The Effectiveness of Alexander Technique on Music Performance and Musicians’ Health and Well-being – a Systematic Review

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Introduction
Musicians often suffer injuries related to their music playing. Therefore, some use Alexander Technique (AT), a mental-physical method that is assumed to facilitate releasing unnecessary muscle tension and re-educating non-beneficial movement patterns through enhanced kinesthetic awareness. According to a recent review AT may be effective for chronic back pain [1].

Objectives
This review aimed to evaluate the evidence for the effectiveness of AT lessons on music performance and musicians' health and well-being.

Methods
The following electronic databases were searched up to July 2012 for relevant literature: PUBMED, Google Scholar, CINAHL and EMBASE. The search criteria were “Alexander technique” AND “music*” [all fields]. References were searched, and experts and societies of AT or musicians’ medicine contacted for further publications.

What is Alexander Technique?
Alexander Technique (AT) enables patients to become aware of non-beneficial movement habits through enhanced kinesthetic awareness and creates the possibility to replace them by consciously directed actions. Through this conscious re-education of thinking and moving, unnecessary muscle tension can be released and a better coordinated “use” (the manner in which a person moves and behaves while doing anything) regained. This leads to more ease in movement and breathing and may result e.g. in changes in quality of sound production and technical abilities in musicians.

AT was developed by Frederick Matthias Alexander (1869-1955), a reciter and actor, who suffered from voice disorders and hoarseness, which only appeared while reciting on stage. He discovered that a change in the head-neck relationship occurred when he started reciting. Therefore, he developed principles (inhibition and direction) to change automatic responses to certain triggers and replace them by consciously directed actions, leading to a dynamic, balanced relationship between head, neck and back. Thus, the positioning of head, neck and spine became the main focus of AT.

The principles of AT are taught mainly one-to-one by certified AT teachers through verbal instructions, touching and directing movements.

Results
• 100 studies were identified. 24 studies were included for further analysis, 5 of which were randomized controlled trials (RCTs), 5 controlled but not randomized (CTs), 5 without control group, 2 mixed methods (RCT and case studies), and 7 surveys (Fig. 1).
• 13 to 72 musicians participated per RCT.
• In 5 RCTs AT groups received between 12 and 20 one-to-one lessons. In 4 RCTs control groups received no interventions.
• Primary outcomes were performance anxiety, music performance, “use” as well as respiratory function and pain.
• Performance anxiety decreased by AT in 3 of 4 RCTs and in 3 of 3 CTs.
• Music performance was improved by AT in 1 RCT, yet in 2 RCTs comparing neurofeedback (NF) to AT, only NF showed improvements.

Discussion and conclusions
• To investigate the effectiveness of AT in musicians a variety of study designs and outcome measures have yet been used.
• Evidence from RCTs suggests that AT may improve performance anxiety in musicians.
• Effects on music performance, body use and respiratory function yet remain inconsistent.
• Trials with scientifically sound study designs are warranted to further and more reliably explore the potential of AT as a relatively low cost and low risk method in the interest of musicians.

Figure 1: Study selection

- included: 24
  (i) randomized controlled trials (n=5)
  (ii) controlled non-randomized trials (n=5)
  (iii) studies without control group (n=5)
  (iv) mixed methods (n=2)
  (v) surveys and cross-sectional studies (n=7)
- excluded: 76
  (a) not related to musicians (n=18)
  (b) AT just mentioned (n=6)
  (c) description, no study (n=22)
  (d) qualitative case reports and series (n=9)
  (e) publication not found (n=16)
  (f) unpublished pilot studies (n=2)
  (g) ongoing research (n=3)

Reference