

Ericsson paper
Motor learning

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The main point in Ericsson et. Al.(1993) is that in order to achieve expert performance, one must engage in deliberate practice with the explicit goal of constant improvement. This theory further dismisses to a large extent the role of genetics, in which Ericsson reasons that there has been no great correlations between the attainment of superior performance and inherited traits. The purpose of this paper is to show agreement with Ericsson's theory, but only to the extent that deliberate practice is just one of many factors which must be included in order to gain expert status. Also, the task at hand can be a major determinant of how large a role practice plays in improvement. For example, in endurance sports such as marathon running, some are genetically endowed with a high aerobic capacity/VO2 max, and if these "special" people develop and improve their performance through deliberate practice, they can attain expert status. In contrast, the "average" person may also engage in an equal amount of practice but will never be able to achieve that same level of performance because their body is physiologically incapable. Furthermore, physiologist Dr. Astrand contends that up to 90% of the variance in aerobic performance is due to one's genes, regardless of training programs. (McArdle,1994). But sports like golf are probably influenced very little by genetics because skill acquisition far overshadows physical ability. History provides many examples of athletes who apparently has a poor genetic endowment, yet by hard training and motivation went on to international success (Shepard,1987). In conclusion, expert performance is most likely due to a complex interaction of psychological, physiological, and biomechanical factors (Powers, 1994); factors whose importance is dependent on the nature of the task at hand.

