

RESEARCH

Latest Smell Training Research

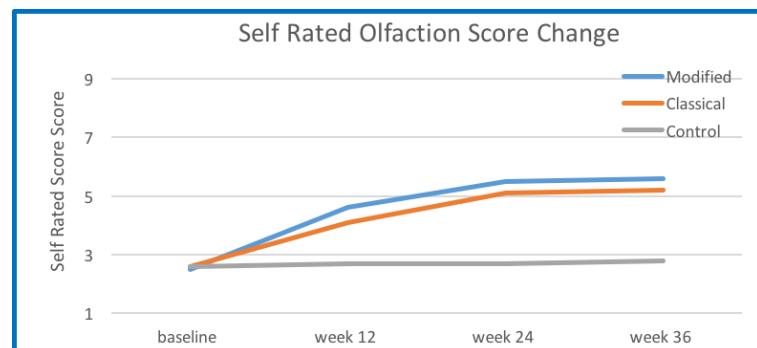
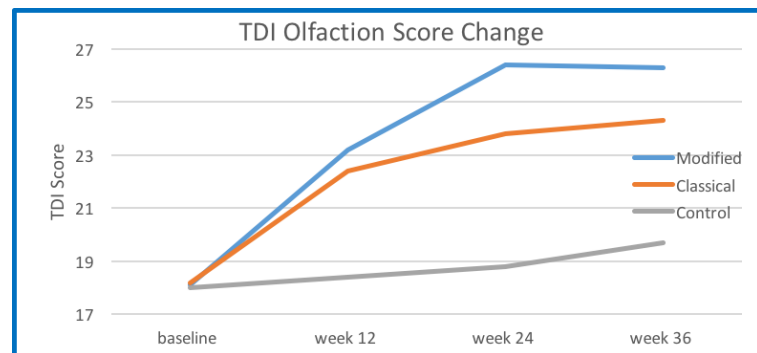
By Jim Boardman, Fifth Sense Research Coordinator

In 2015 a further study was published confirming that smell training is beneficial for people with impaired sense of smell due to a previous upper respiratory tract infection, and that some additional benefit can be gained from using a wider range of odours over a longer period than the 12 weeks used in earlier studies. The work was done at the Istanbul Surgery Hospital by a team including Professor Thomas Hummel and was reported in the Laryngoscope journal.

The study included 86 people with post infection olfactory loss, aged between 24 and 68 and with an average of 7 months since their infection. They were divided into three matched groups, one doing the “classical” smell training with the standard 4 odours for 36 weeks, one doing a “modified” smell training with the classical odours for 12 weeks followed by two different sets of 4 odours for 12 weeks each, and one doing no training - the “control” group. The progress of each group was measured using the standard Sniffin Sticks olfaction test and by self-reported sense of smell on a 1-10 scale (1: no smell, 10: excellent). The odours used were : “classical” - rose, eucalyptus, cloves, lemon; “modified” - classical for 12 weeks, menthol, thyme tangerine, jasmine for 12 weeks, green tea, rosemary, bergamot, gardenia for 12 weeks.

The results obtained were very similar when comparing the Sniffin Sticks measurements with the self-reported figures and are best appreciated from the graphs below. The TDI Score is an amalgamation of the different results from the Sniffin Sticks covering threshold, discrimination and identification measurements. A normal sense of smell would lie in the range 31 to 48 and anosmia (no sense of smell) would lie below 16, with hyposmia (impaired sense of smell) between 16 and 31.

The results suggest that 24 weeks of smell training gives a better outcome than 12 weeks, but with little further improvement between 24 and 36 weeks, even if different odours are used. However, a slightly larger improvement as measured by TDI occurs between weeks 12 and 24 if different odours are used. The authors of the study suggest that changing the odours periodically would help the users stick to their training by adding a degree of variation.



Several other points were noted by the authors. Firstly that the average degree of improvement experienced is higher the shorter the time since the infection which caused the loss. Secondly, the proportion of people in the smell training groups with a clinically significant improvement in their olfaction (TDI Score increased by 6 or more) was 20-30% after 12 weeks and 45-55% after 24 and 36 weeks, indicating that more people would notice a benefit from 24 weeks of smell training compared to 12. Thirdly, from another study, that the benefit of smell training lasts at least six months after finishing, and probably longer (presumably the follow up period was only six months).