

SPORT AND MENTAL TRAINING

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BACKGROUND

Being an athlete in both individual and Team Sports I decided in the 1960's to become a psychologist specialized in the -at that time new area -"Sport Psychology".

After the basic education at Uppsala University to become a clinical Psychologist" I focused my research on Sport Psychology areas based on 3 questions which are of concern for all athletes:

1. What is behind the big variations in Performance, not only from one competition/match to the next one but also during the same competition/match. This question led to research about the **Body-Mind** connections, for instance the "Ideo-motor" relations.
2. What is the contents and criteria of FLOW (this wonderful state of Mind when good Performance seems to happen by itself) and how to induce and control Flow.
3. The Training concept. a. The Training/Talent relation. b. The Training effects in relation to contents, frequency, recovery and c. training duration.

This questions led to the question about the possibility to develop methods of **training the Mind** in the same way as training the body.

Mental Training in Sport

The research on these 3 areas led to the construction of the new concept "Mental Training" which I introduced 1969. The publication created a big interest among athletes and trainers and some weeks after the publication I was invited to Rome to introduce the Mental Training for the Swedish National Team in Track and Field in connection with a competition against Italy. Everyone was very interested but we lost the fight and I could not see any effects of what I had been talking about.

The Training concept

The Mental Training is in character similar to Physical Training. 3 hours of listening to the concept of Mental Training in Rome will not give any effect as little as 3 hours listening to strength training methods will make you stronger. Both areas have to dp with "Learning by doing or Action learning."

Development of Mental Training programs

1970's was the decade when the concrete mental training programs and methods were developed and evaluated in cooperation with 9 National Teams and 2 Olympic Teams. Sport specific scientific reports were published about Mental Training in in Archery, Bowling, Golf, Shooting, Swimming, Skiing, Track and field and Tennis. An evaluation of the 1980 Olympics showed a significant relation between results and the Mental Training.

1980`s

Mental Training was introduced as university courses (Uppsala, Örebro, Växjö) and at educational centers for Music, Singing, Dance and Health. Mental Training was also introduced in the Swedish Defense (Airforce, Army and Marin) as well as in the Police education, with the name "Mental preparedness training" (Psykisk beredskapsträning), where focus was om the 3rd part of Mental Training: Preparedness for stressful situation.

In the Sport area Mental Training was introduced to athletes and trainers of all kind and from all levels. An Olympic Support Center were established at Örebro University, where various National Teams were trained mentally.

It was also in the 1980's that Mental Training went from Sport over to most other areas of Societies, like Leadership, Work (all 48000 in the Swedish Telecom was introduced to the "Goalimage training"), Schools, where Sven Setterlinds dissertation 1982 gave the effect that 72% of the 6000 Swedish physical education teachers introduced Mental Training programs in their Physical Education classes, Health (Investigations on various university hospitals of the effect on Sleep disorders, Tinnitus, Chronic pain, Cancer, Post-operative recovery, etc). Mental Training was also reaching the general public through the pharmacies who sold programs for sleep, weight, smoking, stressreduction, etc.

From Sweden to the world

After the Olympics in Montreal, where I was the only Sport/Psychologist/Mental Trainer, word began to spread that Sweden had something new and valuable for the increase of Sport Performance. During the 80's I got invitation from the Olympic Committées in 8 countries and also invitations to work as guest professor in Sport Psychology with the additional task to introduce the Mental Training.

It meant that the further development of Mental Training in the eighties happened mostly outside Sweden, mainly in Australia, Canada and US.

It may seem strange from a national point of view, but my goal from the beginning has been to spread the mental training to everyone in the world. But I must admit that I felt a little strange when I entered the Winter Olympics in 1984 as the leader of the Bolivian Olympic squad or when I participated in the Seoul Olympics, 1988 with the American gymnastics team.

1990's

I decided 1990 to take an off duty leave from the University in order to start two private universities, "Skandinaviska Ledarhögskolan" and its international counterpart "Scandinavian International University". This gave much more freedom to work in a practical way with mental training, but also to start cooperation with universities in other countries.

Together with 2 universities in St Petersburg I started a Swedish-Russian research project which lasted from 1990 to 2011 and which had a big impact on the development of Mental Training. The Russian Olympic committee translated all of my programs and some of the books to Russian but the application was not only in sport but also in Schools and in Health. Another important part was to investigate the neurophysiological changes of various mental training states, for instance the "mental room" state. Being in that mental state created changes in the brain which made us call it the "holistic brain" (same basic EEG measures in all 4 quadrants) and the "harmonic brain" (the golden ratio in the relation between the various EEG levels.) We could also measure interesting hormonal changes which could explain the decrease of the biological age, which seem to happen after long-term mental training.

SIMILAR MODELS IN SPORT AND IN MENTAL TRAINING

I. THE TRAINING MODEL

I define Mental Training as a systematical and long-term training of :

- a. Mental processes (Thoughts, Feelings/moods, Images, Attitudes, etc. and
- b. Mental skills (Concentration, Creativity, Endurance, Self-Control, etc

The main goal of the Mental Training is to improve Performance and Wellbeing in Sport, School, Work, Relations, etc)

Training duration

One study I made in the 1970:s to look at the long-term effect was to divide 200 bowlers (from national level to a lower division) in experiment-(100) and control- group (100) After 3 months we could see some “personality changes” but very small changes in performance. However, 3 years later it was not only a significance but very big difference in favor of the mental training group. One of the members in that group asked me: “Do you think I could be best in the world if I continue with this combined training 7 years more” (The 10 year and 10000 hours concept). The other team members said: “Impossible” but I said: “I believe it would be possible”. He continued and after 10 years he became the best bowler in the world, not only for one – but for 3 – years. His name is Mats Karlsson and one year ago he was elected as the best bowler during the 20th century.

II. THE DEVELOPMENTAL MODEL

Sport and Mental Training is directed by what I call the “Developmental model” in difference from the rest of the society which is governed by the “C-” or the faultseeking model.

C stands for Clinical, Complaining, Criticism followed by many more like Crappy, Cheeky, Cheesy, Confusing, confounded, Constrained, Cheerless, etc.

In Health we visit a doctor to find out what is wrong and proposal of changes in companies are often followed by the objection: “What is wrong with what we are doing”.

Mental Training and Sport work with “Continual improvement” independent of the present situation. We do not ask a runner: “What is wrong with your conditioning as you are training?” and Mental Training is also working with the “From Good to Great model”

The C-model is based on dissatisfaction with the present while the D-model is based on Acceptance of the present and Commitment to the future (ACT but with training instead of Therapy)

This was one reason why I was careful to call myself “Mental Trainer” instead of a Sport Psychologist. Which athlete or trainer want to go to a Sport Psychologist and get feedback from others: “What is wrong in your head as you have to visit a Psychologist?”

III. THE EMPOWER MODEL

Mental Training is like physical training a long-term training which we are responsible for ourselves. It means that I have met (physically) very few of the 2,5 million Swedes who have tried mental training, from a more formal education over to those who have tested some single program (for instance from the pharmacy “cassettes”.

Before the pandemy I had a talk the evening before “Göteborgsvarvet”.

I was then introduced by a lady who started with. “I am so glad to meet Lars-Eric Unestahl for the first time, as I have him to thank for winning gold in the Olympics.”

I started my talk by saying. “Do not thank me, thank my training programs, which you could use without knowing me”. Mental Training leaves the responsibility over to each person, which create empowerment and self-control.

The Empower model looks at Life as a “Do it yourself project”.

IV. THE SELF-CONTROL MODEL

My first book had the title: "Self-Control through Mental training". The book emphasized the need of Self-Control for a good life (Sport included) and it introduced some alternative Control systems (ASC) to the common system (DSC-Dominant Control system) meaning Voluntary effort or trying. I pointed out that trying often gives the opposite result. Trying to sleep prevents the sleep to come and many other things like trying to focus or trying to be happy gives the opposite results, etc. (Even trying to become pregnant seems to make pregnancy more difficult).

The negative effect of DSC in Sport can be seen in many ways. If we try to run fast the speed will go down. The reason for that is that effort will activate all muscles, which means that the antagonist muscles will also be activated (We both accelerate and brake). Sweden was the first country to show that the best athletes differed from not so good athletes by their ability to relax the antagonist muscles. After we had shown that in the 70's it became natural for athletes to start the Mental Training with the relaxation training in order to teach the brain the experience of relaxation of every muscle. After that can Mental rehearsal be used: Visualization of what the body should do and then "handing over to the body" to get it done. The second ASC method is "triggers", where a stimulus has been conditioned to the wanted response. Everything can be used as a trigger by a conditioning procedure between Stimulus and Response. As the "Flow" state can not be controlled by voluntary effort, triggers are used instead to induce focus and the flow state, where the body takes over the control. However, thoughts are connected with the DSC control and this is one reason why "thought" should be avoided in Sport competition. There are many examples from football how the automation is broken in penalty shooting by stressful thoughts. Suddenly you break the well-rehearsed automaticity and start to think, and then another system comes into play when you suddenly have to take over the action voluntarily and "bring it about" instead of letting the body take care of it. The thoughts and the feelings also increase the tension in the antagonist muscles, which gives shorter steps which increase the risk of a bad penalty shot.

V. THE NEURO-PSYCHO CYBERNETIC PROGRAMMING MODEL (NPCP)

This model is the base for the Self-control Model, as good automation, which direct the body, has to be programmed in order to prevent the influence of negative thoughts and feelings. The model also separates Goals and Motivation in Mental Training from common goal-setting, as the intellectual goalsetting (the SMART model) is complemented with 1. Translation of the goals to images and 2. Programming of the Goal-images.

Cybernetics means target control, and most often one thinks of AI or military rockets. I often demonstrate the cybernetics of the brain by driving a car to work and at the same time think about completely different things on the way. The brain controls the body and thus the car because we have a program installed that works like the autopilot on an airplane and controls the automation. Since most of a normal day consists of automation, it becomes extremely important which directing program images we have. Many people, unfortunately, have negative directing programs, as Images with a strong emotional contents are the most effectives and as negative emotions often are stronger than positive ones (fear for instance). The NPCP model is necessary in order to get control over the FLOW-state. The body taking over creates the feeling that the performance happens "by itself". The model is also very important in order to reach Life- and Long-term- goals, as the "brain programs" will find many more alternative ways to the goals compared with the more intellectual action plan

VI. THE MINDSET- FEEDBACK MODEL

Performance is directed by Mindset before- and Feedback after- the Performance.

Mindset

Examples of important Mindset factors are the effect of Expectancy and of the Self-Image, and especially the Self-confidence and the Self-esteem (or Self-compassion).

Confidence in Sport is normally a consequence of my interpretation of the Performance while Mental Training instead will induce good Confidence as a cause to good performance. Low Self-esteem and Low Self-compassion is not related to- or effected by- external factors like success and has to be treated and changed by long-term Mental Training.

This also include the Imposter syndrome ("Bluffsyndromet") to be afraid of being exposed as a fraud. This is much more common than people think and also among athletes and trainers.. Imposter people are often outwardly successful so it is not a feeling that can be treated by more external success. Mental Training has here a very important task.

Feedback

The Mental Training Feedback model is based on a positive feedback model without criticism. I made several studies in the seventies to show the importance of immediate positive feedback when you did things right instead of negative (and often delayed) feedback when you did something wrong. More and more trainers and coaches has the last decades changed their feedback from negative to positive.

VII. THE COMPETITIVE MODEL

"The most important victory is the victory over yourself," said the Swedish Queen Kristina in the seventeen century and many wise people have said similar things since then.

When I started Mental training I proposed a change of the definition of Competition from a fight between me and somebody else to a fight between me and goals which I decide.

When I met the swimming team in the seventies to prepare for the world championship it turned out that all swimmers had VMF-goals (Victory-Medal-Final). However we do not have control over such goals as they depend on the opponents performance and prevent the possibility of "telling" our bodies what they have to do in order to reach the goals. After discussion, all swimmers changed goals to times, often times under the personal or the Swedish record. During VM many records were beaten but in addition also VMF. However, it is possible to start with a VMF and then translate it to a controllable goal. Pär Arvidsson wanted to win the Olympics 1980 but translated that to a controllable goal (time). He was then swimming mentally on that time 3 times a week starting 1977. In spite of a non perfect physical shape (due to an illness some month before) he still made the time and won the gold. I have seen many such examples through the years in various sports. Ingmar Stenmark did not need to compare with his opponent as he instead compared with a mental image of the "perfect" race.

In team sport it is also important to transfer the goal of winning over to the play itself and work with continuous improvement of the play independent of the result in a single match, which are often influenced by random factors.

The area of individual- vs team- goals in Sport or Management vs coworkers goals in company is such a big area that I will save that to another article

FINALLY

Let me finish with some words from Tomas Gustavsson, one of Swedens most successful sportsmen with three Olympic golds, one Olympic silver and two European Championship.

“The Mental Training meant a lot for my Success in Sport but still more important is the benefit I will have of the mental training during my whole Life.”

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