

Summary Research Report Project Peak Performance & Reducing Stage Fright: Implementation HeartMath Method with students of the Prince Claus Conservatoire

Peter Mak

This report describes a research project into stage fright among music students, which took place at the Prince Claus Conservatoire and was commissioned by the Research Group Lifelong Learning in Music & the Arts. The research consists of two parts. The first part contains a study of literature into characteristics, causes and treatment methods of stage fright. The second part is a report of an evaluation study into the implementation of the HeartMath method among six female classical music students of the Prince Claus Conservatoire.

Stage fright is a complex phenomenon in the practice of performing musicians. Research among professional musicians shows that 60 % of the musicians who participated in the research suffer from stage fright, 20% of whom with such severe symptoms that they are hindered in their professional career. Research among conservatoire students shows the same picture. Stage fright is often a reason to quit the professional music study.

Stage fright is sometimes defined as the fear before or during a performance, the fear of not being up to the challenge of increased tension during a performance. The fear itself is made up of four components.

- a physiological component: related to changes in our nervous and hormonal system which can lead to increased heartbeat, dry mouth, sweaty or trembling hands, nausea, breathing difficulties and blurred eyesight;
- a cognitive component: for example having difficulty to concentrate, experiencing a blackout, being too focussed on yourself and having negative thoughts about own abilities and performance;
- an affective component: to these belong experiencing fear, panic, insecurity and feelings of inferiority.
- a behavioural component: among which are problems with natural movements, more playing mistakes, less expressive playing (or exaggerated playing), more rhythmic irregularities, irregular tempi (too fast or too slow), more reading mistakes in playing from a sheet.

These components influence each other mutually. Negative thoughts (cognitive) about the performance lead to heightened physical reactions (physiological), which increase the chance of making playing mistakes (behavioural), with as a result impairment of self-confidence (emotional), because of which the negative thoughts and the physical reactions are stronger in the next performance. The cognitive component, as research shows, is the most important factor for continuation and worsening of stage fright.

Stage fright is learned behaviour. Causes of this behaviour can be traced to characteristics of the person (such as hyper sensitivity, perfectionism, insufficient technique), the job (among which the importance that is awarded to the performance, music pieces which are too difficult) and the (musical) way of being raised (such as too high demands and having to meet expectations of others).

For dealing with stage fright there is a wide range of methods and means to reduce fear, varying from kinds of mental training to taking medications (beta blockers). Research into the effects of these forms of treatment shows that methods which deal with the four components of stage fright mentioned (physiological, cognitive, affective and behavioural) have the greatest effect.

These results were the reason we chose this project for the HeartMath method in order to determine its usefulness for conservatoire students. The HeartMath method is a method which gives people better balance by means of self-direction of their thoughts, emotions and body language (via biofeedback) which improves their performance. By means of exercises the student learns to gain insight into her own physical reactions,

thoughts and emotions while making music and into how to change these. For the students of the Prince Claus Conservatoire an adapted training programme was set up for learning the HeartMath techniques.

Objective of the implementation research was determining the usefulness of the training programme for music students. In order to do this the effectiveness of the programme was measured (do the complaints diminish) and which adjustments were necessary for the improvement of attuning the programme for the target group. To answer the research questions qualitative as well as quantitative research methods were used. Quantitative data was collected with the aid of questionnaires such as the State Trait Anxiety Inventory and various appraisal lists. Qualitative information was obtained in the shape of homework assignments which students handed in, the notes they made in their work log to accompany the training and the logbooks they kept. Added to this were the reports by the trainer and the researcher of the meetings and the final evaluation the researcher held with each student individually.

The data was described in the format of individual portraits (multiple case design) and consequently analysed. For the data-analysis the outcome of quantitative data was used, in which the outcomes of the appraisal beforehand was compared with the appraisal afterwards. In the analysis of quantitative data document analysis was used, in which categories were determined according to which the accounts of students could be organized concerning the effectiveness and the improvement of the programme. In order to heighten the validity of the findings the portraits were submitted to the students and they were asked to correct inaccuracies or deficiencies in the description.

The research shows that for five of the six students the method led to a decrease of the experienced stress complaints. One student stopped halfway the project because she did not experience any beneficial effects. The effectiveness was measured immediately after the sessions were completed and again two months later. What makes the method so effective is that it provides both more insight into the phenomenon stage fright and into the sources which have led to the causes of it in individual students, and that it provides concrete techniques which help students to change the stress reactions they have taught themselves. Students also appear to have individual preferences for certain techniques: techniques which benefit them. It turns out that practicing the techniques and integrating these into the study-behaviour of students increases the effectiveness of the HeartMath method. As well as a positive effect on study behaviour, the HeartMath method proves to be of influence on various other aspects of the students' lives as well. Reported were sleeping better, smoking less and being better able to handle conflict situations. All five students recommend the method to fellow students who suffer from stage fright. Moreover they think it is important that all students and teachers of the Prince Claus Conservatoire should be made aware of the method.

The students' remarks also provided concrete points for improving the training programme. It was established that the number of meetings (two individual and three group meetings) is insufficient to deal with the material and to make it your own. Also the number of feedback moments, in which it is assessed in how far the techniques offered earlier are executed properly, proves to be too few. Two aspects of the instruction need adjustment in order to make more clear what is meant. Another suggestion for improvement concerns the layout of the workbook (a better distinction between explanations of theory and practice and an English language version for non-Dutch speaking students).

Although research shows that the HeartMath method is effective with music teachers it should be noted that only female students participated in the research. American research shows, however, that the method also works for male conservatoire students. Differences in the appraisal beforehand and afterwards on the State Trait Anxiety Inventory have not been determined properly, on the one hand because information of only four students of an appraisal beforehand and afterwards was available and on the other hand because the performance situation to which the appraisal was linked was not felt as anxiety-inducing by the students. Further research is necessary in order to determine whether the HeartMath method is sufficient

in reducing stress for all students or whether a follow-up treatment, depending on the problems of the individual student, is necessary. For example strengthening the student's self-confidence or task-concentration training in order to be able to focus on the tasks better.

The conclusion of the research is that the HeartMath method can be recommended to students who are suffering from stage fright. The outcomes of the research are cause for a recommendation of the method, individually to students in eight sessions, with more if necessary. The value of group meetings, besides the individual sessions, requires further research. We recommend making students and teachers of the Prince Claus Conservatoire acquainted with the research. It would be a good thing to inform students about it during the first year of their studies, within the framework of student counseling. During the second year this could be followed-up by giving students the opportunity to choose a workshop HeartMath method. For students whose problems are more severe there would be a possibility for a referral for individual treatment. Teachers could be informed via the newsletter and participation in a workshop, together with students.