

## Alexander technique and Feldenkrais method: a critical overview

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The natural state of the human body is to be in motion. This motion includes dynamic movements, such as running or jumping; subtle fine movements, such as writing; or omnipresent movements, such as breathing. Most people do not focus on the quality of movement, but rather take movement for granted. It is not until people become injured or begin to perfect their movement for a specific activity that they may become more aware of these activities. Heightening the awareness of one's own movements can be traced back more than 1000 years. The importance of being fully attentive to the state of all one's muscles, including the muscles involved in the act of breathing, can be found in references to meditation and yoga found in the *Yogasutra* by Pathanjali dating back to 200 A.D. Applying this same awareness to the body in motion, rather than at rest, is the primary focus of modern movement re-education techniques. Two of these techniques are the Alexander technique and the Feldenkrais method.

The Alexander technique and Feldenkrais method are somatic education techniques designed to establish a heightened awareness of movements. The desired outcome is to become more functional and aware of one's movements spatially (or, more accurately, kinesthetically) throughout everyday routine activity. The Alexander technique and Feldenkrais method, in contrast to other forms of alternative therapies, are relatively new and not as widely understood by society. Although each method has its own history and accepted approach, both also have many parallels and similarities. Both techniques use the student/teacher paradigm rather than patient/therapist

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paradigm. The teacher's role can be compared with that of a sports or musical instructor, such as a golf instructor or piano teacher. Movement awareness taught by a practitioner helps the student to move more fluently and as a result may aid in pain, muscular imbalances, performance difficulties, movement disorders, and many other ailments, such as overuse injuries. Throughout the entire process of learning these techniques, the student ideally alters habitual movement patterns, which are viewed as limiting, to become more aware kinesthetically of the functional movements that are a part of everyday life.

This article develops an overall better understanding of the Alexander technique and Feldenkrais method. Initially, a brief history is provided to lay the groundwork for the development of these techniques. A description of the techniques, training requirements, and mechanism of action follows. Indications, contraindications, and patient selection are discussed. This article reviews and identifies what research has been completed and what areas need further investigation. Overall, the goal is to establish a guide to aid in determining who may benefit from these techniques and outcomes to expect when using these techniques [1,2].

## History

Fredrick Matthias Alexander, founder of the Alexander technique, was an actor and teacher born in 1869 in Australia. Although gifted in his chosen profession, he developed voice problems while reciting. Frustrated with the chronicity of his problem, he visited many professionals, including physicians and voice specialists, who offered him many of the same treatment recommendations without improvement. Resting his voice resulted in recovery from his hoarseness. He did not lose his voice with everyday speaking, yet during the course of a performance he ultimately would become hoarse and unable to complete the performance. This situation led him to self-investigations eventually resulting in what is known today as the *Alexander technique*. While experimenting with head and neck positioning, Alexander became aware of habitual movements that were hindering his expression and quality of voice. Over his lifetime, he further developed the technique to assist and aid others, primarily individuals in the performing arts, to overcome their own dysfunction and use their bodies better as a whole. Alexander continued his teachings throughout his life eventually training others in the art of the technique until his death in 1955 [3].

Moshe Feldenkrais was born in Russia in 1904 and lived until 1984. An electrical engineer and physicist, he possessed a sharp intellect and athletic physique. His interest in athletics, including soccer and judo, resulted in multiple knee injuries, which eventually left him crippled in his ability to walk. Unsatisfied with the treatment options offered by medical professionals, he began researching other mechanisms to overcome his injury. Similar to Alexander, through his own investigation, Feldenkrais believed habitual

movements predisposed injury. While developing the method, Feldenkrais researched and experienced many different treatments. All of his experiences helped to shape what is known today as the *Feldenkrais method*. Feldenkrais experimented by performing minute variations in his movements to become more aware of his own body mechanisms as a whole. Eventually through self-experimentation and variation of movement, he overcame his disability, improved his gait, decreased his pain, enhanced his functional level, and avoided surgery [4,5]. He too found that his discoveries were equally helpful to others, and after many years of teaching, he began to train others to become teachers of his method.

## **Training**

Alexander and Feldenkrais went on to teach their individual techniques to others interested in the methods for various reasons. Over time, these practitioners have established themselves via their respective organizations. The most recognized bodies governing the Alexander technique and Feldenkrais method in the United States are the American Society of the Alexander Technique (AmSAT) and the Feldenkrais Guild of North America. In the United States, there are more than 20 schools certified to teach the Alexander technique. After completing these programs, graduates are eligible to become certified practitioners by the AmSAT. Depending on the program, courses and training usually span 3 to 4 years, and students must complete approximately 1600 hours [6]. This training usually incorporates an understanding of the Alexander technique and a basic understanding of anatomy. The primary focus is, however, on hands-on training. The schooling that practitioners undergo allows them to experience and embrace the Alexander technique. Prerequisites are minimal and do not require a specific educational background but may require that a person has experienced the technique personally briefly over a few sessions before acceptance into the school.

Similar to the AmSAT, the Feldenkrais Guild of North America governs the Feldenkrais method in the United States. When a person completes the course work at 1 of the more than 20 US accredited training programs, he or she is eligible to be certified as a Feldenkrais practitioner. Feldenkrais training requires approximately 1200 hours of training that occurs over 3 to 4 years [7]. The educational training consists of lectures and readings specifically on the Feldenkrais method and complementary knowledge and teaching a basic understanding of anatomy and biomechanics. Classes also may address communication techniques and developing relationships through the art of interviewing. Overall the program emphasizes a hands-on experience of the method that allows each student to practice the technique fully. A significant aspect of the preparation is that the practitioner-in-training experiences the technique as if he or she were the student. The individual also observes the methods performed on others to gain a better understanding and prepare

them further as a teacher. In choosing a practitioner for either the Feldenkrais method or the Alexander technique, it is important to look at the practitioner's educational background, experience with the technique, and specific area of interest. The most important factor in choosing a teacher is, however, the interaction between student and practitioner and that a comfortable relationship is formed.

### **Mechanism of action**

The mechanisms by which somatic movement re-education techniques achieve their effect are unknown. Theories exist as to the mechanism by which each technique obtains its desired effect, and as expected, the originator of each technique theorized why his treatment worked. The Alexander technique and Feldenkrais method theorize that movement is a function not only of the body, but also the mind, and the two should not be viewed separately but as a whole. Few research attempts have been made to evaluate the mechanism by which these techniques achieve their effect, and that type of research at a physiologic level would be difficult to conduct. Jones, in the 1950s and 1960s [8–10], performed experiments attempting to document physical improvement in quality of movement of the head and neck in subjects using the Alexander technique. The process by which these techniques achieve their effect is likely multifactorial, however. One hypothesis on a physiologic level is that these techniques change the muscle spindle set points to a new resting length or change the gamma neuron system set points [5,11]. Another concept may be that the engrams of habitual movements are effectively altered or replaced by more functional and efficient movement patterns. The techniques could be compared with osteopathic, muscle energy techniques in how they derive their effect. The hands-on aspect of these treatment interventions (although primarily intended to be instructional) may elicit effects similar to massage by activation of peripheral sensory receptors, a mechanical release of neurohumeral factors, or direct stimulation of Golgi tendon organs. The psychological component of the Alexander technique plays a large role in movement because the method educates the student on how to control physical movement in the time between *deciding* to move and the actual movement itself.

### **Techniques**

The Alexander technique and Feldenkrais method have many similarities; however, each method also has a unique philosophy that makes it distinctive. Both techniques postulate that habitual movements lead to movement problems, pain, or overall patterns of dysfunction. Through changing these patterns, the entire system or body functions better. The Alexander technique and Feldenkrais method suggest that the process by which these

patterns are changed is a learning process. The techniques have been used extensively for decades by performing artists and professional athletes and more recently by low-level functional performers to help improve their performance. Whether the goal is for a person to be able to roll from back to side in bed; reach for, grasp, and drink out of a cup; or perform a triple somersault, the learning process is essentially the same. Over time, the student begins to delineate and differentiate subtle nuances of intention and allow for a greater awareness of performance. Throughout this process, the student continually closes the gap between what he or she wants to do and what he or she actually achieves. Overall, by becoming more aware of one's actions kinesthetically, one functions at a higher level.

Alexander stressed the importance of inhibition to alter routine movement. He postulated that by stopping a movement from occurring, one could reset the action and redirect motion to function more naturally. Over time, these movements become second nature. The result may include an array of different results, including improvement of movement, posture, or voice quality, and even a decrease of pain. Alexander believed the dynamic relationship between the head, neck, and spine was crucial to a person's overall well-being. He referred to this as the *primary control*. The upper and lower extremities were secondary to the head, neck, and spine. Alexander set precise standards that he applied to every type of movement. He stressed the importance in positioning of the primary control and believed that no movement would be adequate if it did not to some degree follow his format. Alexander's problems involved his voice, and he worked primarily on repositioning the head and neck; this may explain why he emphasized the importance of head, neck, and spine positioning.

An initial session of the Alexander technique usually focuses on chair work and table work (Figs. 1 and 2). Alexander worked with his students in front of a mirror. He and the student would go through the motions of sitting, standing, and lying while maintaining appropriate head positioning and body lengthening (see Fig. 2). The focus of the pupil is to lengthen and widen while maintaining the upright central positioning of the head, neck, and spine. The student is encouraged to use visual cues to maintain positioning rather than just proprioception. The student does not rely solely on misleading proprioceptive feedback. This also allows the student to become an active participant in the session rather than a passive observer. The Alexander technique focuses on the direct hands-on methodology from the practitioner to help define movements objectively and reposition the student (Fig. 3). The technique sometimes is taught in a group setting, but it is preferably taught one on one.

The Feldenkrais method, although similar to the Alexander technique, varies in its fundamentals, teaching mechanisms, and philosophy. Feldenkrais often said his goal was to produce "flexible minds, not just flexible bodies." This technique usually is taught in positions that eliminate gravity, such as lying down (Fig. 4). He used developmental movements, such as



Fig. 1. Alexander technique and chair work.



Fig. 2. Alexander technique and table work.



Fig. 3. Alexander technique, chair work, and hands-on head and neck positioning.



Fig. 4. Feldenkrais method using the functional integration method in a gravity-eliminated environment.

rolling and crawling. The Feldenkrais method typically does not address posture directly, whereas the Alexander technique focuses on dynamic posture. In the Alexander technique, the teacher provides more clear direction to the student, whereas in the Feldenkrais method, the teacher makes a point of not directing toward a specific outcome.

Feldenkrais coined the terms *awareness through movement* and *functional integration* to define the teaching techniques of his method. Although the goals behind each method are similar, the instruction and philosophy behind each differ considerably. During an awareness through movement session, the instructor verbally guides a group or individual through a series of movements to explore systematically the relationship of body position and space (Fig. 5). In this setting, the student is encouraged to experiment individually and freely. Ideally the student becomes more aware of his or her movements independently without the practitioner directing the experience. One key difference between functional integration and awareness through movement is that awareness through movement consists primarily of verbal cues, whereas functional integration mainly incorporates touch to facilitate movement and awareness (Fig. 6). The use of touch and direction creates subtle sensations that result in new experiences for the student. In the Alexander technique, the objective is controlled, elegant, functional movement, whereas in the Feldenkrais method, the desire is spontaneous, elegant, functional movement.



Fig. 5. Feldenkrais method using awareness through movement using verbal cues.





Fig. 6. Feldenkrais method using functional integration.

## Research

A review of the literature on the Alexander technique and Feldenkrais method reveals that there are few well-designed, blinded, and controlled studies with objective or standardized outcome measures published in peer-reviewed journals. Much of the literature and printed material on these techniques include case studies and testimonials on the effectiveness of the technique. Although these testimonials are passionate in their description of course and outcome, they do not carry sufficient scientific weight to carry the impact that may be intended.

Multiple difficulties exist in being able to design and implement good clinical research using these techniques. Difficulties in study design include the expense and time of the practitioner, the prolonged length of time needed to conduct the studies, the difficulty in establishing a control group that meets regularly and receives placebo or sham treatment sessions, the difficulty in having a blinded treatment protocol with hands-on treatment, obtaining a large sample size that is randomized, controlling for variability in technique among practitioners, and using objective standardized outcome measures. An analysis of important factors to consider when designing effective studies of patients with chronic pain is found in an article by Harden and Brucehl [12]. The available published research, although limited in quantity, covers a variety of conditions and is reviewed subsequently.

A study by Dennis [13] assessed the effect of learning the Alexander technique on balance by using functional reach as a clinical measure of balance. Understanding and improving body mechanics and body awareness is a proposed benefit of learning the Alexander technique; this may improve balance and reduce falls in the elderly. In this study, the experimental group received group sessions of Alexander technique instruction for 1 hour twice a week for 8 weeks, and the control group underwent the pretesting and post-testing only. There was a small improvement in functional reach in the Alexander technique group compared with their pretest scores and compared with the control group. Subjective improvements in balance, posture, ease of movement, body awareness, and self-confidence also were noted. Weaknesses of the study included the small nonrandomized sample size, lack of any sham treatment control group, lack of standardized questionnaires assessing subjective gains, and concerns of test/retest reliability in assessing functional reach. Nonetheless, this study suggests clinical gains in functional reach using a limited number of Alexander technique training sessions in a group setting.

It has been proposed that the Alexander technique affects the pulmonary system and is used to improve breath and voice control. A study by Austin and Ausubel [14] evaluated the use of Alexander technique and pulmonary function. In this study, 10 healthy volunteers performed pulmonary function tests before and after a total of 20 weekly sessions of Alexander technique lasting 35 to 45 minutes each, taught by eight different Alexander technique practitioners. Results were compared with a matched control group of 10 healthy volunteers who did not undergo Alexander technique training or any structured exercise routine. Statistically significant increases were noted in peak expiratory flow and maximal inspiratory and expiratory mouth pressures. No significant changes were noted in other tested areas, and no significant changes were noted in the control group. The use of multiple practitioners in teaching the technique supports the notion that the results are more likely from care elements in the technique itself rather than secondary to the unique skills of a particular practitioner. Postulated reasons for the improvement in pulmonary function included increased length of muscles of the torso derived from “inhibiting” slumping patterns in posture and increased strength or endurance in abdominal muscles from improved posture. The Cochrane group performed a review of the literature and found no studies of sufficient rigor evaluating Alexander technique and asthma management. The review mentioned anecdotal reports from practitioners of the technique and performers who have experienced improvement with their asthma symptoms and less dependence on medications. No significant evidence in the literature supports this conclusion at this time, however [15].

The effects of Alexander technique and Feldenkrais method treatments in various neurologic and musculoskeletal conditions have been examined. A randomized controlled study published evaluated the Alexander technique versus massage and a control group in treating 93 patients with idiopathic Parkinson’s disease [16]. One group received 24 sessions of the Alexander

technique, another group received 24 sessions of massage, and the third control group received no treatment. Findings included improvements in the Alexander technique group in the Self-Assessment Parkinson's Disease Disability Scale at the best and worst of times during the day and improvements in the Beck Depression Inventory following the course of treatment. Sustained benefits were noted in these measures at 6-month follow-up.

A Swedish study of 78 patients compared the effect of body awareness therapy, Feldenkrais method, and conventional physical therapy on changes in health-related quality of life, self-efficacy, and sense of coherence in patients with nonspecific musculoskeletal complaints [16]. Questionnaires and standardized assessment tools were used. Results were not specifically significant but suggested that body awareness therapy and Feldenkrais method may have some relative greater benefit over conventional therapy in improving health-related quality of life and self-efficacy of pain.

An evaluation of the effect of Feldenkrais awareness through movement on hamstring length was investigated in 48 healthy undergraduate students. Four treatment sessions were conducted with no significant difference noted in hamstring length between the Feldenkrais group, relaxation group, and control group [17]. Valid concerns about study design include the short course of treatment and the validity of the outcome measure.

Another study compared the effectiveness of 8 weeks of Feldenkrais method versus sham treatment in 20 patients with multiple sclerosis [18]. Assessment tools used included the Nine-hole Pegboard Test of Hand Dexterity, Hospital Anxiety and Depression Scale, Multiple Sclerosis Self-efficacy Scale, Multiple Sclerosis Symptom Inventory, Multiple Sclerosis Performance Scale, and Perceived Stress Scale. The patients were randomly assigned, and a crossover design was used. The treatment group showed no objective improvement in any of the noted measures except for improvement in perceived stress and lowered anxiety.

An article published in the German literature suggested that the use of the Feldenkrais method in a multimodal treatment program for patients with various eating disorders may result in an improved perception and acceptance of their body. A 9-hour treatment course in the Feldenkrais method was used in this study.

The use of the Alexander technique in a multidisciplinary pain treatment program was evaluated in an article by Fischer. Feedback from participants indicated a higher degree of satisfaction persisting more than 1 year after treatment with the Alexander technique compared with the other interventions used. Although these results were not statistically significant, trends were noted indicating the relative perceived benefit.

## **Contraindications**

Every form of treatment currently available has relative risks and benefits. Whether the treatment is medication, physical therapy, or a form of

alternative therapy, the relative risks and benefits should be identified before treatment. Relatively speaking, the Alexander technique and Feldenkrais method are benign in practice and have no strict contraindications. In any therapy, however, it is imperative the patient and the health care provider address certain issues. Initially, if the patient has a complaint, a diagnosis should be ascertained, and serious pathologies should be excluded before considering either movement technique. After the workup is complete and the patient and the health care provider are comfortable with the results, it is important to address other treatment options that exist and the relative anticipated risks and benefits of each. If a person has a rotator cuff tear, and he or she is experiencing a significant amount of pain, it is important that all treatment options, including surgery and physical therapy, are considered. If a patient has exhausted other appropriate resources or wishes to pursue a movement re-education technique, it may be reasonable to try either the Feldenkrais method or the Alexander technique.

### **Indications**

Each patient is an individual, and every course of treatment should be distinct and specific to a patient's particular needs. It sometimes is difficult to know which patients would respond to alternative types of treatment. The Alexander technique and Feldenkrais method require highly motivated students who are willing to put forth time and effort to see if the techniques are beneficial. As with many forms of treatment, an individual is not cured overnight. Both techniques are not intended to solve specific problems, but by learning the technique individuals may have improvement in their complaints. Individuals who may benefit from these techniques fall into four general groups. The first group includes patients with specific complaints or chronic pain. The second group consists of high-performing individuals, including athletes, artists, actors, musicians, dancers, martial arts participants, singers, computer operators, and equestrian riders. A third group that may benefit from these techniques are individuals with specific conditions, such as learning disabilities, movement disorders such as Parkinson's disease, cerebral palsy, stroke, and autism. Finally, the fourth group comprises individuals interested in improving their particular state or seeking personal enlightenment.

### **Patient selection**

Selecting individuals for various alternative medicine treatments is not an exact science. It is impossible to know who will succeed with their treatment and who will not. The overall goal of the Feldenkrais method and Alexander technique differs from most medical or even alternative treatments in that these methods are not trying to fix a problem or cure an ailment. Rather, the goal of these movement techniques is to teach the student to become more

aware of his or her own movements functionally and kinesthetically. The result may be an improvement, however, of posture or liberation of muscle tension. Others may have an improvement of voice projection or quality. Additionally, for some, the techniques may improve chronic pain, balance, coordination, or flexibility. The techniques also may improve breathing patterns and an overall fluidity of movement. Overall, the techniques primarily teach students a general awareness of movement, and all else is added benefit.

The length of time needed to achieve this overall awareness varies widely but mainly depends on the student and the teacher. Patient factors include their goals, progress, and financial backing. The student and what he or she hopes to achieve determine how long he or she needs to invest in learning the technique. Highly functioning individuals already may be at a superior level functionally, and they may need only a few sessions to fine tune or reiterate what they already are aware of. Other individuals may have experienced many years of dysfunction secondarily to muscle imbalances or movement disorders, and they may require much more time to work fully through the different levels and complexity of issues. Similarly, the progress that one makes during the sessions may affect the length of time it takes one to reach the desired outcome. The movements and adjustments made are small in both techniques. Learning, processing, and using this information vary widely depending on the individual and significantly influence the length of time the individual continues with classes.

Financial concerns also may affect the number of sessions the student pursues. Most insurance companies at this time do not cover the Alexander technique or Feldenkrais method. Exceptions occasionally include worker's compensation cases, automobile insurance cases, or cases in which the practitioner teaching the technique also is a physical therapist. The average cost of a 30-minute session usually ranges from \$30 to \$50; costs in metropolitan areas range from \$50 to \$100. The cost in general limits not only who can afford to learn the technique, but also the number of sessions the person can afford to undergo. The philosophy and routine of the practitioner also affects the number of sessions administered. Some salaried certified practitioners of the Alexander Technique and Feldenkrais method, such as a physical therapist working within the constraints of insurance reimbursement, may incorporate these techniques into their overall treatment program. Only a few sessions may be devoted primarily to these techniques with a strong emphasis on teaching the pupil to incorporate learned strategies independently into their routine. Typically, courses of treatment from independent practitioners range from 20 to 60 sessions.

## **Summary**

Knowing how the body moves and responds seems simplistic. Being truly aware and attentive to the subtleties of that movement is a learned skill,

however, that requires a concerted effort. Conventional physical therapy, biofeedback, yoga, meditation, and martial arts training are examples of activities that incorporate this awareness. The Alexander technique and Feldenkrais method focus on developing one's awareness of movement and provide the student the ability to improve that movement. The philosophy and method each technique uses to achieve that common goal differs. For motivated individuals, both techniques provide tools to improve functional quality of movement and improve quality of life. Each technique has been practiced for more than 50 years, in many countries, by thousands of students and teachers. Strong anecdotal experience supports its use and growing popularity. The core principle of improving awareness of one's movements resonates as a useful tool in improving dysfunction of movement. Current research-based evidence cannot guide clinicians, however, in determining the effectiveness of these techniques, the length of treatment needed, or for which patients it would be most effective. Prospective clinical studies with standardized outcome assessment tools would provide more objective evidence to support the utility of these techniques. Keeping an open mind, being motivated, and having a clear goal allow an individual to benefit from these techniques, while still remaining a critical consumer of health care options.

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### **Further information**

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### **References**

- [1] Davis CM, Barnes JF, Berger D, et al. The Alexander technique. In: Davis CM, editor. *Complementary therapies in rehabilitation: holistic approaches for prevention and wellness*. Thorofare (NJ): Slack Inc; 1997. p. 161–82.
- [2] Brennan R. *The Alexander technique: a practical introduction*. Shaftesbury: Element; 1998.
- [3] Alexander FM. *The use of the self*. California: Centerline Press; 1984.
- [4] Feldenkrais M. *Awareness through movement*. New York: Harper & Row; 1977.
- [5] Feldenkrais M. *Body and mature behavior: a study of anxiety, sex, gravitation, and learning*. New York: International University Press; 1988.
- [6] American Society for Alexander Technique. Available at <http://www.amsat.ws/>. Accessed May 24, 2004.

- [7] Feldenkrais Guild of North America website. Available at: <http://www.feldenkrais.com/faq.html>.
- [8] Jones FP. *Freedom to change: the development and science of the Alexander technique*. London: Mouritz; 1997.
- [9] Jones FP. *Collected writings on the Alexander technique*. Cambridge (MA): Alexander Techniques Archives; 1998.
- [10] Jones FP. Method for changing stereotyped response patterns by the inhibition of certain postural sets. *Psychol Rev* 1965;72:196–214.
- [11] Cranz G, Collin B, Bluethenthal A, et al. Foreword. In: Sontag J, editor. *Curiosity recaptured: exploring ways we think and move*. San Francisco: Mornum Time Press; 1996.
- [12] Harden RN, Brucehl S. Conducting clinical trials to establish drug efficacy in chronic pain. *Am J Physical Med Rehabil* 2001;80:547–57.
- [13] Dennis RJ. Functional reach improvement in normal older women after Alexander technique instruction. *J Gerontol Med Sci* 1999;54a:M8–11.
- [14] Austin JH, Ausubel P. Enhanced respiratory muscular function in normal adults after lesions in proprioceptive musculoskeletal education without exercises. *Chest* 1992;102:486–90.
- [15] Cates DJ. *Alexander technique for chronic asthma*. The Cochrane Database of Systematic Reviews. Chichester (UK): John Wiley & Sons, Ltd; 1999.
- [16] Stallibrass C, Sissons P, Chalmers C. Randomized controlled trial of the Alexander technique for idiopathic Parkinson's disease. *Clin Rehabil* 2002;16:695–708.
- [17] Malmgren-Olsson EB, Branholm IB. A comparison between three physiotherapy approaches with regard to health-related factors in patients with non-specific musculoskeletal disorders. *Disabil Rehabil* 2002;24:308–17.
- [18] James M, Kolt G, McConville J, Bate P. The effects of a Feldenkrais program and relaxation procedures on hamstring length. *Aust J Physiother* 1998;44:49–54.