

Autogenic training

N. Kanji

Faculty of Health Studies, Buckinghamshire College, Brunel University, Chalfont St Giles, UK

SUMMARY. This article attempts to provide an introduction to autogenic training. It examines the historical perspective of autogenic training from its beginnings in Germany in the 1930s to its present-day status in the UK, and gives an outline account of the method, its benefits and its clinical and non-clinical applications. The therapeutic potential of autogenic training in nursing is also considered.

INTRODUCTION

Autogenic training is a relaxation technique. It is a psychophysiological form of psychotherapy which an individual carries out on him- or herself by the use of passive concentration and certain combinations of psychophysiological adapted stimuli.

Autogenic training is a method which, when used daily, can achieve results comparable to those achieved by Eastern meditators who have been working at their practices for a long time. From the Western point of view, it has the appeal of being without cultural, religious or cosmological overtones and requiring no special clothing or unusual postures or rituals. Autogenic training is self-induced, as its name implies: it is generated by a person, from within him- or herself and achieves a steadily developing enhancement of energy and tranquillity. There are no external values or philosophies imposed upon those practising autogenic training which, once learned, can be practised for the rest of a lifetime.

HISTORICAL PERSPECTIVE

The origins of autogenic training lie in the research into sleep and hypnosis that was carried out in the period 1890–1900 at the Berlin Institute by Oskar Vogt, a renowned brain physiologist. Vogt observed that intelligent individuals who had undergone a series of hypnotic sessions under his guidance were able to put themselves, for a self-determined period of time, into a state which appeared similar to a hypnotic state. These individuals reported that these ‘autohypnotic’ exercises had a remarkable recuperative effect.¹

Vogt observed that these short-term mental exercises, when practised a few times during the day, reduced stressor effects such as fatigue and tension, while other disturbing manifestations, typically headaches, could be avoided. An impression was gained that a person’s overall efficiency could be improved. On the basis of these observations, Vogt considered such self-directed mental exercises, which he called ‘prophylactic rest-autohypnosis’ (*Prophylaktische Ruhe-Autohypnosen*), to be of definite clinical value.¹

Stimulated by Vogt’s work, Schultz became interested in exploring the potential of autosuggestion. He intended to find a psychotherapeutic approach that would reduce or eliminate entirely the unfavourable implications of contemporary hypnotherapy, principally the passivity of the individual and an undesirable dependency on the therapist. During subsequent years, while investigating hallucinations in normal persons, Schultz collected data that appeared to link up with Vogt’s prophylactic mental exercises.² Schultz found that a great majority of his hypnotized subjects reported having experienced two types of sensation: the first, a feeling of heaviness in the extremities, often involving the whole body; the second, a feeling of agreeable warmth. Schultz concluded that the experience of heaviness and warmth were essential factors in bringing about the change from the normal to the hypnotic state.

Schultz wished to establish whether or not a person could induce a psychophysiological state similar to a hypnotized state by merely imagining heaviness and warmth in the limbs. To this end, he developed six basic exercises. Since these exercises survive essentially unaltered today – indeed, these are the Six Standard Exercises of modern autogenic training – it may be said that Schultz’s research provided the cornerstone of autogenic training.

Nasim Kanji, Faculty of Health Studies, Buckinghamshire College, Brunel University, Newland Park, Chalfont St Giles, Buckinghamshire HP8 4AD, UK.

In the 1940s, Dr Wolfgang Luthe, a general medical practitioner and chest physician, sought out Schultz, believing that they had a common interest in the respiratory disorder of asthma. Initially, Luthe was sceptical of the claims made by Schultz about the benefits of autogenic training to this condition. It says much for Schultz's powers of persuasion that after only a short period, Luthe began what may be described as his life's work: the instigating of autogenic training research and gathering of resultant data in Germany, Canada and Japan.

From studies in the 1960s, Luthe developed the technique of autogenic neutralization, in which consistently longer periods of time spent in the autogenic state allow the discharge of the type of repressed material that characterizes certain mental health disorders. In order to facilitate the potentially long process of neutralization, Luthe developed a system that is now known as the Intenational Exercises and these are demonstrated to a trainee subsequent to the Standard Exercises.

During the 1950s, Luthe had become interested in art therapy and had studied carefully the techniques involved. Later, he drew parallels with these techniques and those of autogenic training, before developing his own version of art therapy, known as Creative Mobilization Technique.

In the late 1970s, autogenic training was introduced to the UK by Dr Malcolm Carruthers, who established the first autogenic training centre in Harley Street, London. The British Association of Autogenic Training and Therapy was established in 1984. Luthe died in 1985, having continued his research in the field of autogenic training until the end of his life. His extensive library was donated by his widow, Daki, to the British Association of Autogenic Training and Therapy.

AUTOGENIC TRAINING: THE METHOD

Psychophysiologicaly, autogenic training is based on three main principles:

1. Reduction of exteroceptive and proprioceptive afferent stimulation
2. Mental repetition of psychophysiologicaly adapted verbal formulae
3. Mental activity conceived as 'passive concentration'.

A reduction of afferent stimuli requires observation of the following points: the exercise should take place in a quiet room with moderate temperature and reduced illumination; restricting clothes should be loosened or removed; and the body should be relaxed, with the eyes closed, before the mental exercises are begun.

Three distinctive postures are employed:

1. The simple sitting posture
2. The reclined armchair posture
3. The horizontal posture.

All three training postures require careful consideration of a number of points: if certain details are ignored, disagreeable side- or after-effects and ineffective performance of the exercises may be experienced.

The first exercise of the autogenic standard series aims at muscular relaxation. The principle theme of the verbal formula is heaviness. Right-handed trainees start with passive concentration on 'My right arm is heavy'; left-handed trainees start with the left arm.

Luthe observed that during the very first exercises, about 40% of all trainees experience a feeling of heaviness, predominantly in the forearm.³ During subsequent periods of regular training, the whole arm becomes heavy and the feeling of heaviness will spread to other extremities. A spreading sensation of heaviness, tingling or warmth to other parts of the body is called the 'generalization phenomenon'. Along with the development of the generalization phenomenon, passive concentration on heaviness will be extended to the other arm or to the leg. The heaviness training is intended to continue until heaviness can be experienced more or less regularly in all extremities.

Subsequent necessary passive concentration is on warmth, keyed by the instruction 'My right arm is warm'. This is a developing situation and continues to provoke a feeling of warmth in other limbs until all the extremities become heavy and warm.

After having learned to induce the feelings of heaviness and warmth, the trainee is taught to continue with passive concentration on cardiac activity by using the formula 'My heartbeat is calm and regular'. Then follows passive concentration on the respiratory mechanism, with the formula 'It breathes me', then to warmth in the abdominal region with 'My solar plexus is warm'. The final exercise of the physiologically oriented standard exercises concerns the cranial region, which should be cooler than the rest of the body, and here the formula is 'My forehead is cool'. The time needed to establish these exercises with a trainee varies between 8 and 10 weeks.

The trainee's attitude, while repeating a formula in his or her mind, is deemed as 'passive concentration'. Apprehension must be avoided, as must any goal-directed effort. The effectiveness of passive concentration on a given formula is seen to depend on two other factors: the first, mental contact with the part of the body indicated by the formula, for example, the right arm; the second, representation of the autogenic formula in the mind. At the outset, passive concentration on a formula should not last more than

30–60 seconds, and should lead only to superficial relaxation. The time span is gradually increased, with an increasing depth of relaxation, to 10–15 minutes.

The state of passive concentration is terminated by the application of a three-step procedure: the arms are flexed energetically; the trainee breathes deeply; the eyes are opened.

Usually three exercises are performed in sequence, initially with about a 30–60 second interval between each of them.

Luthe³ observed that about 10% of individuals do not experience a sensation of heaviness. Consequently, trainees are informed that the heaviness formula functions merely as a trigger to bring about many different functional changes in the brain and bodily system, and that a sensation of heaviness is therefore not inevitable or essential. Autogenic training therapists stress to trainees that the exercises are effective as long as they are performed correctly, even if sensations do not occur. Clearly, it is important that the therapist be familiar with the therapeutic problems resulting from the different forms of autogenic discharge which may be evident while the trainee is in an autogenic state, and be able to deal with these by the intentional exercises previously identified.⁴

The more complex meditative exercises are not started until after 6–12 months of standard training, and the trainee should be able to prolong the autogenic state for up to 40 minutes without experiencing any disagreeable side or after-effects.

The meditative exercises begin with passive concentration on phenomena of visual imagination, such as the spontaneous experience of certain colours. Later, the trainee may focus on seeing all colours at will. When this is achieved, the meditative series continues with visual imagination of objects. This training phase may take several weeks before results are obtained. It is followed by imagining abstract concepts like 'happiness' or 'justice' in different sensual modalities. Still later, a trainee may meditate on his or her own feelings or try to evoke the image of another person. Finally, at the deepest level of meditation, an interrogatory attitude may be assumed in expectation of answers from the unconscious.

The meditative exercises are seen to be most effective in palliative care and have been described as 'Nirvana Therapy'.⁵ The meditative exercises have also been found to be of particular value in depth-dimensional psychotherapy. In general, it has been observed that the effects of these more physiologically oriented standard exercises are reinforced by the meditative training. However, the meditative exercises are not, as a rule, introduced to the average trainee, since the standard exercises in combination with intentional exercises, motivational and organic formulae, are designed to meet the therapeutic requirements of most relevant functional or organic disorders.

BENEFITS OF AUTOGENIC TRAINING

The technique of autogenic training supports the existing self-healing and self-regulating physiological functions of various body systems (homeostasis). The emphasis is not on trying to control or override these natural systems, but on helping them to use their inherent self-healing potential. Autogenic training enables individuals to become aware of manifestations within themselves, in their physical bodies and at mental and spiritual levels. They become aware of the negative patterns of life they are subject to and which continue to recur. Autogenic training shows individuals that there are alternatives and there are choices, and how to find them. Autogenic training operates on the principle 'what the mind causes, the mind can cure' and is an excellent short cut to self-improvement. Through autogenic training, a person is enabled to acquire a new and successful way of thinking and living.

The benefits of autogenic training are numerous, therefore. Some of them are instant, such as the counteracting of acute stress or fatigue and the provision of mental and physical refreshment; others are more long-term and help trainees to:

- Achieve peace of mind
- Cope with life's pressures
- Find emotional balance
- Enhance health and general well-being
- Improve coping abilities
- Control the body's stress responses.

The standard formulae induce physiological changes of autonomic functions which are coordinated by diencephalic mechanisms. This suggests better balance between the two hemispheres, leading to improved creativity at work and better communication in relationships.

O'Donovan⁶ suggests that the current ideas about psychoneuroimmunology are particularly relevant to the autogenic training process, whereby the individual has the potential to mobilize inner resources and self-healing properties.

CLINICAL APPLICATION

Autogenic training exerts a therapeutic action on certain mechanisms which are of relevance for many types of pathophysiological and mental disorders. With the influences of autogenic training principles, it is possible to use one's brain to influence these bodily and mental functions effectively. It is clear that this type of psychophysiological manipulation requires proper training, adequate medical background knowledge, critical application and systemic control of the effects of the treatment.⁷ Table 1 lists the application of autogenic training in a variety of pathophysiological conditions. This is backed up by research.⁸

Table 1 Clinical application of autogenic training

Type of disorder	Specific applications
Cardiovascular	Angina pectoris, recovery phase of myocardial infarction, hypertension, certain arrhythmias
Respiratory	Bronchial asthma
Gastrointestinal	Dyspepsia, peptic ulcers, ulcerative colitis, haemorrhoids, anorexia nervosa, obesity
Genitourinary	Functional disorders of micturition, sexual dysfunction
Musculoskeletal	Rheumatoid arthritis, low back pain, non-articular rheumatism
Endocrine & metabolic	Diabetes mellitus, thyroid disorders, premenstrual syndrome
Neurological	Headache and migraine, tremors, epilepsy
Psychological	Anxiety, phobia, depression, sleep disorders

There has been limited research in the UK on autogenic training. Carruthers⁹ demonstrated that autogenic training had a significant effect in reducing the resting pulse rate, and reduced systolic and diastolic blood pressure, cholesterol, triglyceride and free fatty acid levels.

Kermani's study¹⁰ of HIV-infected individuals showed that autogenic training could improve quality of life and also help to provide a more positive outlook. Autogenic training helped to control unpleasant and unwanted symptoms such as pain, diarrhoea, night sweats and weight loss. Perhaps most significantly, Kermani claims that the individuals in his study had an average survival rate of 18.5 months, greater than survival rates reported elsewhere.

NON-CLINICAL APPLICATIONS

Autogenic training has been used in everyday life both to improve the efficiency of various bodily or mental activities and to counterbalance the psychophysiological effects of stress.¹¹ Therefore, if we accept autogenic training as a valid proposition, and increasingly this seems to be the case, it should be made available to all those who suffer from the various types of stress prevalent in our present-day society.

Apart from the fact that autogenic training exercises reduce tension and have a calming effect in general, they enhance central nervous system elaboration and coordination. Autogenic training seems valuable, therefore, in sporting activities, where

trainees have noted improved performance with better reactions and coordination, superior endurance, and faster recuperation.¹¹ Autogenic training has already been used by athletes in Europe, and a quarter of a century ago, Vanek & Cratty¹² assessed this usage and its value to sportsmen in the reduction of tension and anxiety. These findings have been confirmed more recently by Harris & Harris,¹³ Nideffer¹⁴ and Orlick.¹⁵

Autogenic training has also been used in education. Luthe⁸ reports that when it was used therapeutically in the treatment of specific disorders such as stuttering, enuresis, ulcerative colitis and bronchial asthma with children and adolescents, a variety of changes in the behaviour of trainees were noted, for example in better attention, improved performance during tests and improved classroom behaviour. At the same time, Luthe noted that postgraduate students preparing for final examinations or working long hours in order to meet deadlines for assignments, were able to sustain their working ability at a more satisfactory level when they practised brief autogenic exercises at regular intervals.

Autogenic training has been practised also by industrial workers to counterbalance occupational stress. Luthe³ reports a number of improvements after autogenic training, with sleep becoming more restful, improved attitudes to workmates, greater job satisfaction, decision-making that appeared to be easier, more easily sustained concentration, keener powers of reasoning during long hours of difficult negotiations, and an increase of initiative and increased productivity with less fatigue and faster recuperation.

Luthe¹¹ also reports some interesting and isolated cases where autogenic training had been found to be helpful to people being menaced by the Gestapo, to groups of soldiers in prisoner of war camps, and to political prisoners enduring solitary confinement and interrogations.

CONTRAINDICATIONS

It is not considered advisable to use autogenic training with individuals who suffer from severe mental disorders, or children below the age of 5 or in situations where control of a trainee's symptoms is not possible. To these may be added individuals who have recently experienced myocardial infarction and those who suffer from hypoglycaemic conditions and glaucoma.

THERAPEUTIC POTENTIAL IN NURSING

Autogenic training is seen to be an effective aid to stress management and therefore of potential value to nurses, who work in a notoriously stressed occupation. Monat & Lazarus¹⁶ suggest that established

Table 2 Stress management techniques

Environment/lifestyle	Personality/perceptions	Biological responses
Time management	Assertiveness training	Progressive relaxation
Proper nutrition	Thought stopping	Relaxation response
Exercise	Refuting irrational ideas	Meditation
Finding alternatives to frustrated goals	Stress inoculation	Breathing exercises
Stopping smoking, drinking, etc.	Modifying Type-A behaviour	Biofeedback

Reproduced from Monat & Lazarus (eds) (1991) *Stress and Coping, An Anthology*, by permission of Columbia University Press, New York.

techniques that attempt to reduce stress generally fit into one of three categories:

1. Alterations of environment and/or lifestyle
2. Alterations of personality and or perception
3. Alterations of biological responses to stress.

Table 2 shows examples of each category. Some of the techniques might well be placed in more than one category; for example, formal exercising may be seen as a technique altering biological responses to stress, as well as one that alters a person's lifestyle.

Although Monat & Lazarus classify autogenic training under biological responses, it could be said that it belongs in all three categories and as such may be seen as unique. The only published study of autogenic training in nursing demonstrates that it helped significantly to reduce overall sickness absence in the experimental group. This study does not report other favourable or non-favourable effects.¹⁷

The author's own study of autogenic training as applied to student nurses¹⁸ showed that trainees experienced recognized benefits, such as increasing calmness with decreased anxiety, improved relationships both at work and in personal lives, and increased awareness of a healthier lifestyle. Generally nurse trainees were more aware of what they were eating and of the need to exercise regularly, and some spontaneously gave up smoking. This study seemed to show that trainees became more self-aware. If practised regularly, autogenic training meets some of the criteria for stress management set out in *The Health of the Nation*.¹⁹

CONCLUSION

This paper has attempted to provide an outline of the technique of autogenic training and to discuss its usefulness as psychophysiological self-protection against the damaging effects of stress. It is recommended that autogenic training be made available to all who undergo the various types of stress peculiar to our times, particularly in the nursing profession. If nurses are conversant with this technique and have actually experienced its benefits themselves, they will be more likely to offer or recommend it to their clients/patients,

and more able to offer choices and alternatives. Obviously, nurses require the necessary training to become therapists.

With the advent of nurse practitioners and nurse-led clinics, nurses are becoming more autonomous and have the potential of offering this technique much more widely. Research funded by the Department of Health is currently under way to examine the provision of complementary health care by practice staff, including practice nurses.²⁰ This, along with EEC legislation on complementary medicine currently at the consultation stage,²¹ is likely to have implications for nurses' use of techniques such as autogenic training.

REFERENCES

1. Schultz J, Luthe W. Autogenic training: a psychophysiologic approach in psychotherapy. New York: Grune and Stratton, 1959.
2. Schultz J. Autogenic training. Stuttgart: Thieme Verlag, 1932.
3. Luthe W. Autogenic therapy. Vol I, autogenic methods. New York: Grune and Stratton, 1969.
4. Geissman P, Jus A, Luthe W. Autogenic state and autogenic shift: psychophysiologic and neurophysiologic aspects. University of Toronto Press, 1962.
5. Schultz J, Luthe W. Autogenic training. Proceedings of the Third International Congress of Psychiatry, Montreal, 1961.
6. O'Donovan JB. The application of autogenic training in organic illness, a handbook for therapists. Chichester: J.B. O'Donovan, 1989.
7. Luthe W. The clinical significance of various forms of autogenic training abreaction. University of Toronto Press, 1962.
8. Luthe W. Autogenic therapy. Vol II, medical applications. New York: Grune and Stratton, 1969.
9. Carruthers M. Health promotion by mental and physical training. *British Journal of Holistic Medicine* 1984; 1(2): 142-147.
10. Kermani KS. Stress, emotions, autogenic training and AIDS: a holistic approach to the management of HIV-infected individuals. *Holistic Medicine* 1987; 2: 203-215.
11. Luthe W. Autogenic therapy. Vol III, applications in psychotherapy. New York: Grune and Stratton, 1969.
12. Vanek M, Cratty B J. Psychology and the superior athlete. London: Macmillan, 1970.
13. Harris DV, Harris BL. The athlete's guide to sports psychology: mental skills for physical people. New York: Leisure Press, 1984.
14. Nideffer RM. Athletes' guide to mental training. Champaign: Human Kinetics, 1986.
15. Orlick T. Psyching for sport mental training for athletes. Champaign: Leisure Press, 1986.
16. Monat A, Lazarus R S. Stress and coping, an anthology. New York: Columbia University Press, 1991.

17. Bailey R. Autogenic regulation training and sickness absence amongst student nurses in general training. *Journal of Advanced Nursing* 1984; 9(6): 581-587.
18. Kanji N. Stress amongst student nurses and effects of autogenic training. Unpublished dissertation. Buckinghamshire College, 19
19. Department of Health. The health of the nation: a strategy for health in England. London: HMSO, 1992.
20. Parliamentary Group for Alternative and Complementary Medicine. Complementary health care in general practice. *PGACM Newsletter* 1995; 2: 2.
21. Lannoye P. Motion for resolution on the status of complementary medicine in the EEC. European Parliament, 1995.