasks. Here, we investigated whether this agerelated overactivation reflects compensation or dedifferentiation mechanisms.

"Compensation" refers to additional activation that counteracts age-related decline of brain function and supports successful performance, whereas "dedifferentiation" reflects age-related difficulties in recruiting specialised neural mechanisms and is not relevant to task performance.

To test these predictions, performance on a complex interlimb coordination task was correlated with brain activation. Findings revealed that coordination resulted in activation of classical motor coordination regions, but also higher-level sensorimotor regions, and frontal regions in the elderly. Interestingly, a positive correlation between activation level in these latter regions and motor performance was observed in the elderly. This performance enhancing additional recruitment is consistent with the compensation hypothesis and characterises neuroplasticity at the systems level in the aging brain.

Key words: aging; fMRI; motor control; interlimb coordination; cognition; compensation; dedifferentiation; neuroplasticity