Mental training for musicians - excellence in performance

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Abstract: As any musician's goal is to achieve excellency in interpretation in order to receive public's appreciation of its performances, mental training can open the door to its inner creative energy flow that conceals behind restricted patterns. A musician's training must include more than individual exercise on the instrument. Many performing musicians experience a marked difference in their performance level in either a stressful situation such as an important concert or even in a non-stressful practice situation. The difference can vary considerably. As the timeframe is limited and proper study is not always available, the environmental reasons and fatigue affect the artist both, mentally and physically. Therefore, the possibilities to study and perform up to a certain qualitative level it becomes difficult. Moreover, many talented performers have been forced to give up their career because of a mental block, high stress or strong anxiety. Mental training exercises bring energy that can be canalized into the music and strengthen the music performance, memory, creativity, attention and self-confidence. These exercises are of help dealing with stress and accumulation of adrenalin from traumatic performance experiences. And, although diverse methods are available the mental representation and imaginary training have, certainly, best results in performing.

Keywords: focus, mental training, music, psychology, performance, techniques

1. Introduction

The difference between a good performance and a top-level performance in interpretation is always noticeable. To be not good, but excellent in performing includes hours of study and mental training. The article herein provides a series of validated musical and psychological techniques that aim at polishing the musicians' mental qualities and playing at his highest level. Given the wide applicability of the mental-quality training to numerous areas of performance, we assume that the special techniques of the cognitive-behavioural repertoire are also helpful to elite

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musicians. Apart from the personality and talent a musician could have, our goal is to underlie several mental-study techniques to prove once more the collaboration between music and applied psychology resulting in higher-quality performance.

The elements of performers' training are positive thinking, hard study and professionalism which focus on the interaction between mental and physical skills. Each one of these elements has its own importance. The thinking determines the desired level of performance and the determination of performing (e.g. B., a 22 yearold pianist, told me that from the very first time he touched the instrument dreamed of becoming an excellent performer.) To touch that level of performance there is need for hours of studying and a great health. Researchers state that physical health indulges precision and it harmoniously blend with mental agility, determination, attention and unconstrained vision of the performance's outcome. Thus, the efficiency of pursuing the body-mind approach with a view to developing both physical and mental skills is real and proven in terms of musical performance (as well as in sport.) For instance, a soloist playing with orchestra needs to develop various psychological features, in order to remain in control, to only mention the ability to merge his own musical ideas with the conductor's or of other orchestra members, so as to efficiently convey this combined vision to the audience and to reduce any anxiety excess that the performer might experience.

No doubt, in music it often happens that the qualities necessary for achieving the characteristics of a great performer should be attained after years of hard work, study, expertise and self-reflection. Hence, the objective of the mental-quality programme comes to outline and conduct a training method derived from applied psychology. It underlines how mental skills may be used in training by the instrument players, in helping them comply with various performance problems (including a not very good performance, stress, so on) to ensure and attain long-term goals. We note that mental skills may be learnt and developed similarly to any other musical quality and regularly practiced.

However, as performance incorporates multiple aspects: long study hours, mental training and a state of physical well-being, by assuming and making all this effort, performance becomes itself the final goal. And, nevertheless, once the performance is complete, the audience will judge the success. The evaluation may take the form of either enthusiastic ovations or of unconvincing, cold applauses. Often, a performance is followed by a critique report conveying an assessment on the musician's fulfilment of certain criteria. Regardless of the critic polemic or the glowing report the musician must go further towards a new performance.

2. Musical-performance evaluation process

One of the most asked questions regarding a performance refers to how successful it was and how is measured this success. Apart from the audience who could be or not

specialised, typical forms of musical evaluation seek (i) to determine by comparison the attained degree of performance (reference standard), or (ii) to establish how well a performance complies with the predetermined examination criteria (basic criterion). The procedures of the reference standards are common in competitions, music festivals, where the intention is to designate a winner and to rank the participants in terms of their performance. The methods of the basic criteria are much more common in the institutions endeavouring to ascertain what progress has been attained in learning and whether the musician or the ensemble can prove mastery over predetermined skills.

In their use of both the *basic-criteria method* and of the *reference-standard method*, it is typical for music critics to focus their attention on a series of musical parameters to guide their assessment – whether it is about personal criteria ensuing from their previous work as evaluators and musicians, or the type of criteria identified by the authorities appointed to define the most adequate parameters to guide an evaluation. This insight has a few limitations because any musical evaluation will be influenced by additional factors that have an impact on the quality of the evaluation.

Therefore, a better understanding of the musical-assessment process comes to life with a broader vision including – in addition to musical criteria – extra-musical and non-musical parameters to mitigate the measuring errors that influence all evaluation forms. Consequently, whereas critics may believe to be evaluating the 'musical value' of a performance, they also include other factors in their assessment.

3. Musical value - a broad perspective

The performance evaluation (musical value) is obtained in an evaluation process where there are considered non-musical, extra-musical, and musical factors, and a measuring error. A briefly study of the evaluation literature tacitly asserts that one may access the authentic value of behaviour proper to assess musical performance. For a musician this aim is fundamental. However, musical assessment is much more complicated. The existing literature on the criteria used in assessing performance suggests there are at least five types of competences usually resorted to within musical institutions, wherefrom adequate criteria for assessing performance are being conceived. (Barry and Hallam 2001)

These are:

- 1. **Technique**, considered from three perspectives:
- *Physiological* refers to respiration, posture, relaxation-tension, balance, coordination
- *Physical Sounds production* (instrument/voice projection, control and consistence of the sound, clarity and attention to the timbre in all registers and levels, dynamism, intonation, physical control /resistance, coordination

of the body)

Physical - instrumental (overall coordination, balance, cohesion, accuracy, certitude and facility of rhythm, of sharpness, of articulations, of dynamics and synchronization, as well as the extent to which errors undermine and distract from the overall quality of performance, quality enhancement, intonation sensitiveness)

2. **Performance** is referring to:

- *Authenticity* (comprehending the style/genre and establishing the performance practice)
- *Accuracy* (based on correctly reading or memorizing the score, on exploring and bringing to life the composer's intentions)
- *Musical coherence* (perceptual choice of the tempo, accurate phrasing, dynamics, sense, melody, comprehension of the structure as a whole)
- 3. **Expressiveness** including comprehension of the emotional character displayed by the musical work, projection of the character and the belief that the work should convey, communication between the important structural points and the turning points of the work, adequate use of texture and colours, of lights and shadows.
- 4. **Communication** among the members of the musical ensemble, or the ensemble and the soloist, the proven *trust* in the performance (which should be convincing and purposeful), the *interest* in the idea whereby the performer succeeds in capturing the audience's attention, the upholding of a sense of direction, the creation of a sense of important occasion, the convincing closing of the stage appearance, the projection of expressive, interpretative and structural aspects of the played composition.

The aforementioned evaluation criteria encompass varied categories that may be classified either as skills or as masteries. To these could be added personal characteristics such as: the attitude towards performance, success or failure, mental development, self-confidence and self - control, a certain "viewing", the existence and control of fears, a success control, criticism and self-criticism, the existence of a goal and the way to achieve it, perseverance and optimism. The psychologists involved in studying music clarify the micro-structural changes affecting the expressive performance explaining that there is a substantial set of 'rules' of expressiveness that musicians may incorporate in their performance which help transmitting their expressive intentions to the audience. Given the evaluation criteria of musical performance, various methods may be developed whereby musical performance should attain the highest quality. Thus, mental training may be transformed according to each performer's needs and characteristics. The following subchapter submit the methods whereby musicians may achieve excellence in music, using their mental skills in order to enhance both their physical and emotional qualities.

5. **Relaxation** – Since excitation is the bodily degree of activation, it may have an impact on preparing performance and quality. A relaxed state is characterized by an absence of useful activity and pressure; it is a time of stillness wherein the need for work or any sense of deficit is subdued or at least interrupted. In terms of musical performance, relaxation techniques may be used to manage the over-excitation levels that may interfere with the moment before, during or after performance, to control life's aspects in general and to diminish the occupational stress that may affect the physical and psychological well-being.

First, a large number of studies yielded outstanding results when having used cognitive-behavioural interventions in order to reduce stage fright typically associated to emotional, physical and mental excitation. (Kendrick et al. 1982, 353-362) Although the degree of performance-appropriate excitation varies from one individual to another and from one public apparition to the next, relaxation exercises may contribute to acquiring bodily and mental awareness. This awareness may afterwards be used, for instance, to reduce the muscular tension interfering with the physical-quality coordination, or to divert attention from the anxiety created in the performer's mind. The focus on performance is thereby increased. Of course, relaxation and tension degrees vary based on excitement; while used as part of a routine in preparing a recital, an audition etc., relaxation techniques may be associated to mental alertness. A relaxed state benefits the performer; thus, relaxation techniques should be implemented and tested long before any landmark event.

Secondly, relaxation techniques are beneficial to the lifestyle and matter very much to study, activities and performance. For instance, they may regenerate the body, mind and emotions by inducing a well-being state; they may be used to increase the learning and memorizing power, to improve sleep and energy conservation. (Woolfolk et al 1976, 359-365) Indeed, researchers suggest that abilities are best acquired in a relaxed state and by interleaving relaxation and learning periods, being likely to be assimilated without damaging the learning process. (Benson, 1975)

Overall, relaxation techniques are physical (muscle-tension reduction) or mental (inner view of a natural, quiet scene). Both tend to be used in order to reach either a deep-relaxation level or a low-depth moment; the relaxation depth for each individual depends on the time and given attention to the exercises. Practicing deeper relaxation-methods is best achieved after than before musical activities (after having closed an intense study session, before dinner or bedtime, when one has to fight fatigue or excessive care). Momentary relaxation can be used in relation to musical performance in various ways: before warming up (to imprint a direction to the physical, psychical and emotional state), in the pauses in-between study or stage

appearance (to reduce unnecessary stage fright and focus again on performance), or before any form of mental rehearsal. In terms of relaxation exercises, the most important are the breathing exercises during which one must become aware of all surrounding sounds, all physical sensations, all thoughts and, withal, the respiration itself. The way one breathes greatly influences on the mental, physical and emotional state. The deep breath that starts in the abdomen may be relaxing and energizing.

4. Mental training

Literature on the subject often use, instead of mental training, the term *mental rehearsal* seen as the cognitive or imaginative rehearsal of physical skills without resorting to muscle movements. In our opinion mental rehearsal is only a part of mental training, the one involving 'visualizing' the actual performance, in other words the technique and performance. Aside the mental rehearsal there are expressiveness, relaxation, the way the performer communicates.

4.1. Introduction to the mental training

The basic idea is that the musician's senses – predominantly auditory, visual and kinaesthetic – might be used to create or recreate a similar experience to a physical event. Anyone has the ability to mentally rehearse, however, musicians may be significantly helped by this technique to activate their analytical skills, to notice how they should play, move, their power to reflect and memorize.

Researches show that mental and physical practices are connected at psychophysiological level. Hale (quoted in Freymuth 1993, 141-143) discovered that inner images produced the same muscle activity as the body itself. Furthermore, Bird and Wilson (1988, 51-64) studied the results of electroencephalograms and electromyography of students and their mentally-rehearsing professors. The results indicated that, despite individual differences, the professor and his students produced electromyographic models almost identically corresponding to real-performance models. Given that conducting students need more mental practice, these results show that, by practicing, mental rehearsal may truly be an efficient supplement to physical rehearsal and should be integrated in the musician's study routine, in order to avoid muscle problems (dystonias) likely to be caused by physical strain. Studies performed by Ross (1985, 221-230) or Coffman (1990) support the concept of interweaving physical and mental study, which is particularly useful to musical study.

It is worth pursuing and analyzing the students' gain from the integration of the mental study in everyday life. Of course, the benefits and outcomes depend to a great extent on the individual's endowment, on the preferred learning techniques, on the conditions wherein a certain musical work will be played, but, most of all, on the extent to which the mental-technique rehearsal is practiced. Finally, one must not raise the problem whether mental or physical rehearsal should be adopted, but rather how to efficiently combine these two approaches.

Studies made on motor skills have identified situations in which mental rehearsal is very efficient. For instance, that person must have previous expertise of the task execution. Similarly, mental rehearsal may prove beneficial during early learning stages, when new perspectives and ideas may be formulated on the musical tasks; also during advanced stages, to enforce the strategies of the cultivated performance. Furthermore, the musician should endeavour to imagine the muscle reaction during real performance. (Weinberg 1982) Also, the years of researches conducted in the field of sports psychology led to a few basic rules of mental rehearsal, therefore mental training (Loehr, 1987) This way, regular study is recommended, especially in the morning. (May et al. 1993) Mental training should be brief and reiterated (Weinberg, 1982), practices should begin by relaxation, so that clear signals might be transmitted between mind and body. The musician is recommended to be positive and to focus on the aspects concurring to his attaining the goal and not on those unrelated to performance improvement. All senses must be used, so as to faithfully convey the rehearsed real situation. Though, in order to successfully practice mentally, it is highly important to interweave relaxation with focus on the task, followed by realistic experience and regular practice.

4.2. Evocative symbols and images

Images, sounds and words may evoke feelings and physiological changes within us. Indeed, music professors often resort to metaphors in order to suggest new musical ideas and to encourage students to variedly express music. In a study involving 135 students, 81% were taught at one time to express music this way; 42% reckoned it to be the most efficient, as compared to the 'experienced emotions' (preferred by 39%) or 'modelling phonetics (preferred by 25%). (Lindstrom et al. 2003) The purpose of the mental training in relation with evocative symbols and images is to develop within performers the capacity to avail themselves of symbols and images and, subsequently, to mentally train themselves, with dedication and in detail. For this purpose, they should be aware of images, stories and sounds that might naturally occur during rehearsal and performance.

4.3. The use of mental-skill development for specific performance situations

Partington (1995) has discovered that most talented musicians assign a central role to physical and mental strategies that give them confidence and prepare them to play. The pre-performance routine and focusing to the performance are the most important to be discussed.

4.3.1 Pre-performance routine

A day or two before the performance, the musicians both, mentally and physically, involved in music, reach a high level of performance ready to make their public appearance. They develop their training routine by personal experience, thus there are differences in the training followed by the musician in the day of performance. Physical and technical training include their connection to music though light practice, unchanged performing manner, assurance of adequate sleep and nutrition. In order to mentally prepare themselves, some musicians endeavour to feel impatient and ready to play, without feeling fright. To achieve this, they tackle everything easily. Others resort to relaxation techniques or positive images. There is another category that engages in constructive inner dialogues and reasoning.

The last training stage (a few hours before performance) also differs from one individual to another. With a view to avoiding anxiety associated to waiting, some arrive only 15 minutes before playing. Others came 1-2 ore before and approach systematized physical and mental training, which consists in either reviewing the score, or engaging in an internal dialogue so as to achieve an orientation and inner state adequate to the coming event, or completing a warming up. The last minutes before entering the stage, some musicians attempt to create an inner state adequate to the music expression, while others isolate themselves and relax.

Despite individual differences, it is clear that every performer makes an effort to maintain an optimal state for the performance. Two essential factors facilitated this process: long-term commitment for the best-quality training (physical, technical and artistic) and development of an individualized and flexible pre-performance routine including physical activity, nutrition, as well as warming up by mental, emotional and technical musical strategies.

Training coherence results in performance coherence. The concert day prepartion may thereby be divided in four sections:

- morning of the stage appearance
- afternoon of the stage appearance
- appearance at the venue
- last 10 minutes before the performance.

In each of the four sections, the artist must technically, musically, mentally and emotionally prepare himself. Moreover, when it comes to warming up, the musician should be careful and adjust the five factors that might affect performance:

- the place of the concert (identification of the supportive and distracting factors of that musical environment)
- the way the performer feels (physical sensations, thoughts, feelings)
- the persons accompanying the performer (especially the musical-ensemble members)
- the technical and artistic intensions
- the way the performer complies with and convey these intentions.

4.3.2 Focus

There is natural for musicians to wonder why they have difficulties in remaining focused in the great-pressure situations of performance. Being capable to stay focused is a remarkable component of musical expertise (Williamson et al. 2002) which is attained after many years of training and study. Concentration may vary in duration and intensity. For musical performance, this focus should take the ideal form of a relaxed state of being in alertness. The performer should be quite agile in order to rapidly and easily shift the focus, in corroboration with the course of the relevant factors and of the external events. In this study involving athletes, Nideffer (1976) developed a model that is useful in raising awareness on how one should focus before, during and after a performance. This genre of focus consists of two great dimensions: *direction* (internal or external) and *size* (wide or narrow).

In terms of focus training, the performers must remain aware of themselves and what happens around them, allowing only relevant factors to capture their musician's attention. Training focus and shifting the object of attention may help performers become aware of the things they pay attention to and why; then destroy unwanted thoughts or unproductive behaviours. Performers may become thereafter more familiar with parts of their performance, managing to distance themselves or to interrupt their thoughts from something else or the concerns arising from sources beyond their control.

If the question arises when a performer should focus, a plausible answer is throughout the public event; but many performances offer more or less active periods of activity. This may require continuous shift in direction, openness and intensity of focus. To discover where it is best to focus the attention during inactivity periods requires practice. In general, the shift of focus between the external and internal or between the broad and narrow provides the performer with a path to revise and reorient. When attention leans towards diverting and irrelevant things, useless in terms of performance, it should be re-directed towards the relevant indices of the performer's task. The ability to achieve this may be enriched by identifying the occasions or moments when attention is habitually diverted. Once identified the counter-productive model in orienting the attention, the mental training may be directed towards replacing or solving the negative habits through using better ones. Note that in the behavioural change, a negative habit must be replaced with a more productive one: simply repressing a habit without substituting it for another, can determine the respective negative habit to reassert its presence.

There are several additional strategies that may be adopted and may have an effect on focus enrichment. They include constructing and practicing a stronger model, fortifying the focus on the object or on the action upon which the performer must be oriented, deliberate focus on the distraction and attempt to consider it positively and shift focus from the emotional distraction to the physical or mental

model (if the distraction is emotional and causes anxiety and tension, it may be removed by a breathing exercise that helps relax.

Things to which a musician focuses during performance seem to be the key for inspiration perception. (Partington, 1995) Experimented artists focus on a range of characteristics when they play, such as their manner of appearing in public, their relation with the audience etc. They are often aware that the consequences of focusing on each note played with perfect technique are often disappointing and may bring about severe anxiety caused by errors during playing.

Furthermore, they seem to focus on *doing* and not on *how they should do*. To achieve an optimal state during performance, the instrument player should be energetic and relaxed, confident, attentive. Mind should cooperate with the body in unison, and the performer should control what he plays and feel good on stage.

5. Acknowledge the utilization of long-term learning and training mental skills for performance

There are several qualities that artists should introduce in preparing long-term performance. They include maintaining high individual quality and group practice (adoption of a systematized practical approach, by selecting a study-appropriate environment, wherein internal or external distraction should be minimal and by using routine warming up, which prepares the body and mind for performance), technical training and learning (removal of unwanted physical movements and blood pressure) as well as expressive training, musical performance and the attempt to communicate this state to the audience.

Mental training may be likewise used to help performers achieve their long-term purposes. The essential ingredients of a strategy for any long-term training include the ability to assess the quality of performance, to set goals and a plan, to take steps with a view to achieving this process and monitoring progress.

6. Conclusions

Mental skills are an integral part of the success in performance. The capacity to constantly orient oneself towards a state of calm, concentration, which should be flexible and mood-oriented, is essential for the performance. And it has been promoted by renowned pedagogues have promoted for a long time. Karl Leimer, for instance, the professor of the famous pianist Walter Gieseking, recommended mental training to all his students, in the first place to help them memorize, to technically refine themselves and to develop their inner ear. As regards the general benefits of mental training, Leimer underlines the importance of practicing mental skills. The purpose of the work herein has been to submit to musicians, some

training ideas on the mental and physical abilities, which may be applied to their goals and plans.

The performers are encouraged to experiment with these methods, to adapt them and to reflect on how their mental and physical abilities may improve their performance. And although performance means cumulating practice (including self-organising, practice environment, taste and capacity to perform, self-recording, professionalism, artistic interpretation, mental imaging, warming-up, repetitions and memorization) with creativity and motivation, must take in account the performance anxiety-the roots of it and the crafting confidence, injury prevention, and, not at least appreciation of criticism. (Klickstein 2009, 135–146).

Despite the fact that mental-skill training varies from one individual to another, a common factor of the potential users is that mental skills should be regularly practiced and used in the long term. By adopting and complying with a personalized regime of mental skills, the benefits will become manifest both personally and professionally.

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