A recent study at the University of North Texas found that 75% of their piano students wished they had larger hands. Playing a keyboard with narrower keys effectively gives the pianist a larger hand span!

The current keyboard was not designed to suit most pianists - it dates from the 1880s and suited certain famous European male virtuosos of the time. Before then, piano keyboards generally had narrower keys.

The problems of the ‘one-size-fits-all’ piano keyboard which is too big for most pianists:

- Those with smaller hand spans are at greater risk of pain and injury. This comes mainly from playing large chords and fast octave passages which means hands are in a stressed position.
- Intensive practice, particularly by those with smaller hands (applies to most adult women and children), can lead to hand deformities, bad technical habits and injuries.
- Hands which are fully stretched deliver less power and have less control over dynamic range.
- Fingering choices are often not optimal.
- Legato and voicing of chords is often compromised.
- Increased practice time is required for those with smaller hands and more effort - both physical and mental - is needed to overcome technical challenges.
- Career opportunities are curtailed and many pianists are unable to fulfil their musical potential.

Dr Carol Leone, Chair of Keyboard Studies at Southern Methodist University in Dallas, has recently had an article published in the summer edition of Piano Professional journal (UK EPTA). She says: ‘I often witness pianists place their hands for the first time on a keyboard that better suits their hand span. How often the pianist spontaneously bursts into tears. A lifetime of struggling with a seemingly insurmountable problem vanishes in the moment they realise, "It’s not me that is the problem; it is the instrument!" Following on that, the joy of possibility overwhelms them.’

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**SUMMARY FOR PIANISTS AND TEACHERS**

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Alternatively sized keyboards

The evidence is that at least two additional sizes are needed:

- the 5.5 inch octave (approx. 7/8 of the current width), and
- the 6.0 inch octave (15/16 of the current width).

The major manufacturer of these keyboards, Steinbuhler & Co from Pennsylvania, USA has adopted the names DS5.5™ and DS6.0™ for these sizes. Steinbuhler keyboards are now being used in ten universities and an international piano competition in the USA!

For information about where you can try these keyboards, see: http://www.paskpiano.org/resources-links-and-success-stories.html

Some benefits of keyboards with narrower keys

- Faster learning
- Access to more repertoire
- Hands closer to ideal playing position – ergonomically neutral
- Improves performance quality - tone control, extra power and speed where needed
- Technical problems are reduced or disappear
- Initial adaptation to smaller size normally takes no more than one hour
- Pianists who play these keyboards can swap easily between keyboards as needed - just like string and woodwind players often do!
- Reduced tension and pain, greater security
- Enjoyment!

‘I have been playing on the piano [with Steinbuhler DS5.5™ keyboard] and I am starting to grow quite accustomed to the keyboard. Inevitably, of course, my first few hours of practicing has been wrought with awkward mistakes, but also with astonishing revelations. It goes without saying that chords which were merely played in wishful daydreaming are quite comfortably reached. That is not even the tip of the iceberg, however, as I saw, as I progressed in my practicing, that the whole gamut of piano playing is infinitely easier with the right keyboard size. Chord leaps, trills, scales, arpeggios, ascending and descending octaves could be played with virtually no effort in comparison to what I had to labor through hitherto. Consider, how I had neglected an Etude of Chopin’s, after seeing that no matter how much I practiced this one passage, it can only sound at best clumsy and amateurish. Indeed, when I played it on the smaller keyboard, I thought to myself, “Wow, I sound like Yefim Bronfman!”’ ... Daisuke Sakai, Thailand, November 2014.

‘Before I got my Walter [with DS6.0™ keyboard], I had chronic back pain, tightness from shoulders down which never resolved. With a few massages and adjusting to the 6.0, it’s now all gone. My technique, posture, enjoyment is natural and effortless. The answer is the right instrument.’ ..... Roger James, Colorado, May 2015.

Recent research relating to the hand spans of nearly 500 pianists has found:

- Adult males have a significantly larger span (thumb to 5th finger) than adult females. On average, the gender difference is 1 inch (2.5 cm) – more than the width of one white key!
- Caucasian spans (for each gender) are about one quarter of an inch larger than Asian spans.
- Esteemed international soloists who perform across a wide range of repertoire tend to have larger spans than others.
- A span of less than 8.5 inches has been defined as ‘small’, based on the ability to perform fast passages of octaves and large chords with power and ease but without tension, and the ability to just play a tenth. On this basis, we find that about 87% of adult females and 24% of adult males have ‘small’ hands when playing the conventional keyboard!

Further information

www.paskpiano.org
www.facebook.com/pask.piano
www.facebook.com/task.piano
www.smallpianokeyboards.org
www.youtube.com/channel/UCdiQ0iwCWFsGjZ1QI41KSBq [PASK YouTube channel]
www.steinbuhler.com
www.carolleone.com/ergonomic-keyboards/
www.dallasipc.org

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