Microsurgeons do better - tactile training might prevent the age-dependent decline of the sensibility of the hand.

Recent data demonstrate that the normal sensibility of the hand seems to be age-dependent with the best values in the third decade and a consecutive deterioration afterwards. However, it is not clear if long-term tactile training might prevent this age-dependent decline. We evaluated sensibility of the hand in 125 surgeons aged between 26 and 75 years who perform microsurgical operations, thereby undergoing regular tactile training. We examined sensibility of the radial digital nerve of the index finger (N3) and the ulnar digital nerve of the small finger (N10) using static and moving two-point discrimination (2PD) tests and compared the results to 154 age-matched individuals without specific long-term tactile training. We found significantly lower static and moving 2PD values for the sixth, seventh, and eighth decade of life in the microsurgery group compared to the control group (p<0.05). This study demonstrates that long-term tactile training might prevent the known age-dependent decline of the sensibility of the hand.