# PROFESSIONAL MUSICIANS AND F.M. ALEXANDER TECHNIQUE.

Birgitte Due

Qualified teacher of F.M.Alexander technique, member of S.T.A.T.

Michael S. Nielsen

Medical student, University of

Aarhus, Denmark.

Christopher Stevens

Qualified teacher of F.M.Alexander

technique, chairman of S.T.A.T., B.Sc.

Jens Rossel

Head of PR-department, Aarhus Symphony

Orchestra, M.A. (music).

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### Introduction.

The Aarhus Symphony Orchestra (ASO) had the services of a fulltime teacher of F.M.Alexander technique (FMAT) for a period of seven months. This was made possible by the financial support of the Danish government, neither the musicians personally nor the ASO had to pay the teacher's salery. This is also the procedure for the appointment of FMAT-teachers in some theatrical companies and academies of music in Denmark.

Prior to and at the end of the seven-months period we carried out some measurements and used a simple questionaire, to establish both objectively and subjectively whether any measurable changes had occured in the physique of the students.

As we did not want to interfere with the student-teacher relationship during this period and to "overload" the students with a lot of measurements, we reduced the study to some simple measurements on two occasions only.

## Methods.

17 out of 64 professional musicians in ASO and 5 members of its administrative staff took part in the research. 14 other members of ASO took lessons in FMAT too, bud did not participate in the research.

After the first and last lessons the following were measured: blood pressure, pulse, lung function (peak expiratory flow), height and width across the shoulders (distance between acromia).

On both occasions the measurements were carried out under identical physical conditions, at the same time of the day and by use of exactly the same procedures.

Excluded from the measurements were those, who 3 hours before had taken any kind of medicine, coffee or tea, or did not feel well in any respect.

The participants were also sent a questionaire aimed at collecting information about their subjective experience of FMAT - especially in connection with their profession.

Due to practical circumstances, the participants were allocated to 2 groups. The lessons in group 1 were close together in the first half of the seven-months period, whereas the participants in group 2 had their intense course in the last half of the seven months.

## Findings.

Only the important findings are included in this abridged report (the full report on the research, which also includes a full description of the procedures, is available from the address below).

Group 1 (11 participants) received between 15 and 26 lessons (on average 20 lessons). The participants standing-heights increased by an average of 6.5 mm (paired t-test: p<0.05) and height in a sitting position increased by an average of 10.5 mm (p<0.01). Mean shoulder width increased by 8.1 mm (p<0.01). All changes are stastically significant at the 5% level of significanse.

Group 2 (9 participants) received between 5 and 15 lessons (on average 11 lessons). The mean standing height increased by 10.3 mm (paired t-test: p<0.05), the mean sitting height increased by 6.8 mm (p<0.01) and the width across the shoulders increased in average by 13.4 mm (p<0.01). These changes are also statistically significant.

There were no significant changes in blood pressure, pulse or lung function in either group.

22 participants answered the questionaire. All had made a number of definite gains from the teaching and their gains were typically characterised as follows:

"Increased awareness of the body",

"Improved control and coordination of body movements in handling the instrument",

"Improved attentiveness, acquired better sitting posture with the instrument",

"Reduced stress",

"Less frequent headaches, can relax and consequently play for a longer period of time (for example Wagner) without getting too exhausted"

## and finally :

"..... a feeling of good and appropriate use of the possibilities of the body....., gives an altogether pleasant feeling of comfort and better quality of life".

19 of these participants held the view that their gains from having lessons for seven months were so noteworthy, that efforts should be made to make the teacher's job a permanent one.

### Discussion.

These findings underline (with the help of some objective measurements) the observations often made by teachers of the FMAT, that most students become taller, increase in width across the shoulders and use their bodies in a more appropriate manner.

Changes in pulse and blood pressure were not expected, since everybody had values within normal ranges when they were measured after the first lesson.

Some papers indicate, that peak expiratory flow increases after lessons in FMAT. However, this could not be confirmed in this study, even if smokers were excluded from the statistics.

The musicians in ASO were "ideal" FMAT pupils. They grasped the FMAT principles quickly and could make use of them in their work - i.e., in the manner in which they used their bodies and instruments. A special phenomenon can often be observed in musicians: they adjust their bodies to the shape and size of the instrument, disregarding correct position and posture while playing music. As a result, the musicians' concern for a good and healthy use of themselves is often dominated and determined by the demands made on them by their work. In other words, body use often becomes secondary to these demands.

A lot of time was devoted to teach the musician how to handle his instrument without distorting his body and neglecting correct posture, and - hopefully - members of ASO are now playing music with a more conscious control and use of themselves when practising and performing.

#### Conclusion.

FMAT teaching has introduced the ASO employees to a technique which is conducive to improvement of neuromuscular use.

Egronomically, we therefore recommend FMAT to musicians as a technique for reducing typical job-related problems, since, looked at subjectively, there was a decrease in occurence of muscle pain, headaches and strains presumedly caused by workstress.

In addition to this, there was a significant increase in the participants heights and width across the shoulders.

We are very grateful to the musicians in Aarhus Symphony Orchestra for their cooperation in the research.

The full report can be obtained from :

Birgitte Due, Ny Munkegade 52, 8000 Aarhus C, Denmark.