

## PSYCHOMOTOR TRAINING PROGRAMS FOR MANAGEMENT

HARALD POLSTER

### I. *Introduction*

Emotions are an unseparable element of our actions. Each person feels emotions—every day. It is well known that two groups of emotions can be distinguished: Positive and negative emotions (Table 1).

TABLE 1. EMOTIONAL STATES

Positive Emotions	Pride, pleasure, ecstasy, enthusiasm, happiness, contentment
Negative Emotions	Desperation, fear, rage, anxiety, irritation, disappointment

Emotions can speed up or delay our actions. Sometimes they stimulate us to act very spontaneously. At other times emotions lead to the sudden breakdown of all activity.

Emotions can be apparent before a person begins to act, but also manifest themselves after the action is completed. Simply: Emotions are present in all phases of our activities. If a person is unable to control their emotions, the risks of acting will be increased. In such cases the help of a psychologist will be looked for chiefly. It is generally believed, that emotions are purely psychic conditions and therefore subject to the responsibility of psychology or the psychotherapist.

Especially sports are characterized by a large diversity of emotional phenomena. They are linked narrowly with bodily and motor processes. Subsequently risk emotions should be noted, that they stand in particular context to motor behavior of the person.

If the relationship is considered between movement and emotion by the point of view of training and movement science, than the usefulness of psychomotor training programs for better control of risk emotions is indicated. The social conditions in an increasingly mechanized and automated environment change the behavior of individuals. In addition, motor deficits, the lack of movement generally or exaggerated, perhaps even inappropriate sports activity contribute to pent up emotions.

In the following some examples are systematized, which can be causes for risks in movement behavior (Table 2).

TABLE 2. CAUSES FOR EMOTIONS IN MOTOR BEHAVIOR (POLSTER 1985)

ORIENTATION	REALISATION	DRIVE
Sensory weakness	Protective reactions	Hyper-motivation
Perceptual disturbances	Breathing distress	Pain
Observation weakness	Inhibition of muscles	Dislikes
Lack of knowledge	Lack of physical energy	Antipathies
Gaps in recollection	Breakdown of coordination	Arrogance
Sway of attention	Adaptational problems	Anticipation of consequences
Decision insecurity	Aggression	

## II. *Scientific Experiment in Sport*

### Method

Competition sport is a very useful field, to gain inside into to the effects of emotions in motor acting. In 1985 a pilot study with young athletes was conducted at the former German College of Physical Culture and Sports in Leipzig.

The experiment was based on two premises:

- Analytical determination of motor actions regarding open looped motor steering (tobogganing, sailing, sport shooting).
- Postulation of different, hierarchically joined levels of motor regulation (Sensory-motor system, Ideo-motor system, Drive-motor system).

This codification led to a multivariable experiment with different regulative features. In investigations of younger competitive athletes (N=39, 12/13 years) were inserted in all 18 diagnostic tests. The statistical calculations resulted from discriminanz and cluster analyses. The competition and risk variables were raised as criterion of scoring. The quality of competition was interpreted as a feature for mastering specific actions (open looped steering). The risk variable was based on emotionally-motivational scores, raised by following investigation means:

- Traid-Anxiety-Questionnaire (SPIELBERGER 1966)
- Complaint List (FLIEGEL 1978)
- Risk-Anxiety-Questionnaire (POLSTER 1981, 1985)

The diagnostic investigations were subdivided in sensory (4), perceptive/cognitive (4), emotionally/motivational (3), risk motor (2), coordinative (2) and physical/energetically (3) regulative features. Competitive performance was based on a placements coefficient. The coordinative investigation method had a particular meaning, in realizing simulated risks (optic deficit, acoustic flooding). Two fundamental motor regulative types were demanded: (1) Open steering task as a hand-eye-coordination and (2) Closed balance task as a fullbody-coordination.

### Definitious

The risk-control-concept can be further defined by the following:

1. Risk is the probability of successful human activity and can be evaluated by objectively

social norms.

2. Risk-situation is described by conditions of action, which can cause uncertain decisions regarding inadequate control of action. All components of action (orientation, drive, execution) can affect inadequate control.
3. Risk-action is determined through concrete behavior under limited possibilities of control. Risk actions can lead to the mastering or the avoidance of demands.
4. Risk situations and risk actions are accompanied by emotionally and motivational processes of valuation. Independently from the type of risk action (mastering or avoidance) can arise emotions of risk-pleasure or risk-anxiety.
5. Anxiety is defined as an emotionally-motivational state, which results from the subjective reflection of inadequate possibilities of action control. Anxiety can proceed with mastering risks. The emotions of anxiety are specific forms experiencing risk.
6. Risks must not induce anxiety necessarily, but anxiety is always related to a risk action. Risk-control includes the overcoming of anxiety. Not however, in the reverse case; anxiety-control the mastering of risks.
7. Risk-control in sports means the entire spectrum of methodical as well as therapeutical routines, which can contribute to mastering risks.

### Findings

By the combination of Diskriminanz and Cluster Analyses following 4 clusters could be found.

TABLE 3. DETERMINATION TYPES OF BEHAVIOR

CLUSTER	MEDIAN VALUE		DESIGNATION
	CO-PF	RI-DR	
I	+1,035	+1,088	MAST-PLEA
II	-0,384	-0,230	MAST-ANXI
III	-0,723	+0,281	AVOI-PLEA
IV	-0,524	-0,733	AVOI-ANXI

Legend to Tab. 3:  
 CO-PF: Competitive Performance  
 RI-DR: Risk Drive  
 MAST: Demand-Mastering  
 AVOI: Demand-Avoidance  
 PLEA: Risk-Pleasure  
 ANXI: Risk-Anxiety

Comparing relationships between the levels of motor regulation the functional, structural base of these 4 types of behavior could be generalized.

#### Type I: Mastering/Pleasure

Overcoming and joyful behavior requires the adequate development of close to all regulative features: sensory/physical functions, cognitive/coordination functions, emotional/risk motor functions. Individual requirements and objective demands of activity are in balance.

#### Type II: Mastering/Anxiety

Overcoming and anxious behavior can be determined by adequate features of the sensory/physical functions and cognition/coordination, however by insufficient emotionally-

motivational components of valuation. This type of behavior can control actions up to the moment appearing risk drives. Risk anxiety is caused by emotionally and motivational elements of motor regulation, i.e. the *drive of action*.

**Type III: Avoidance/Pleasure**

Avoiding and joyful behavior can result from insufficient physical and coordinative requirements. Although features of orientation (sensory/cognitive functions) and drive (emotion/motivation) are well developed. These elements characterize the “joyful” feature of this type, despite avoiding behavior. Causes for avoidance lie in physically and coordinative elements of regulation, i.e. the *execution of action*.

**Type IV: Avoidance/Anxiety**

Avoiding and anxious behavior is founded by limited sensory requirements. Although enough physical energy exist, this type of behavior is displayed in general disturbances in hierarchical regulation. Causes for avoidance and anxiety lie in defective sensory/cognitive processes, i.e. the *orientation of action*.

**Conclusions**

—The four described types of behavior confirm the concept of risk-control. The advantage of this methodology exists in widening interpretations of the problem of anxiety. The results of this experiment exceed the field of sports, because the findings refer to general levels of human action regulation.

—Risk emotions can be caused by all components of regulation (*Orientation, Drive, Execution*). The differences are in the formation and interplay of regulative features.

—Emotional-motivational drives take effect of a “supreme instance” to value and to control hierarchical processes of regulation. The risk-control-concept gives the possibility of finding functional and structural reasons of drives regarding the development of regulative features, such as sensory, cognitive, coordinative and physical requirements.

—The experimental routines, researching emotional processes, were limited up to now. The risk-control-concept offers new diagnostic ways by “opening” habitual regulations. Applications in sports are especially suited for:

*Sensory deficit risks*  
*Cognitive flooding risks*  
*Anticipatory consequence risks*

Such practical attempts can produce multivariable data to emotional processes under laboratory as well as field conditions.

### III. *Psychomotor Training Program*

After the experimental findings a psychomotor program was derived and compiled on the basis of practical experiences in athletic training. The program was created with three stages of development. The program allows, that all regulative elements of uncon-

trolled emotions can be covered as a whole complex. However, if necessary a single training to develop certain emotional regulations is possible. Parts of this program were successfully utilized in Germany for athletic training. Likewise it was used in educational courses for managers and businessmen. In Japan are being run tests with university students.

The following paragraph contains a short presentation of the program and some exemplary descriptions of methodical steps.

TABLE 4. METHODOLOGY OF PSYCHOMOTOR TRAINING FOR RISK CONTROL

STEPS	CONTENTS	EFFECTS
I. Sensitization	Perceptual Training Mental Training	Orientation Verbalization
II. Discovering	Risk Training Expressive Training	Moving Realisation
III. Experiencing	Survival Training Adventure Training	Emotionalization Controlling

Frequently, insufficient physical functions lead to the loss of quality of a persons life. One does not become aware of one's own body, until one has lost their health. This seems to be an inglorious mechanism of our modern period.

Therefore the aim of psychomotor training exists in order to consider the unit between physical and psychic welfare states. From sports deduced knowledge and developed practical methods can be utilized in other social fields. Psychomotor training programs are suitable to make management in several social spheres more effective.

Psychic stress together with physical weakness are typical phenomena which belong to many managers with high responsibility. Aimed psychomotor training can help to recognize psychophysical boundaries of one's own performance capacities in time and can avoid from being overstepped. Psychomotor training is directed to gradually sensitizing, discovering and experiencing of motor movements and/or one's own body.

### Sensitization

With the first stage the participants are instructed to the importance that motor movement has to individual behavior. By means of selected methods, exercises to control and develop body consciousness are tested. The educational goal is to be found in sensitizing of one's own physical conditions (awareness, feeling).

#### *Contents of training:*

1. The perception—starting point of any action.
2. The diversity of perception world.
3. Perceptual weakness—causes and consequences.
4. Rules to balance one's own perceptions.
5. The body—a part of our self-confidence.
6. Phenotypes of motor movement: movement of organs, everyday life, sports, verbal and facial expressions.
7. Perceptual movements—versus competitive movement?

8. Methods to improve perception: seeing, hearing, touching, balancing, moving. (cp. Fig. 1)
9. Modal integrational training.
10. Creation of individual programs.

**Discovering/Recognizing**

With the second stage the participants are taught to recognize the regulations of emotional excitement. Risks and anxieties, which can emerge from motor acting in everyday life serve to illustrate. Methods to reduce anxiety are offered, as well as mastering emotions by means of simple motor exercises. The seminars serve the development of personal experiences by controlled handling of emotional situations.

*Contents of training:*

1. Emotions—catalysts of our acts.
2. The positive and negative modality of our emotions.
3. Emotional control—suppression or expression of feeling?
4. Risks and anxieties of the modern era—consequences of our acts.
5. Anxiety reducing methods of self influence (cp. Fig. 2).
6. Particularities of motor risks in everyday life, in profession and free time.

FIG. 1. EXERCISES TO IMPROVE PERCEPTUAL ABILITIES

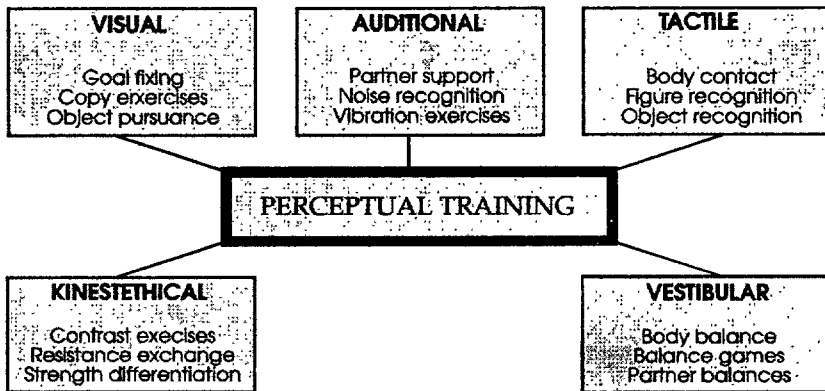


FIG. 2. METHODS TO REDUCE ANXIETY

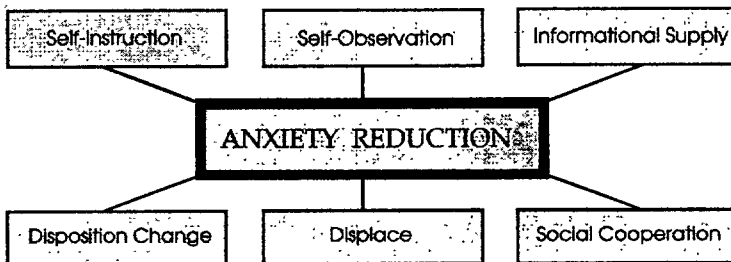
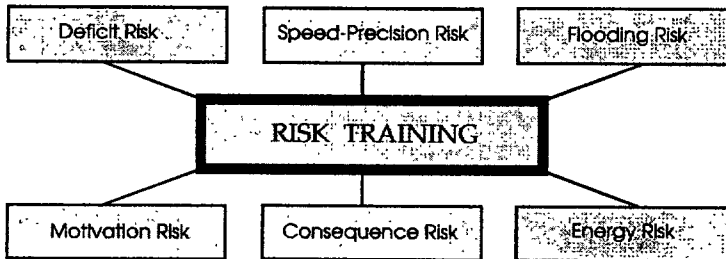


FIG. 3. METHODS TO DEVELOP RISK-CONTROL



7. The mastering of risks—simply courage to act?
8. Exercises to overcome motor risks (cp. Fig. 3).
9. Logical conclusions for individual behavior.

### Experiencing

The third stage needs a careful planning and individual readiness of the participants. The basic values of human existence are put in the center of the training sections (own body, movement, social group). With the help of actual everyday situations and including of sports possibilities, personal boundaries of activities are experienced. This part of psychomotor training depends on local or territorial realities. The training should not be accomplished in single seminars, but in the form of units, which can be continued over several days.

### Contents of training:

1. Psycho-physical reactions in human boundary situations.
2. The diversity of individual experiences.
3. Basic human boundary situations:
  - Body: hunger, thirst, pain, loss of balance.
  - Movement: speed, immobility, disorientation.
  - Social group: loss at leadership, loneliness.
4. Rules of psychoregulation in behavior and corresponding methods.
5. Experiencing of actual situations, to help approach boundaries of human existence (cp. point 3).
  - Utilization of territorial possibilities:
    - Imposition of fasting.
    - Leaderships of a group in unknown areas.
    - Tandem exercises in adventurous sports.
    - Withdrawal of civil comfort.

*REFERENCES*

- Fliegel, S.: Zur Wirksamkeit von Selbstverbalisation bei der Verhaltenstherapie phobischer Ängste.—Bochum 1978—Dissertation.
- Polster, H.: Zur experimentellen Diagnostizierung subjektiver Risiken.—In: Theorie und Praxis der Körperkultur 30 (1981) 10, S 781–784.
- Polster, H.: Risiko- und Angstkontrolle im Sport. Leipzig, DHfK, 1985—Habilitation.
- Spielberger, C.D. (Ed.): Anxiety and behavior.—New York, 1966.