

The Power of Visualisation

From the 1950s to the 1980s, the Russians dominated the Olympics. During those Golden Years of Russian sports, one question was always on their rivals' mind – what kind of training system helped the Russians achieve such performance?

Only in the late 1980s was the secret of Russian sports success finally revealed. In the 1956 Melbourne Olympics, the Russian Olympic team took no less than 11 hypnotists to develop mental clarity and help the athletes with visualisation.

It turned out that the Russians had employed mental imagery training, or visualisation. Their secret was to combine physical training and visualisation.


The Russians would not only train physically. They would also mentally rehearse their routines hundreds of times before the actual competition. They discovered that mental images can act as a precursor to muscular impulses. The central nervous system cannot determine the difference between real and imagined events.

Dr Charles Garfield in his authoritative book on mental training *Peak Performance: Mental Training Techniques of the World's Greatest Athletes* stated that, "Without a doubt, the most dramatic contribution to the advancement of goal-setting skills in recent years has been the Soviets' introduction of visualisation. During mental rehearsal, athletes create mental images of the exact movements they want to emulate in their sport. Use of this skill substantially increased the effectiveness of goal-setting."

Garfield cited a study conducted by Russian sports physiologists on visualisation on four groups of athletes before the 1980 Lake Placid Winter Olympics where the Russians won the most medals – twice more than arch rival USA. The athletes were divided into four groups.

Group	Physical Training	Visualisation
1	100%	0
2	75%	25%
3	50%	50%
4	25%	75%

The result? All improved and the extent of improvement was in this order.

Outcome	Group
Most Improved	4
	3
	2
Least Improved	1

Group 4, the group that spent the most time visualising improved the most.

Garfield's finding is corroborated by another oft cited study - by DR. Blaslotto at the University of Chicago.

Blaslotto studied how visualisation impacts a player's performance. The performance measure was the basketball players' free throw percentage.

Blaslotto randomly assigned the athletes to one of three groups, and took their free throw percentages before starting the experiment. He then conducted the experiment for 30 days as follows:

Group	Free Throw Practice	Visualisation
1	1 hour a day	0
2	0	1 hour a day
3	0	0

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Group one would practice making free throws every day for one hour.

Group two would spend one hour a day visualizing themselves making successful free throws.

Group three, the control group, did not do anything.

30 days later, the three groups were retested.

The results:

Group	Improvement
1	23%
2	24%
3	No change

As expected, group three, the control group showed no change in performance.

Group two, who had physically trained 1 hour a day for 30 days improved their free throw percentage by 24%.

The surprise result was in the first group, who visualised themselves making successful free throws but did not physically make a single free throw at all. They improved their free throw percentage by 23%!

So what do all these findings mean for us?

Visualisation cannot replace physically practicing, training and performing a task. And we can always improve on our performance and outcomes by practicing visualisation.

Visualise your success:

Before a fight, World Heavy Weight Champion boxer, Muhammad Ali would focus intensely on visualising how he will take on his opponent in the ring move by move, round by round. When Ali is clear how he would defeat his opponent, he would call a press conference and confidently announce in which round and how he would win the fight. Ali's "predictions" were no empty boasts as they invariably came true. Ali was not engaging in idle talk but was really sharing his vision of his desired outcome with the press.

Imagination is more important than know how

Before Andre Agassi lifted the Wimbledon trophy for the first time in 1992 at age 22, he has already won the championship thousands of times – in his mind. By repeatedly imagining achieving his goal, Agassi was certain of success. Agassi's beautiful obsession to be the best tennis player in the world gave him the tenacity to find a way to realise his dream

Developing mental strength and focus is widely recognised as one of the major factors to great performance on the golf course. All top professional players use a range of techniques to get them in the right frame of mind for each shot and to keep them focused for the whole round.

Jack Nicklaus said: "I never hit a shot, even in practice, without having a sharp, in focus picture of it in my head. It's like a colour movie!"

Paul Lawrie's and Retief Goosen's games were transformed when they learned to control their reactions. It's ok to make mistakes it's the bad reaction to mistakes which are costly.

Very few amateur players visualise the shot they are about to play yet all the top golfers do this as a matter of routine. It is important to build a consistent mental approach to every shot where you develop your powers of visualisation and synchronise your body and mind.

- Nick Faldo says that once you have the physical ability it's all in the mind.

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- Mark James says putting is 10% technical and 90% mental.
- Gary Player said it's not in the swing - the mind is the thing.
- David Duval says hit the ball solid move it forward and hit it again. He also said reducing the importance of every shot was crucial in winning
- Tiger Woods said my mind is my biggest asset. I expect to win every tournament I play.
- Bernhard Langer says if you think positively and keep your mind on what's right, it gives you a better attitude. If you moan and groan and are disgusted, you play miserable too.
- Robin Seiger says the most common cause of choking in sport is imagining a negative outcome.

You can add sounds to make your visualisation even more vivid.

Feel as if

Australia won the America's Cup in 1983 after 132 years of futility. Three years before the race, the Aussie coach made a tape of an imaginary commentary of the Aussie team piping the Americans. The coach instructed team members to listen to the tape twice a day, every day. By the time the teams set off from San Diego harbour in 1983, the Aussies had mentally rehearsed winning the race over 2000 times, and they did!

Mirror neurons

In the 1980's Dr. Giacomo Rizzolatti and his team of researchers from the University of Parma, Italy, discovered mirror neurons in the brains of monkeys. The mirror neurons fired to help the monkeys mimic what other monkeys were doing. In 2010, Rizzolatti was credited with proving that humans had and used mirror neurons, as well.

In June 2011, at the annual American Psychological Science convention, Rizzolatti shared his updated research and new applications for the research.

"If you see someone kick a ball or if you read the word 'kick' the same neurons fire in your brain as if you were the one kicking the ball. Rizzolatti first discovered this phenomenon with monkeys and then began to study it in humans."

This is big news, we don't have to actually kick the ball, for our brains to record it, we just have to observe it being done and our brains code it, which may explain why men love watching football, but here's the real kicker (pun intended):

"He [Rizzolatti] presented new data that motor neurons do not just code any act of movement. The motor act that is coded for monkeys is one that has a goal. In fact, in the brain it is the goal that is coded, not the movement itself."

The "why" not the "what"

The process goes something like this:

- we see;
- we review – "Is there a goal/is there not a goal?" "Is there intention present, if so what is it?";
- we code – if we perceive a goal or intention is present, neurons fire, chemicals release and the goal, not the movement is recorded.

Our brains are hard-wired to help us understand what other people are thinking – their intentions – and then to code their intentions in our brains! We mirror the "why", not the "what" of their actions. That's how we empathize, how we know what others are feeling.

It might explain how humans encode culture. A New York Times article notes that Patricia Greenfield, a psychologist at U.C.L.A. explained it this way, "Until now, scholars have treated culture as fundamentally separate from biology . . . But now we see that mirror neurons absorb culture directly, with each generation teaching the next by social sharing, imitation and observation."