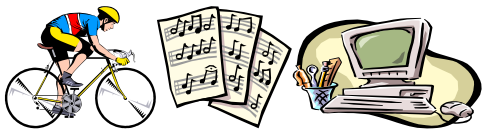
August 2007; Vol. 4(1)

The PERFORMANCE EXCELLENCE MOVEMENT (PEM)

Designed to Raise Awareness of the Valuable Role of Sport Psychology Outside of Sport

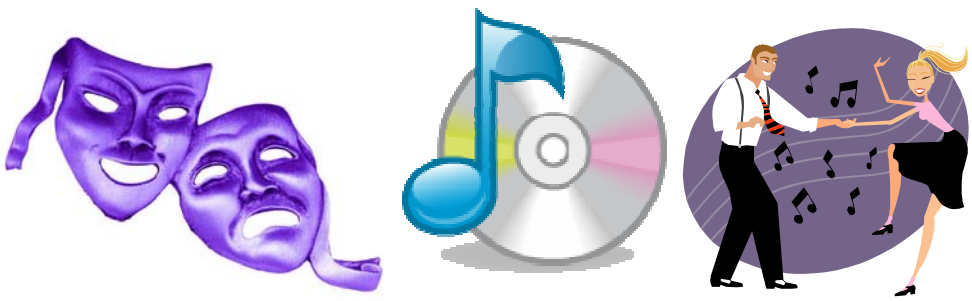


Dear AASP colleagues,

As always, welcome to the latest edition of the Performance Excellence Movement! On behalf of all our contributors, I am truly pleased to present "Sport Psychology in the Performing Arts", a collaborative effort that includes work from 10 AASP student members. I know you will find the interviews, original articles, and research reviews both exciting and thought-provoking. In addition, I hope this issue of the PEM also inspires you to find connections between your current work in our field and the opportunities that exist with performing artists… as all of the authors suggest, there is amazing potential to be tapped into!

We start this journey with an introduction to working with performing artists by Kimberlee Bethany-Bonura and Hector Morales-Negron, followed by a documentary by Kristin Kane and Melissa Murray about some current efforts at Florida State University between the Sport Psychology Department and the Elite Orchestral program. Next is an original contribution from Brian Hite, describing the application of sport psychology skills to the population of stuntpeople… very invigorating to say the least! A series of interviews with both performers and sport psychology consultants follows; as the work by Sean Mullen and Fredrick Weibul suggest, there are many commonalties and differences between athletes and performing artists. Finally, thanks to Katie Copeskey and Pam Landry, we wrap things up with a selected review of published work regarding performance psychology and the performing arts.

If you end up enjoying what you've read and are interested in contributing to the next edition of the Performance Excellence Movement, please do not hesitate in contacting the current organizer, Tucker Readdy (readdyr@onid.orst.edu). Your feedback, kudos, and potential contributions are much appreciated!



Sport Psychology in the Performing Arts

Training Minds outside Sports: Applied Sport Psychology Opportunities for Graduate Students

By Kimberlee Bethany Bonura (kimberleebethany@aol.com) & Hector Morales-Negron
Florida State University

For the creative graduate student willing to seek out new opportunities and forge new relationships, there are many ways to utilize sport psychology strategies and gain applied experience. We can provide services to our communities which allows us to simultaneously prepare for future endeavors and provide performers, at all levels, with mental strategies for success. We can work with a wide variety of clients across the spectrum of experience and ability level. We can also work to cultivate our skills with performers outside of sport, including individuals in the performing arts. This can serve the double benefit of helping us earn hours and experience, while also laying the groundwork for future career paths. Expanding our training options will expand our career options, and give us a greater chance of achieving self-sustaining careers as performance enhancement consultants.

The first step in moving into performance enhancement consulting outside of sport is a careful self-assessment. What mental skills have you used and taught within the sport context, and where have you used them outside of sport? For instance, do you play a musical instrument? Have you done some community theater? Had a few stints with public speaking? Experienced all-eyes-on-you during a first dance? Your own experiences in performance – music, drama, dance, public speaking – can give you insights into the particular needs of each area. For your first ventures into non-sport performance enhancement, start with an area you know.

The second step is to identify clients. Where can you offer your services? Start by listing all of the contacts you have in the community – both on campus, and outside its boundaries. Do you have friends in the theater department? A peer whose child is in a local children's choir? Look for community groups which lack funding, then offer your services for free – high school drama and forensic clubs can use help attacking stage fright (performance anxiety in another venue); youth choirs may need help with communication strategies (both verbal for during practice and non-verbal for during performance); parent boosters for a girl's dance team might appreciate classes on helping parents and performers manage the stress of rigorous training and competition. Scan the yellow pages and the newspaper's community calendar to identify potential clients such as modeling or pageant preparation schools, clubs for amateur clowns or magicians, a senior citizen clog-dancing group, Toastmasters, or other community speaking groups. Offer to help education majors preparing for their first semester as student-teachers deal with public speaking anxiety. Volunteer for community program fairs and hand-out informational sheets about stress management techniques. Young professionals offering their services at program fairs may also be interested in your services as they deal with the performance-related stressors of networking and building a professional identity. No

matter what you do, always make sure to include your contact information and indicate your availability for consulting!

Once you've identified potential clients, contact them and get to work! Try to meet in person with a group leader, and bring your resume, sample activities, and a program plan. Offer to give a presentation to the group, and start with something everyone can relate to – like performance stress or motivation. Remember that most of your sport psychology strategies are still relevant –relaxation techniques, stress management skills, communication, goal setting, mental preparation, pre-performance and post-performance routines. Performances vary, but the demands of performance are remarkably similar, and performance enhancement strategies apply across broad domains. And, if you get stressed along the way about what you're doing, how you're doing it, and if you're doing it right, remember that performance enhancement strategies even apply to your performance as a consultant!

* Interested in learning more? Consider reading *You're On! Consulting for Peak Performance*, the leading book on performance consulting in non-sport contexts. The book is written by Kate F. Hays and Charles H. Brown Jr. and is published by the American Psychological Association, Washington D.C. (2004).

Original Student Contribution
Elite Orchestral Students: A Large-Group Seminar

By: Kristen Kane and Melissa Murray (mam04d@fsu.edu)
Florida State University

A small group of Florida State University (FSU) sport psychology students were asked to take part in a sport psychology/performance enhancement workshop on November 15th, 2006. This invitation was extended by the Director of Orchestra Activities at FSU, Dr. Alexander Jimenez. He has been tremendously helpful in linking the extremely talented School of Music with the Sport Psychology Department at FSU. He not only encourages his students to broaden their awareness of the role of mental skills, but also strongly believes in the practice of sport psychology for himself as a musician. Therefore, by inviting sport psychology students to address the orchestral musicians, Dr. Jimenez sought to expand his students' knowledge of sport psychology, and holistically shape them into successful musicians.

What Took Place at the Sport Psychology/Performance Enhancement Seminar?

Stations for this seminar covered the following topics: performance enhancement for you, arousal control, communication, goal-setting, and concentration. At the end of the seminar, the musicians were asked to complete a brief survey rating their experience during the sport psychology program.

The station covering "what performance enhancement can do for you" was structured as an opportunity for the presenters to discuss some of the myths musicians might have about sport psychology/performance enhancement, as well as to explain how sport psychology techniques might be able to help improve performance. The importance of mental skills at an elite level was emphasized during this session. We also discussed mental skills as life skills.

While the musicians noted that the station was informative, it might have been more effective if we had several examples of high-level musicians who use psychological skills.

Arousal control was rated as the most popular station. Musicians were asked if they had experienced high arousal prior to performance and to describe some of the symptoms. Individual differences in arousal level were discussed and musicians were encouraged to think back to previous performances to determine differences in arousal between good and fair performance. Interventions for managing arousal were also discussed, including meditative breathing and progressive muscle relaxation.

The third station, communication, was viewed as important to both the conductor and the students. Communication networks, such as dialogue between the students and the conductor and between instrumental sections, were the primary topic of discussion. In addition, the differences between verbal and nonverbal communication were described. Musicians were introduced to some strategies used to improve the effectiveness of communication, and also asked to discuss how some of these strategies could be incorporated into their daily activities.

The musicians reported that the fourth station, goal-setting, was useful. The principles of effective goal-setting, as well as some common mishaps (focusing on outcome goals only or sporadic re-evaluation of the goals), were discussed. Musicians were also asked to create mission statements for their time at FSU, which included both process and product goals. Finally, presenters discussed the importance of monitoring and adjusting goals over time.

The final station, concentration, covered the different types of concentration (e.g. Nideffer & Sagal, 2006) and the importance of shifting attention among several cues. Musicians were asked to listen to the presenter and shift focus to the cued word. For example, if the presenter said the light switch, the musicians were to shift their attention in that direction. It was the second most popular station as students enjoyed it, and found it useful. The musicians were asked to complete a short attentional-shift activity and then to relate the activity to musical performance. A few interventions for improving concentration were discussed, including the use of cue words and mental rehearsal of each piece of music.

As the presentation progressed the musicians seemed to warm-up to the presenters. A few of them even commented that "we actually have more in common with athletes than we thought." We received a good deal of feedback from the musicians, with suggestions such as, "too broad, we need help in practical stress management and thought control." Additionally, they felt that "we could benefit more from one on one time with a sport psychologist." Overall, the students rated their performance enhancement experience as great, and most would probably utilize these services in the future. As presenters, we felt that it was a great experience and has opened the door for future work with the music department. A few of the musicians have requested individual sessions and the door has opened for future group sessions.

Original Student Contribution
"Mind over Music": An Interview with Melody Gardot

By: Sean Mullen (thesportdr@yahoo.com)
University of Virginia

As a musician and an athlete, I have discovered many parallels in the factors that influence my performances on-stage and on the field. Researchers and practitioners in the field of sport psychology have pointed to a number of effective strategies available to athletes for converting negative mental states to more positive, ideal states of mind. However, these performance-enhancing strategies are rarely discussed in terms of how musicians may use them. If you have ever performed in front of an audience, regardless of the venue, you probably experienced anxiety or a loss of focus at one time or another. It is also likely that you have developed ways to cope with such stressful situations. The purpose of this article is to highlight the idea that elite performers appear to use several mental skills, whether they know it or not. Furthermore, and as evidenced in the rest of this article, it is how one interprets stressful situations that determines whether or not negative consequences will transpire.

Recently, I had the privilege of interviewing Melody Gardot, a buzzing new jazz vocalist/musician. If you are lucky enough to hear her perform, your jaw will hit the floor. Regardless of your preference of music genre, you cannot help but immediately recognize her talent. Melody started playing in piano bars until she got into a tragic bicycle accident, at which time her doctor recommended using music as part of her therapy. In addition to her physical condition, Melody has faced many mental hurdles as well. It is the way Melody approached her race to recovery that illustrates one of the strongest cases for applying performance-enhancing strategies (such as those used in applied sport psychology) to the arena of music.

Melody suffered damage to the part of her brain that is responsible for executive functioning, processing, and making new memories. She told me, "My physical condition is what it is" but this has not stopped her from doing everything in her power to improve her situation. In doing so, she's become quite an expert in neurobiology and physiology, and, therefore, is very aware of the connection between her mind and body. During the recovery process, Melody struggled with remembering music that she had composed. Her answer was to develop a recording system, using all of her senses (a cryptic method that only she could decipher). Given all of this, her humor is still intact: "I don't think I could take on anything, but I could Google anything [laughing]."

Now what makes Melody's story so extraordinary is that she's developed ways to accommodate for her physical condition on stage. She told me that she is "sensitive to light and sound, so it's like masochistic for me to be a performer because I'm putting myself in a situation [wincing] that is really painful." To deal with these factors, she has had to work closely with stage hands and her band to ensure that lighting and sound registers remain within an acceptable range. "Things that throw me off are usually musical . . . if I get interrupted, I have to do this whole thing [she pauses and sings a musical scale] to find where I am in the verse." She will also tell herself repeatedly to "Keep it down." It was encouraging to know that next to musical talent and creativity, Melody also has a pocketful of mental skills such as imagery and positive self-talk in her repertoire to help her stay focused. Negative thoughts, emotions, and self-talk often cause errors in performance because they influence the degree of effort we put into changing our psychological state or momentum – something that can fluctuate a lot, particularly on stage in front of hundreds of people. But Melody doesn't actually get nervous while on stage. Rather, she gets unnerved and loses confidence when she feels pain or senses a looming seizure. In fact, she said that "when I'm on stage I'm completely focused . . . performing is an opportunity for me to have no pain for a little while."

Keep in mind that Melody is a professional musician. For most amateur musicians, negative performance states can occur before, during, or even after a gig. So, the psychological strategies that Melody used during her recovery period, and those she uses to ward off self-doubt with respect to her

physical condition (imagery, positive self-talk), can also be used to improve control over one's performance at any time. Even with an untrained eye, one could walk into any "open-mic" venue and easily identify inexperienced musicians struggling to find their ideal performance state. For example, you might find bashful performers forgetting to introduce themselves. They will also be difficult to hear because they will have their head down and won't sing directly into the microphone. I have even witnessed musicians use self-handicapping strategies like confessing "I'm really not very good" to the crowd.

The take home message here is that musicians, like athletes, can benefit from mental skills training, whether they are seasoned professionals or American Idol castoffs. But sport psychology practitioners and "head coaches" working with musicians should keep in mind that elite performers have probably already developed some mental skills on their own. They might simply benefit from recognizing *when* they are using them so they are more self-aware and can use them consciously and consistently, at will. Lastly, if musicians of all levels interpret the on-stage experience as an opportunity to shine rather than an opportunity to fail, as Melody has done so well, they will better utilize their time in the spotlight.

Original Student Contribution
The Invisible Athlete: Including Stunt People in Applied Sport Psychology

By: Brian Hite (brianhite@msn.com)
Walden University

When I read that this issue of the newsletter was focusing on the ways in which sport psychology can be applied to the performing arts, I leapt at the opportunity to introduce stunt people, a population that is seldom recognized or acknowledged but contributes significantly to virtually every television show and movie that is produced.

In many ways, stunt people face similar issues to those faced by athletes who participate in traditional sports. Anxiety, arousal, and attention control are essential to success; levels of motivation significantly impact performance; injuries and their psychological repercussions are an ongoing concern; and a strong pressure to "keep up with the young folk" tends to manifest itself as aging occurs.

Stunt people face other challenges, though, that are unique to their particular occupation. For example, they are seldom aware of exactly what will be asked of them when they arrive at work, and task assignments and preparation time can change drastically with virtually no notice. Also, there are many times when the actions stunt people are hired to perform are dangerous and/or expensive (e.g. getting hit by a car; fire burn; crashing a car/motorcycle/boat) making physical rehearsal impossible. Finally, stunt people often find themselves in situations where they are expected to perform as members of a team (e.g. large fight scene); however, at the time they are expected to perform, the team members may only have been introduced to each other that day.

The following example illustrates my own experiences in which my knowledge of and proficiency with mental imagery contributed to the successful performance of a difficult skill.

The task was to launch myself out the back of a moving truck in a way that looked like I'd just been thrown, and the physics of jumping and rotating forward and then being sucked backward on impact at the same speed at which the truck was traveling (15 mph) made planning every aspect of the gag very important. In order to figure out my body positions throughout the gag, I used a combination of both Hackfort and Munzert's (2005) model of mental simulation and Hall's (2001) model of mental imagery to analyze the various options from both third and first person points of view.

After making a choice based on the results of preplay imagery simulations (Hackfort & Munzert, 2005), I climbed into the back of the truck in order to mentally practice the skill in the location where I would be performing. After a driving rehearsal, I realized that my imagery scenario was nearly perfect; however, I'd forgotten to incorporate bumps. That is, because the road wasn't made of glass, the truck was bouncing quite a bit at the time I was supposed to initiate the flip, so I immediately engaged in mental practice (Hackfort & Munzert, 2005) that incorporated the bumps as well as a couple of slight technique changes. The gag went off flawlessly. I flipped, under-rotated slightly to facilitate the roll and decrease the risk of a knee injury, and rolled perfectly. It all happened exactly how I'd envisioned it during those countless imagery sessions throughout the morning.

While the scenario above provides one example in which performance enhancement techniques such as visualization might be beneficial to stunt people, it also poses many questions, such as: "Is there a difference between stunt people and other athletes in terms of imagery efficacy or types and frequency of imagery use?"; "To what extent does imagery affect stunt people's levels of confidence, anxiety/arousal, skill acquisition, number of mistakes, and injury frequency?"; and, "In what ways do other performance enhancement techniques affect stunt people's confidence, motivation, performance, etc.?"

While stunt people deal with many issues similar to those faced by traditional athletes, it is the unique challenges faced by this population that makes their inclusion in future sport psychology research important not only to the stunt community, but the sport psychology community as well. Therefore, my long-term goals are to convince sport psychology researchers that stunt people can be a useful population to include in their research studies, and to convince stunt people that the services of sport psychologists can be extremely helpful under a multitude of circumstances. For my part, I plan to focus my dissertation on the stunt population, continue to present on topics pertaining to stunt people at conferences and symposiums whenever possible, and pursue opportunities to speak to groups of stunt people about the benefits of performance enhancement techniques. Hopefully, little by little, stunt people will be brought into the fold and will begin to reap the benefits enjoyed by traditional athletes all around the world.

References

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Hall, C. R. (2001). Imagery in sport and exercise. In R. Singer, H. Hausenblas, & C. Janelle (Eds.). *Handbook of Sport Psychology* (2nd ed., pp. 529-549). New York, NY: Wiley & Sons.

Professional Profile: Kjell Enhager

By: Fredrik Weibull
Halmstad University

Kjell Enhager has worked as a coach for 20 years. He has been a PGA instructor for 31 years, and has a M.B.A. from Maharishi University of Management in the United States. He has and is currently working with major corporations, Olympic gold medalists, world class athletes and teams, hospitals, schools, the military and so on. He has worked with artists, for example, in opera, with symphony orchestras, pop music, world artists, solo artists (i.e., piano players, singers) and groups. Among other things he is currently working with three pop artists.

What is your working philosophy?

To help people to help themselves; that is the whole point. How can I help them develop and unleash their own full potential in order to reach their goals? In order to accomplish this, I often need to coach on two levels simultaneously, the outer level which can be seen; technical, physical, body language, etc. and the inner level which can't be seen; emotional, psychological, specific belief systems, values, etc. When the student can see how the inner connects to the outer level or vice versa it often creates a deep motivation within. Sometimes profound motivation comes when the student realizes how the smaller parts fit in to the larger whole, and how the whole creates a purpose and a meaning for them in their life.

I start out from a desired outcome. Then, I compare it with the present situation so I can detect the differences. Next, I find out the barriers that exist (e.g., technical, psychological, financial, etc). After that, I look to which resources the person needs in order to get to the desired outcome, as well as the necessary steps, decisions and actions they have to take. That is the structure of my coaching: desired outcome, present state, barriers, resources, and action.

What are the biggest differences between working with artists and athletes?

Hard to say, generally speaking. Athletes, at least in the start to become champions, find faults outside of themselves. Artists more often have a tendency to blame and find faults within themselves. The name of the game is also how you focus; in sports external results will decide whether you succeed or not. For an artist it can be themselves, their colleagues or the audience. When I was working with a symphony orchestra I asked "who decides if it is a good result?" Some answers included themselves, the media, the audience, but most answers indicated that their colleagues were the ones who decided if it was a good performance. In sport, on the other hand, results are generally measurable, black and white.

What are the biggest similarities between working with artists and athletes?

Still generally speaking, both artists and athletes want to perform and succeed. They want to do their best, learn from mistakes, and integrate their artist and athlete within, where head and heart work together in their mission in life.

Have you learned anything from working with artists that you have been able to transfer to your work with athletes?

What I have experienced from working with people who use their body as an instrument (e.g., opera singers or musicians) is how important it is to listen to yourself. I have used that a lot with athletes. Be sensitive of your emotions, your inner self and how much that matters. For example, when working with singers I work a lot with their body language, balance and breathing. I bring that to sport. I can tell you that not all golfers know how to breathe correctly or how to be centered in their body. I think that breathing, body language, balance, and the difference these three concepts make are really important in sports.

What have you learned from working with athletes that you can use when working with artists and vice versa?

It is the structure, the will, goal setting, and motivation that athletes have. Most artists have belief systems that they create best at evenings, that they are different and they often have a desire to be special. Sometimes it is true but sometimes it is only a belief, something made up in order to find identification. What you can use from sports are more structure, more will and more motivation. Do not drivel so much, nor talk, nor find seven thousands excuses; just do it.

Do you use your own techniques in your work?

I only teach things that I have tested on my self. Coaching is about relationship and trust. Coaching for me is like when children hurt their fingers, for example, with a hammer, what will they do then? They will go to their parents. What will their parents do? They will blow on the child's finger. Who came up with that technique? It exists all over the world. For me coaching is exactly like blowing on the finger. It is 99% trust and 1% knowing where to blow. If I work with a person who does not believe he can learn anything, then it does not matter which technique I use, it is almost manipulation. From my experience when educating coaches in Sweden, coaches often stare themselves blind and rely on techniques they do not feel confident using. That is why it is important to use things you can vouch for. Because then subconsciously you say, "This is true, this works." That is why you have to walk your talk. I would never say "I know" in words, but hopefully in my behaviors and life.

Professional Profile: Betty Kelley

By: Fredrik Weibull

Betty Kelly has a BA in Physical Education, Coaching and Music; a MEd in physical education, motor learning and sport psychology; and a PhD in exercise and sport science and counseling – sport, health, and exercise psychology. She has been an elite downhill ski racer, played tennis, field hockey, and many other sports. She was the youngest certified ski instructor in the USA and has been the university head coach in women's basketball and tennis at Augsburg College, Luther College, and Winona State University. She is a certified consultant and has worked as a sport psychologist since she started the PhD Program in 1988. Betty plays several instruments and has been in a choir and danced. She majored in music as an undergraduate – voice, violin, and conducting. Betty also led praise and worship at her church (4,000 members) and continued with voice and guitar until an illness limited her ability to continue.

How would you describe your working philosophy?

My job is to work myself out of a job. My vision is to help others improve their performance whether this is on the athletic field, in the boardroom, at school, or throughout life in general. My primary focus is working with athletes from all sports, skill levels, and ages. I understand that the mind controls the body BUT, the athlete controls their mind. I have four over-arching goals, that are; 1) success is earned through hard work,perseverance, and a driving passion for what you do; 2) belief is at the beginning of all accomplishments; 3) excellence is worth the effort; and 4) leave no athlete behind. I combine the most up-to-date techniques, vast educational and experiential background, and a well-thought out and formulated set of core beliefs and values.

Which are your favorite techniques to use when working with artists?

I use many "discovery" type exercises so the artist "owns" that skill. They need to have a solid grounding in self-esteem and belief in their abilities. They need to know what they are trying to convey to the audience through their art. Visualization of process and outcome; relaxed concentration and attention; anxiety and arousal management. Pre-performance routines; goal setting; becoming more aware of what their body is telling them and adapt when necessary; how to bring out the artist's passion; motivation and a never give up attitude. But also that balancing of when to push and when to step back to get a new or different perspective.

What are the biggest differences between working with an artist and an athlete?

The physicality of the demands for participation. A dancer will be guided almost exactly as an athlete while others that have less movement need a greater awareness of creativity using more right brain activities and bringing their "theme" to the fore-front is critical. I find it interesting how many differences there are when working with the two separate groups. Artists are less able to grasp and use mental toughness. Artistes are performing for an audience that has no definitive rating for success or failure where sport has the score. Athletes are using their skills to excel rather than entertain. Artists emote where most athletes do not. Getting artists to practice the mental skills we are working on just as hard as getting athletes to follow-through.

What are the biggest similarities between working with an artist and an athlete?

Performing in front of others; performance anxiety and arousal management; both strive to be the very best they can be. Consistency in performances and strong work ethic. Both will perform in the presence of distractions such as pain, trauma within their family and so on. Finding that balance between their talent and practicing and the other important areas of their lives.

What have you learned from working with artists that you have been able to transfer to your work with athletes?

Seeing it in their heads; let go to "allow" performance happen. Low self-esteem is pervasive. Using their art form to send or covey a message that has meaning from within. For example, I spend quite a bit of time with body language and eye contact so the athlete looks like a threat. Knowing when something is "good enough" and when it is time to step away. The fluidity of movement or physical prowess. That you need to push the boundaries of your sport or art to try new things.

What have you learned from working with athletes that you have been able to transfer to your work with artists?

Hard work and practice is an absolute necessity to achieve greatness. Goal setting keeps you moving forward toward the goal. Mental toughness means pushing through barriers or obstacles so they do not "block" performance. Developing performance routines and setting their own standard of success within a performance.

Do you use your own techniques in your work as an artist?

I have a very eclectic musical back ground and I use that experience to enlighten the artists I work with. I use a combination of what I was taught, what I have learned, exercises that I or others have developed. Performance is performance is performance. I think the more creative you can be and think outside the box, the more effective you can be as a consultant and you will also have more fun.

Research Review

By: Katie Copeskey (mcopeskey@spfldcol.edu)

Springfield College

Performing Arts Consultation: Developing Expertise in this Domain

Hamilton, L. H., & Robson, B. (2006). Performing arts consultation: Developing expertise in this domain. *Professional Psychology: Research and Practice, 37*(3), 254-259.

While many techniques and approaches to psychological consulting are similar to working with performing artists, there are definite differences that need to be considered when comparing a vocalist to a quarterback. Further, within the realm of performing artists, distinctions are also found between those who are ballet dancers or symphonic musicians. The article is broken up into three sections. The first covers the use of peak performance in the arts by using examples from dance, music, vocalists, and drama/comedy. Following this section, the authors discuss the occupational stressors experienced by performing artists. Finally, guidance and suggestions are given to help consultants develop effective treatment plans, and gain expertise in this field. The following is a summary of the highlights from Hamilton and Robson's insightful article While they may think of themselves as artists, not athletes, dancers have been encouraged to cross-train at gyms in order to increase their strength, flexibility, and cardiovascular fitness (Kinetz, 2005). Because body shape is highly emphasized with this population, especially in ballet, and with training beginning at a very early age, injuries and eating problems are highly salient in this domain of performing arts (Hamilton, Hamilton, Warren, Keller, & Molnar, 1997).

Musicians, on the other hand, care very little for their physical appearance and instead focus on their ability to sight-read and other members of the band, and follow the tempo given by the conductor (Hays & Brown, 2004). Years of musical training are needed to develop technical skills as well as supreme accuracy; both of which are essential in this field.

Because the instruments, as well as a person's nerves, can be unpredictable (Butler, 1995), it has commonly been found that musicians use alcohol and beta-blockers to combat anxiety (Clark & Agras, 1991; Hamilton et al., 1995; Lehrer, Rosen, Kostis, & Greenfield, 1987). Attempting to enhance performance, hard-rock musicians may turn to recreational drugs, often while on stage (Hamilton, 1997). Vocalists often face multiple stressors as the profession demands voice control, singing, acting, and the maintenance of one's weight. Like dancers, problems with eating disorders are also found among these performers.

Unlike the aforementioned fields, actors receive minimal, if any, feedback (Kogan, 2002). Most of their career is spent auditioning and, most times, being rejected without any explanation. Like dancing and singing, a strong emphasis is placed on physical appearance, but actors are also asked to memorize scripts, depict diverse roles and personas, and express emotions on command. Comedians, on the other hand, are praised more for their improvisational qualities where timing and delivery are essential. Regardless of occupation within the performing arts category, Hamilton and Robson (2006) note that "fine motor control, technical skill, emotional expression, artistic interpretation, creative, and the ability to conform to esthetic requirements within each art form" (p. 256) are the common thread.

All performers may also experience multiple work-related pressures (Wilson, 1994) even when they are not performing . Specifically, significant levels of personal isolation and erratic work schedules were found in female musicians and dancers (Hamilton et al., 1995). Carpenter (2004) also found reports of social isolation and the inability to have a family or children for female dancers. While more attention is given to females in the dancing profession, both males and females are burdened by the inconsistent demands of the ballet masters and are also perplexed by the criteria being used for their professional evaluations

(Hamilton et al., 1995). Moreover, coping strategies used by males in music and dance were less than adequate (Hamilton et al., 1995) females practiced good health habits and reported fewer fluctuations in mood and physical illnesses.

It is important that consultants help performers set realistic goals, teach techniques to combat anxiety, and encourage the use of strategies that enhance performance such as positive self-talk, diaphragmatic breathing, relaxation exercises, imagery, and optimizing the feeling of flow (Csikszentmihalyi, 1990; Sugarman, 1998). Nutritional issues, disordered eating, performance anxiety, depression, injuries, and other health concerns can all have an impact on peak performance as well, so consultants should be aware of such complexities (Hamilton & Hamilton, 1991; Kanefield, 1990). Finally, environmental stressors need to be taken into account, and allowing the client to physically demonstrate problems is encouraged. Career exploration and coping with an injury, which at times may go hand in hand, may also be topics that arise within consultation.

Developing expertise within the realm of performing arts, consultants usually have a familial background within this area (Goode, 1992). They may have performed themselves or have a close relationship to performers. There are also journals, conferences, and organizations that can provide information to those interested in the field as well as contributing to it (Hamilton, 1997). Existing clinics that tailor services to artists provide lectures on pertinent topics may be a viable source of relevant literature as well as a job opportunity.

* All references provided in this review are part of the original article.

Research Review

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Raymond, J., Sajid, I., Parkinson, L., & Gruzelier, J. (2005). Biofeedback and dance performance: A preliminary investigation. *Applied Psychophysiology and Biofeedback, 30*(1), 65-73.

The purpose of this study was to compare the effects of both alpha-theta neurofeedback and heart rate variability (HRV) biofeedback upon dance performance. Alpha-theta neurofeedback training and HRV training were compared with a no-treatment control group in a population of university dancers. It was hypothesized that both of these interventions would improve dancers' performances differently due to their respective effects on both the central and peripheral nervous systems.

Both the neurofeedback and HRV groups showed significant improvement in average dance ratings when compared to the no-feedback control group ($z = 2.452$, $p < .05$ and $z = 2.389$, $p < .05$, respectively.); however, neurofeedback and HRV training influenced the subscales of dance performance in different ways. Technique was significantly improved by HRV training, as the HRV group improved significantly more than the control group ($z = 2.138$, $p = 0.05$). Similarly, overall execution was significantly improved by biofeedback ($z = 2.080$, $p < 0.05$) as was the timing subscale ($z = 2.688$, $p < 0.05$).

The study provides preliminary evidence that both alpha/theta neurofeedback and HRV biofeedback improve dance performance when compared to a no-treatment control group as seen in the average rating across subscales, as well as in the "overall execution" summary scale.

The study is considered exploratory due to the small group sizes and because two intervention conditions were compared to a no-intervention control group, leaving the study vulnerable to therapist contact effects. When considered alongside prior research in the clinical applications of neurofeedback however, this study suggests that neurofeedback and HRV training could be used as an adjunct to more traditional sport psychology interventions such as guided imagery. This study represents a preliminary step in constructing a program of psychophysiological interventions to optimize performance in both athletes and performing artists.

Research Review

By: Pam Landry

Kenny, D. (2005). A systematic review of treatments for music performance anxiety. *Anxiety, Stress, and Coping, 18*(3), 183-208.

This article provides a systematic qualitative review of both published and unpublished primary studies in the area of music performance anxiety (MPA) interventions. The interventions examined included psychological approaches such as behavioral, cognitive, cognitive-behavioral and combined treatments, as well as pharmacological treatments. The review of treatment for MPA reflects a variety of theoretical arguments regarding etiology and relative effectiveness of treatments for MPA while providing practitioners and researchers with a basis for interventions is assisting musicians who suffer from the condition.

Six studies within the review assessed the therapeutic effect of behavioral treatments on MPA; interventions assessed included systematic desensitization, progressive muscle relaxation, awareness and breathing and behavioral rehearsal. Two studies assessed the therapeutic effect of cognitive techniques such as positive self-talk and cognitive restructuring techniques on MPA. A number of studies examined the effect of combining treatment approaches, which included for example, counseling plus relaxation, and counseling plus relaxation plus tactile sensations in the treatment of MPA. Other study protocols included meditation, biofeedback, music therapy, hypnotherapy, and the Alexander Technique. Finally, studies that used drug interventions on music performance anxiety were also reviewed.

The author concludes that there is considerable scope for the further development and evaluation of interventions for MPA. With respect to behavioral interventions, motor rehearsal, cognitive restructuring, combined self-instruction and progressive muscle relaxation, all were found to have positive effects on performance quality. Systematic desensitization, deep muscle relaxation, visual rehearsal and awareness and breathing interventions alone were not found to improve performance quality. With respect to the other treatments reviewed, even fewer conclusions could be drawn as results were often based on methodologically compromised studies. Overall, the author notes that the literature on treatment approaches for MPA is

inconsistent and methodologically weak, making it difficult to reach any firm conclusions about the effectiveness of the various treatment approaches reviewed. Future research that will offer a clear definition of MPA, consistency and strength in methodology and the development of appropriate outcome measures is recommended.

Special Thanks

This edition of the PEM is certainly the most extensive to date and has included the efforts of many talented, hard-working individuals. First, we must offer our appreciation to Betty Kelly, Kjell Enhager, and Melody Gardot for agreeing to be interviewed In addition to thanking all of the contributing authors, I would also like to extend my thanks to Patsy Tremayne, Ph.D. and Mark Andersen, PhD. for their continued support as reviewers and sources of encouragement. Finally, here's to everybody that has helped make the PEM a success, as well as to those that will offer their support in the future!