

Chapter 5

BODY AWARENESS AND LEVELS OF SELF-REGULATION

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A b s t r a c t

Stress-related disorders, seen from a somatic perspective, are an indicator of a disturbed relationship between the conscious subject and his own living body. The validity of this approach depends on the degree of psychosomatic dissociation, that is, the degree to which the individual is not in touch with the body. This can be tested in a small number of treatment sessions, which help to increase the experienced reality of the living body. A passive attentional state is necessary to increase body awareness and to complete the circle of self-regulatory strategies. This state is also characteristic of a meditative stance and implies that both positive and negative aspects of reality are better accepted. Specific treatment principles are described which are the basis of the method of Breath Relaxation, but are equally valid for any somatic approach. The effect of Breath Relaxation on cardiac patients is described, including a five-year follow-up study on lifestyle. It shows that even after five years patients are improved in medical condition, but not in their feelings of doing well.

S t r e s s - r e l a t e d D i s o r d e r s

A disrupted sense of well-being, fear and psychosomatic symptoms are increasingly a reason for medical consultation and referral for therapy. Such symptoms occur in conjunction to organic disease or on their own. They may in both situations become incapacitating and lead to a severe loss in social function. The economic costs of "stress-related" problems, as such symptoms are also referred to, are enormous and will only increase.

There are a number of effective treatment methods. Rather than discussing effectiveness of various treatments, it is of prime importance to discuss the framework in which such symptoms are to be viewed, because of the consequences for the possibilities of self-regulation. There is a medical and a psychological perspective, as well as the perspective of the social context. From a medical perspective, complaints are taken as signs of potential organic dysfunction, mediated by the individual's experience and interpretation. The doctor's job is to interpret the reported complaints, find the pattern of an underlying disease in the body and treat it. The medical perspective of stress-related disorders is to find the pathophysiologic mechanisms within the body. The psychosocial perspective is complementary to the medical view. It takes complaints as expressions of psychosocial stressors which exceed the individuals coping resources. The psychologist has to judge whether the individuals coping resources are in need of improvement, or whether there is a need

for help in dealing with difficult psychosocial circumstances, or both. In none of them, however, the relationship of the individual to his body is an issue.

I would like to add a “somatic” perspective and propose to view a disrupted sense of wellbeing not as a disease (although it may be a sign of organic or psychic pathology), but as an indicator of a disturbed relationship between the conscious subject and his own living body. From a somatic perspective, such symptoms are not in need of treatment, that is, means to reduce them, but they are in need of clarification to the individual. The relationship of the individual to his body and his ability for internal selfregulation need to be improved and the symptoms may serve as a guide towards that purpose. The individual complains about his body and disturbed functioning, but the reverse may be true as well: that the body complains about the individual. In a somatic perspective complaints would be taken as a sign that the body is asking for and deserves attention and it may be quite rightly doing so. When signals from the body are indicators of an improper life, that is a life that does not fit the individual, they may also serve as indicators towards changes for a more proper life. In case of obvious examples, like drinking too much alcohol, the relationship between behaviour and subsequent symptoms is usually clear. In case of many stress-related symptoms however, the relationship is not clear at all. Thus, there is a need for clarification.

The basis of a somatic treatment is the experienced reality of the living body. The patient is invited to accept and trust the experienced reality of the body and, together with the therapist, explore the response to a variety of strategies. Usually, the individual needs re-education with respect to the nature of bodily responses. He will have to allow their presence, live in peaceful coexistence and even learn to trust them, rather than fight them. The patient is taught strategies to deal with it in a variety of ways. Among the various options for self-regulation, a passive attentional state is emphasised in particular. This state is also the hallmark of a meditative approach.

The validity of a somatic treatment depends upon the degree of psychosomatic dissociation, that is, the degree that the conscious subject is not in touch with the body. This cannot be determined beforehand but it can be tested in a small number of treatment sessions. It seems realistic to try out a somatic treatment when specific causes for the complaints are an insufficient explanation. When this approach is valid, the symptoms usually respond favourably or general functioning improves. Instead of incapacitating, the symptoms become meaningful feedback. The relevance and intelligence of symptoms is sometimes quite surprising. In time, when they are acknowledged and utilised as inner signs of an improper life situation, they become a source of information, and are a strength rather than a weakness.

There are three elements involved when a somatic perspective is applied in treatment: a model of the relationship between body and consciousness, experience of a passive attentional state that completes the circle of self-regulatory strategies and specific treatment principles.

Relationship of Conscious Perception and Living Body: A Model Derived from Biofeedback

The practice of biofeedback provides invaluable lessons on the relationship between conscious perception and physiological function, and on the personal significance of responses from the living body. Biofeedback can be summarised in a simple diagram (Figure 1), where information, derived externally from the body, is fed back to conscious perceptive modes, usually visual or auditory (Van Dixhoorn, 1974). On the basis of such external information, the conscious subject may become interested in internal events, trying to correlate internal proprioceptive information with the external signals. In this way body awareness increases. The conscious subject (CS) is able to (re)gain internal contact and/or to modify the internal events. Often, the CS reframes his view on non-conscious functions. When successful self-control has been achieved, the stress symptoms are usually reduced. It must be understood, however, that biofeedback provides only information. It is not a treatment tool that modifies bodily function, like we are used to expect from medical instruments, but it works through the process of internal selfregulation. Any eventual self-control rests on the perception and acceptance of the (troublesome) physical signs. The basis of self-regulation is openness to internal information (Schwartz, 1981).

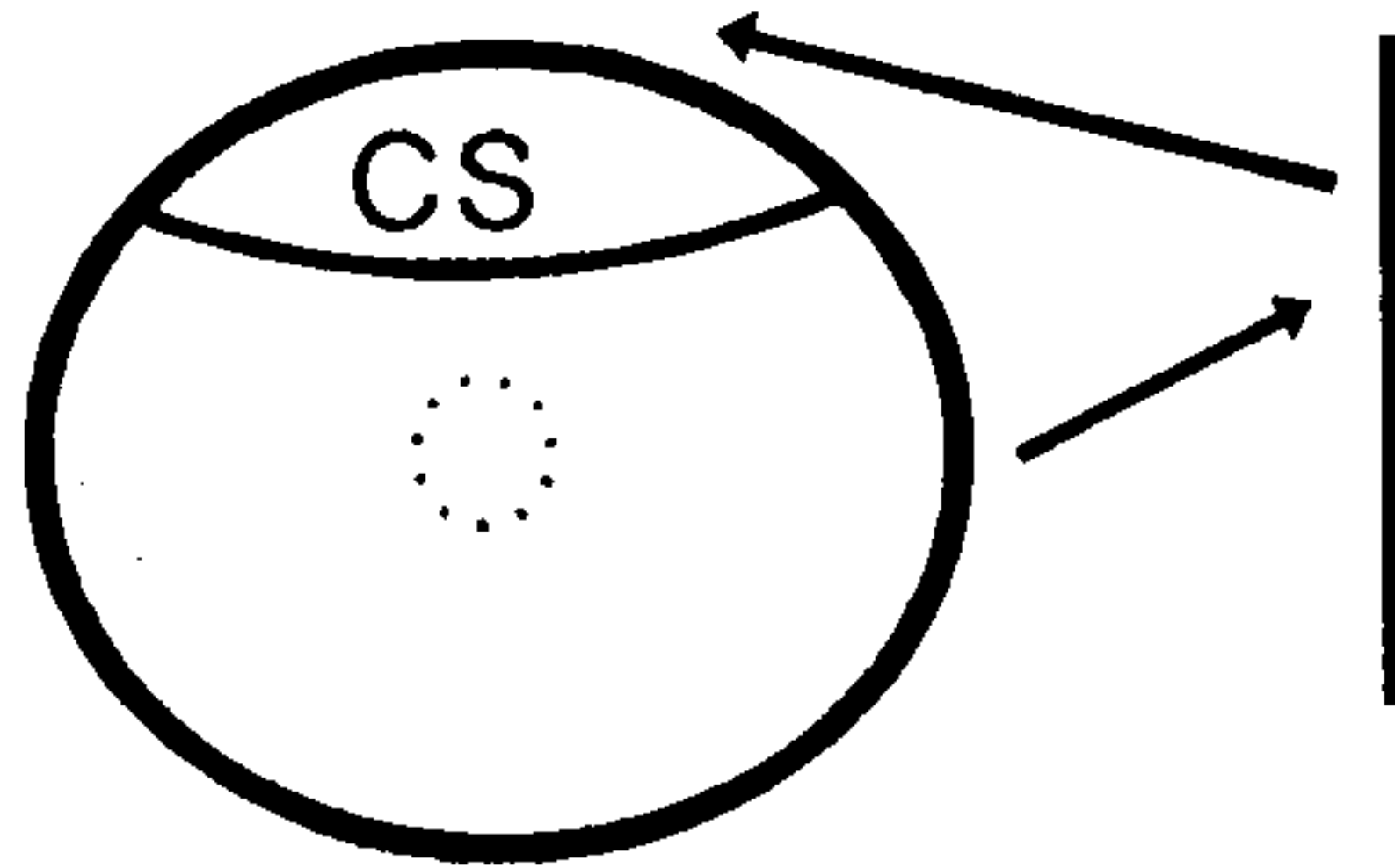


Figure 1. Biofeedback: biological information is measured, filtered, amplified and fed back to conscious perception (auditory, visual)

The biofeedback instrument may teach the patient about the intelligence and sensitivity of one's nonconscious physical acts and responses. Thus, a reappraisal of the body as one's living self, rather than a mere machine, may be stimulated (cognitive restructuring). This biofeedback model is appropriate to explain the meaning of body awareness to the patient.

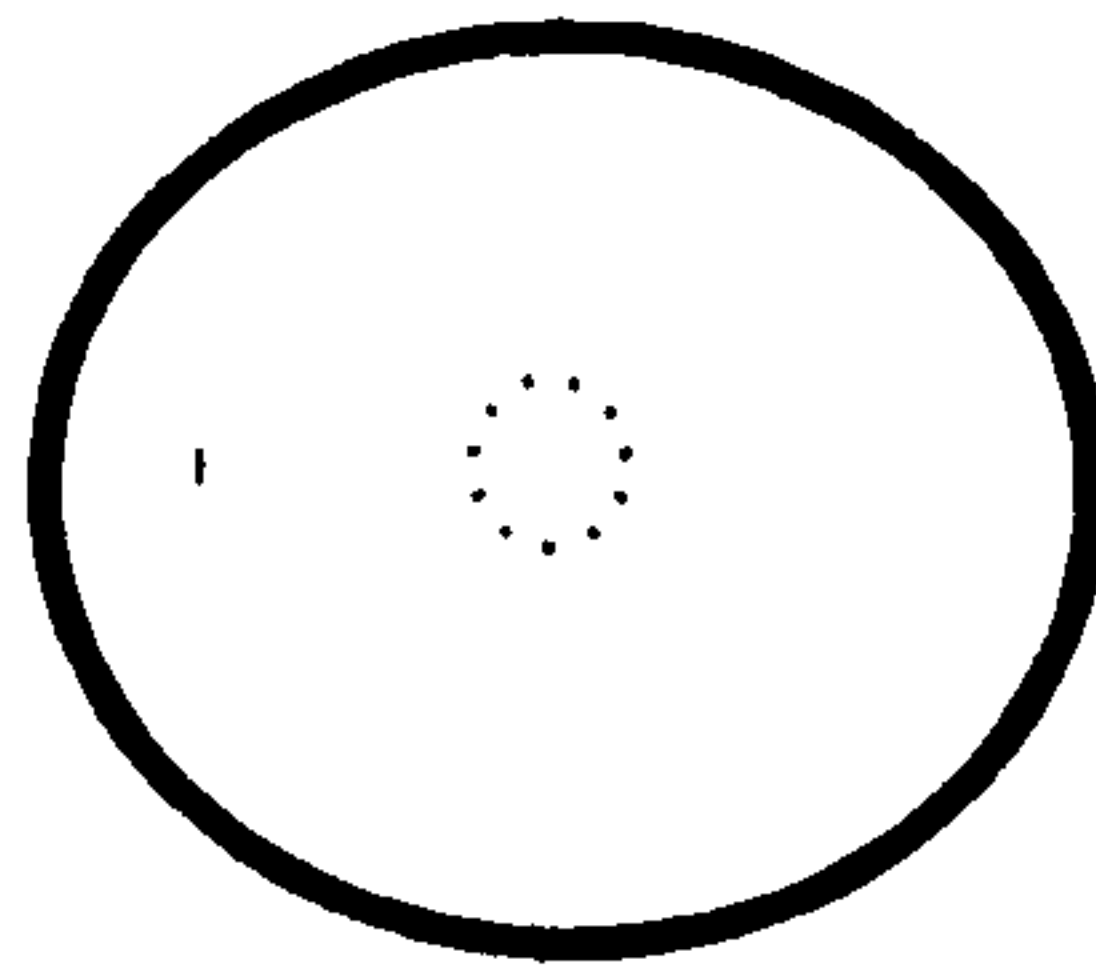


Figure 2. The organism is an open, dynamic system, self-regulatory and self-aware

The organism is an open, dynamic, self-regulatory system. It is self-aware, because the organism knows what is self and what is not-self and is able to maintain its integrity. This self-regulation, medically known as homeostatic control, is indicated by a centre in the middle (Figure 2). We may call this the large Self, since it involves the whole of the organism, which contains innumerable activities and responds constantly to the environment.

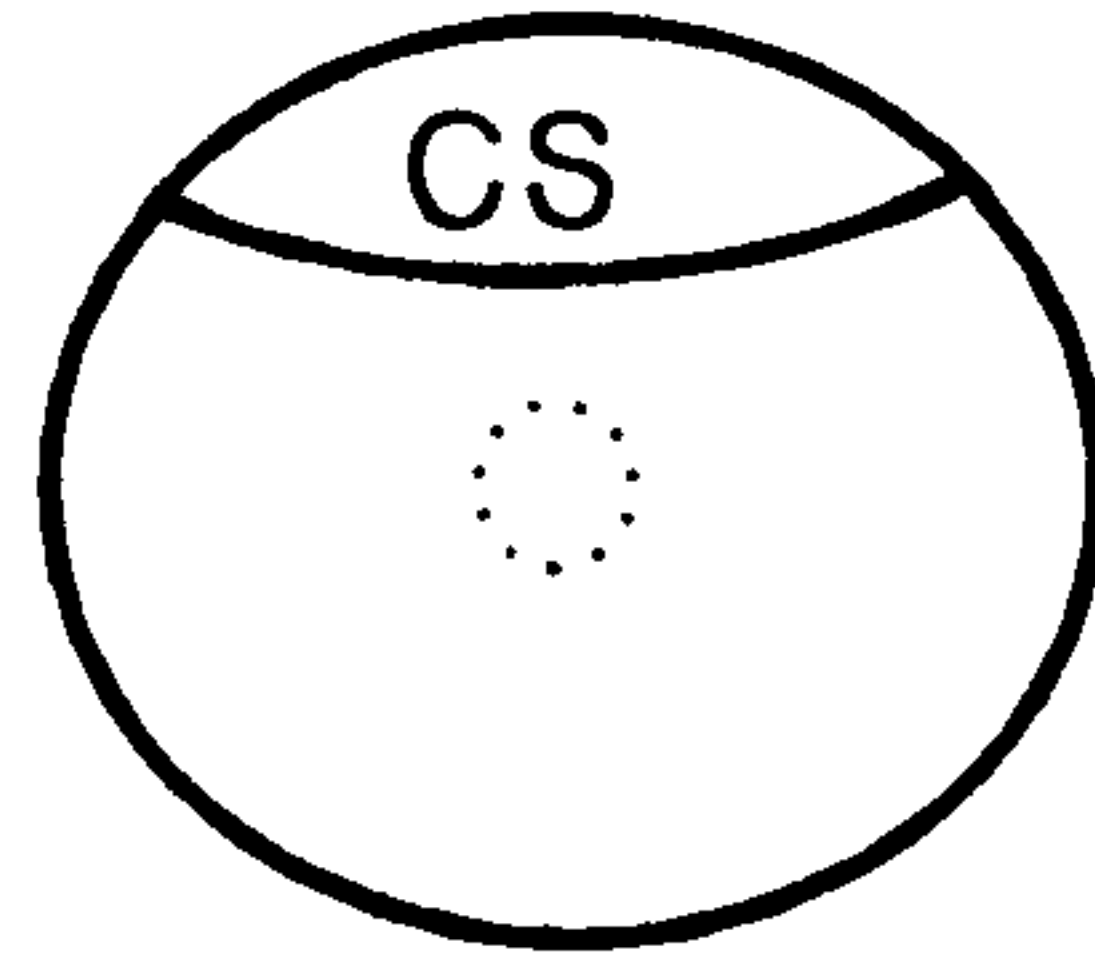


Figure 3. Only a tiny part of the information processes within the organism in its environment enters conscious awareness

The vast majority of these processes occur outside conscious awareness. The fact that only a small part of the processes within the organism is accessible to conscious awareness is indicated by a line that borders the area of conscious awareness (Figure 3). This small part is the basis of the conscious subject (CS), that is, of us as we know ourselves. We may call this the small self, indicated by a small circle within the upper part. This situation implies that the conscious person can do what he likes without having to notice or think so much about the way the body carries out one's intentions. Thus, we rely upon and trust the self-regulatory nature of the organism, whether we like it or know it or not. It is the normal state of affairs and we cannot do much else, since conscious control of all our internal acts is utterly impossible. It is for most patients important to emphasize that the organism has enormous abilities that are geared exactly to live in this world (Weiner, 1992) and that it is quite realistic to learn to trust these self-regulatory (and self-healing) capacities.

This situation implies that our information on our internal state is limited, our image of oneself is incomplete and full control of oneself is illusory. This statement usually needs repetition. The conscious subject has to face the painful fact that he or she does not really know the source of many acts, thoughts and feelings. We do not really know ourselves. This is painful since we need a sense of control in order to feel safe. It is also shocking, since our conscious activities usually assume that we are able to understand, judge and solve problems as for instance physical symptoms. It is for the patient important to realise that one's idea of the solution for complaints or the best way of dealing with them, is probably one-sided, incorrect or incomplete, since we do not have full information. Thus, a complaint may be troublesome, but we cannot conclude that it is wrong. It may for instance prevent a future condition that would be worse. The model helps to instil some modesty and to open the patients' mind for acceptance and possible other solutions. The fact that most stress problems are chronic, indicates that the ways they were dealt with were not effective.

The strategy that a somatic treatment would build on is to increase inner information. The conscious subject has the option to lower or raise the threshold

for internal feedback from the organism. We may allow more internal information to awareness or shut it off. Minimising or amplifying internal information is an essential ability for self-control, that everyone learns in life to some degree. According to the father of experimental psychology, Wilhelm Wundt, the ability to direct one's attention is the basis for selfregulation. When it is not opportune to realise how one actually is, we may temporarily shut off that awareness. This ability lies at the basis of our sense of self-control. Thus, when faced with unwelcome inner signs, we can ignore them. The patient who is invited to explore and accept inner information has to know that this process of opening up is under his control and can be reversed and stopped at any moment. The treatment is an invitation to inner awareness, it is not a forced confrontation. This is an important difference with some forms of body-directed psychotherapy.

P s y c h o s o m a t i c D i s s o c i a t i o n

The option to ignore bodily signs of dysfunction and raise the threshold for internal information means that we can dissociate our conscious self from our body. This psychosomatic dissociation is a state that all humans can be in. We limit the field of conscious awareness and withdraw attention from inner feedback, focusing exclusively on for instance a specific performance or external signals. Usually, the troublesome signs disappear after some time: "do not pay attention, it will pass". The ability to concentrate attention selectively is very important, but its disadvantage is that a raised threshold may remain after the need has gone. When the situation allows us to open awareness again for internal feedback, the resulting experience may be unpleasant. Suddenly, we notice how tired we really are, or how painful some body part is. It is tempting to focus again elsewhere or engage in activities that do not allow much inner feedback. In this way, a temporarily raised threshold may become a tendency to ignore bodily signs. As a result, we lose the ability to read our own bodies, we fail to respond appropriately, the signs of internal dysfunction have to grow stronger to reach conscious awareness and there is "dysregulation" (Schwartz, 1981).

Patients sometimes express the strength of the suppressed symptoms in vivid metaphors, like "living on a vulcano" or "being in a boat on a stormy sea", which frightens them. The point to make is that these strong sensations are not malicious nor alien forces, but are coming from oneself. The very severity means a strong call for attention, which will probably diminish by doing just that. This can be tried by deciding to simply experience the sensations and describe their appearance for some time. Usually, they change in character and become less overpowering after an initial increase in intensity. The patient may feel tense but also relieved and improved health may result (Pennebaker, 1988; Schwartz, 1981). This response confirms the validity and is encouragement to continue the somatic approach. Sometimes, patients may have less symptoms, but more vivid emotional responses. Increased inner awareness helps to read one's emotional state. When the symptoms increase, become incapacitating and the functional state of the individual deteriorates, the inner awareness becomes dysfunctional. Strategies for external selfregulation are more appropriate (see 3.0). The main difference with the concept of alexithymia (Sifneos, 1975) is that alexithymia is a rather stable personality

characteristic, whereas the tendency to raise the threshold for inner signals is a common state that everyone can be in, and it is reversible.

We have also the option to substitute internal information with an image of the body. The body image, or mental representation of bodily actions and appearances, is formed in the same way as one forms an image of another person's body. It is an extraneous or third person image (Van der Velde, 1985), that is, in forming an image of the body we objectify our body (Tiemersma, 1989). We can remember and invoke such images consciously. By contrast, awareness of internal conditions, physical or emotional states, is contingent upon their actual occurrence and cannot be represented in an image. We cannot reproduce them later on, but we can invoke their memory by connection to an extraneous image (Van der Velde, 1985). Thus, pain and pleasure are easily forgotten as such, but the situation in which they occurred will be coloured by it and may serve as a means to retrieve the feeling.

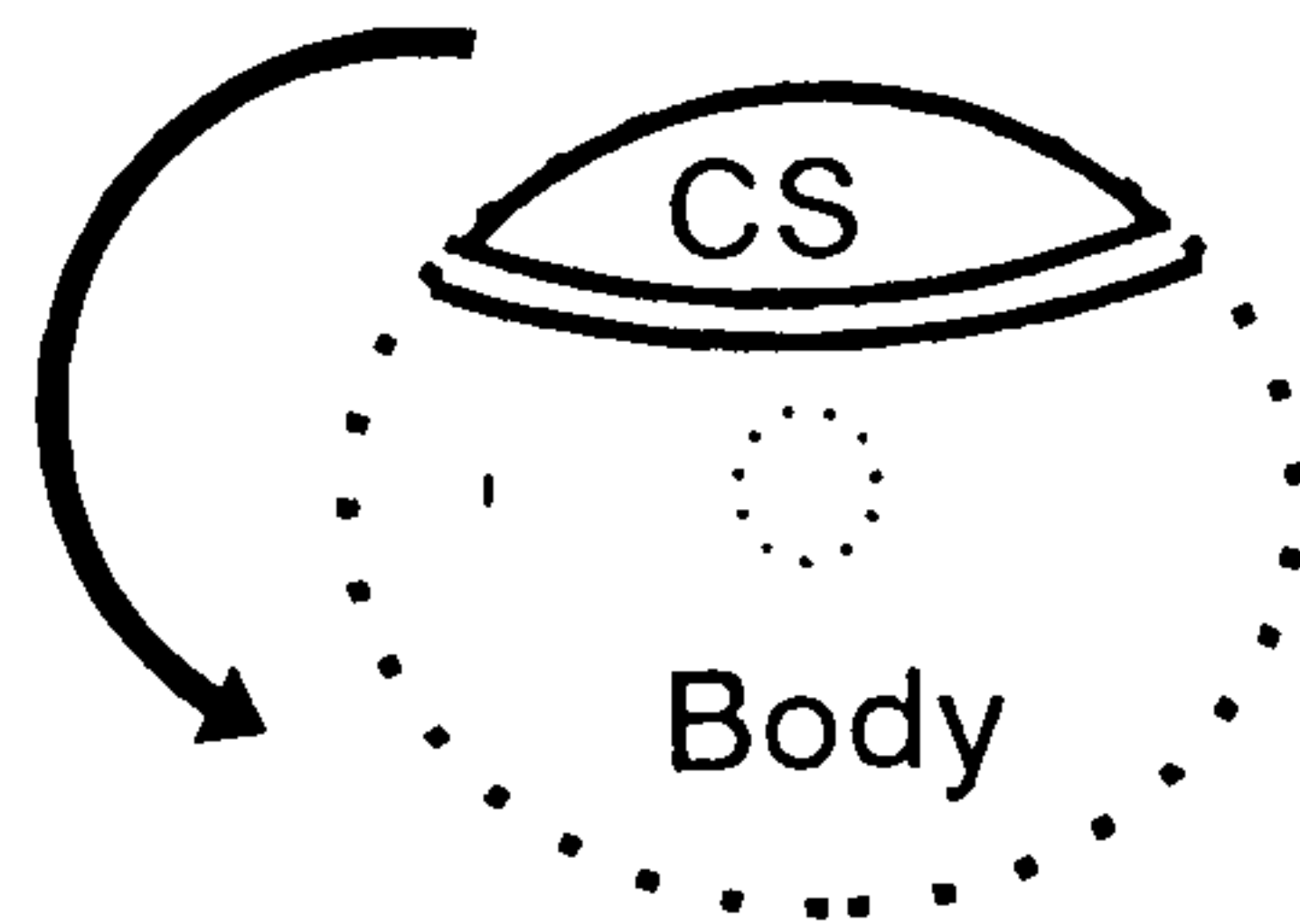


Figure 4. Psychosomatic dissociation: the body is objectified, works automatic and is treated more or less well in exchange for health

Both options are facilitated by an attitude that objectifies the body. Together, they may lead to “psychosomatic dissociation”. The individual tends to shut off internal information, to substitute inner experiences with extraneous images and to see the body as an object (Figure 4). The body is taken for granted, supposed to work “automatic” and is seen as an instrument to serve the purposes of the conscious subject. This view largely underlies most of modern psychology concepts of the body. The individual is more or less willing to treat the body well. In health psychology, healthy behaviour is understood as a form of contract: in exchange for it, health is to be expected. However, the consequence is that disease may feel as a betrayal and the impact of organic disease on the sense of wellbeing may become more severe. This is one reason why body awareness is so important for patients with organic disease, for instance after a myocardial infarction (Van Dixhoorn & Duivenvoorden, 1999; Ornish *et al.*, 1990). Moreover, since there is little internal contact, the idea what is proper and healthy is derived more from external sources than from inner information. There is little personal verification whether a specific healthy behaviour really feels better and does well to oneself.

A strong dissociation between conscious awareness and the living body, means that the individual lives in a sham world of ideas how one's life and body should be, rather than in direct contact with internal reality (Burrow, 1941). This state makes the individual vulnerable to influences from situations that are unfit or improper because the individual does not realize it. The detrimental effects continue but the individual does not act upon them.

An interesting situation is present in patients with anxiety syndrome or panic disorder. They may be overconscious of their bodies and of bodily dysfunction, but they are not better perceivers of actual physical changes. Their awareness is usually limited to specific areas of concern and they tend to ignore other bodily signs, particularly at moments when the specific problem is minimal. For them, body awareness would mean to become open to other functions and to perceive these in a neutral fashion, particularly at moments of feeling relatively quiet and pleasant. Thus, a somatic approach would not focus on the main complaints, but on the state of general dysregulation, to increase selfregulation and regain respect and trust towards the body [note 1].

Psychosomatic dissociation is present in all of us in varying degrees. It is a necessary possibility in order to function in society, but will have detrimental effects on health and wellbeing, when used too often or too long, because that strains self-regulation of the whole organism. When this is the case, treatment should follow the somatic approach. It should be directed on an experiential level at restoring the relationship of the conscious subject and the body, and at a re-education as to the intelligence and sensitivity of the organism.

S e l f - r e g u l a t o r y S t r a t e g i e s

One way to regain homeostasis after a disturbance was to suppress the symptom, raise the threshold for internal information and wait for the disturbance to pass. It is usually very effective, because the selfregulation of the whole body resolves most temporary dysfunctions. The major disadvantage of this strategy is that it blunts the sense of feeling well. When applied too often, the threshold for inner information remains high and it becomes difficult to know whether true homeostasis is present. The motto “feeling nothing, means that I am well” does not apply any more. It is indicated in Figure 5 by a thick line separating the conscious part from the non-conscious whole and suppressing the signal of inner disturbance.

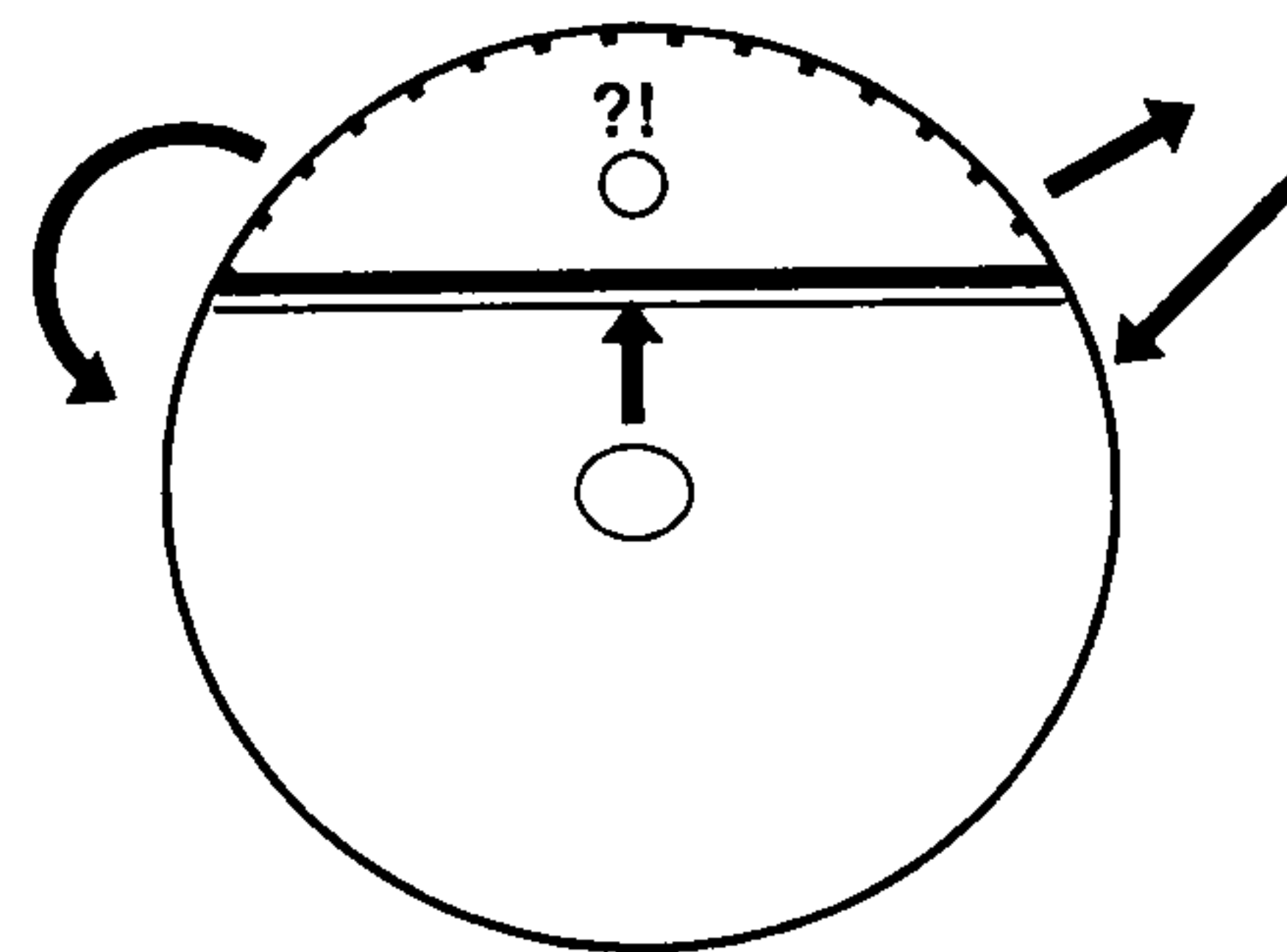


Figure 5. Response to disturbance: 1) suppressing the signal, attention remains outward directed, 2) call for external help, 3) taking care of the body in a third-person fashion

Another option is to acknowledge the disturbance and seek for external, third person help or external passive control. It is indicated in Figure 5 by the two arrows in the upper part on the right. The CS asks another person to have a look at him or help him. This option refers to the social system of health care and the role of social support in health. It is an essential ability of self-regulation to know when and

where to ask for help, when to trust homeostasis and when to practice a self-help technique. The major disadvantage of the passive external form of selfregulation is that it tends to increase itself. Each time external help was successful, the subject tends to think that the problem would not have solved without external help. Over-use of external help, which raises the costs of health care enormously, stems partly from insufficient inner awareness and in turn damages the trust in one's own ability to regain health.

Another level of self-regulation consists of strategies for active control. External active control means that the individual takes care of the body in the same way as one would help another. It is indicated in Figure 5 by the curved arrow from the CS to his body through the external environment. It requires that one takes a neutral attitude towards oneself and is able to objectify one's body and the specific problem. This ability is also essential for the sense of control and it is often taken as the only form of self-control. The individual is coached and taught healthy behaviour, self-help and self-care techniques. Its major disadvantage is that it may replace internal control, that knowledge and external information substitute immediate experience within oneself. In other words, it does not dissolve the "psychosomatic dissociation".

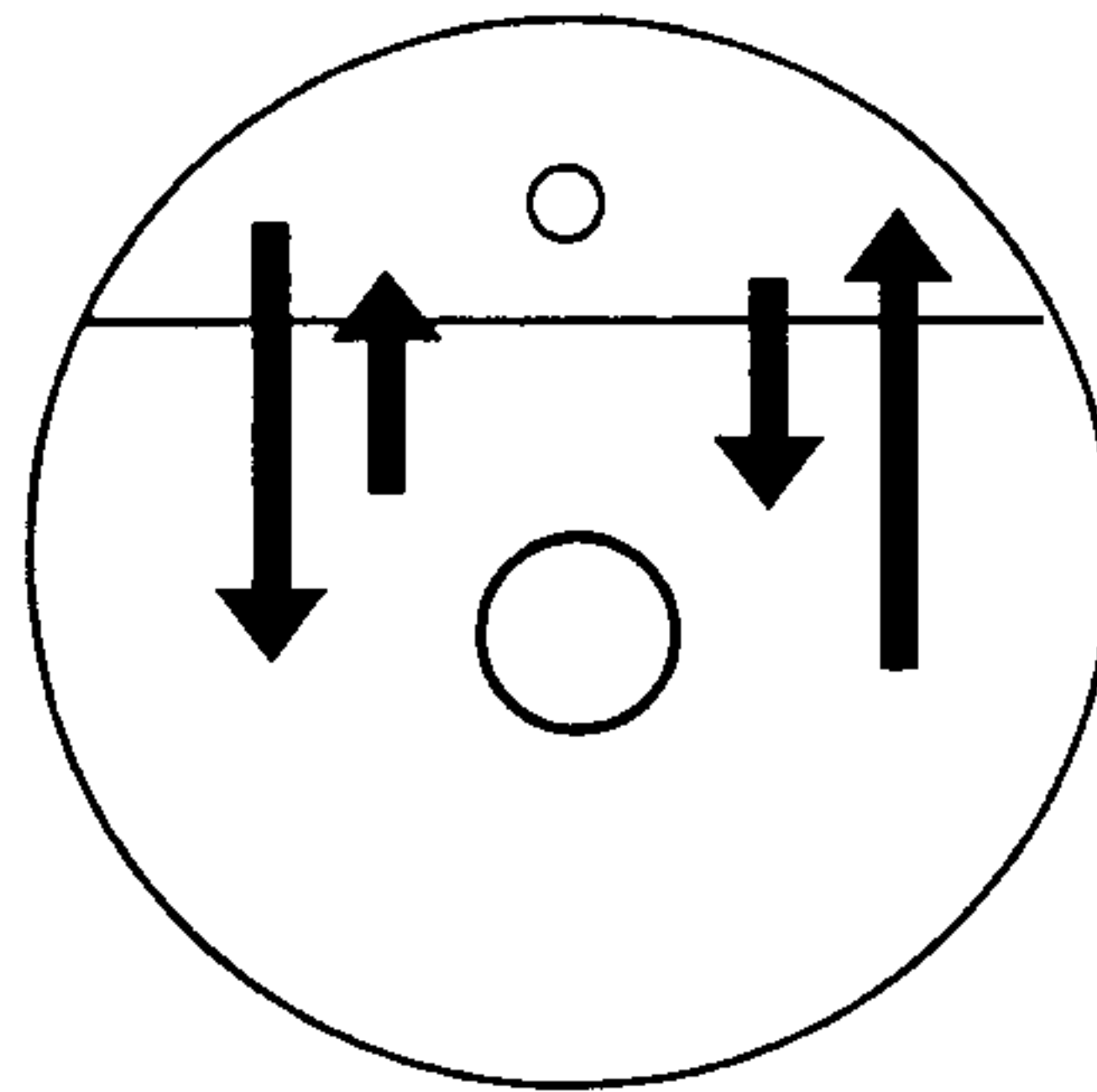


Figure 6. Internal selfregulation: active (top-down) and passive (bottom-up)

The last two options refer to the internal forms of selfregulation. Internal active control consists of ways to influence the body consciously and directly, by attending actively to the body. By way of relaxation instructions, self-suggestion, imagery, self-talk, movement, breathing and posture the individual tries to guide and direct bodily processes. There is a top-down control from consciousness towards the organism, represented in Figure 6 by the large internal arrow on the left, pointing downward. This strategy requires sufficient internal feedback from the body (the small arrow pointing upward), because the individual has to feel what happens in order to practice. When successful it gives a tremendous sense of mastery and control. This may, however, overshoot and lead to arrogance ("mind over matter") or to self-blame when the effect is disappointing. Another disadvantage is the idea that the body would not function well without conscious control. When a relaxation or breathing exercise is effective in reducing a symptom, this may instil a basic distrust that the problem would not solve and the organism would not be healthy, without the exercise.

The final option is internal passive control. This refers to a passive attentional state and a receptive, accepting attitude towards internal processes. There is a relatively small voluntary influence, represented by the small arrow downward, and ample time for the internal feedback from the organism as a whole, represented by the large arrow upward. The individual allows internal information without imposing a direction: not trying to relax, not breathing or sitting properly, not thinking positively or visualising radiant health, but perceiving and witnessing spontaneous internal changes (Kabat-Zinn *et al.*, 1985; Van Dixhoorn, 1995; Dunn *et al.*, 1999). It requires a non-critical, non-judgmental attitude and a realisation that internal information is meaningful. A passive mental state may be deeply relaxing, promote natural easy breathing and give a sense of inner quiet, trust and safety. However, unpleasant signals may also occur and they are equally accepted. Since the opinions of the conscious subject are necessarily incomplete and one-sided, it is only sensible and realistic to be open for any source of internal information. Thus, control is temporarily and more or less consciously given to the large Self.

A passive attentional state is the option that completes the circle of self-regulation strategies. This state allows bottom-up control from the organism towards consciousness. When there is reason to pay attention to an internal state, a small signal suffices. This may take any form: a physical sensation, an urge to move or do something, a thought, image or feeling. Thus, the view of homeostasis as a physiological balance may be enlarged to include the psychic system (Weiner, 1992). A passive attentional state is a natural transition to the state where the body is left to itself. When the threshold for internal awareness is not heightened, when there is concrete internal sensory awareness but no clear signal of any disturbance, then one may just as well not pay attention, forget about the body and do what one wants to do. Thus, passive internal feedback does not mean that the subject is constantly monitoring his body. Finally, this state complements and neutralises the negative effects of the other strategies. Therefore, it is the main goal from a somatic perspective. Figure 7 represents the four forms of self-regulation.

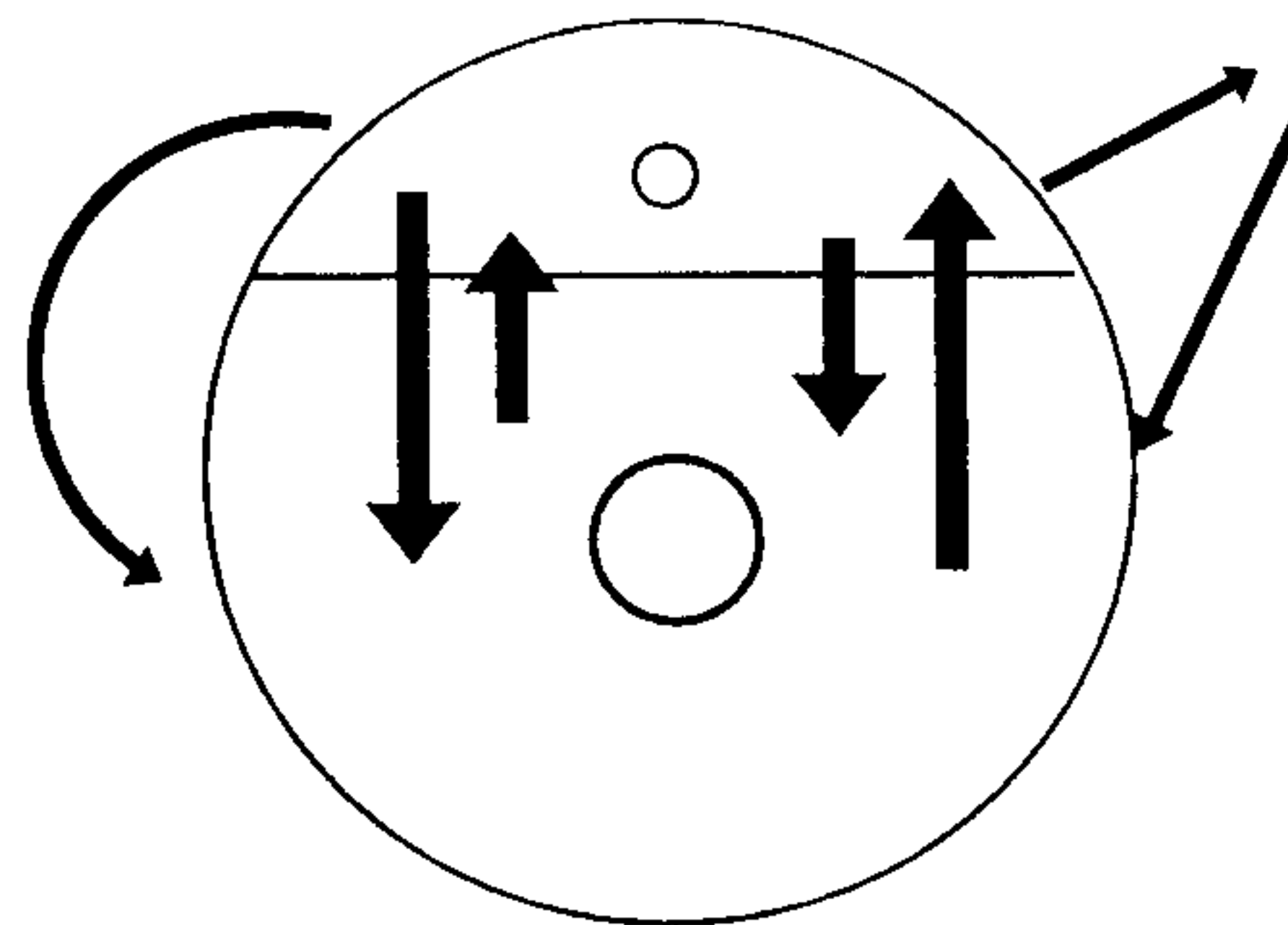


Figure 7. Full circle of four forms of selfregulation

T r e a t m e n t P r i n c i p l e s

The somatic perspective can be translated into a number of treatment rules, which are relatively independent of techniques and can be applied in many treatment

settings. They are the basis of the method of “Breath Relaxation” that I have developed. I have witnessed the feasibility and utility of this approach in the treatment of numerous disorders, both of a functional and an organic nature, and in psychological problems.

Make complaints more concrete. When a patient complains of e.g., tension, fatigue, fear, do not accept his or her words as such. Explore what specific sensations occur, how they change in time and move through the body. What do the descriptions exactly mean to the patient? One may ask: how do you know that you are tense? What exact perceptions do you refer to? Where in the body do you feel the tension, where is less tension and how does that feel to you? Concrete sensations can usually be localised, they exist somewhere in the body, they have clear dynamics, they respond to attention and disclose the inner processes best. Thus, anamnesis can be used as an exercise in neutral self-observation. One stays with the sensations, clarifies them, refrains from interpretation and differentiates them from cognitive and affective dimensions. This attitude somehow conveys that the complaints are literally taken seriously as such and prepares the ground for further practice of passive attention.

Alternate active and passive attention. A basic procedure is to give instructions where active internal control techniques are used and to alternate them with passive attention (Van Dixhoorn, 1995). During one instruction it is possible to alternate attentional state a number of times. This procedure has several advantages. First, attending actively is relatively easy. The subject is asked to do something specific: tense a muscle group, make an movement, repeat a sentence, visualize an image, breathe deeper and slower. In order to do this, the patient will focus and concentrate on internal activities. Secondly, the effect of the active influence is noticed when the patients stops doing it. The patient is asked to stop and to take time to notice how the body responds to the influence and what is changing compared to before the active influence. Thus, the patient is invited to experience and verify for himself, in a neutral way, whether the active influence had any effect. Thirdly, a passive attentional state appears naturally, when one consciously stops an activity that one consciously started. The timing of the passive and active parts can be adapted to the individual patient. The more a passive attentional state appears, the longer the pauses in-between instructions and the time of not-doing the active part can become. In this way, patients who are restless, anxious or have little inner contact, can be reached by minimising the passive phase. Thus, the therapist can adapt the instruction to the response and characteristics of the patient (Zillner & Wickramsekera, 1987; Lazarus, 1993) and avoid relaxation-induced anxiety (Heide & Borkovec, 1983).

Leave experience open. The same instruction will have different results in different persons and on different moments. Self-regulation requires that the patients concretely perceives what is actually going on at this moment. It is important to elicit interest in the bodily response and respect for the variety of responses. Alternating active and passive attention is like having a conversation. One starts with a remark (active phase) and then waits for and listens to the response (passive phase). Applying the exercises only to reach a predetermined goal is like holding a monologue to another person, without ever knowing the other persons opinion.

Thus, it is important to emphasise that the same instruction can have different effects and to leave the actual experience open.

This differs from usual relaxation procedures. In autogenic training for example, the pupil is taught what to feel. A passive attitude is required, as in all relaxation and meditation procedures, but it is difficult to distinguish between the active concentration of repeating self-suggestive words and the passive perception of actual changes. A true passive mental state implies that no guidance is given at all. Interestingly, Jacobson's progressive relaxation, which seems to be a more active form of relaxation, because the pupil is asked to tense muscle groups, in fact originated from systematic introspection and passive self-observation (Gessel, 1989). Later, Jacobson selected the sense of muscle contraction.

Provide means for a change in tonus. A passive mental state is easier when there are real physical changes to observe. The active phase of the instruction does not have to be very quiet, but can contain movements that vary from small to gross. The movement should be difficult enough to require the patient to pay attention, but not so difficult that extra effort is elicited. After some repetitions, the quality of movement may improve and co-ordination increase (Feldenkrais, 1972). Thus, there is an actual decrease in tonus, which will be rather easy to perceive.

An effective way of inducing change in tonus is manual handling of the patients' body by the therapist. In that way, the external passive form of control is utilised to bring the attention of the patient interior. It means that the therapist regularly pauses his activity and asks the patient whether he notices any difference. Here lies a crucial difference between a treatment of the body as an object and promoting self-regulation. Any treatment has both a direct effect on the body and it elicits a response from the body afterwards. When the direct effect is used as a stimulus to elicit a response and when time is taken to observe the response and when the patient is asked to pay attention to and report his experiences, the treatment has a somatic nature and may promote self-regulation.

An instruction is a proposal. Starting from the individuals experience of his own body, the nature of the problem and the way to proceed become more clear to both patient and therapist. Both start from a position of not knowing. The subject is proposed to practice, report on the experience and to find out whether and how the techniques are of any use. This can be tried out in a limited number of sessions, without prior knowledge of the exact nature of the problem. The purpose is that the individual receives as much internal information as one can handle in order to decide how to deal with the problem.

The expertise of the therapist lies in the ability to select instructions with a high likelihood of inducing observable changes, but he does not know the exact nature of the effects. He observes changes but also needs the self-report of the patient. A non-judgmental and non-directive attitude is necessary on the part of the therapist, in order that the patient feels free to report any effect, including unpleasant ones.

Differentiate experiences. In discussing the patients' reported experiences, the therapist tries to differentiate the somatic sensations from cognitive and affective responses. He may elicit experiences by mentioning areas of possible effect: regions in the body, respiration, attentional state, mood, self-image. Such differentiation helps the patient to verbalise perceptions and to distinguish between physical, emotional and mental levels. A complaint can consist of a strong physical response,

as for instance a muscle cramp, but it can also be unpleasant because of the painful memory it elicits, or because of the ideas that are associated with it. Negative interpretations (catastrophising) of minor physical symptoms may be just as disturbing as severe physical symptoms (Kabat-Zinn *et al.*, 1985).

Such a differentiation, coupled to neutral and precise self-observation, may be helpful to become aware of the role that emotions and thoughts play in creating symptoms. This will enhance the person's skills of self-regulation and his understanding of cause and effect. Both add to a sense of control.

Practice when relatively quiet. Patients tend to take self-regulatory exercises in the same way as medication: use them when needed. Self-regulation may indeed be very helpful in stress situations, but they should be practised in particular at moments of relative ease. The therapist should be very clear about this. First, a passive attentional state is a perfectly natural state, that occurs at quiet moments, but tends to remain unnoticed. It is not a spectacular sensation, but more a sense of inner, quiet feeling, natural and easy, almost unobtrusive. It is the experience that "I" am simply more my "self", more at home in myself, without much inner talk. At these moments, practice is more likely to result in clear experiences. The patient needs to recognise them. Secondly, when such moments do not occur naturally, the patient has to create them and to make changes in his lifestyle, which allow them to occur. Thirdly, it is the tendency to dissociate consciousness from the body that is to be addressed, not primarily the specific complaints.

Respiration. Breathing is a common ingredient of most relaxation therapies, meditation and movement systems and it is an excellent model system to teach the patient about the relationship between behaviour and physiology (Schwartz, 1981). It is the only vital function that is under both voluntary as well as autonomic control (Ley, 1994). There is a strong tendency however, to change respiration as soon as we pay attention to it. In other words, we are attentive in an active way and start breathing deeper, slower, more abdominal, without really noticing how the body is breathing by itself, or being sure how the body should breathe at the particular moment. The basic procedure of alternating attentional states is therefore strongly indicated when using respiratory techniques. The concept of "whole body breathing" comes in useful (Van Dixhoorn, 1989). It means that the whole body is actually involved in the mechanics of respiratory movement, and particularly, the whole of the trunk and spinal column. Thus, it is not sufficient, nor necessary to focus on respiratory motion in any particular area. Flexibility of breathing and co-ordination of breath and body movement is more important than any fixed pattern.

Spontaneous acts. A passive attentional state facilitates self-regulatory processes in the autonomic nervous system and in the psyche: discharge of tension, catharsis, reliving experiences, spontaneous movements. It mobilises also ideas, energy and creative resources within the individual. These phenomena are known in e.g. meditation, autogenic training, craniosacral therapy, breathing therapy, qigong and they occur naturally. They provide strong arguments for the intelligence of the body and self-regulatory capacity of the whole organism (Upledger, 1990). However, they can be frightening at first because of their strength, spontaneity or unexpectedness. Guided experience into this state helps to tolerate and join forceful bodily reactions without panic.

Lifestyle Changes in Cardiac Patients: Five-Year Follow-up

The method of “Breath Relaxation” that I have developed was tested in a randomized clinical trial on myocardial infarction patients. The trial was conducted in the early eighties and has been already reported (Van Dixhoorn, 1990). In this chapter changes in lifestyle in the long term will be described. All patients participated in an exercise training, half of them followed in addition six individual one hour sessions of relaxation and breathing instruction. The intervention did not urge the patients to make any changes in lifestyle. Thus, it differs sharply from the usual perspective of health psychology that tries to motivate patients to engage in healthy behaviour: stop smoking, exercise regularly, eat sensibly. Patients were only asked to try the instructions at home or in daily life and to report their experiences.

Directly after rehabilitation, the relaxation intervention resulted in higher levels of wellbeing, less exercise-induced ischaemia, less training failure and more pleasant awareness of the body during rest. At three months follow-up, return to work was higher, respiration rate was a little lower, resting heart rate was lower, heart rate variability during rest was higher (Van Dixhoorn, 1998), pleasant awareness of the body was still increased. Less patients judged their subjective age to be more than 5 years below their actual age. There was no effect on smoking, betablocking medication usage, anginal complaints or level of physical activity.

At one year follow-up, there was no effect of relaxation on smoking, anginal complaints or betablocking medication. About two-thirds of patients in both treatments said they were doing fine. However, more patients in the relaxation group said they had had a difficult time (65% versus 44%) and that they had changed (72% versus 49%). This demonstrated that they had become more realistic about the impact of the events and that they had felt the consequences in themselves more.

At five years follow-up, there was no effect of relaxation on smoking, anginal complaints or betablocking medication, but there were less cardiac recurrences (Van Dixhoorn & Duivenvoorden, 1999). Cardiac death, reinfarction or cardiac surgery happened in 20% of the relaxation group versus 32,5% in the control group (odds ratio: 0.52, 95% confidence intervals: 0.28-0.99). Thus, objectively, they were doing substantially better, as a group.

Table 1. Five year follow-up of cardiac patients with and without breath relaxation

	With Breath Relaxation	Without Breath Relaxation	Odds Ratio (95% CI)
Major cardiac events	15 (20%)	26 (32.5%)	0.52 (0.28-0.99)
No cardiological control	19 (30%)	9 (13%)	2.88 (1.12-6.9)
Doing well, lately	36 (57%)	46 (81%)	0.31 (0.14-0.68)
Being active, whole day	37 (58%)	46 (68%)	0.68 (0.33-1.39)
Much physical effort per week	46 (75%)	44 (67%)	1.44 (0.67-3.1)
Mid-day rest	38 (60%)	36 (52%)	1.18 (0.52-2.4)
Able to concentrate	41 (65%)	46 (70%)	0.81 (0.39-1.7)
Practice relaxation	44 (70%)	25 (38%)	3.8 (1.8-7.9)

CI=Confidence Interval

Table 1 shows that in regard to lifestyle, there was no effect on the ability to sustain much physical effort per week, the ability to be active whole day, the ability to concentrate, nor on the habit to take mid-day rest. Patients in the relaxation group, however, managed themselves better, because they were significantly less under control of the cardiologist (O.R.: 2.88, 95% CI: 1.12-6.9). Nevertheless, they also reported less often (O.R.: 0.31, 95% C.I.: 0.14-0.68) to be doing well!

It seems that, although they were doing better in the physical sense, they did not feel better. In order to understand the meaning of this, the correlations between the item “doing well, lately” and the other items were calculated. Table 2 shows that patients in the relaxation group “doing well” correlated higher with the other items. When they reported to feel good or very good, instead of reasonably well, they meant concretely that they could be active whole day, sustain much physical effort per week, had no angina pectoris and were able to concentrate. When these four items were added into a sumscore, the mean scores were almost identical for the two groups: 6.27 versus 6.29. Thus, patients in the relaxation group were not doing worse at all, but they reported more honestly how they were doing. This idea was confirmed by the correlations between the item “doing well, lately” and the sumscores, which were 0.73 and 0.40 respectively. This implies that about 50% of the variance of the answers to the question “how are you doing, lately?” was explained by the sumscore of four concrete items in the relaxation group, whereas only 16% of the variance was explained by the sumscore of these four items.

Table 2. Correlations of individual items with “doing well, lately”

	With Breath Relaxation	Without Breath Relaxation
Being active whole day	0.71	0.44
Much physical effort per week	0.43	0.10
No Angina Pectoris	0.38	0.35
Able to concentrate	0.42	0.15
Sumscore of the above items	0.73	0.40

Table 3. Correlations of items with the habit to “take mid-day rest”

	With Breath Relaxation	Without Breath Relaxation
Physical effort per week	- 0.32	
Practice relaxation	0.31	
Being active whole day		- 0.50
Able to concentrate		- 0.42
Doing well, lately		- 0.33

In the same way, the meaning of the habit of mid-day rest was investigated further. Contrary to our expectation that relaxation practice would increase the amount of rest that patients take, about equal numbers of patients went to lie down after lunch. Table 3 shows the reasons why patients did this, for the two treatments separately. It appeared that in the relaxation group patients took a rest when they could not

sustain much physical effort per week and when they practised relaxation. This seems to be a sensible habit. In the control group, however, patients went to lie down when they could not go on. They were forced to take a rest because of their inability to be active whole day, their inability to remain concentrated and because they did not feel well. Thus, although the habit of taking an afternoon rest did not differ between the two treatments, it was more of a healthy coping style to balance the amount of effort and rest in the relaxation group. In short, breath relaxation improves patients objective medical condition and at the same time increases a realistic perception of their functioning.

C o n c l u s i o n

Passive attention is deeply relaxing, promotes natural easy breathing, gives a sense of inner quiet, trust and safety and facilitates restorative processes. Although it is a perfectly natural state, its occurrence depends on conditions that are less common and need special attention in our society. This causes alienation of conscious awareness from one's self, a disturbed relationship between the conscious subject and the living body, which is at the root of disturbed sense of wellbeing, fear and psychosomatic symptoms. There is a need for somatic reeducation in addition to symptom directed therapies.

N o t e

1. The word "Panic" is derived from the Greek God Pan, who was unpredictable, unreliable, living in the wild and often malicious. However, when Pan was paid proper respect, the individual would receive benefit (Campbell, 1949).

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