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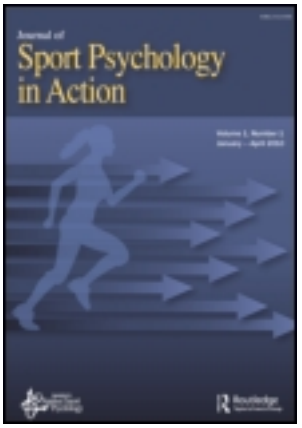

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Online Mental Training: Making it Available for the Masses

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Online Mental Training: Making it Available for the Masses

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Mental training for athletic performance has expanded in recent years but expense and access has limited its application. Although there is much information on the Internet, no programs offered individualized, automated training that could be easily accessed by the masses. This article describes the creation of an online platform that addresses these obstacles while maintaining the essence of the 1-to-1 client–professional relationship at an affordable cost. Resources include PowerPoint presentations with voiceovers, interviews with expert sport psychology professionals, "whiteboard" presentations of mental skills, and "simulations" taking the athlete through different scenarios, along with innovative coach and parent education programs.

KEYWORDS mental training, masses, Internet, individualized, coach/parent education

Generally, historians consider 1965, with the first international congress in sport psychology, as the formal beginning of sport psychology. The next 15 years primarily were spent conducting laboratory research attempting to develop a body of knowledge to legitimize this new and developing field. However, Martens (1979) wrote a landmark article entitled "Smocks to Jocks" arguing that sport psychology should start to get out of the laboratory and start to conduct research in more real-life externally valid settings like the soccer field, baseball diamond, and tennis court. Although we know that

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the father of sport psychology, Coleman Griffith, consulted with the Chicago Cubs in the 1930s, and individuals such as Bruce Ogilvie and Richard Suinn consulted with athletes in the 1960s and 1970s, it was not until the 1980s that sport psychology consulting started to really emerge. This was helped by television talking about and showing sport psychologists working with professional and Olympic athletes. Although for some individuals there was a stigma in working with a sport psychologist (e.g., "I don't need a shrink"), as there still is today, the negative connotation has slowly evaporated, as it is more accepted to use a sport psychology professional.

The United States Olympic Committee now employs several full- and part-time sport psychology professionals at the Olympic Training Centers to help athletes with the mental side of sport and competition. Gould and colleagues (Gould, Diffenbach, & Moffet, 2002; Gould, Greenleaf, Chung, & Guinan, 2002) have documented the use of sport psychology professionals by many Olympic athletes during the preparation for the Olympic Games as well as at the Games themselves. Although not as standard as athletic trainers and strength and conditioning coaches, more and more sport psychology professionals are now working with professional and collegiate athletes. This leads us to the major premise of this article and the development of the online mental-training system. Specifically, although applied sport psychology services have been targeted primarily for elite athletes, there is a great need to bring mental training to the majority of competitive athletes who are nonelite, such as athletes participating in high school youth sports, select clubs, and the majority of NCAA athletic programs. This need remains despite the fact that many eminent sport psychology professionals have long emphasized the importance of providing sport psychology services to all (Vealey, 2005; Weiss, 1998).

There is a growing body of literature that attests to the effectiveness of mental skills training (MST) in improving performance as well as psychological well-being (Greenspan & Feltz, 1987; Vealey, 2007; Weinberg & Comar, 1994). So if MST can help a wide variety of athletes, then what would be the best way to provide services to these competitive athletes? Currently, most sport psychology services appear to be provided on a 1-to-1 basis usually in the office of the sport psychologist or on or near the athletic field. Although some professionals provide MST for teams, even then, most of their mental training occurs in 1-to-1 meetings either in a formal or informal setting. To help ensure quality services, the Association for Applied Sport Psychology (AASP) developed a certification procedure in 1989 for certifying individuals delivering sport psychology services. The criteria are difficult to achieve, as approximately 350 individuals have received certification, with only 250 of these remaining active consultants (Castillo, 2011, personal communication). This is a low number considering the millions of competitive athletes. Of course there are many individuals practicing applied sport psychology who currently work with athletes and teams, who do not have AASP certification.

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The point is, there are not that many certified consultants to deliver mental training to the many millions of competitive athletes. So what is the answer?

INTERNET-BASED SPORT PSYCHOLOGY SERVICES

The rapid development of the Internet from a text-only medium to an ever-expanding multimedia communication system has increased the opportunities for alternative delivery mechanisms for education in general and MST in particular. To date, most sport psychology professionals are using the Web to deliver text-based information, market their products and services, communicate with athletes and others in the field, deliver online courses, engage in scholarly discussion, and share and disseminate research. In addition, sport psychology professionals are starting to offer live 1-to-1 consultations over the Web using Skype and other technology to connect with clients (although these services always involve a "live" sport psychology consultant). There is nothing wrong with these activities—in fact they can be very useful and informative. However, as noted earlier, most MST that is occurring is through 1-to-1 (face-to-face and phone) meetings with the athlete and sport psychology professionals. Furthermore, it is generally advocated that MST be conducted over an extended period of time, and this is rarely feasible except perhaps at the highest level of competition—and even here it is still a rarity (Weinberg & Williams, 2010). School, work, travel, family commitments, and health concerns can all get in the way of attending regular meetings. This obviously limits the number of athletes who can get MST through sport psychology consultants, especially considering the number of competitive high school athletes alone in the U.S. is estimated to be more than 10 million (Bachman, Johnston, & O'Malley, 2010; U.S. Census, 2010).

Another limiting factor is the cost of MST. Of course there is wide variation in terms of the cost of MST (depending on the experience/knowledge/marketing of the sport psychology consultant as well as the athletes'/teams' ability to pay), but it would not be out of bounds to say that MST costs approximately $100.00 per hour or more. The cost, either as an individual or as a team, is a definite issue for athletes and athletic departments. For example, in a survey of athletic directors, sport psychology was seen as nice to have but not essential (as were as strength and conditioning coaches) given the cost (Wilson, Gilbert, Gilbert, & Sailor, 2009). Directors would like their athletes and coaches to have the advantage of working with a sport psychologist, but with budgets the way they are, it is almost seen as a luxury rather than a necessity. Thus, to date, mostly high-level athletes with sufficient resources are the ones who can generally take advantage of MST through sport psychology consultants and mental trainers. In fact, these barriers to "sport psychology for all" (e.g., cost and availability) have been discussed for over 20 years in the literature and continue to be a problem (Weinberg & Williams, 2010; Weinberg & Gould, 2011).

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This access problem can be solved in part by offering MST over the Web. However, it was noted over 10 years ago (Stodel & Farres, 2000) that the full capacity of the Web as an interactive, dynamic educational tool had not yet been realized by sport psychologists, and this remains the case today. To document this void, in the summer of 2010, we searched for online Web-based MST, and were not able to find any such programs. Specifically, we were unable to find a fully interactive MST site on the Web that provides athletes with a collaborative learning environment (e.g., one which could assess issues and provide individualized solutions) supported by expert practitioners, and within which they can develop their mental skills. In fact, presenting our quest for such a platform to a large audience at the 2010 AASP conference still did not reveal anyone who was using the Internet in an automated way to conduct 1-to-1 MST. Certainly there is much sport psychology information available over the Internet in terms of specific information, training modules, specific psychological techniques videos (e.g., Youtube), and testimonials (Watson, Tenenbaum, Lidor, & Alfermann, 2001; Watson, Lubker, Zakrajsek, & Quartiroli, in press). However, this information is not presented in the form of individualized online mental training that can serve the vast population of competitive athletes. Sport psychology is missing a great opportunity to reach out to the millions of competitive athletes and offer them MST. Specifically, a Web-based MST program would have the advantages of reaching a much broader audience than the current 1-to-1 training while at the same time greatly reducing the cost. Furthermore, the Web can provide users with a convenient access to a wide range of educational resources which might not ordinarily be available to athletes. In essence, the Internet could provide athletes the opportunity to interact with the learning environment to create more meaningful learning experiences. For example, athletes have different learning styles, and they could have the option of listening to an audio clip, watching a video clip, simply reading about a technique, or possibly talking with someone. So if Web-based MST would provide all these benefits, why is it that no such programs have been developed?

BARRIERS TO USING THE INTERNET FOR 1-TO-1 MENTAL TRAINING

There appear to be three primary reasons why no full-service, automated, online mental-training program has been developed thus far. The first has to do with the myriad of expertise that is needed to develop and implement such a program. In addition to the mental training content, many different skills and types of knowledge are needed, such as application development, instructional design, Web site design, audio and video recording, legal knowledge, e-commerce implementation, marketing and promotion, and a sophisticated knowledge of computer graphics.

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A second barrier is the amount of time necessary to develop all the different aspects of this type of program. For example, it took us approximately 400 hours (6 months) to create and develop the sport psychology content (including audios, videos, PowerPoint presentations, exercises, and testing), 175 hours (3 months) for website development, 750 hours (9 months) for application design, and 600 hours (9 months) for project management. These are assuredly estimates but it certainly underscores the huge time commitment to get a program like this off the ground. At the same time, one would likely have to give up his or her income-producing job, which makes such and undertaking even more difficult (as noted below).

Along these lines, a third major barrier is financial in nature. All this expertise and time costs a great deal of money (easily in the hundreds of thousands of dollars), and this alone could be a major deterrent. Specifically, in developing our on-line mental training program, the following has been spent already, or is budgeted to be spent: (a) application creation: $140k; (b) website design: $65k; (c) content production: $85k; (d) basic marketing: $60k; and (e) lost wages: $160k. This estimate totals up to $510k. These are quite accurate estimates, although one could obviously start this type of business with less capital. However, we wanted to create a high-quality program in all aspects, and thus spent the money necessary to accomplish this goal.

ONLINE (INTERNET-BASED) MENTAL TRAINING

Sport psychology professionals/mental trainers, coaches, and athletes probably will be most interested in the actual program itself and how it works and is implemented. In developing online mental training for all, it was felt that the program would need to meet the following key system requirements: (a) affordable, (b) Internet-based, (c) fully automated, (d) generate customized mental training programs, (e) provide prioritized information for members, (f) taught by sport psychology experts, (g) follow "best practices" in mental training, and (h) provide useful tools and support to enhance individual program success.

In terms of best practices in consulting, we used Vealey's (2007) model to guide the development of the program. These best practices included (a) mental strengths and weaknesses are identified, (b) a mental training plan is generated, (c) mental skills are prioritized within the plan, (d) specific training actions are identified, (e) goals are set and tracked through charting, (f) mental skills are explained in terms of their implementation, (g) competition plans are established, and (h) progress is assessed and evaluated.

Regarding the process of the online mental-training program for each individual athlete, the sequence included (a) attracting the prospect, (b) screening the prospect, (c) signing up the client, (d) assessing the client, (e) generating a custom mental training program, (f) teaching and training

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client on mental skills, (g) sending updates and reminders regarding mental skill practice, (h) tracking client progress, and (i) providing online support systems.

One of the critical parts, from an online mental-training perspective, was creating an automated issue-assessment and solution-generation engine—one of the potential stumbling blocks of using online mental training, in that we wanted to ensure that clients would receive appropriate individualized assessments and mental training similar to that which they would receive if they went to see a sport psychology professional in a 1-to-1 meeting. Developing such a program required innumerable hours of testing and trial-and-error, with expert sport psychologists working with Internet specialists. Based on athlete assessment and needs, a computer-generated individualized program would be provided to the athlete, which would be revisited periodically to determine progress. To ensure that this was appropriate for each athlete we had expert sport psychology consultants evaluate hypothetical and real athletes, and then develop a mental training program for the specified individual. This was also done with a computer program generator that was refined until programs recommended by the expert sport psychology professional were virtually the same as those developed by the computer generator. In this way, we felt that athletes were getting feedback and training programs similar to that which they would receive with 1-to-1 consultation with a sport psychology professional, and implementation included both practice and competitive situations.

Once athletes completed the in-depth evaluation of the situations that cause them difficulty—as well as those they handle successfully—along with an assessment of their mental skills, they were directed to the "My Program" area. Here, the different skills and information that they needed to learn (based on the evaluation) were presented along with various resources they could use for each mental skill. For example, let's say that based on the assessment, imagery was one of the skills that was recommended as a potential solution to the athlete's issue. Resources included such things as a PowerPoint presentation on imagery with voiceovers, interviews with expert sport psychologists on the topic of imagery, a "whiteboard" presentation including the key points of imagery, and "simulations" taking the athlete through some imagery scenarios. These resources took many months to develop and required sport psychology expertise as well as technology expertise in a variety of areas. Development of these resources required some of the outlay of capital noted earlier. Athletes would receive periodic reminders regarding the kinds of resources they needed to use to learn some of the mental skills, based on their assessment. After they completed using a resource, this was checked off and they could then use a new resource.

To ensure that athletes were competent in the different areas identified in the assessment, they were given a test before they were able to advance from the basic skills to the advanced skills. Similar to the basic mental skills

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section, the advanced mental skills section provides athletes with a variety of resources to help them develop more advanced skills. For example, in the basic mental skills section, athletes learned about effective attentional control and the importance of focusing on and maintaining attentional focus over time. The notion of attentional width (broad and narrow) and direction (internal and external) and different attentional styles (i.e., broad external, broad internal, narrow external, narrow internal) are presented. Furthermore, the idea that different types of attentional focus appear more effective for different types of tasks is discussed. In the advanced attentional control section, a few ways to stay in the present and increase/practice attentional control, such as simulations use of cue words, nonjudgmental thinking, and development of pre-competition and competition routines are presented.

One recent addition that would be extremely helpful for coaches is the "Usage Tracking Area." This addition was designed to increase usage and improve users' accountability by tracking the mental skills that are being taught. Specifically, this tracking area displays athlete usage statistics such as total time logged and the number of log-ins over a user-defined time period. Consistent with AASP ethics guidelines, athletes are first required to authorize and "unlock" the Tracking Area for coaches to know how much and how often athletes are using the online mental training program, although no athlete personal data are available for sharing and coaches would not be privy to exact answers to questions. This is not an invasion of athlete privacy, as coaches are often privy to athletes' activities as they directly relate to their training. Thus, this is an easy way for coaches to implement a mental skills training program while not having to teach the mental skills themselves, because research (Gould, Medberry, Damarijan, & Lauer, 1999; Gould, Damarjian, & Medberry, 1999) has indicated that coaches lack the confidence to teach mental skills.

The last point noted in Vealey's (2007) article on best practices in sport psychology consulting was evaluation. Although there is some evidence for the effectiveness of mental skills training as noted above, there is really a dearth of literature regarding the effectiveness of online mental training. However, there is a growing body of literature that indicates the Internet can be effective in changing exercise and health behaviors for large populations (e.g., Marcus, Nigg, Riebe, & Forsyth, 2000; Nigg, 2003; Vandelanotte, Spathouis, Eahin, & Owen, 2007). Thus there is some precedent for using the Internet to effectively change behavior. Along these lines, we are currently collecting data on program effectiveness by assessing the improvement (pretest–posttest) in the specific mental skills that the athletes needed to improve upon, as indicated by their written pretest assessment. Athletes themselves would be rating the degree to which they felt any improvement (or not) in the different skill areas that were targeted by the intervention. Tremendous effort will be needed in the future to examine the effectiveness of online mental skills training.

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COACHING CERTIFICATION

Besides regularly updating materials in the athlete section, new educational sections were added for coaches and parents. Specifically there is now a "certified mental coach" and a "parent mental trainer." There, of course, have been many coach certification programs developed in the past to provide athletic coaches with knowledge and education about the sport sciences (see Trudel Gilbert, & Werthner, 2010 for a review). However, the authors conclude that certain programs seem to be of some value, but overall, there is no strong or consistent evidence regarding the effectiveness of these coach education programs in actually changing coach behaviors. (The research of Smith and Smoll summarized in their 2005 book and conducted over 30 years is a notable exception.) Thus, why would one think that the current program would be more effective? There were a number of points raised in the Trudel et al. review, in addition to other coach education articles (e.g., Coatsworth & Conroy, 2006; Erickson, Cote, & Fraser-Thomas, 2007; Nelson, Cushion, & Potrac, 2006), that discuss ways to make coaching education more effective. Thus the current coach certification included the following elements: (a) use of flash technology to increase user-friendly presentation and enhance engagement and recall, (b) use of a forum for interaction with other coaches, (c) use of sport psychology experts to develop contemporary and cutting-edge content, (d) focus on mental skills instead of a generic coach education program including several content areas, (e) feedback regarding learning and understanding of mental training principles (f) basic and advanced certifications for coaches with different levels of expertise as well as providing a progression of skill learning. Similar to athlete evaluation, data will be collected to determine the effectiveness of this specific coaching effectiveness program.

PARENT EDUCATION

Formal parent education is a fairly new practice in the world of competitive youth sports. However, it has long been known that parents exert a critical role on the development of young athletes' skills and expertise. In fact, parental support is often associated with athlete enjoyment, improved sport performance, and self-esteem (Gould, Lauer, Rolo, Jannes, & Pennisi, 2006). But it is also known that too often, parents exert a negative influence on their children and the individuals who coach their children. In developing the current program, interviews were conducted with coaches of youth athletes. These results indicated that parents were often a major concern to coaches who felt the parents often had a negative influence on the learn-

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