

Role of Attentional focus in delivering a flawless performance

By Gabriele Wulf, PhD

An excerpt from *Attention and Motor Skill Learning*.

Adina Mornell is a renowned concert pianist and professor of instrumental pedagogy at the University of Music and the Dramatic Arts in Graz, Austria. Here she shares some interesting insights into the various facets of expertise of concert pianists, as well as the role their attentional focus plays in delivering a “perfect” performance.

Concert pianists are judged by their ability to give creative and inspired musical performances. The audience expects these professionals to play the correct notes. It is taken for granted that these artists will play flawlessly. Not a thought is given to the fact that this involves executing highly skilled motor tasks with utmost perfection.

In many ways, this is also what performers think—and should think. In order to deliver their utmost, they must remain focused on the musical message, on the emotional qualities of the work, on the overall structure of the composition, and not on the notes.

The work that these experts have put in, innumerable hours of training over a period of years, even decades, enables them to concentrate on sound quality and expression, forgetting about technique and difficulty.

Instead of delivering a routine performance fixed by repetitive practice, musicians are able to react flexibly to the environment. They are able to modify tone, tempo, and use of pedal, for example, to adapt to the acoustics of the hall.

They can follow a spontaneous urge, deciding onstage to play a phrase with

more flamboyance or introspection. This is achieved by listening to their fantasy.

Once the goal is set and the sound imagined, they act. A high-level command is issued, eliciting a set of complex movements. There is no time for thought to be given to the ‘what’ or ‘how’ of creating this desired effect. This is musical expertise.

The mind-set of professionals involves not questioning actions, but rather having trust in their own abilities. No surprise then, that descriptions of optimal performance often include reference to ‘flow’ (e.g., Csikszentmihalyi, 1990), or to being in the ‘zone.’

Not to be confused with effortless-ness, this state involves seamless coordination of intention and execution, in which human ability matches task difficulty and challenge. From an individual fingertip caressing a key to the entire body movement necessary to creating full sound upon impact—playing the piano means activating mind, body, and soul.

The countless individual actions involved in each and every phrase are simply not readily available to cognition. Without automation of motor programs, this would not be possible. That is why experts learn to ‘let go’ in order to achieve, and why the desire to control can be so dangerous.

In performance, musicians’ most valuable assets can become their worst enemies. The same finely tuned ear that enables musicians to weave intricate musical lines can suddenly pick up a disturbing sound in the hall.

The same emotional sensitivity that generates beauty in their playing exposes musicians to vulnerability and self-doubt. In the moment concentration becomes interrupted, for whatever reason, self-consciousness is created.

A sudden shift in attentional focus towards what Gabriele Wulf defines as 'internal focus' throws the brain engine into a lower gear with a loud roar and pulls the hand brake, disrupting a fluid glide through the musical composition.

In short, nothing is worse for a musician than the sudden urge to deliberately manage movement, a departure from external focus. As logical and obvious as this sounds, there has been almost no empirical research done to date on this phenomenon.