SPECIAL SECTION

Performance Optimization Program for the Business Community: Combining Executive Coaching and Biofeedback

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MATTE Consulting Group has been providing individual and organizational development services for the past 23 years. Two years ago, it was brought to our attention that many of our clients (executives) were looking for tools to better perform under stress. We conducted a thorough search to identify executive coaching programs that integrated biofeedback, as well as studies that demonstrated a return on investment for such programs in the business community. We concluded it was preferable to design our own program and determine, with the help of our long-standing clients, how to ensure its efficacy. We also developed our first MindRoom with the help of a leading biofeedback equipment manufacturer, Thought Technology. We have been successful in assisting numerous individuals as well as complete teams of executives in optimizing their performance. We are now building a business spa, and we will soon start group training (eight people at a time).

The Need for Designing a New Program for the Business Community
Executives are frequently exposed to high levels of stress and pressure because they need to perform on a daily basis. Their reality resembles that of elite athletes.

Alexandre Bilodeau (Olympic gold medal winner) and a growing number of athletes train with biofeedback using a sport peak performance suite. When we conducted our search, we could not find a program specifically designed to enhance executive performance that included systematic biofeedback and coaching. Again, many parallels can be made between elite athletes and executives (see the Figure), but there is a difference. Executives need to perform every day and have no time to rehearse. They operate on a rational/cerebral mode rather than on an emotional/physical mode.

Performance Optimization: A Very Simple Definition
Performance optimization can be defined as follows: helping executives to enhance their ability to focus and achieve a complete day of work while remaining highly energetic to get on with their evening activities. The goal we are pursuing is not to have the executive do more in less time or to have him or her perform at his or her peak. We rather prefer to teach the individual to self-regulate (Servan-Schreiber, 2003), in order to build resilience and avoid remaining for long periods in the resistance mode (Selye, 1945), which would eventually lead to crashing from adrenal fatigue (Wilson, 2001).

Our Typical Clients
• The iron man/woman whom nothing seems to bother, who maintains a resistance stage most of his or her life. These individuals are able to handle anything that life throws at them yet often think there could still be room for being more balanced and fulfilled (they are often referred by human resources and/or superior).
• The high achiever who starts to feel that he or she needs to do something to stop his or her “busy brain” or deal with the fact that he or she has become increasingly impatient.
• The executive who begins to feel burnt out but wants to find a scientific yet natural way to help himself or herself, rather than use prescription drugs.
• The individual hoping to build better self-awareness to become more focused and work more effectively with colleagues.

Biofeedback Is a Great Tool to Change Beliefs
Our program participants are not the typical captive athletes. They don’t usually enjoy being analyzed, receiving guidance, or wasting valuable time during business hours. So we needed to adapt our language as well as use a more rational approach at the beginning. After
several sessions, unprocessed material often came up and represented another challenge for us. We explored this information in a nonjudgmental way and helped the individual reframe.

With executives, biofeedback is often used as a great tool to change beliefs as it raises the person’s self-efficacy perception (Bandura, 1977) and empowers the person to make the proper changes internally as well as in the work environment.

**How We Combine Executive Coaching and Biofeedback**

We use a holistic approach with every executive. In addition to using several measures at the onset, we take into consideration many other aspects such as nutrition, physical exercise, work/family balance, leisure activities, and so forth.

Situations may bring us to alternate from leadership/management coaching to career or lifestyle coaching. When we combine biofeedback and coaching, we realize that what causes stress in our clients is not always what they foresaw. Elements related to their lifestyle or personal life often interfere with their executive functioning. It then becomes a challenge to deal with some of those issues. We may use a traditional clinical psychology approach to raise awareness or gently confront the individual, for example, rational/emotive therapy, thought analysis and replacement or stoppage, guided imagery, cognitive/behavior modification, clinical tools in psychosomatic medicine, and other psychological approaches. We also make every effort to keep abreast of stress research, and we often work with Lupien’s SPIN approach (Lupien, 2010). Her stress analysis model helps clinicians and patients not only to identify and treat stress symptoms but also to understand the underlying causes and act upon them.

**Our Treatment Protocol**

An initial meeting is held to describe our program (including a short demonstration with the biofeedback equipment), answer questions, and establish a meeting schedule. Most executives appreciate this initial session because they see the scientific value of our approach and they can easily identify with the kind of feedback we give them, using ratios, graphs, and bar charts.

- A complete intake interview (1.5 hours) is conducted, followed by the administration of three questionnaires (general health, stress, and lifestyle) and a complete psychophysiological assessment, using electroencephalogram (EEG), surface electromyogram (SEMG), skin conductance (SC), peripheral temperature, blood volume pulse (BVP), and respiration rate (RR).
- A debriefing session is held to discuss results and agree on specific objectives to be achieved during a 2- to 6-month program (1 hour/week).
- A booster session is offered 1 to 2 months after the program has ended.

**Case Studies**

**Case 1**

The participant, a 60-year-old CEO, came to see us because she wanted to become calmer and more focused. It was quite difficult for her because she was suffering from acute anxiety in different work situations.

A 20-session intervention was proposed. Before training, excessive sympathetic activity was noted at baseline, under stress, and during the recovery period. After four sessions, the participant showed a good level of autonomic...
balance, as indicated by fast Fourier transform (FFT) results at 0.1 Hz maintained for at least 20 consecutive minutes. We found a direct correlation between lowered sympathetic activity and the reduction of the patient’s stress symptoms.

The participant’s ability to successfully self-regulate was challenged by gradually exposing the person to situations usually triggering a stress response or negative thoughts. During each session, the participant discussed these situations and exercises with her coach.

**Case 2**

The participant, a 40-year-old managing partner of a highly successful legal firm, hoped to improve his level of concentration and be more productive at work despite his recurring headaches and somatization symptoms.

We first identified a strong correlation between high sympathetic activity as measured with FFT results very much below 0.1 Hz for long periods of time and high masseter muscle activity (SEMG). The participant also showed a high level of physiological activation as measured with SC. After three sessions, the participant successfully reached an autonomic balance at rest and recovery and showed normal SEMG activity for the sites originally measured. Significant correlations were found between stress symptom reduction and the lowering of sympathetic activity, masseter muscle EMG activity, and SC.

In addition to feeling more comfortable and productive at work, he also reduced the masseter muscle tension and associated headaches were eliminated.

**Case 3**

One of the world’s largest chocolate manufacturers was going through many important organizational changes. The president asked that the members of his executive team participate in our program. After a 2-month program (BVP, RR, and SC), the president told us he could tell the difference between those who participated in the training program and those who had not attended the training program. We received important positive testimonials from all.

**10 Rules to Achieve Success**

We have developed the following guidelines to ensure the success of participants in our programs.

1. Conduct a pilot study to convince the executive in charge of the validity of the approach.
2. Have clients sign a contingency contract so they don’t skip sessions (we are as important as their physician or the company president).
3. Don’t promote services using the words *stress management* with executives because they may perceive this as a sign of weakness.
4. Don’t instruct clients to cancel prescription drugs without physician approval.
5. Use only professionals who have proper clinical training, meeting the Biofeedback Certification International Alliance (BCIA) standards.
6. Have clients pay in full or minimally half of the professional fees at the beginning.
7. Have clients sign consent forms, and don’t make promises or offer unconditional guarantees.
8. Give short assignments between sessions, and provide breathing pacers for work and home computers.
9. Full cap assessment EEG and quantitative EEG would be ideal, but practically this is very difficult with executives (a baseline with two EEG sensors may suffice).
10. Provide reports regarding progress made and stay calm when things don’t go as planned (executives not showing up, lack of introspection, slow progress, etc.). The client is the main person responsible for his or her success.

**Conclusion and Future Projects**

With more than 20 years of experience in industrial and organizational psychology, we realized that our clients needed help to quiet their minds and improve their attention and focus so that they could develop better mental agility, make better business decisions, and increase their physical and psychological well-being.

We trained ourselves in biofeedback, took BCIA-certified courses, built a MindRoom, developed a performance optimization program, and offered it to hundreds of executives. Our clients are now referring other individuals to us, and we see potential for growth.

We have recently moved to a new facility. Our new business spa has three MindRooms for individualized training and two large training rooms for groups. As mentioned earlier, we are starting to train eight people at a time from the same organization to increase teamwork efficacy, work flow, positive attitude, and general wellness. We strongly believe there is a need for this kind of service in the future, and we are convinced that permanent executive performance optimization can be achieved only by teaching individuals to self-regulate.
References

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