Brain mapping in sportsmen

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Sports is an essential part of life for both physical and mental fitness. Sports as a competition require a high level of physical, technical, and mental fitness as they are always under pressure of winning. Psychological factors that affect performance enhance individual and team performance.

To find out the psychological state of a sportsman we use brain mapping by IBVA (Interactive Brain Wave Analyzer) which gives us a data in form of brain waves of different frequencies-Delta (1-4Hz), Theta (4-7Hz), Alpha (8-12Hz), Beta (13-28Hz) and Gamma (29-40Hz). Each brainwave has its own significance and an impact on their behavior and henceforth it will also affect the sportsmen’s performance. We are using this principal of measurement of brainwave patterns of sportsmen and analyze them to find out the dominant brainwave pattern when a sportsman is giving his best performance and also the worst performance so as to incorporate this into their rehabilitation program to physically and psychologically train the sportsmen to give his best performance every time.

The brain wave patterns of various athletes/sports professionals have been studied and it is concluded that when they are consistently winning & delivering optimum performances their brainwaves display a consistent, high activity in the alpha & theta range or otherwise known as “The Alpha State”.

1. By measuring the brainwaves of athletes /sports professionals we have determined that when he or she is NOT performing well, the brainwaves display consistent, high activity in the BETA/GAMMA range.

2. A Sports Physiotherapists can play an important role in not only preventing injuries to the sportsman, treat him and train him and also prepare him for his best performances by getting him into the ALPHA STATE (Zone) before and during the game and also maintain his state of mind after the game.

This information can be utilised to train sportsman to perform better as well as cope up with injuries.

Brain Mapping is going to be the next generation food for thought for Physiotherapists!!!