
Autogenic training for stress and anxiety: a systematic review

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Authors' objectives

To evaluate all controlled trials of autogenic training (AT) as a means of reducing stress and anxiety levels in humans.

Searching

The authors searched MEDLINE from 1969 to 1997, CISCOP in April 1998, PsycLIT from 1974 to March 1998, and CINAHL from 1982 to January 1998, using the following search terms: 'autogenic training', 'autogenics', 'stress' and 'anxiety'. Reference lists of retrieved reports, published review articles, various textbooks, and Luthe's extensive collection of papers held by The British Autogenic Society Library were also examined manually. Studies published in the English language, and one study published in Italian, were included. Authors were not contacted for additional information. No abstracts, review articles or unpublished articles were found.

Study selection

Study designs of evaluations included in the review

Controlled trials were included.

Specific interventions included in the review

Trials of AT were included; one trial used AT in combination with visual imagery. Five studies featured no treatment control groups, whereas three studies compared AT with progressive relaxation, electrical stimulation or hypnosis. The application of the AT technique varied considerably among studies. The number of AT sessions offered to the participants varied from 1 to 12, and the duration varied from 30 to 90 minutes.

Participants included in the review

Healthy volunteers such as university students with no known medical condition, nursing students or sportsmen, were included. Two studies recruited patients from psychiatric institutes, whilst one recruited through newspaper articles and radio interviews. Gender of participants was reported in only 4 studies, mean age was reported in 4 studies, and an age range was reported in 1 study. Three studies failed to provide any clear information on participants' ages.

Outcomes assessed in the review

Reduction of stress and anxiety levels were measured in 4 of the 8 studies using Spielberger's State-Trait Anxiety Inventory. Other measurements were sickness absence records, electromyography, auditory feedback, cognitive-somatic anxiety questionnaire, mental health self-rating symptom scale, psychovegetative complaints and frequency of pain attacks.

How were decisions on the relevance of primary studies made?

The authors do not state how the papers were selected for the review, or how many of the authors performed the selection.

Assessment of study quality

The authors assessed the quality of the included studies using the Jadad 3-item, 5-point scoring system (see Other Publications of Related Interest). The authors do not state how the papers were assessed for quality, or how many of the reviewers performed the quality assessment.

Data extraction

The authors do not state how many of the reviewers performed the data extraction. Data were extracted in a predefined standardised manner for the categories of: country of origin; design of research; quality of the study; type of participants; number and gender of participants; details of the AT procedure utilised; whether in classical or modified

form; whether appropriate number and length of instructional sessions were observed; treatment and control conditions employed; whether adverse effects and withdrawal of patients were reported; whether outcome measures were explicit; follow-up period of participants; and statistical analysis reported.

Methods of synthesis

How were the studies combined?

The studies were combined in a narrative review organised around the stated outcome measures.

How were differences between studies investigated?

The authors did not formally test for heterogeneity.

Results of the review

Eight trials were included in the review with 245 participants: 3 were randomised controlled trials (RCTs) and 5 were controlled trials.

The authors state that the overall result of this systematic review suggests that AT, or what was described as AT, does reduce stress and anxiety compared to no treatment. However, all included trials were methodologically flawed. Results from individual studies were not combined.

Authors' conclusions

The authors state that no firm conclusions could be drawn from this systematic review. AT, properly applied, remains to be tested in controlled trials that are appropriately planned and executed.

CRD commentary

The authors have clearly stated the research question and inclusion and exclusion criteria. The literature search appears to be thorough. The quality of the included studies was formally assessed, and the method and results are reported and discussed in the review. The authors have not reported how the articles were selected, or who performed the selection, the quality assessment and data extraction.

The data extraction is reported in a table and discussed in the text of the review. The studies were combined in a narrative review with little discussion of heterogeneity.

The authors state that no firm conclusions can be drawn from this review, and this is appropriate.

Implications of the review for practice and research

Practice: The authors did not state any implications for further practice.

Research: The authors state that AT, properly applied, remains to be tested in controlled trials that are appropriately planned and executed.

Bibliographic details

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Other publications of related interest

Jadad AR, Moore RA, Carroll D, Jenkinson C, Reynolds DJ, Gavaghan DJ, et al. Assessing the quality of reports of randomized clinical trials: is blinding necessary? *Control Clin Trials* 1996;17:1-12.

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This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.