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Introduction
Peter C. Terry

Secrets of Asian Sport Psychology
Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Sport in the Asian-South Pacific region has made rapid progress on the international stage in recent years, with several countries in the region becoming sporting powerhouses, and in some instances dominating particular sports in major international competitions. As examples, China won more Olympic gold medals than any other nation for the first time in 2008, while Australia, Korea and Japan have finished as high as 4th, 5th and 5th respectively, in the medal table during the past three Olympiads.

*Secrets of Asian Sport Psychology* is a collection of 22 chapters in which applied practitioners from the Asian-South Pacific region provide accounts of working with elite athletes in sports at which the country in question excels. So, for example, the text includes accounts of *Diving, Gymnastics, and Aerials Skiing in China, Archery, Speed Skating, and Taekwondo in Korea, Baseball and Judo in Japan, Rowing, Track Cycling, and Triathlon in Australia, Rugby in New Zealand, Wrestling in Iran*, and so on, all written by sport psychologists who provided support for the elite teams of those countries. Other chapters, notably *Boxing in the Philippines, Golf in Taiwan*, and *Shooting in India*, provide case studies of the psychological characteristics of some of the world’s best performers, based on the athletes’ own accounts of their sporting journeys or accounts provided by those close to them.

A unique feature of the book is that it also captures previously untold accounts of smaller nations that have taken on and beaten Goliath nations of world sport, in chapters such as *Cricket in Sri Lanka, Sailing in Israel*, and *Table Tennis in Singapore*. For the most part, these accounts are penned by well-published practitioners, although in some instances, chapter authors are writing about their experiences for the very first time, willingly sharing whatever secrets their applied work may hold.

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1. It should be noted from the outset that the term *Asian*, as used in the context of this book, should be read as shorthand for the Asian-South Pacific region, which includes Oceania (Australia, New Zealand and 12 other countries) as well as nearly 50 countries in Asia.
The Asian-South Pacific region includes more than 60 countries, accounting for about 65% of the world’s population. The region stretches from the Arab world, Israel, and Iran in the west, through the Indian sub-continent and the former Soviet republics of central Asia, to China, Philippines, and Indonesia in the east. The region also stretches from Korea and Japan in the north down under through the island nations of the South Pacific to Australia and New Zealand. It is a vast area, much more culturally disparate than alike, in which applied practitioners have combined elements of sport psychology practices from the influential nations of North America and Europe into their own cultural contexts, to produce hybrid practitioner models that incorporate the best of east and west.

It should not be forgotten that many of the sport psychology techniques commonly espoused in the west have their origins in the ancient civilisations of the eastern world. Add to this the longstanding tradition of Asian scholars travelling to study in the west and the somewhat more recent trend of western experts visiting Asia to share their knowledge and experience, or coming to live and work in the region.

The result is a fusion of approaches to the art and science of sport psychology. Secrets of Asian Sport Psychology has been written to showcase some of the best applied work completed in the region. It is hoped that there is something of interest within this text for coaches, athletes, teachers and students of sport psychology, and anyone else interested in learning more about the subject, whatever their country of origin.

Secrets of Asian Sport Psychology is an official publication of the Asian-South Pacific Association of Sport Psychology (ASPASP). ASPASP was established in Singapore in 1989, during the 7th World Congress of Sport Psychology, under the leadership of the late Professor Atsushi Fujita of Japan. It is affiliated to the world body, the International Society of Sport Psychology. ASPASP has grown steadily since its inception, with its Managing Council and Council of National Representatives now including members from Australia, China, Hong Kong, India, Indonesia, Iran, Iraq, Israel, Japan, Korea, Macau, Malaysia, New Zealand, Philippines, Saudi Arabia, Singapore, Taiwan, Thailand, and Viet Nam. ASPASP has held seven international congresses, in Melbourne, Australia (1991), Hong Kong (1995), Wuhan, China (1999), Seoul, Korea (2003), Bangkok, Thailand (2007), Taipei, Taiwan (2011), and Tokyo, Japan (2014).
The motivation for writing *Secrets of Asian Sport Psychology* was born out of the *raison d’être* of ASPASP, which is to promote the development of sport psychology throughout the Asian-South Pacific region and beyond. The cost of sport psychology textbooks published by commercial publishers often puts them beyond the reach of huge numbers of people who are interested in the subject, especially those in developing countries where salaries are typically modest and textbooks fall into the luxury item category.

To more readily facilitate the development of sport psychology in developing countries, *Secrets of Asian Sport Psychology* has been published as an e-book under a Creative Commons Attribution 3.0 Unported Licence (CC-BY-3.0). This licence allows readers to access the text without cost, to share the text with others, and to use the content for their own purposes.

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Secrets of Asian Sport Psychology has been generously supported and published by the University of Southern Queensland (USQ: www.usq.edu.au), without whose assistance this project may never have come to fruition. The Managing Council of ASPASP would like to offer its sincere gratitude to Professor Jan Thomas, Vice-Chancellor of the USQ, and to the many others at USQ who have played a role in supporting this project to completion. Particular thanks go to Emeritus Professor Jim Taylor AM for championing the project at the outset and for sharing his wealth of knowledge about open education, to Professor Ken Udas, Deputy Vice-Chancellor (Academic Services) & Chief Information Officer, for his unwavering support for the project and for allocating the time of some of his most talented members of staff to assist its progress, and to Professor Mark Harvey, Deputy Vice-Chancellor (Research & Innovation), for allowing me the luxury of sufficient time to see the project through to completion when other priorities were begging for my attention.

I would especially like to sing the praises of the very talented graphic design and multimedia team at USQ. The efforts of the wonderful Sian Carlyon have been nothing short of Herculean, and she has been more than ably supported by Lynn Zeckomske, Tara Mann, Alex Charchar, Alison McDonald, Zoe Lynch, and Shane Gadsby, all of whom brought their creative talents and technical expertise to bear in the process of transforming dry collections of prose into, by my estimation, objects of beauty during the typesetting, design and graphics process.

Others at USQ and beyond whose encouragement and support warrant a mention include Adrian Stagg, Jason Myatt, Eddie Flemming, Annie Baker, Dawn Humphrey, Cindy Laine, Kok Chun Li, Neil Martin, Associate Professor Michael Sankey, Associate Professor Robyn Smyth, Professor Janet Verbyla, Professor Lyn Karstadt, Dr Dave Povey, and the team from Ellipsis Media.

I also thank the many photographers out there who took the trouble to upload their photographic efforts with Creative Commons licences for the world to share. The text would not have been illustrated nearly so well without you.

Finally, I would like to thank all the chapter authors for allowing themselves to be convinced by me and my fellow editors to publish Secrets of Asian Sport Psychology under a Creative Commons licence and thereby freely share their intellectual property. I finish by acknowledging the outstanding efforts of my co-editors, Professors Zhang Liwei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan for their sustained commitment to the project, for tolerating my moments of frustration, and for making the book happen.
Secrets of Asian Sport Psychology is an unashamedly applied text, written by practitioners from around the ASPASP region. Authors were asked to take one of two approaches; either to tell the story of their work with elite athletes, usually the national teams of their country of origin, or to provide a narrative on the psychological characteristics and mental skills development of an outstanding athlete, as a case study. By doing so, it was anticipated that both the commonalities and uniqueness of approaches from different parts of the Asian region would emerge, revealing some of the secrets of the undoubted success enjoyed by Asian countries on the world’s sporting stage.

The book is definitely not a series of research studies set in Asia, and hence should not be judged by standard scientific criteria. Most of the evidence presented is anecdotal or experiential, but no less deserving of attention for that. It is anticipated that the discerning reader will look beyond the absence of theoretical models, hypothesis testing, and p-values, to accept the content for what it is, a series of narratives of applied sport psychology that go beyond empiricism. Collectively, the authors have accumulated more than 500 years of applied experience. The accounts they have provided offer a rich tapestry of practitioner experience as varied and intriguing as the Asian-South Pacific region from which they come.
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This book is dedicated to the memory of Professor Atsushi Fujita, founding President of ASPASP, and to the loved ones of the Editors, especially Victoria Terry, Zhang Tian-Lu, Kim GuiBong, Felicity Morris, and Jane B. Hanrahan.

Professor Atsushi Fujita
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Aerials Skiing in China
Zhang Li-Wei and Wang Jin

In

Secrets of Asian Sport Psychology
Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

Olympic performance is largely determined by the combined influence of physical talent, technical ability and psychological control during competition. Physical and technical abilities are relatively stable factors that do not change from day to day or within a short period of time. However, an athlete’s psychological state can change not only from day to day, but also from moment by moment, especially when competing at the elite level. Since the Olympic Games are the highest level of competition in the sports arena, athletes who compete in them experience tremendous pressures in many different ways. The internal pressure on Olympic athletes may originate from perceptions of having invested a great deal of time, energy, dedication, and many resources over a long period for the purpose of achieving Olympic success. External pressure may come from coaches, parents, friends, institutions, fans, and so on. Therefore, often the greatest fears and concerns for Olympic athletes are not related to whether they are prepared for the Games, but rather that they are afraid of not doing well even though their physical and technical skills have reached a superior level.

Having well-developed skills alone may not guarantee success because psychological factors play such a significant role in determining whether an athlete can succeed in the Olympic environment. Sometimes, due to pre-competition anxiety, Olympic athletes are unable to sleep well for a month before the Games start and many who are unable to handle the competition pressure, “choke” or lose concentration. Thus, helping athletes to effectively maintain an optimal psychological state and to master techniques of mental and psychological control has been one of the major challenges and foremost tasks for preparing them to achieve success in the Olympic Games. Since there is only one Olympic champion in each event every four years, the Olympic title belongs to the athlete who is well-prepared in all the aspects that contribute to peak performance. Hence, psychological training is one of the most critical fields in the process of preparing athletes for the Olympics.
The Chinese Olympic aerials teams have produced some impressive performances since the sport gained medal status in 1994, winning eight medals overall (to 2014) including a gold medal from Han Xiaopeng in the men’s event and a silver medal from Li Nina in the women’s event, at the 2006 Games in Turin, Italy. At the 2010 Winter Olympic Games in Vancouver, Canada, eight Chinese athletes participated in the freestyle skiing aerial events and seven of them made the finals. Li Nina, nicknamed the Snow Princess, again won a silver medal and Guo Xinxin and Liu Zhongqing both won bronze medals. It was no accident that the Chinese team did so well. The excellent performances were the result of the group efforts of the whole team, which included the leadership team, technical coaches, strength and conditioning coaches, and the sport psychology consulting team. The psychology consulting team was credited by the coaches with playing a vital role in ensuring that the athletes used the psychological skills that they had learned, to achieve an optimal psychological state for producing peak performances at the Olympic Games. In this chapter the authors present the psychological training approaches they used to prepare the Chinese team for the 2010 Winter Olympic Games to promote an understanding of psychological training and counselling for elite athletes from a uniquely Chinese cultural perspective.
Overview of the Psychological Training Program

The psychological training program ran from December 2008 to February 2010. Our primary objective was to enhance the self-confidence and self-control of the athletes. The program included a series of group seminars to teach basic psychological skills, theme visits and workshops aimed at character and moral development, biofeedback training, development and refinement of competition plans, individual counselling, plus psychological testing and self-monitoring strategies. The psychological training resulted in positive outcomes by helping the athletes to cope with psychological anxiety, improve the consistency of their performances in competition, and improve their thinking skills, which were the three areas identified by coaches as the major psychological challenges faced by the athletes. At the same time, taking into account the athletes’ specific perspectives rooted in the Chinese culture, we considered the core values of self-confidence, self-control and self-development for the purposes of establishing good behavioural habits and a positive mindset.

During the process of preparing the Chinese aerials team over a one and a half year period, we gained a better understanding of the characteristics, challenges and goals of psychological training for elite athletes. We recognised the importance of the establishment of dialectical thought (see http://en.wikipedia.org/wiki/Dialectic and Chinese culturally-based, self-confidence, self-control and self-development as the core of our training foci. In addition, we emphasised athletes’ good habits and positive thinking approaches as central to our psychological training model. On the basis of our experiences delivering the program, we subsequently proposed a three-level psychological training system for athletes (Zhang & Zhang, 2011).

VISION-ORIENTED: VALUE SYSTEM
Philosophy, history, literature, art education

KNOWLEDGE-ORIENTED: PSYCHOLOGY EDUCATION
Recognition, emotion, motivation, personality, cognition, social orientation

TECHNIQUE-ORIENTED: BASIC PSYCHOLOGICAL SKILL TRAINING
Goal setting, relaxation, behavior, biofeedback, attention, thought control training

Figure 1. Psychological Training System for Chinese Athletes

The base level of the system is technique-oriented, teaching basic psychological skills aimed at ensuring the athletes master the techniques and methods of psychological control. Through training, they develop positive psychological and behavioral habits. The second level of the system is knowledge-oriented psychology education. It is designed to help the athletes understand the psychological control techniques according to the basic principles of sport psychology. The third
level of the system is vision-oriented, cultural education covering four aspects: philosophy, history, literature, and art education. It is designed to help the athletes approach their sports career and life journey with appropriate ideological and dialectical methods. At the same time, by being enriched culturally and developing a spiritual mindset, athletes will not simply focus on learning psychological skills; instead, through enhancement at the ideological level and the establishment of optimal behavioural characteristics, they will be more likely to reach their full potential by striving for best performance, continuous self-improvement, and achieving their life-long goals.

Psychological Training Seminars

The purpose of the psychological training seminars was to help the athletes gain basic knowledge of how to properly control their psychological states, improve their psychological well-being, and develop positive attitudes towards life. The psychologists organised a series of 30 seminars, with lectures on specific topics such as self-confidence, self-control, and individual values. These lectures inspired the athletes to take a broader view of their own lives and to perceive things from new perspectives through introspection and reflection. For example, after a lecture about a group of Chinese athletes who turned adversity into triumph, one athlete wrote: “The underlying reason why they could reverse the situation was because they never gave up, even in the most difficult of situations. They maintained a strong belief in their sport, the Olympic Games, and the goals in their life. They devoted their passion, self-confidence, and strong will to their profession. They kept a clear mind, patience, and a positive attitude toward training, and they were determined at every step to move forward and learn valuable experiences from success or failure, staying brave when facing setbacks. Every day’s training is a challenge. When your mind focuses on training, everything becomes full of passion instead of boring. I should learn from them, understand the process, and know how to engage in self-realization.”
Theme Visits

As the athletes trained in a relatively closed environment for long periods, we introduced strategies to help them broaden their vision, by stimulating their philosophical thinking and providing a new perspective from which to examine their daily training, competition, sports career, and life journey. Teaching specific mental training skills and psychological control techniques, such as relaxation, attentional control, and regulation of emotions, provided them with very beneficial skills but we wished to add another level of the program that would enhance their outlook on their own lives. For this purpose, we arranged theme visits to which the athletes responded very positively (see Table 1).

Table 1. Content and Purpose of the Theme Visits

<table>
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<tr>
<th>Date</th>
<th>Content</th>
<th>Aim</th>
</tr>
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<tbody>
<tr>
<td>June 2009</td>
<td>Visit the Beijing Planetarium</td>
<td>To help athletes to recognise their position in the vast universe, and the lifelong road ahead</td>
</tr>
<tr>
<td>Oct 2009</td>
<td>Visit the Bird’s Nest Stadium in Beijing</td>
<td>To inspire the athletes to fight hard for the glory of the country</td>
</tr>
<tr>
<td>Oct 2009</td>
<td>Watch 2004 and 2008 Olympic videos</td>
<td>To help the athletes better understand the meaning of their lives from the social values, interests, and noble ideas of others.</td>
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</table>

Training camps were held regularly at the Beijing Sport University (BSU). In order to create an inspirational atmosphere and to improve athlete motivation for training, during May 2009, all athletes provided a list of their own aphorisms (i.e., brief statements of principles), which were collated and voted on by the group to choose the three most meaningful statements. Three large banners with the statements on them were created and hung on the wall of the training facility. The aphorisms chosen were “Did you work hard today?”, “Opportunities will always belong to those who are well prepared,” and “The difference between success and failure relies on persistence.” Additionally, a slogan written by one of the BSU students, Zhou Dawen, was placed on the wall of the athletes’ apartment, which read, “The secret of success is perseverance.”
Thematic Workshops

We organised two thematic workshops, during which we encouraged athletes to discuss and share their thoughts and perspectives, culminating in each athlete giving a presentation to the other athletes.

Workshop 1. The Universe in My Mind, The Hero in My Heart

Every athlete has a personal philosophy of life, an individual viewpoint on how to do things and appropriate ways of behaving. The athletes prepared well by carefully finding information and meticulously making PowerPoint presentations and, as a result, they all made animated and impressive speeches. The leadership personnel of the Center of the Winter Olympic Events came to listen to the athletes’ speeches and acted as the judges, giving every presentation a score. The athletes’ speeches were a great success; not only were they filled with profound ideological content, but also the feelings expressed moved the entire audience. One athlete, a medallist in Vancouver, recalled making the speech with the words, “My deepest memory was last year’s theme speech and I remember that I was extremely nervous during my speech. As a result, my speech was ineffective, but it helped me greatly from a psychological perspective. I was able to face such situations in a much calmer manner when I was next given the opportunity.” Table 2 shows examples of the presentation topics chosen by the athletes.

Table 2. Presentation Topics for The Universe in My Mind, The Hero in My Heart Workshop

<table>
<thead>
<tr>
<th>Athlete</th>
<th>Presentation Topic</th>
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<tbody>
<tr>
<td>A</td>
<td>When failure comes, the opponent cannot beat you, but you can be beaten by yourself.</td>
</tr>
<tr>
<td>B</td>
<td>I want to keep forever the bright red colour of my history.</td>
</tr>
<tr>
<td>C</td>
<td>If my teammate can obtain the Olympic gold medal I will support her; If I am closer to the gold medal, I would not hesitate to achieve.</td>
</tr>
<tr>
<td>D</td>
<td>If I experience adversity, I have to learn to deal with the setbacks and be brave.</td>
</tr>
<tr>
<td>E</td>
<td>Failure is not a destination, it is a precious life experience. It makes us stronger and helps us to have a better life.</td>
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The second workshop was based on the theme of The First-Timer or Re-Participant at the Winter Olympic Games; I Want to be a... Through this theme we encouraged the athletes to identify an individual theme that inspired them to think about the longer-term implications of Olympic participation. In particular, we guided the athletes to understand the meaning of self-improvement, which can be trained, can be used in competition or life, can be perceived as technical, physical or psychological, can be detailed in nature, can be seen as macroscopic, can be revealed at the critical moment, and can be planted forever in the heart accompanying them...
through the rest of their life journeys. Although the subject seemed quite ordinary, it touched the souls of some athletes who had not wanted to face, talk about or think about the topic before. We encouraged them to confront, to think, and to imagine. All the athletes in the theme workshop did this very carefully before writing anything down in preparation for their presentations. Although the presentation topics differed (see Table 3), they all reflected the reality of their self-improvement after seriously considering the significance and interpretation of the meaning of their lives.

Table 3. Themes and Testimonials from Athlete Speeches

<table>
<thead>
<tr>
<th>Athlete</th>
<th>Theme</th>
<th>Testimonial</th>
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<tbody>
<tr>
<td>A</td>
<td>I want to be a strong woman.</td>
<td>I failed again, again, and again. I experienced numerous stumbling blocks, and then I gradually became a strong person.</td>
</tr>
<tr>
<td>B</td>
<td>Challenge myself to achieve difficult goals.</td>
<td>A sports career is a very short part of my life journey, but through my athletic career, I have learned the principles of hard work, strength and persistence. These qualities will positively affect my life in the future.</td>
</tr>
<tr>
<td>C</td>
<td>Self-confidence is a life-long quality.</td>
<td>Since self-confidence is a life-long quality, not only would I like to achieve peak performance and honours, but also through preparing for and competing in the Olympic Games, I would enhance my self-confidence not only for the Olympic Games, but also for my future life.</td>
</tr>
<tr>
<td>D</td>
<td>My Olympics.</td>
<td>I would like to take this opportunity to make a contribution to my motherland and the community! I also want to be an outstanding and unique individual!</td>
</tr>
<tr>
<td>E</td>
<td>Go beyond myself in the face of adversity.</td>
<td>I need to keep a normal attitude toward everything. This is a big step forward in my life. I have to learn to accept what I do not want to accept.</td>
</tr>
</tbody>
</table>
Biofeedback Training

The purpose of biofeedback training was to allow athletes to receive biological information from their own bodies, and thereby help them to perceive the changes in their body and especially to distinguish between tension and relaxation. By doing this, they can enhance their ability to regulate these biological changes and especially to learn to relax, which is important for controlling competitive anxiety and psychological tension, and thus to obtain an optimal psychological state in order to achieve peak performance in competition.

Our biofeedback method involved electromyography (EMG) and we also monitored changes in heart rate, rate of breathing and skin temperature. The first activity required athletes to engage in five minutes of abdominal breathing (the computer screen provided information about their breathing rate and heart rhythm, blue representing the breathing rate and red denoting the heart rhythm), followed by 10 minutes of relaxation exercises. Athletes were usually able to master the relaxation techniques after a few sessions and to achieve a relatively stable psychological state. In the final biofeedback training session changes were made to the way in which the feedback was presented. Although the athletes were affected by the changed conditions initially, the effect was small and they were usually able to quickly adapt to the new conditions.

At the end of each training session, the sport psychology consultants sought feedback from athletes. Following the second session, Athlete B reported that she was not used to abdominal breathing, that it made her chest feel tight, and that she had to take a big breath from time to time (other athletes also reported this). When we checked her EMG results before and after abdominal breathing, we found that abdominal breathing made her more relaxed, that the relaxation persisted, and hence we concluded that the athlete felt uncomfortable because this was a change from her normal breathing patterns. Upon Athlete B’s request, we provided additional biofeedback sessions for her. After the third additional session, she no longer felt any tightness in her chest and began to feel more comfortable using abdominal breathing. After the last training session, Athlete B wrote down her feelings about the training: “After the biofeedback training, I felt better and better. I attribute this to the abdominal breathing training. Now when I am nervous about executing difficult technical routines I use abdominal breathing; I feel great and it does have beneficial effects. My breathing becomes stable very quickly. My breathing stays very stable, almost without any ups and downs. I am just beginning to grasp the breathing technique, so it is not yet completely automatic. I believe that I will be better once I can do this automatically.”
Competition Plans

Sport psychologists promote the importance of developing competition plans as such plans represent a crucial step in formulating pre-competition and competition routines. A competition plan should include preparations for coping with potential problems that may occur in competition and for establishing appropriate cognitive and behavioral strategies, including routines and intervention approaches for any unforeseen events during competition. They include such things as measures that need to be taken on the pre-competition day, activities for the night before competition, preparatory activities before competition, specific activities and cognitive preparations after the first round of competition, and so on. Plans for countermeasures to be taken in the event of unexpected circumstances such as competition time changes, harsh weather, teammates performing badly, or poor physical or psychological states before competition, should be included. Through extensive discussions with athletes and coaches based on their practical experiences, we took the following steps to formulate detailed, practical and competition-oriented competition plans.

STEP 1: Before the Chinese National Championships on January 1, 2009, we helped the athletes to formulate their pre-competition plans and this served as the basis for further developing their competition plans for the 2010 Winter Olympics.

STEP 2: On November 29, 2009, in Changchun City, we helped the athletes develop very detailed pre-competition plans, based on the following principles:

- **Countdown activities should be carefully planned:** what to do, at what time, and what to think for every segment of the 24-hour block of time before competition.

- **Plans should be very specific,** including how the athletes should control their psychological state and the way they behave when talking to reporters, coaches or teammates.

- **Plans should be based on the athlete’s existing and already formulated routines,** and then revised where necessary.

- **The closer it gets to jump time, the more detailed the content should be.**

- **The countdown plan for the final 15 minutes before jumping should be brief and clear; all preparations have been well planned so everything should be ready.**

- **Positive words should be used when giving instructions to the athletes.**

STEP 3: On December 8, 2009, in Changchun, we organised a seminar to discuss the competition plans. The sport psychologists and all the coaches participated to refine the pre-competition plans based on each athlete’s psychological characteristics. The following is an example of the content of the discussion between an athlete and the coach:
Coach: “Instructions before competition should be simple. Don’t think too much. You need plenty of time to warm up, and engage in sufficient jumps during the warm-up period.”

Athlete: “I need my coach to remind me to prepare early in the transition zone. Before take-off, look at me, encourage me, and give me a high five.”

STEP 4: On January 31, 2010, in Changchun, based on the outcomes of the previous six World Cup events in China, Canada and the United States, we modified the pre-competition plans by adding the final element of the plans, which was the most important psychological preparation component.

STEP 5: On February 13, 2010, before departure to the Vancouver Olympic Village from the Canadian Training Center, the sport psychology consultants made another revision to the pre-competition plans and also provided written feedback to every athlete. An example of a pre-competition plan after five rounds of modifications is shown in Table 4.

Table 4. Example of an Olympic Pre-Competition Plan

<table>
<thead>
<tr>
<th>If ... happens</th>
<th>I will ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the bus is late</td>
<td>On the bus, I need to rearrange my warm up activity sequences and time.</td>
</tr>
<tr>
<td>If it snows today</td>
<td>Last night I had already waxed my snow cleats. I have prepared in advance.</td>
</tr>
<tr>
<td>If it is very windy</td>
<td>I need to keep active, take sports drinks, maintain body energy, patiently wait, warm-up, and do imagery.</td>
</tr>
<tr>
<td>If the speed is slow</td>
<td>Wax, tuck body together, don’t change the way of jump, believe in myself, be decisive, and keep calm.</td>
</tr>
<tr>
<td>If there is something wrong with my equipment</td>
<td>Stay calm, immediately fix or change the equipment, believe in myself, trust the equipment, then test speed again. Before competition, always examine the safety of the equipment.</td>
</tr>
<tr>
<td>If an unexpected thing happens during competition, and I must wait for a long time</td>
<td>Be patient, listen to music, pay attention to what I am doing, keep calm, keep clear in my mind, stay relaxed, and keep my body active. Always keep warm, and wear a jacket. Always be prepared to compete.</td>
</tr>
</tbody>
</table>
Individual Counselling

During the process of preparing for the 2010 Winter Olympic Games, the psychological consulting team provided special one-to-one consultation for athletes who were troubled or confused, or were focusing on problems that had occurred in training, competition, or their personal lives. The psychological issues of these athletes included concerns about whether or not they would make the final team selection, issues of low self-confidence, poor attentional control in competition, psychological rehabilitation after injury, coach-athlete relationships, and so on. The main objective of the counselling was to guide the athletes to maintain a positive attitude when facing difficulties and challenges, and to achieve self-confidence, self-control and self-reliance. The benefits of the psychological counselling were obvious and could mainly be seen in improvements in the athletes’ attitudes, in their willingness to make more strenuous efforts during training, and in their ability to remain calmer and more focused.

Since the sport psychology consultants were not accredited to enter the competition venues in Vancouver to provide on-site psychological support to the athletes, it was necessary to provide assistance in advance so that the athletes could prepare for competition by themselves. Additionally, the consultants provided the coach on the hilltop and the team doctor with specific suggestions and advice so that they could “read” the athletes and provide them with psychological support during competition based on pre-arranged principles. What follows is an example of how we helped the athletes through one-on-one counselling.

![Credit: amlibrarian/flickr/CC-BY-NC-SA-2.0](image-url)
Athlete A: Counselling for competition

During the World Cup Series in Canada and the United States, which took place during January 2010, just prior to the Olympic Winter Games in Vancouver, we assessed Athlete A to determine her ability to compete successfully at the Olympics. The psychological consulting team focused on helping her to develop an appropriate psychological orientation by eliminating her tendency to compare herself with other athletes. When athletes engage in social comparison before competition, they are more likely to experience anxiety that disrupts their attentional focus. We taught the athlete the techniques of how to pay attention to the controllable factors, engage in self-comparison, and maintain a positive psychological orientation. The following are extracts from the counselling records for Athlete A, which are reproduced here with her permission.

January 22, 2010: After the morning preliminary competition, I asked her, “Do you have any problems going into the final?” She replied, “I am now competing against only one particular person,” clearly implying that she was competing with a teammate as her major competitor for Olympic selection. I said to her, “If you compare yourself with others, there are many things you cannot control. If you avoid comparing yourself with others, this will make you more comfortable and more relaxed.” She replied, “Right now I cannot stop making comparisons with others and I have to compare myself to my rivals.” I said to her, “You should pay attention to the controllable factors, compete with yourself, and try to do better than the previous jump.” In the final, Athlete A fell during a jump. When she started to cry I comforted her, “There are more opportunities in the future, don’t give up! The competition is like Microsoft Windows; when one window closes, you can open another one, a better one. Your life is a long journey, and you will continually move on.”
January 24, 2010: During the post-competition team meeting, Athlete A concluded, “I did not perform well in the competition because I was not bold enough, not decisive enough, and I lacked confidence. I was unable to find a way to control myself.” She went on to explain that she was over-concentrating, which caused excessive nervousness. She over-complicated a familiar skill and as a result became more and more nervous during the competition. She then stated again: “Although my performances were repeatedly poor, I still have the confidence to do well. There is still one more World Cup event. No matter what happens, I will do my best to fully prepare myself. I would like to extend my sincere thanks to the sport psychology consultants who encouraged me when I did not do well in competition. Although the psychology consultants did not talk much, at that critical time, their instruction was truly important to me.”

January 30, 2010: This was the last event of the World Cup Series just two weeks before the Vancouver Olympics began. Before Athlete A started jumping I reminded her, “Before jumping, please focus only on the action. You are competing with yourself, not comparing yourself with others.” She nodded her head and said, “Thank you, teacher.” At this competition, she achieved her best performance of the six World Cup competitions, taking first place in the preliminary round and second place in the final. Soon after, Athlete A was selected as a member of the 2010 Winter Olympic delegation. The sport psychology consulting team sent her an “Olympic Message” to congratulate her on her selection and to encourage her future efforts and achievement. Athlete A achieved a personal best performance at the 2010 Olympic Winter Games.
Psychological Testing

As part of the psychological training program, all team members took Chinese-language versions of the Sport Self-confidence Scale (SSC; Vealey, 1986; Zhang, & Mao, 2009), the Athlete Burnout Questionnaire (ABQ; Raedeke & Smith, 2001; Zhang & Mao, 2009), and the Short-form Profile of Mood States (POMS; Grove & Prapavessis, 1992; Zhang & Mao, 2009; Zhu, 1995) on three occasions each (December 2008, August 2009, December 2009). Group scores remained within the normal range and did not vary significantly over the three testing sessions on any measure, indicating that self-confidence and mood remained stable, and that the athletes did not experience symptoms of burnout.
Self-Monitoring

One of the primary goals of psychological training is to foster in athletes an ability to effectively engage in self-monitoring of thoughts, emotions and behaviours, and eventually to develop the skills required for their self-regulation. To this end, during a training camp held in Quebec, Canada during August 2009, athletes filled out a daily Psychological Training Diary (see Table 5).

Table 5. Psychological Training Diary

| Name: ______________________ | Date: ______________ |

1 = I did very badly; 5 = I did very well

<table>
<thead>
<tr>
<th>Self-Test Item</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before training, I used positive words to encourage myself</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>I set clear and specific objectives</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>I met challenges, and I controlled my emotions</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>I paid attention to controllable factors</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>After training, I used positive words to encourage myself</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Today I accomplished the pre-established plans</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

We gave individualised written feedback to athletes based on their diary entries. An example of the feedback reads, “You have done a good job by setting clear and specific goals, but it seems that there is room for improvement in the areas of self-control of emotion and paying attention to controllable factors. As we have discussed before, retaining a championship title is a more difficult task than winning the title for the first time, so I would like you to remember that not being afraid of failure is more difficult than daring to succeed in any situation. When you are successful, your family, friends, the media, coaches, teammates, your opponents, and everyone else around you will treat you differently. Amid the praise and admiration, can you remain calm and maintain normal attitudes? I hope you can be like the sea: No matter how many rivers pour in, the sea still has the same tides and wave formations. If you want to go beyond your limit, you must become an ordinary person again!”
Evaluation of the Psychological Training Program

The consensus among sport psychologists is that the evaluation of the effectiveness of psychological training programs is challenging and complex, and thus should be conducted in multiple ways (Si, 2006). Hence, we combined evaluative feedback from several sources in order to judge the effectiveness of the program, using information gleaned from the perspective of objective performance data, perceptions of the athletes and the head coach, and the personal reflections of the sport psychology consulting team.

Objective Perspective

We recruited three substitute athletes to evaluate the competition performance of the participating Chinese athletes at the 2010 Winter Olympics Games. All three athletes watched the preliminary and final competitions, evaluating performances objectively on a 1 (performed very poorly) to 5 (performed very well) scale. The evaluations showed that in the preliminaries, the average rating of the eight athletes who competed was 3.87 points, a little above their normal performance levels, and the average level of the seven athletes competing in the finals was 4.38 points, well above their normal performance (see Table 6). The performances in the finals improved compared with the preliminaries. This showed that the performances of the athletes at the 2010 Winter Olympics were generally better than their normal performances, which was indicative of psychological stability.

Table 6. Performance Assessments of Chinese Aerials Team at the 2010 Winter Olympic Games

<table>
<thead>
<tr>
<th>Athlete</th>
<th>Prelim Jump</th>
<th>Prelim Score</th>
<th>Final Jump</th>
<th>Final Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>FDF; DFF</td>
<td>4.33</td>
<td>DFF; DFDF</td>
<td>5.00</td>
</tr>
<tr>
<td>B</td>
<td>LFF; FFF</td>
<td>3.67</td>
<td>LFF; FFF</td>
<td>4.33</td>
</tr>
<tr>
<td>C</td>
<td>FDF; DFF</td>
<td>4.33</td>
<td>FDF; DFF</td>
<td>4.67</td>
</tr>
<tr>
<td>D</td>
<td>LFF; FFF</td>
<td>4.00</td>
<td>FFF; LDFF</td>
<td>4.00</td>
</tr>
<tr>
<td>E</td>
<td>FDFF; FFF</td>
<td>3.33</td>
<td>FDFF; FFDF</td>
<td>4.67</td>
</tr>
<tr>
<td>F</td>
<td>FDFF; DFF</td>
<td>4.33</td>
<td>FDFF; DFFF</td>
<td>4.00</td>
</tr>
<tr>
<td>G</td>
<td>FDFF; DFFF</td>
<td>4.00</td>
<td>FDFF; DFFF</td>
<td>4.00</td>
</tr>
<tr>
<td>H</td>
<td>FDFF; LDFF</td>
<td>3.00</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>3.87</td>
<td>_</td>
<td>4.38</td>
</tr>
</tbody>
</table>

Note: Compared with normal performance levels, 1 = performed very poorly; 2 = performed poorly; 3 = performed at normal level; 4 = performed well; 5 = performed very well
Athlete Perspective

Immediately prior to the 2010 Winter Olympics Games, we invited the athletes to sum up their perspectives on the psychological training program that they had experienced. The following are examples of the thoughts of the athletes.

**Athlete A:** At critical moments I should know the right thing to think and what psychological state I should attain, especially when I plan to a jump for the first time. If I am in a state of panic and fear in regular practice, I should know how to control my psychological state to reach an optimal level. The program helped me to develop these skills.

**Athlete B:** I feel that I have improved a lot in many different areas through the psychological training. Now I can control psychological problems, pay attention to the controllable factors, keep calm and think rationally when facing challenges.

**Athlete A:** Psychological training has helped me gain a new understanding and perspective on the meaning of life and think about issues more critically with a brand new perspective. No matter what difficulties or challenges I encounter, I will no longer feel fear and helplessness, whether in competition or my normal life. I feel very good about that.

**Athlete B:** The program has helped me to control my psychological and emotional states well, and to think about the positive aspects of myself.

**Athlete A:** I keep my concentration by not being distracted by external stimuli before or during training. I follow the pre-competition and competition plans to deal with any situations, including adverse situations that need to be overcome, with a strong will and determination.

**Athlete B:** The pre-competition plans are very important, not being distracted by little things, being firm in my faith, and treating the competition seriously and with respect.

**Athlete A:** The theme speeches, individual counselling, and developing a game plan were all very helpful to me. I feel I should also participate in group discussions more in order to analyze and identify my own weaknesses. Sometimes, when the team leaders were here, I could not speak my true perspectives, instead I said some common, superficial things; neglecting the real issues in such a way that prevents me from solving the problems.

**Athlete B:** I would like to engage in more activities that can help us improve our ability to face the public. Then when perform in front of a lot of audiences, we could effectively regulate and control our psychological states.

**Athlete A:** I feel that besides receiving psychological training, we need to engage in more honest dialogues, and be given the opportunity to speak truthfully in order to really solve the problems that occur during competition.
Coach Perspective

The sport psychology consulting team asked Mr Ji Dong, Head Coach of the Chinese team, to provide his feedback and evaluation on the implementation and effectiveness of the psychological training programs. He wrote the following in his evaluation.

“The sport psychology consulting team provided an effective psychological training service, which included not only theoretical knowledge, but also psychological training methods. Besides that, the leader and members of the psychology consulting team actually became part of the team by training and working together with the coaches and athletes in practice and competition. By working at the front line of training and competition, the psychology consultants were able to get first-hand information and receive valuable feedback from the athletes. Over a long period of time working with the team, they were able to successfully integrate the theoretical knowledge into practical training, combining them effectively. In particular, Professor Zhang Liwei stood at the highest jumping platform to provide psychological instruction and counselling to ease the fear of the athletes and enhance their self-confidence.

In preparation for the competition, the psychological consulting team revised and developed the pre-competition and competition psychological plans many times. Eventually, the consulting group made a detailed final plan that took into account the full range of potential challenges and difficulties the athletes might face in competition. Finally, they developed a personalised program for each athlete. The results of the psychological training were fully reflected in the excellent performances of the athletes at the 2010 Winter Olympics. Specifically, a total of eight Chinese athletes participated in the Games, of which seven entered the finals; all seven athletes finished in the top eight in the final, with one winning a silver medal and two winning bronze medals. We truly appreciate your excellent work and the support you extended to our teams. We sincerely hope that your psychology consulting team will continuously support us and provide your excellent service to our teams in preparation for the 2014 Winter Olympic Games.”
Personal Reflections

We applied a humanistic counselling approach, based on Maslow’s self-actualization theory (Maslow, 1943) and Rogers’ psychological counselling principles (Rogers, 1989). Rogers pointed out in his book, *A Way of Being* (translated into Chinese by Zhang, Zhu, & Yuan, 1987), “As long as we can create a sincere coexistence, mutual understanding, an atmosphere of mutual respect, there will be a miracle. Everyone can change from rigid into flexible, from static to dynamic, from dependent to independent, and gradually realise their full potential.” Rogers also noted that the success of treatment is not primarily dependent on the treatment techniques, but on whether the treatment has a certain attitude, and he further emphasised that the clinician should be sincere, unconditional, positive, caring and empathic toward patients.

During the process of counselling the athletes we fully recognised that they were elite performers rather than patients and that the issues that needed to be resolved were performance concerns and not pathologies. Their challenge represented a process of seeking self-actualization by continuously overcoming self-limitations and a range of psychological barriers. Therefore, Rogers’ counselling philosophy became particularly applicable. In the counselling practice, we deeply appreciated his principles of non-directive therapy, active care, empathy, and sincere exchange of ideas to obtain athletes’ trust, to open the windows to their soul, and to help them to cope with difficulties, setbacks, and continuous self-development in ways that would have a lasting effect.

Long-Term Benefits for Athletes

Our sport psychology consulting team not only focused on the athletes’ psychological training and competition, but also showed great concern about their personal long-term development. During training periods at the Beijing Sport University, for the long-term development of these athletes, we invited academic instructors whose expertise was in areas other than physical education and sport science to teach the athletes and coaches academic subjects such as Chinese languages and English twice a week. The athletes showed great interest in studying these subjects. We believe that in the process of helping the athletes with their psychological training, our concern for their overall well-being and future careers reflected our passionate support for these athletes.
As a group, the psychology consultants were older than the athletes and coaches, but we did not hesitate to help the athletes with such things as carrying heavy skis at the airport. We were not only university professors, but also the athletes’ friends. Our job was to provide psychological training and counselling, but we also willingly and diligently shoveled the snow on the mountains, repaired the landing slope, and engaged in other training-related work together with the athletes and coaches on days when it was snowing. We provided our athletes and coaches with numerous lectures and counselling sessions giving them professional psychological suggestions and advice. In the process, we discovered so many impressive and commendable qualities and actions of these athletes, coaches, and team managers. We made contribution to this team, but we also gained a lot through our consulting experience. We experienced icy, snowy and bitterly cold weather as low as minus 34 degrees Celsius, and unfortunately witnessed athletes suffering excruciating ligament ruptures. We heard the cries of grief of those whose Olympic dreams were shattered, and listened to athletes as they expressed their fears about their injuries, and their longing for success. There was an athlete who was born on the same day and same year as the son of the first author. By spending more than 10 days with this athlete, the author developed a better understanding of what is pain, what is dedication, what is worry, what is a dream, and what is self-transcendence.

Helping the athletes prepare for the 2010 Winter Olympic Games was a grant project approved by the Chinese Olympic Committee. Our psychology consulting team signed a contractual agreement with the Chinese Olympic Team, identifying that the central mission of our consulting work was to ensure success for the Chinese Olympic aerials athletes. In addition to helping the athletes to achieve peak performance through psychological training, our non-contractual task and long-term goal was to help them engage in self-improvement and self-development in order to achieve their life-goals and find happiness on their life-long journey. The Olympic Games take place every four years, but we wanted to help the athletes to continuously achieve their dreams and, in doing so, to actualise our own dreams by increasing our psychological knowledge and enhancing our competence in consulting with elite athletes.

Psychological training for elite athletes is undoubtedly one of the most important processes for helping them achieve peak performance in high level competition. Each psychology consultant has unique ways of providing training and counselling based on the particular athlete’s psychological characteristics and unique situation. Because every athlete is different, a psychological training program should be tailored to individual needs for the best outcome. With this principle in mind, our psychology consulting team developed consulting programs that were multi-layered and diverse, yet deeply rooted in the Chinese culture. Since our athletes had lived in China their whole lives, their ideology, beliefs, value system, ways of thinking, behaviors, visions, dreams, psychological characteristics,
and personality traits were strongly influenced by Chinese culture. We intentionally designed our programs to take into account the characteristics of the Chinese culture while integrating Western psychological consulting approaches. Based on the excellent performances of the Chinese aerial skiing athletes at the 2010 Winter Olympic Games in Vancouver, it is concluded that the psychological training approaches we provided for our athletes were successful. It is our hope that these culturally-sensitive psychological training approaches will benefit athletes, coaches, practitioners, and sport psychology specialists in the future.

REFERENCES


VIDEOS

11. Chinese Freestyle Aerials: www.youtube.com/watch?v=SRIA1howAMw
26. Li takes off for silver: www.olympic.org/videos/li-takes-off-for-silver
27. Liu takes off for bronze: www.olympic.org/videos/liu-takes-off-for-bronze

PHOTO CREDITS

10. The athletes from China entering the stadium at the opening ceremonies of the 2010 Winter Olympics by Jude Freeman, used under a Creative Commons Attribution 2.0 Generic license. (CC-BY 2.0) from http://en.wikipedia.org/wiki/File:2010_Opening_Ceremony__China_entering.jpg
11. Team photograph, courtesy of Wang Jin
12. Freestyle Skiing Men’s Aerials Final by Duncan Rawlinson, used under a Creative Commons Attribution-NonCommercial 2.0 Generic (CC BY-NC 2.0) licence, from http://www.flickr.com/photos/2002#N0/333222/
14. Freestyle Skiing Men’s Aerials Final by Duncan Rawlinson, used under a Creative Commons Attribution-NonCommercial 2.0 Generic (CC BY-NC 2.0) licence, from http://www.olympic.org/videos/44124400268@N01/4392697907/
15. Sport psychologist and team, courtesy of Zhang Liwei
17. Medalists by amlibrarian, used under a Creative Commons Attribution-NonCommercial-ShareAlike 2.0 Generic (CC BY-NC-SA 2.0) licence, from www.flickr.com/photos/203#N00/323
21. Flower ceremony by amlibrarian, used under a Creative Commons Attribution-NonCommercial-ShareAlike 2.0 Generic (CC BY-NC-SA 2.0) licence, from www.flickr.com/photos/26803869@N00/439862377
23. Medalists by amlibrarian, used under a Creative Commons Attribution-NonCommercial-ShareAlike 2.0 Generic (CC BY-NC-SA 2.0) licence, from www.flickr.com/photos/26803869@N00/4398862845
24. Liu Zhongqing competing in the men’s aerials at the 2010 Winter Olympics by Duncan Rawlinson, used under a Creative Commons Attribution 2.0 Generic licence. (CC-BY 2.0), from http://en.wikipedia.org/wiki/File:Liu_Zhongqing.jpg
28. The first author delivers a seminar to the athletes, courtesy of Zhang Liwei
28. With the athletes, courtesy of Zhang Liwei
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Archery in Korea
Han MyungWoo, Kim YoungHo, and Hong SeongTaek

In
Secrets of Asian Sport Psychology
Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

The Republic of Korea is undoubtedly the most successful nation in the history of competitive archery, having won 19 of the 36 Olympic gold medals on offer since archery was re-introduced into the Olympic Games in 1972. The Korean women’s team has been particularly successful, winning 14 of the 15 Olympic gold medals contested during the period stretching from the 1984 Los Angeles Olympic Games to the 2012 Olympic Games in London; a record of unparalleled success in any Olympic sport. The dominance of Korean archers has been reflected in similar levels of success at the World Championships, World Cup events, and the Asian Games.

In 1992, the Fédération Internationale de Tir à l’Arc (FITA; International Archery Federation) revised the style of competition for Olympic archery from the Grand FITA style where everyone shoots at once, to the Olympic round in the form of head-to-head, single-elimination contests. FITA’s rationale for this change was to make the sport more appealing for television audiences, although some people in the sport have expressed the view that the revised competition format also represented an attempt to break Korea’s domination of the sport. If that were truly part of the rationale, then the rule change has clearly not served its purpose. Korea has remained the dominant force in international archery, winning at least two gold medals of the four events (team and individual for males and females) in each Olympiad since the rules were changed.
One undoubted consequence of the revised format has been to alter the psychology of Olympic archery competition. Archery has always been considered to be a predominantly mental challenge, given that physical considerations are not critical and that the techniques of the sport, although very precise, are not overly complex. In Olympic round competitions, the rigid head-to-head format tends to intensify the psychological stress placed upon individual archers. Rather than releasing each arrow in the relative anonymity of a long line of competitors in the Grand FITA format, the spotlight falls very acutely on each competitor alternately, providing much greater awareness of the prevailing match score, and thereby encouraging more of an outcome orientation than a process orientation.

The closed-skill nature of archery and the absolute requirement for calmness during competition, demands an almost Zen-like state of mind. This was described by Herrigel (1948) in his classic text, *Zen in the Art of Archery*, as when “The archer ceases to be conscious of himself as the one who is engaged in hitting the bull’s-eye which confronts him. This state of unconscious is realized only when, completely empty and rid of the self, he becomes one with the perfecting of his technical skill.” This characterisation of the optimal psychological state for the sport has led many to conclude that the achievements of Korea’s archers are closely related to their superior mental control. However, to date, little information has been published or made available internationally about the development of archers in Korea. In this chapter, we chronicle some of the potential reasons for the success of Korean archery. We first provide a brief historical overview of archery and the establishment of the Korean Archery Association. Then we propose some of the factors that underpin Korea’s international success. Finally, we explain the psychological techniques used by elite archers in Korea, including lessons learned from interviews with Olympic champions.
A Brief History of Archery

Archery is one of the oldest sporting arts still practiced. The earliest indication of human use of a bow and arrow comes from the Ahrensburg valley north of Hamburg, Germany, dating from the late Paleolithic period, about 10,000–9,000 BC (Haywood & Lewis, 1997). In China, archery dates back to the Shang dynasty (1,766–1,027 BC). A war chariot of that time carried a three-man team of driver, lancer, and archer. Ancient Korean civilizations, such as the Silla, Baekje, and Goguryeo, were well known for their regiments of exceptionally skilled archers, and following the domestication of the horse, Mongol armies were renowned for their mounted archers (Duvernay & Duvernay, 2007).

Archery as a sport appears to have its origins in England. The first documented competition was the Ancient Scorton Silver Arrow, first held in Yorkshire in 1673 and still contested today. In the United States, sport archery was established when a group of Philadelphia gentlemen founded the United Bowmen Club in 1828. As the sport became widely accepted, the National Archery Association was founded in 1879. Archery was first included in the Olympic Games in 1900 in Paris, retained in 1904, 1908, and 1920, and then reintroduced in 1972 after a uniform set of rules had been established.

Modern archery has been organized internationally since FITA was founded in 1931 but traditional archery, known as Gungdo, retained its popularity in Korea. Modern archery was introduced to Korea by American soldiers after the Korean War and in 1963 the Korean Gungdo Association (KGA) joined FITA having amended its constitution to include modern as well as traditional forms of archery. In 1978, Korea participated in the archery competition at the 8th Asian Games, in Bangkok Thailand, its first participation in international archery. In 1983, modern archery split from the KGA and the Korean Archery Association (KAA) was established. One year later, Korea competed in the Olympic archery competition for the first time, returning from the 1984 Los Angeles Olympic Games with a gold medal in the women’s event.
Reasons for the Success of Korean Archery

The success of Korean archers in international competition has prompted many inquiries about training and performance strategies from coaches and athletes worldwide, and theorising about the secrets of their success. Some have hypothesised that the key to Korea’s domination lies in the highly attuned sensitivity in their hands, “The theory suggests that Korean women excel at feel sports such as archery and golf because of heightened sensitivity and dexterity in their hands and fingers. This sensitivity supposedly developed generations ago through the traditional method of making the national dish kimchi, where women use their hands to lovingly squeeze cabbage leaves for hours on end” (Rutherford, 2012). There is, however, no scientific evidence to support this theory and, of course, it does not explain the success of male Korean archers.

Information about the cognitive and behavioural strategies used by elite archers in Korea during practice and competition may provide valuable training guidelines for coaches and athletes from other nations. It is clear that many different factors have contributed to Korea’s international success, including large numbers of participants in the sport, a rigorous training system, significant extrinsic rewards, collective intelligence, great persistence among competitors, and cohesiveness between athletes and coaches. In this chapter, we will focus on three contributing factors: the challenging selection procedure, support from the KAA and the Korean Olympic Committee (KOC), and world-class scientific support from the Korea Institute of Sport Science (KISS).

Challenging Selection Procedure

It is said that it is necessary to “penetrate the hole in a needle if you want to be a Korean archery delegate.” This saying captures how difficult it is for a Korean archer to become a national team member. Only three among hundreds of excellent competitors in domestic tryouts are selected as Olympic team members. The selection process involves diverse environments, a variety of competition arenas, and different scoring systems. Received wisdom suggests that if an archer can survive the Korean process of selection, then (s)he deserves to be a gold medallist in the Olympics. A by-product of the rigorous selection procedure is the enhancement of an archer’s self-confidence.

After selection to the national team, special training sessions designed to strengthen mental toughness, concentration, and self-confidence are implemented. Archers are prepared for a range of competition scenarios by training at night, in the rain, in extreme temperatures, in front of a full stadium at a baseball game, and particularly by establishing detailed simulation of forthcoming
international competitions. The photograph below shows the Korean national team practicing in an elaborate mock-up of the Beijing archery stadium constructed at the National Training Centre in Korea prior to the 2008 Olympic Games. The simulated Olympic environment, available to the Korean team more than a year in advance of the Beijing Games, included an artist’s impression of the Chinese crowd along the side of the archery arena, complete with crowd noises in Chinese played over the loudspeaker system. Such sophisticated simulation strategies gave the Korean archers an opportunity to develop a sense of feeling at home in the forthcoming Olympic environment, and therefore less likely to experience the same levels of anxiety that often occur in an Olympic competition.

After securing the women’s team gold medal, archer Joo HyunJung, one of the victorious Korean trio in Beijing, recalled how well the team had been prepared for the event and, in particular, for the vociferous and partisan Chinese crowd, “We had various types of mental training to prepare. We knew China and the spectators would be very loud and the attention level would be very high. Mental training helped me because I felt nervous” (British Broadcasting Corporation, 2008a).

Part of the victorious Korean Olympic men’s team in 2008, archer Park KyungMo shot the gold medal-winning arrow in Beijing. He spoke of the crucial benefit of simulation training for when the critical moment in competition arrives, “Any one of us could have made that shot, any time. Of course I was very tense, I was under pressure and I was nervous. But that’s part of the game. When we were training for the Olympics in Korea we recreated these kinds of situations” (British Broadcasting Corporation, 2008b).

Somewhat controversially, the mental toughness sessions have often involved extreme activities such as bungee-jumping and platform diving, which were seen by some KAA administrators and coaches as a means of enhancing self-confidence and developing mental strength, based on the principle that if the archers could cope with the stress of a bungee jump then the Olympic environment should by comparison seem less threatening. This approach was also extended to include participation by the national archers in boot camps and survival courses usually reserved...
for Korean military special forces personnel such as the Black Berets. Survival courses ran for 3-7 days, in rugged mountainous terrain, with the archers passing through cemeteries on pitch-black moonless nights where they might encounter soldiers in ghost costumes, and sleeping rough where they might share their makeshift bed with a snake. Although a few of the archers enjoyed these extreme experiences, most didn’t. Such activities have now been discontinued for the Korean archery team primarily due to safety concerns and lack of evidence of a causal link with enhanced performance. Some coaches and KAA executives regard the demise of these activities as a retrograde step.

Support from the KAA and the KOC

The KAA and the KOC both support Korean national archery delegates in many ways. The KAA is responsible for the selection process of the national archery team. Once the archers are selected as the national delegates, the KOC then manages the remaining procedures for international competitions. As with most sports in many countries, the KOC convenes the national team including archers and coaches at special training camps prior to departure for the Olympic Games, and provides world-class facilities to assist them to train efficiently.

Above and beyond this, however, elite athletes in Korea have been eligible since 1975 to access “performance enhancement funds” from the KOC to pay for training costs, compensation for lost income, lump sum bonus payments for Olympic medals, and a lifetime monthly pension. For the 2012 London Olympic Games, bonuses were the US$ equivalent of $50,000, $25,000 and $15,000 for gold, silver, and bronze medals, respectively. Lifetime pensions range from $440 (bronze) to $833 (gold) per month.

In addition, the KAA also pay bonuses to Korean archers and coaches. After the London Olympic Games the KAA, sponsored by HyunDai and KIA Motors, paid about US$1.4 million to the national archery team. Ki BoBae, who won gold medals in both the women’s individual and team event, received around $210,000, while the other two female archers who won team gold were paid $100,000 each. Oh JinHyuk, who won gold in the men’s individual event and team bronze, received $170,000 dollars. Besides the archers, the coaches and some support staff members also received significant performance bonuses. Although other countries may have paid much larger bonuses for Olympic success (Italy, for example, offered $175,000 per gold medal, and Singapore dangled a $1 million carrot for any athlete who became the country’s first Olympic champion) the significant financial incentives available to Korea’s archers exert a powerful motivational force on their relentless pursuit of excellence. It is acknowledged that much of the research in sport psychology emphasizes the benefits of intrinsic motivation (e.g., Cerasoli & Ford, 2014) but the extrinsic rewards available to successful international athletes certainly play their part in motivating athletes to greater efforts.
Scientific Support

The Korea Institute of Sport Science (KISS; http://www.sports.re.kr/eng/) is a government-funded organisation, established in 1980 and supported by the Korean Sports Promotion Foundation. KISS provides a range of sport science support services for Korea’s national team athletes and those who show promise. Attention to detail lies at the heart of the KISS ethos. Services include physical strength and conditioning programs, sports technique analysis and technical improvement programs, and psychological counselling and technique improvement. Although the KAA appointed a full-time sport psychology consultant to the national archery team for the 2004 Olympic Games in Athens, that was a rare occurrence because typically the KISS sport psychology team provides ongoing support for archers and coaches to assist their program for addressing the mental aspects of the sport.

One of the main functions of KISS is to improve athletes’ and coaches’ chances of winning in international games through their support and research activities. As a macro goal-setting exercise for the 2012 London Olympic Games, KISS established a 10-10 Gold Medal Project to help to maximise the number of medals won by Korean athletes across all sports. The specific aims of the project were to help Korea’s athletes secure at least 10 gold medals and to finish in the top-10 of the medal table. Given that Korea won 13 gold medals and finished 5th in the medal table in London, this goal was comfortably exceeded.

Archery requires highly-developed concentration, emotional control, and other psychological skills, because a single errant arrow in competition can significantly affect the psychological equilibrium of an archer and ultimately determine the outcome of a contest. In an important event such as the Olympic Games, many external factors serve as potential distractions. Thus, archers must develop strategies to deal with distractions, organisational problems and irregularities, performance errors, jet lag, media pressure, expectations of others, and all the other pressure situations that might occur. They must be able to stay confident, avoid negative thinking, and maintain faith in their ability to achieve the goal of victory.

Psychological skills training (PST), defined as a range of diverse strategies to overcome stress in competition and achieve best performance, is provided for all archers. The skills taught include concentration, motivation, imagery, confidence, anxiety regulation, goal-setting, and relaxation. Empirical research has shown that concentration is the psychological skill that most significantly discriminates successful archers from their unsuccessful counterparts (Kim, 2010; Um, 2003). In terms of the relative importance of psychological skills for competition, Korean coaches rank concentration at the top of the list, whereas athletes consider concentration to be the third most important factor behind confidence and goal-setting. Thus, both coaches and athletes perceive the ability to concentrate effectively to be a critical factor that contributes to competition success in archery.
Given the high priority placed on concentration by archers and coaches, strategies designed to
develop the concentration skills of national team members form a significant part of the support
provided by KISS. One such strategy involves meditation training using electroencephalography
(EEG; http://en.wikipedia.org/wiki/Electroencephalography) in which graphical representations
of brain activity are provided as feedback to the individual archer (see photograph EEG During
Meditation). This strategy forms an important component of the mental training activities for all
members of the Korean archery team in order to improve their ability to concentrate and stay
relaxed in competition.

Athletes in all sports use a diverse range of strategies to help maintain concentration during
competition. The typical cognitive and behavioural strategies used to maintain concentration
in competition include self-talk, positive thinking, imagery, thought stopping, and performance
routines. Research on Korean elite archers has provided evidence that to maintain concentration
they typically use positive self-talk, maintain positive attitudes throughout events, adopt
successful imagery, and carry out consistent performance routines (Kim, 2010; Um, 2003). Three-
time Olympic gold medallist, Yun MiJin, summed up the challenge of concentrating so intently on
the task that conscious thought ceases completely, with her words, “I leave my mind somewhere
else during archery competitions.”

Director of the KAA, Seo GeoWon, has identified mental training as a critical component of Korea’s
international success. He has especially praised use by national team archers of visualisation
techniques, such as shooting rounds with an unloaded bow and scoring themselves on how they
feel they would have done, and then shooting and scoring a round with arrows, with the tallies for
the two often being just a few points apart (Monaghan, 2012).

Several scientific studies have been conducted to assess if PST produces benefits for elite Korean
archers. For example, Han (1998) evaluated the effects of PST on competition anxiety, mood
states, and performance scores in elite female archers, concluding that PST was effective in enhancing performance scores as well as psychological responses. He strongly recommended the regular use of the PST program simultaneously with physical skill training for the top archers. Other researchers (Han & Lee, 1997) have developed an online system for assessing psychological variables, for the convenience of Korean archers and other athletes who want to check their psychological states remotely, especially when travelling to international competitions. The system allows access to eight different standardised questionnaires, including Korean-language versions of the Sport Competition Anxiety Test (SCAT; Kang, 2000), the Competitive State Anxiety Inventory – 2 (CSAI-2; Kang, 2000), the Profile of Mood States (POMS; Yun, 1993), the Test of Attentional and Interpersonal Style (TAIS; Yun, 2006), and the State-Trait Anxiety Inventory (STAI; Han, Lee, & Jeon, 1996).

Another example of KISS-generated technology for archery has seen Jang and Han (1997) and Jang (2006) develop a computer-based performance analysis system, which can be used in the field and has many features for the benefit of archers and coaches. For example, every shot taken by an archer in practice and competition can be recorded and analysed to identify individual performance tendencies. Figure 1 shows the monthly fluctuations for a national team archer over a 1-year period. Output can show past or present performance classified by many variables of interest to archers and coaches, including inter-round and intra-round fluctuations, arrow groupings and individual pattern tendencies (see Figure 2 on page).

As well as facilitating detailed analysis of individual performance, the program assists selection of the order of archers in the team event, based upon each archer’s shooting styles and patterns. Prior to using this program, the order of archers for the team competition was determined primarily by the instincts of the coach rather than objective data, which sometimes resulted in less than desirable outcomes. After assessing the effectiveness of the program, the KAA distributed this program to all Korean coaches.

Figure 1. Record of Monthly Variations in Shooting
In addition to the use of EEG, psychological skills training, archery-specific research, and resource development, the KISS sport psychology team also provides individual counselling sessions for archers to address personal issues that may influence competition performance and/or personal well-being. The range of issues raised by the archers is as varied as the personalities of the individuals concerned but includes such things as poor performance, selection concerns, and relationship issues.

Lee KiSik, Head Coach of the Korean archery team from 1981 to 1997, has publicly praised the contribution of KISS, “I began working closely with the Sports Science Department in 1983 and we studied very hard to make our archers’ technique as efficient as possible. It was also important to emphasise that mental preparation was just as important for success, and I tried to create a concept of thinking which would help our archers shoot arrows in an extremely efficient way” (Monaghan, 2012).

Four-time Olympic and World Championship gold medallist, Kim SooNyung, who was voted FITA’s Athlete of the Century, believes that the standard of mental preparation among Korean archers is even higher now than it was in her heyday from 1988 to 2000, “The archers are prepared and conditioned mentally for a high level of competition. I think Korean archers concentrate even better nowadays” (Monaghan, 2012).
Lessons from Olympic Champions

For the past two decades, Korean archers have achieved huge success in international competition. With such an elite pool of archers available to us, we took the opportunity to investigate the psychological experiences of Korean champions and to explore the strategies they applied in major competitions. Hence, we invited two Olympic gold medallists, Park SungHyun and Park KyungMo, to share insights into their success. Their responses to our questions are summarised below.

MAJOR CAREER ACHIEVEMENTS:

- 2 gold medals in the 2004 Athens Olympic Games
- 2 gold medals in the 2006 Doha Asian Games
- 1 gold and 1 silver medal in the 2008 Beijing Olympic Games
- The world’s first 1400 points scored in a single round

In international competition, what psychological factors influence performance? Among those psychological factors, what is the most important?

**PSH:** The Korean national archery team feels psychological pressure even before a competition begins, because many Koreans take it for granted that Korea will win a gold medal in the competition. In my experiences, I felt even heavier psychological burdens when other Korean archers who participated in the same individual competition with me had dropped out of the tournament. I thought I had to do even better to make up for them.

**PKM:** As a representative of the Korean national team, I think that the most important psychological factor for athletic performance is a strong belief in myself. This belief comes from the exhaustive preparation for important competitions. To make and maintain such beliefs, I try to practice self-management and discipline in regular everyday life. In addition, I think that believing in one’s coach is another important factor influencing athletic performance. Both archers and coaches need to trust each other, not only in practice, but also in competition, to be able to optimize athletic performance.
What negative psychological factors have you experienced during competition? What sorts of strategies have you used to overcome them?

PSH: I have sometimes experienced negative thoughts (e.g., “the competition result might not be good”) during competition because I am not able to know the competition result in advance. I think that such negative thoughts might impede the flow of my shooting. When a negative thought comes into my mind, I try to think only of my shooting posture (although this is not easy!!).

PKM: In international competition I have experienced psychological weaknesses and confusion due to excessive muscle tension and unnecessary worry. When this happens, I try to think of a time when my performance was perfect and to shoot an arrow with the feeling and posture of that time. I think that environmental changes in archery ranges (e.g., weather, competition delay) are other negative factors that can influence the competition. In this case, I keep telling myself that all the other archers are in the same situation and then I focus on my performance.

What psychological techniques have you typically used during competition?

PSH: I try to think positive thoughts before the competition. For example, when I participate in international competition, I say to myself that “I am a very lucky archer” because many Korean archers wanted to be selected for the national team, but they did not make it.

PKM: I have applied various psychological skills during competition. Among them I think that positive self-talk is the most effective method that I have frequently used. Examples of my self-talk are “Fighting! KyungMo,” “I can fully do it,” and “Concentrate just on me.”

What sorts of psychological skills training have you practiced in the national archery team?

PSH: A professional mental trainer has personally consulted with me, and provided psychological skills training suitable to me. I think that imagery (e.g., an image of shooting), effective order simulation (i.e., a computer simulated order to prepare for team competition), building up courage, and competition simulation have been especially useful.
PKM: Regular psychological skills training has been offered by the mental trainer, which was really helpful in improving my concentration. From this training, I have tried to recall the things that helped me in winning a gold medal and that help me to be able to sustain an optimal posture and feeling while shooting.

As an Olympic champion, is there any unique training you have ever practiced?

PSH: There is nothing special about my training. However, I think that the mental consultation and the psychological skills training that I practiced with the international team is the best driving force that made me who I am.

PKM: I always tried my best and trained harder than other archers no matter how tired I was. Through these efforts I have maintained the strong belief and confidence that I am the best archer in the world.

Are there specific reasons why Korean archery has maintained its domination of international competition?

PSH: I think there are several reasons. The Korean archery team maintains a strong trust between archers and coaches and the Korean Archery Association fully supports the national team. Systematic and science-based coaching and state-of-the-art facilities are other reasons why the Korean team is almost unbeatable.

PKM: More than anything else, I think that former senior archers have done a great job of passing on their know-how. Korean archers have great role models to watch and therefore they learn how to cope with psychological burdens, to perform well, and to win.
Summary

Although the history of archery may date back to 10,000 BC, modern Korean archery only began in 1983. In spite of this short history, Korea has achieved a lot in world archery. For example, Korea has earned 19 gold, 9 silver, and 6 bronze medals between the 1984 Los Angeles Olympics, where modern archery was first adopted in the Olympics, to the 2012 London Olympics. On average, Korea has won at least two gold medals out of the four Olympic archery events. Korean female archers are especially dominant, having never relinquished the Olympic team title and having won seven of the past eight individual gold medals.

As there are many factors that contribute to excellence, we chose to focus on only three factors underlying Korea’s archery success; the challenging selection procedure, support from the KAA and the KOC, and scientific assistance from the KISS. The KAA and the KOC provide administrative and financial support, while KISS generates scientific methods to provide a decisive edge over opponents. KISS researchers in the sport psychology section have continuously worked with the archers to add the finishing touches to Olympic Games preparation by providing appropriate psychological skills training, which is individually tailored to each athlete.

It is clearly reported in the interviews described above that not even Korean Olympic gold medallists are immune from psychological burdens. However, they are not negatively influenced by those burdens and know how to deal with adversities. For example, they always imagine the best performance even when the conditions are not good, and they concentrate only on what they have to do right now instead of being distracted by negative thinking or excessive worries. Through their regular psychological skills training with the help of a sport psychology consultant, they develop the skills to successfully cope with environmental changes such as wind, rain, competition delay, and noise. In addition, they strongly believe in themselves and their coaches. This self-confidence and mutual trust usually results in a synergistic effect leading to higher self-confidence and the reduction of unnecessary anxieties, worries, or negative thoughts. As a collective result of these psychological characteristics, the Korean archers continue to be the best in the world.

REFERENCES


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Figure 1. Record of Monthly Variations in Shooting, courtesy of YoungSul Jang

Figure 2. Analysis of Shot Groupings, courtesy of YoungSul Jang

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Psychological Consulting with Baseball Players in Japan

Yoichi Kozuma

In

Secrets of Asian Sport Psychology

Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

Baseball is one of Japan’s most popular and successful sports. After the sport was introduced from America in 1872, a professional league was established in 1936, divided into two divisions in 1950, and continues to thrive in the modern era. The Japanese national team has won two World Baseball Classic titles, in 2006 and 2009, three medals from the five Olympic Games in which baseball featured, and has dominated Asian baseball, having won 17 of the 26 Asian Championships contested. As of March 2013, Japan was ranked third in the world behind Cuba and America.

The world of Japanese baseball is steeped in a traditional system whereby coaches train their players in the same manner in which they were trained themselves. This time-honoured training practice is a reflection of traditional Japanese culture and can be found in numerous disciplines from martial arts to fine arts, where a master would teach his apprentice the skills and techniques that were learned from his master. This teaching legacy cycle repeats generationally as the art is passed down to the next generation of artist. Such training practices are deeply rooted in Japanese sports, where use of new coaching methods is often considered to be a show of disrespect towards the tradition of the sport, even if it is a western sport introduced to Japan. With the prevalence of this culturally-ingrained teaching tradition, introducing other sports science methods to Japanese coaches and athletes is often not easy to do.

Nowadays, with access to global information readily available, Japanese athletes and coaches have the ability to study and gather information about different training practices from around the world. Armed with knowledge of what sports in other countries are doing to enhance performance, there are times when athletes want to try new training methods, but often their coaches are wary because they hold the view that a new training method is disrespectful to the long-standing tradition of the sport. On the other hand, there are times when it is the coaches who are willing to seek new practical solutions for their athletes to improve their performance, but the athletes are unwilling to cooperate because they feel strongly that it defies the culture and tradition of the sport. This never-ending cycle of maintaining and honouring the tradition of a sport has hindered Japanese coaches and athletes from looking beyond tradition and culture to seek practical, science-based solutions to improve performance.

Rarely does an opportunity arise where both coaches and athletes are willing participants in a training program that addresses the psychological aspects of a particular sport in Japan. It can only happen when a sports team decides to take a bold step beyond the strongly-held cultural traditions of a sport to become more open and receptive to new training methods. One sport that decided to take that initial giant step was baseball.
In Japan, the history of baseball is strongly influenced by *bushido* (the way of the samurai warrior) and *budo* (Japanese martial arts). Although baseball is a Western sport introduced to Japan, it reflects the essence of the samurai days from former times. Today, many coaches and players use the word *yakyu-do*, or literally “the way of baseball”, which categorises and aligns the sport with Japanese martial arts such as *kendo* (the way of the sword), or *judo* (the way of passiveness). Predominant in traditional Japanese martial arts is the idea of *konjo*. Loosely translated into English as “guts”, it actually has a deeper meaning that encompasses additional nuances including high physical endurance, courage under adversity, and the tenacity to face pain and hardship for the good of the team. As with other sports in Japan, there are many generations of baseball coaches and players who have been strongly ingrained with these *konjo* remnants from the samurai warrior class. Hence, introduction of western training ideas is often viewed with suspicion and is usually rejected before it is even applied (Kozuma, 2009).

My involvement with baseball started in an indirect manner when I was asked to be part of a program that evaluated the fitness level of players. In 1986, a professional baseball team in Japan decided to incorporate a post-season physical fitness test for all of its players, and I was asked to be part of the evaluation team. The team’s athletic trainer requested that I contribute to the psychological fitness of the players by evaluating and analysing the players’ psychological aptitudes towards the sport. I utilised a Japanese standardised sport psychology measure that was available at that time, known as the Taikyo Motivation Inventory for Sport (Matsuda, 1981). This was the first time that a sport psychologist or a mental training consultant had become involved with a professional baseball team in Japan. I remained involved with the team every year for their post-season physical fitness test for next six years.

In the 1990s, four other professional teams became interested in learning how to apply mental training skills and techniques for their players. I conducted mental training seminars specifically designed for professional baseball teams during their pre-season and post-season camps as well as during the baseball season. In the 2000s the interest of mental training in Japanese baseball grew to the point where several professional teams considered offering a full-time position to a mental training consultant. Due to the transient nature of sudden changes in the coaching staff or team owners, the full-time positions never quite materialised but, even without access to a full-time mental training consultant, the interest in applying mental training skills to professional baseball teams never waned.

In the next section, I provide examples of the mental training program and the sport psychology consultations that I have provided to professional baseball teams in Japan. Although the basic steps of my mental training program are the same, the program is adaptable to fit the needs of a particular baseball team or player.
Case Study #1

In 1997, the general manager of a professional baseball team asked if I could give a seminar to a minor league team during their spring camp. After the initial seminar, I was approached by one of the coaches who thought that their major league division should also start a mental training program and asked me to give a talk to their major league players as well.

From this introduction to mental training, I was able to conduct mental training seminars from 1997-2000 for every spring and fall training camp held by this professional baseball for their minor league division. I had a 3 to 7 day schedule to work with the team during each camp. At that time, many coaches and players were intrigued about mental training and the team was open and receptive to study and learn all they could about mental training. During the first year, the head coach of the minor league team initially selected four specific players to be involved with the mental training program in order to enhance their performances. As interest grew, eventually all of the players on the minor league team participated in the mental training program. Interest about mental training grew among the coaching staff as well. One coach, who was particularly interested in learning more about mental training, would sometimes invite me and other coaches to his home to further discuss the application of mental training for the whole team.

I worked with the minor league team every week. I would visit their ballpark and observe their morning practices as well as their afternoon official games. During practices, I observed their warming-up routines and their practice sessions. I talked with the players and gave advice on psychological skills that they could readily use in the field. I would especially check the players’ facial expressions, attitudes, and emotions they exhibited towards their practice session as they performed their warm-up routine. I videotaped them for feedback analysis and also to show them their demeanour before and during the warm-up routine. If there were any opportunities to speak to the team members individually, I would talk with the players and coaches on the ball ground during practice time.

There are three reasons why I observed the players both during practice and during the actual game. The first reason is so that a comparison of their psychological aptitude and behaviours during practice and during a game could be made. Secondly, I observed the eyes, face, demeanour, and actions of the players during the practice and the game in order to infer any changes in their state of mind. Any emotional or psychological issues or concerns that are evident during practice are often also seen during the game. Thirdly, I videotaped and analysed the players’ pre-performance routines in order to show them what routine actions they did or

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video feedback analysis
what nervous movements they made, such as repeatedly removing their cap, tugging on their uniforms, or swinging the bat a set number of times before signalling to the pitcher that they are ready. Through these video recordings, it was often revealed that for some players, their pre-performance routines during the game and during practice were inconsistent or completely different. I would show the players the video of a particular day of practice or game at our nightly seminars, allowing the players to share and discuss their feelings, attitudes, and state of mind during a particular play. To encourage camaraderie with the players so that they felt at ease to approach me with their concerns, I would eat with the players in the dining hall in order to increase communication and to lower any affective filter that might prevent players from being open and honest with me about their game.

After the initial seminar for this team, the original four minor league baseball players continued to attend a 3-hour mental training workshop every week for an entire year. The players were assigned two textbooks and two workbooks for their workshops. One of the textbooks used was a mental training program targeted for coaches (Kozuma, 1995, 2003) and the other book was a Japanese translation of a baseball mental training program for American Major League teams (Ravizza & Hanson, 1995, 1997). The workbooks include step-by-step mental training instructions, with the first workbook designed as a general introduction to mental training and the second workbook especially designed for baseball players. The players would fill out the worksheets found in the workbooks for self-reflection, self-evaluation, and self-study.

At the end of the first season, members of the major league team also started to attend a mental training seminar during their fall camp. At this camp, all of the players used the same two textbooks and two workbooks that I had used for the original minor league players. The team continued to study mental training for the next four years. This was the longest duration for any Japanese professional baseball team to actively apply mental training to their program as an official part of their training. As a result, by year four, the major league team, which was usually ranked at the bottom of their league, won the championship for that season.
Case Study #2

More recently, there was a case of another team that also requested my services for psychological consultation and advice on mental training. For this team, I was able to work with them a total of 16 times. With one of my mental training staff members, we administered the Diagnostic Inventory of Psychological Competitive Ability for Athletes (DIPCA.3; Tokunaga, 1996) to test the players. In addition, a survey was given to the players to answer questions for self-analysis and evaluation of their psychological aptitude. The first administration of DIPCA.3 was given a week before the spring camp.

We were able to analyse the data from all 72 minor and major league players from this team. Results of the psychological testing and the survey were presented and explained to all the players and coaches of the team as feedback. An example of the results from the psychological test can be found in Figure 1 (see p.62). After the initial seminar on the first day of spring camp, a special room was designated as the mental training room and from the pool of 72 players, 15 players (21%) came to us to ask for individual mental training consultations.

Around this time, a certification licensing process was introduced in Japan for mental training. As certified mental training consultants, one of my mental training support staff and I worked with the 15 players and others for a total of 10 days during spring camp. After spring camp, we also worked with the whole minor league team another 13 times during the year.

We would fly early Saturday morning to the team’s practice location to visit the team and we would stay with the team all day. We talked with the players during practice individually whenever an opportunity was available, such as in the locker room, in the weights room, in the food service area, in the athletic trainer’s room, on the bench in the dugout, or on the field. Many coaches, athletic trainers and other specialist coaches would also talk with us on the field during their practice session as well. In addition, we were given permission to be available to the players during the actual games. Some of the major league players from the same franchise also contacted me and requested private consultations. The concerns of one particular major league player were based on the data from his DIPCA.3 analysis that he received as feedback from the introductory seminar. He asked for advice on how he could control pressure, what he could do to focus better on the game, and how he could set aside negative reactions with positive thinking during the game.

For this particular player, I introduced a pre-performance routine that he should perform consistently and taught him some breathing control techniques that he could use while on the field during a game.
The breathing control techniques were practiced every day as part of a relaxation program. I encouraged him to perform his breathing control techniques during batting practice so that his breathing rhythm and timing were the same in practice as during the game. The pre-performance routine I recommended started from the dugout. First, he would grab his bat and do his usual warm-up swings. When he entered the on-deck circle, he visualised an image of successfully hitting the ball. As he moved towards the batter box, he did stretching exercises as he was walking. He always entered the batter box with his right foot, prepared his stance for hitting the ball and then took a deep breath. He then stepped back, swung the bat again, and tapped the home plate twice. Finally, he would swing the bat for a third time, take another deep breath and prepare his stance to receive the pitch.

By mid-season, a second administration of the DIPCA.3 and the survey occurred with all players in order to evaluate improvements in psychological ability through mental training. Post-season, both the major and minor teams had a combined fall training camp together, and the DIPCA.3 and survey were administered for a third time. A comparison of the three test results was shared with all involved as feedback during their off-season and before the start of the spring training camp in preparation for the upcoming new season.

The minor team division in Japanese baseball is a preparatory educational and training stage in professional baseball that grooms inexperienced athletes to become more skilful and proficient baseball players so that they can be promoted to the major league division. The minor league is comprised of promising young players from high school, college, semi-professional, and independent professional baseball teams who were selected to start their professional career in the minor leagues in hope of becoming a major league player one day. Once in the minor league program, the young players were often mentored and coached by the major league team’s coaches. Given my understanding that the world of baseball in Japan is strongly influenced by traditional Japanese training methods, whereby coaches use the techniques and psychological factors from their own experiences as professional baseball players to teach the new crop of
players, I was always cognisant that my approach to the introduction of a mental training program needed to be an integration of the old traditional coaching methods with new ideas, skills, and techniques from mental training.

On the first day of spring camp during the first year that we started working with the team, we conducted a 1-hour mental training seminar to introduce our mental training program to all of the coaches and players of the minor league team. The introduction included an explanation of basic psychological skills to the players and coaches, such as goal-setting, relaxation, psyching-up, visualisation, concentration and focus, positive thinking, self-talk, communication and mental preparation for baseball. Participants at the seminar were issued two textbooks and the same two self-study workbooks. The difference this time was that one of the textbooks was an introductory book on mental training that targeted athletes, rather than coaches, for performance enhancement (Kozuma, 2002).

For the next few days at spring camp, we were able to observe their small group practice situations as well as the whole team practice. As a result, we discovered that mental preparation was an issue for many of the players. Many of the participants communicated with us that the pressure to compete and be selected to enter the major league team was often overwhelming. They especially felt pressured to maintain outstanding batting statistics because it reflected to the coaches their ability to perform at the major league level. The players felt that they did not know how to control their anxiety when they were faced with pressure to perform their task well. Since their coaches were not familiar with any self-control skills or techniques, the players were not given any guidance or advice on what they could do. The coaches and players acknowledged that when faced with pressure, they had to develop and devise their own style of self-control without any knowledge of sport psychology or any other psychological methods that might have been effective for them.

Through our work, we were able to help the players establish psychological skills, which included visualisation, concentration and focus, relaxation, and psyching-up techniques. The players continued to practice the mental training program even after they were promoted to the major league level. At the end of the first year after their promotion, their team won the major league championship. In addition, the team was able to recapture the championship again during the following season.
Mental Training Program for Baseball

I have now conducted many seminars, workshops, fieldwork, and consultations sessions with various professional baseball teams in Japan. The mental training program that I designed is tailored specifically for baseball in Japan and it is most effective when everyone involved with the team supports the mental training program. Because of this, the mental training program consists of an introductory seminar and workshop that is open not only to the players, but also for the coaches, logistical staff, and other associates of the team.

Depending on the situation and the needs of a particular team, the seminars and workshops that I conduct are about 4-16 hours long held over a 1-2 day period. The purpose of the seminar is to provide a beginner’s level of mental training to all the players and to evaluate their psychological aptitude through testing and a survey.

Before the start of my seminars, all participants are administered the DIPCA.3 test (Tokunaga, 1996). This test consists of 52 items designed to assess 12 psychological factors associated with sports; namely, patience, fighting spirit, achievement motivation, motivation to win, self-control, relaxation, concentration, self-confidence, decision-making, prediction, judgment, and cooperation. Results are consolidated into a total score, which represents an athlete’s psychological aptitude presented visually in the form of a web chart (see Figure 1).

All of the participants received the results of their DIPCA.3 as feedback at the beginning of the seminar with a detailed explanation of their personal data concerning their overall psychological aptitude, as well as their strong and weak points.
An example of the DIPCA.3 results for a professional baseball player can be found in Figure 1. The total possible score for DIPCA.3 is 240 points and a benchmark of 200 points is used as a baseline score for an athlete in any sport. An athlete who scores above 220 points is considered to have the aptitude or potential to be very successful at the championship level of their sport. Scores for the 12 factors are plotted on a web graphic so that it is easy to recognise areas that may need attention by the athletes and by the mental training consultants. The results from a psychologically well-balanced athlete will resemble a round ball. Indentations in the round figure represent weakness or concerns of the athletes. In the case of this particular baseball player, he has always maintained a very high level of motivation to win throughout the year; however, as seen from the blue (darkest) lines, representing the initial administration of DICPCA.3, areas that need improvement could be found in the other 11 factors. Based on his results, a personalised mental training program was designed that would target and improve problematic areas for him. As the baseball player participated in the program, his scores for the subsequent DIPCA.3 showed a clear improvement, especially in the areas that previously had the lowest scores. His initial DIPCA.3 graph results, which resembled a jagged rock, filled out into a more rounded figure.

The introductory seminar presents the players with background information about mental training. An explanation is provided to the players on why psychological skills are effective and important for their sport. An overview of the history of mental training programs from around the world is included, and the experiences of other sport teams and athletes in Japan who have incorporated mental training as part of their overall training are discussed. Video recordings of specific examples from past consulting experiences are shown to illustrate the advantages of mental training and to justify why mental preparation is important for athletes. In addition, psychological skills that they will learn from the mental training program through the seminars and
workshops are highlighted. These psychological skills include goal-setting, relaxation, psyching-up, visualisation, concentration, positive thinking, self-talk, communication, and mental preparation for games.

For goal-setting, the players are instructed to write down their short-term and long-term goals in the workbooks provided to them. They are told to specifically write down their goals that pertain to baseball and how they are planning to achieve these goals. The goal-setting worksheet is designed to break down the goal planning process by having the players write in a time sequence of a yearly plan, a monthly plan, a weekly plan, and a daily plan. Each player also receives a mental training logbook where they keep a daily diary specifically for mental training.

The relaxation and psyching exercises are based on a packaged program developed specifically for sports teams and individual athletes in Japan (Kozuma, 1995). The relaxation exercise utilises relaxing music, breathing control, stretching, self-massage, imagery, and meditation. The psyching-up program consists of fun games, dance music, dancing exercise, shadow boxing, and a team routine workout. The relaxation and psyching-up exercises are executed before every practice and every game.

The purpose and method of using imagery for visualisation training is taught in a systematic manner and the players are assigned to do visualisation exercises every day after the relaxation exercises, as homework. In addition, they are told to record their visualisations in their mental training logbook. The systematic process of creating imagery is initially guided by my suggestions. I would first ask them to imagine their best play. Then I would instruct them to recreate that best play image in slow motion and then to recreate it again in full motion. As the players become familiar with visualisation, they progress their visualisation techniques to recall a missed play or an error that happened recently, change that error to a positive image where it had a successful outcome, and then merge that successful image with imagery of the next game.

The main focus of the concentration training is breathing control. The foundation of the breathing control techniques that I use is based on the Japanese martial art of karate and it fits very well into the cultural training tradition of Japanese baseball. Various breathing control techniques are introduced including deep breathing, breathing with physical action, breathing with stretching, and breathing with progressive relaxation techniques. Skills needed for positive thinking are discussed and demonstrated to the player. Due to the traditional environment of harsh and hard training, pessimistic attitudes towards the coaches and the sport itself are often prevalent; therefore, it is important to help the players realise that it is okay to enjoy what they do. It is imperative that the positive thinking skills include discussions and instructions on the techniques for self-talk and positive communication skills as well as self-confidence techniques with positive attitudes. Throughout the seminars and workshops, the baseball players learn how to consolidate all of these skills they have learned and then to apply these skills to their individual practice and competition situations.
Application of a Mental Training Program for Baseball

The mental training program starts early morning on the day of practice before the baseball players arrive at the ballpark. My first job is to locate an area to be able to observe and check the player’s expressions, attitudes, and actions before the start of the practice. Once all of the players arrive, the morning relaxation program begins using relaxing music, positive communication, positive attitude training, smiling at each other, breathing control, and breathing control with stretching. In addition, progressive relaxation techniques are performed such as shouting techniques with visualisation, simplified autogenic training, and meditation. All of these techniques are performed in a standing position as well as in a horizontal resting position. Immediately afterwards, the music is switched to an upbeat dance music to indicate the start of a 2-minute psyching-up program.

After our pre-practice morning routine, the players have a 60-minute session with their strength and conditioning coaches for their physical warm-up. During this time, we are able to talk to the players and give psychological advice and consultation when needed. Our approach to the players is in a casual manner in order to maintain a relaxed and positive atmosphere that was created during the pre-practice morning routine. Often times, the main concern expressed by the players is how to refocus after a game error. Many players are concerned in case they make mistakes during the practice game, due to their high anxiety and self-imposed pressure to perform well, because errors that occur during practice can make them ineligible to play in the official game scheduled for that day, and less likely to be promoted into the major league division. In cases such as these, I would advise them accordingly and would remind them of the refocusing techniques that they can use to help them concentrate on the game and not on the error that was just made.

Before the start of the official game, I videotape the players for post-game analysis and feedback. The purpose of these recordings is so that we can interview each of the players to ask them about their mental state or the emotions that they felt at the start of the game, during the game, after any errors, or at the final outcome of the game. DVD copies of the interviews with the original video recording are given to the players. Many players are not aware that some of their actions can be beneficial or detrimental to the performance of certain tasks or skills. Viewing a recording of themselves and listening to their explanation of the actions or reactions to certain errors and plays allows the players to become more aware of their conduct, so that they can make adjustments in a positive manner.

During game situations, there will be some players who need to hear a few words of advice from me. As a certified mental training consultant, I am fully aware that it is not desirable to give any advice just prior to a game because it may interfere with the athlete’s concentration and psychological preparation for the game. However, in the case of the minor league players, some of them are still very young, straight out of high school, and they have not matured enough to control their nervous emotions before a game. In these types of situations, I would offer them just a few pointers or words of encouragement as part of their mental preparation for the game. After the game, I would ask those players how my pre-game advice affected them and whether or not my advice was effective. I do this because I want to keep the communication with these players open so that we can work on how to further enhance and improve their mental preparation skills before a game.
The Future

Interest in mental training in Japanese baseball has grown exponentially from the first baseball team that was willing to try new psychological skills from the West. Mental training is no longer viewed as an alien concept that has no place in the tradition of the sport. For many teams, it is now an accepted scientifically-based method that can be easily incorporated into their overall training and practice. Currently, there are many part-time mental training consultants who are assigned specifically to particular baseball teams.

The usage of mental training programs in baseball has now filtered down into secondary education. Japanese high school baseball teams have now integrated mental training into their general training practices. Out of roughly 4,000 high school teams in Japan, about 1,000 have shown interest in or have tried to apply mental training into their baseball program (Kozuma, Yumigeta & Kanaya, 2008). What is encouraging about the involvement of high school baseball teams with mental training is that for the players who will be eventually drafted into professional or minor league teams, they will be armed with a background knowledge of mental training. In addition, junior high school baseball teams have also shown interest in mental training. Although the basic skills of the mental training program are the same, I have adapted the original program to make it more appropriate and accessible for junior high school players.

As awareness of mental training continues to grow in Japanese baseball, our focus has shifted from trying to break down the long-standing cultural tradition that has prevented many Japanese teams from utilising and accepting mental training and other performance enhancement psychological skills for many, many years. With the recognition of mental training in the world of Japanese baseball, our goal now is to prepare undergraduate and graduate students to become certified mental training consultants who are able to work in any sport field. No longer marginalised from the Japanese sport world, properly educated and licensed mental training consultants have become a necessity for coaches and athletes who are just now beginning to become acquainted with mental training.
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Boxing in the Philippines: The Fight for Survival

Naira S. Orbeta and Maria Luisa Guinto-Adviento

In

Secrets of Asian Sport Psychology

Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan

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Introduction

The Philippines is renowned as a breeding ground for boxing talent. In 2012, this unassuming country in Southeast Asia could boast no fewer than five current and 36 former world professional boxing champions.

The stellar career of Manny Pacquiao, now a universal sporting icon, undoubtedly represents the jewel in the crown of boxing in the Philippines. In a very real sense, his success has placed Filipino boxing talent in the global spotlight. However, there have long been other pockets of boxing excellence among past and present athletes at many levels of the sport.

In the early part of this chapter, the development of sport psychology support for the sport of boxing in the Philippines is chronicled via a personal account from the first author.

This is followed by a detailed exposition of the life and psychological approach of Manny Pacquiao, based on a qualitative investigation conducted by the second author, which provides unique insights into the world of one of the greatest boxers of all time.
Sport Psychology as the New Frontier

As a fledgling neophyte in sport psychology, I started work with the Philippine national boxers in 1993. It was an eye-opening experience. After more than a decade of observing the evolution of amateur Filipino boxers at close quarters, I was still a fan. As I vividly recall the sights, sounds, smells and experiences of working with this select group of athletes, I realize that I learned much from them.

The Philippines is a third-world nation. We lag behind in many things that more developed countries take for granted. Whereas other countries have fully utilized the allied disciplines of the sports sciences, Filipino athletes have not enjoyed the same access. There are many reasons for this, but the most relevant is the overall lack of funding that hampers sport development, growth and sustainability.

The Philippine Sports Commission created the Sports Medicine Association of the Philippines (SMAP) facility as the medical centre for the 1991 Southeast Asian (SEA) Games, which were held in Manila. A Sport Psychology Unit was added in 1993 with a staff of three, including myself. Pioneering this unit was an exhilarating experience. Recognizing the novelty of this idea to the local sports scene, the Director of SMAP allowed us to experiment.

For the first time in Philippine sports history, we transported over 400 athletes to the De La Salle University campus in Manila in order to take a psychological test battery, which included the Myers-Briggs Type Indicator (Myers & Myers, 1980), the Life Styles Inventory (Ware, Leak, & Perry, 1985), a mental health analysis questionnaire, and stress symptom and coping behaviour checklists. The tests were in English and many athletes asked us to translate some words into Filipino/Tagalog, the local language. I vividly recall a group of smiling boys who politely asked me questions, but would jokingly complain how hard the tests were. I later found out that these were the boxers.

When the tests were scored and interpreted, we invited the athletes from all sports to visit our unit. This strategy served a dual purpose; to feedback portions of the test results for increased self-awareness, and to introduce ourselves and our services to the sporting community. The three psychologists divided up the sports and boxing was assigned to me.
Common Demographic Denominator

In a decade of working with Filipino amateur boxers, I have yet to encounter even one who was “born with a silver spoon in his mouth”. This statement is not meant to pigeonhole anyone or to insult. Rather, it is recognition of an important characteristic in understanding the motivational forces that drive Filipino boxers.

Born from humble and modest beginnings, Filipino boxers enter this punitive and uncompromising sport in a quest to improve their quality of life. A very small number have completed a college education or a vocational degree. The others finish whatever education they can, while they hone their boxing skills. Some drop out of high school to focus solely on the sport. It seems that with no educational fallback or a variety of options, Filipino boxers strive for sporting excellence in order to support themselves and create a better life.

Lee Tajonera, the psychologist who presently works with the national boxing team, echoes this sentiment:

The professional and amateur boxers see the sport as a means to a more comfortable life. For most, it’s about survival. So one way of looking at it is that this could be one of the reasons Filipino boxers do well - they’re literally fighting for their lives. There’s nothing fiercer than a cornered tiger, so to speak. (personal communication, March 10, 2012)

Although the desire for monetary reward or financial gain may generally be regarded as extrinsic in nature, its influence can only be truly comprehended against the contextual setting of the Philippines, where the poor vastly outnumber the rich.

When sport allows an athlete to put food on the table, it can act as a powerful driving force. When it further affords him the chance to travel and see places as he competes, it serves as an additional incentive. When a large monetary figure is dangled in exchange for winning a medal, it becomes understandable if he deliberately subjects his body to incredibly demanding and strenuous activities. Once these needs have been fulfilled, the mission is accomplished.

Mansueto “Onyok” Velasco came agonisingly close to winning an Olympic gold medal for the Philippines in 1996. His defeat at the hands of Bulgarian Daniel Bujiyo in the light flyweight division was controversial and loudly decried by Filipinos. In the Philippines, everyone believed he had won. As a result, he returned to a hero’s welcome despite his silver medal. In addition to the mandated government incentives, he received many rewards provided by generous private sponsors. Onyok also began receiving endorsement deals and television/film offers. His life improved and his career path changed. Who could blame him for choosing the new path that opened up for him? Boxing had fulfilled its mission.
The Concept of Support

From the beginning of my time with them, the boxers were thirsty for additional knowledge. They did not exhibit any resistance to the idea of a psychologist. I was surprised, but also intrigued. Over the years, I encountered the same attitude even as the boxing cast changed. When I started working with the national boxers in 1993, my strategy was simple. To develop rapport, I visited the boxing gym and sat through practices often. I talked to the boxers informally and tried to get to know their individual needs. I spoke to the coaches and asked them to enlighten me on the needs of the boys. When they invited me to speak to the boxers, I spoke in the vernacular and used everyday words. I did not say such things as “visualize your technique or game.” I simplified matters, because as one boxer told me in Filipino, “when an opponent is hitting you in the head, you cannot think anymore.”

In a group of simple men with an uncluttered outlook on life, having any kind of well-educated professional express an interest in their well-being was a big thing for them. My mere presence and the fact that I took the trouble to visit them seemed to immediately help and comfort them. Katherine Buot, a psychologist with whom I worked from 1998 to 2005, adopted a similar strategy with the team to great effect. In the 2001 SEA Games, held in Kuala Lumpur, Malaysia, she was sent with the Philippines delegation and developed a strong bond with the boxers. Her psychological support for the team continued at the 2003 SEA Games, held in Ho Chi Minh City, Vietnam.

Over the years, the psychological services that started simply as social support and consultations, evolved into a more sophisticated program. By 2004, the Amateur Boxing Association of the Philippines (ABAP) committed to hiring a psychologist dedicated solely to boxing. ABAP management recognized the importance of a continuous psychological program. To this day, they remain one of only a handful of sports associations in the Philippines who apportion a part of their budget to psychological services.
A Higher Form of Support

Studies with Filipinos have shown spirituality to have a direct impact on their psychological growth and worldview (e.g., Dy-Liacco, Kennedy, Parker & Piedmont, 2005).

The Filipino phrase, *Nagpapasalamat ako sa Diyos*, translated in English as “Giving thanks to God”, is often quoted by Filipino athletes, and the boxers were no exception. They basically injected God into every aspect of their lives. They prayed before and after every training session. They prayed in the locker room, individually and as a team, prior to competition. Any observer would have spotted them as they ascended into the ring and bowed their heads solemnly. These boys prayed when they won and prayed when they lost.

Coakley (2003) has posited six reasons why athletes use prayer:
1. as a coping mechanism;
2. to aid the quest to have a morally sound life;
3. to bless their sport endeavours;
4. to provide a clear and correct perspective on sport;
5. to strengthen teammates’ relationships; and
6. to act as a measure of social control.

Filipino boxers have always used prayer as a coping strategy. This technique showed immediate results. The player remembered the importance of keeping a positive mindset and it seemed to calm them. In essence, it was a type of centering.

As a practitioner, I respected the boxers’ beliefs and tried to utilize the techniques they already had in their arsenal. This was not difficult because religiosity is deeply ingrained with Filipinos, 85% of whom are Roman Catholic. Instead of teaching complicated strategies that they would need to learn and practice, one of the things I did was to formulate simple relaxation and meditation scripts based on prayer. This was effective because the boxers themselves did not experience a great departure from their normal routine. Rather, they responded naturally.

Arguably, religiosity and spirituality carries the danger of over-dependence on forces outside of the athlete. I was deeply cognizant of this possibility and attempted to emphasize to the boxers that prayer and God should not take the place of working and striving for success in their sport.

respect for their beliefs
Significant Cultural Influences

While practically every Filipino belongs to some religious denomination, they can also be highly superstitious and filled with seemingly pagan beliefs (Francisco, 2004). These beliefs come from the *katutubo*, which is roughly translated as “originating from our roots or ancestors.” The Filipino boxer’s life is typically resplendent with such personal beliefs. Every psychologist who has ever worked with them will have heard of at least one startling superstition they follow. Some are highly entertaining and quite harmless; others need further scrutiny.

Belief in *suwerte* (luck) and *malas* (jinxed) is quite common. This orientation towards an external locus of control seems to be a defence mechanism that originates from the Filipino culture. Filipinos embrace values like humility and modesty. When an athlete says that it was luck that caused a win, the elders nod sagely and seem to bestow approval. If a player states that his fight was jinxed and that is why he lost, Filipinos also understand this sentiment.

Since my personal philosophy ran along the lines of an athlete-centered consultative process, I did not shoot down any boxer’s beliefs. Rather, I listened and attempted to understand his world. I only intervened when the belief bordered on obsession and hindered performance or some other aspect of his life. Even then, I realized that I could only gently suggest alternative strategies for coping. One strategy that I introduced was the concept of having specific psychological routines and effective rituals. Whenever rookie boxers joined the national training pool, we administered an easy checklist. Universally, the boxers rated psychological routines as practically non-existent. What struck me was that they seemed receptive to the idea but did not do it for themselves without reminders.

The Philippine contingent to the 1994 Asian Games in Hiroshima, Japan consisted of 98 athletes, and I was selected as a support member of the contingent. We were housed in a single building and the boxers were billeted in one suite of rooms. I was set to arrive from Tokyo the day before the Games commenced, but the head of the medical team called me and said the boxing team wanted psychology services early, so I advanced my trip by a week. As a result, I was with the boxers day and night in Hiroshima. We would have formal and informal sessions. I would ride in the bus with them on the way to the competition venue. In short, I had all the time necessary to remind them about psychological routines and other important points.

They won three gold medals, courtesy of Mansueto “Onyok” Velasco, Elias Recaido, Jr. and Reynaldo Galido. I would like to think that my work with the boxers contributed something to their success.
Laughter, Heart and Hope

One night during the 1999 SEA Games in Brunei Darussalam, I was sitting on an outdoor bench in the Games Village. Many Filipino athletes, including the boxers, were relaxing and socializing after a long day of practice and/or competition. A Philippines team official approached me and said something to the effect that since the boxers were on the fight docket the next day, they should not be making jokes and should concentrate on the competition. I looked over at the boys. Some were clowning around doing slick dance moves. Others were singing. A few had a stand-up comedy routine going on. I did not wholly disagree with him, but said respectfully, “Sir, it is 8 p.m. If you make them stop and go to bed now, they might feel even more stressed. Let’s wait until their coaches call them.”

In a decade of working with the boxing team, some things have remained immutable. First, they are funny jokers when they want to be, but ever respectful of authority. Second, they can dance because of the fancy footwork they need to perfect. Third, they love to sing. Finally, and most important of all, these boxers have heart and hope.

Through the years, I have attempted to utilize the cultural and societal characteristics inherent in the Filipino boxer to aid their performance. I introduced concepts in sport psychology in a simple and uncomplicated manner. There are no secrets or mystery to my work with the boxers. I have always been flexible and tried to adapt to the athletes and the situations in which I found myself. I did not shy away from the challenge of understanding this demanding sport and the gladiators who inhabit it. It has been a rewarding experience. Before I discontinued my work with Filipino boxers, I was fortunate to have seen the birth of Women’s Amateur Boxing in the Philippines. In future years, I hope to see the next incarnation of Filipino amateur boxing reach new heights.
Case Study of Manny Pacquiao: Tracing the Footsteps of a Boxing Icon

Manny Pacquiao is undoubtedly the face of Philippine professional boxing. He holds the distinction of being the first and only eight-division world champion, having won six world titles, as well as the lineal championship in four different weight classes. His phenomenal rise to the top of the boxing world has been made more intriguing by the enormous odds against which he emerged.

Manny makes no pretences about his humble beginnings. His parents separated when he was in sixth grade and he was eventually forced to drop out of high school because of extreme poverty. Manny sold anything he could sell for a profit to supplement the family income. He described himself as a “one-man traveling grocery store” as he sold bread, peanuts, doughnuts, water and a variety of retail items on the street (Pacquiao, 2010, p. 41). Still, it was not enough to make ends meet.

At 14, he decided to take his chances in Manila in response to a boxing promoter who saw his potential in boxing and convinced him that he could have better training and competition in the big city. To survive, Manny took on a variety of odd jobs as a gardener, construction worker, restaurant crew and a tailor, while waiting for his break in boxing. He eventually qualified for the Philippine national amateur boxing team. Finally, he no longer had to worry about his next meal and where he would sleep for the night (Chua-Eoan & Tharoor, 2009).

Manny had an amateur record of 60 wins and only 4 defeats, in the space of two years. He began his professional boxing career when he was merely 16 years of age, standing only 4’11”, and weighing much less than the minimum weight division at 98 pounds (Pacquiao, 2010). How he eventually managed to capture several championships across different weight classes without losing speed and power, in itself defies all expectations of his initial body build and profile.

Many researchers and practitioners in applied sport psychology have been intrigued by the question of what psychological factors might account for his extraordinary success and the performance enhancement interventions he might have utilized. Manny Pacquiao never received any formal sport psychology support services. Even as he progressed in competence and achieved financial stability, Manny continued to rely on his own ways to prepare his mind and spirit for training and competition. It is therefore very fortunate that he agreed to a phenomenological interview with the second author just a few months before the 2008 Beijing Olympics, where he was flag bearer for the Philippines team.
This interview provided rare insights into Manny Pacquiao’s experiences in boxing, through the lens of Asian sport psychology. The focus of the interview was on understanding the psychological features of his extraordinary performance, taking into account the unique configuration of his perceptions, aspirations, motivations and inclinations, within a social, economic, spiritual and cultural context (Guinto-Adviento, 2011). The intent of my investigation was not to identify universal principles that explain his performance but to generate deeper insight into how Manny Pacquiao makes sense of his own world and how people and events have influenced his feats in the boxing arena.

There is only one Manny Pacquiao. Therefore, he is the expert from whom we must draw lessons that could potentially help others who aspire for greatness. To provide ample verbal space for Manny Pacquiao to disclose, in his own terms, his experience of pursuing excellence in boxing, an interpretative phenomenological analysis (IPA) was used (Larkin, Watts, & Clifton, 2006). This approach generated rich insights into sporting excellence as perceived and defined by the champion athlete himself. Results of the IPA are reported under four overarching themes that emerged from the interview.
Theme 1: Success Involves a Strong Sense of Purpose Beyond the Self

Manny began the interview by talking about his boxing career in the context of his earlier experience of poverty. Born into a poor family and raised by a single mother, Manny’s decision to take his chances in the city as an amateur boxer at the age of 14 was borne out of a sense of urgency to literally fight his way out of poverty. However, after having achieved the financial security he initially aspired for his family, he continued to persist in what he acknowledged was a very challenging sport. He explained:

*If we were better off in life, I would not have chosen to get into boxing because this is a very difficult, if not the most difficult of all sports. (But) I am already here; I have to stand firm in what I got myself into. Even if I have already achieved my dreams... I have already come to enjoy my job, even if it is hard. But I always think that it is also my privilege to play the sport so I have to sacrifice... it is also a privilege to bring honor to our country and to my family.*

In a later segment of the interview, Manny further explained that winning and earning a great living in the process made all the hardship and sacrifice worthwhile. After all, he and his family have reaped the fruits of his labour. He also expressed great pride in his growing capacity to share his earnings with his less-privileged countrymen. It was his way of sharing his blessings. No amount of discouragement from well-meaning relatives, friends and financial advisers could dissuade him from his continuous charitable work.

In his book, *Pacman: My Story of Hope, Resilience, and Never-say-die Determination* (Pacquiao, 2010), his wife expressed her sentiments about his generosity, especially to the poor:

*Poverty hurts him in his heart, probably because of the hurt he suffered as a boy seeing his family so hungry all the time. He wants everyone to be happy, even if they have nothing. He says “God gave us everything to live in this world, so why don’t we share with others?”* (p. 114).

His sense of purpose expanded to eventually include, not only a good life for his immediate family, but also a better life for his countrymen, the majority of whom live below the poverty line. Nowhere did he mention anything about fulfilling a personal dream to prove himself, or pursuing a personal ambition to become one of the greatest boxers in the history of the sport. He was apparently driven by a purpose beyond himself. Initially, he seemed to be compelled by the need of his family to survive, and later on, by the need to bring honour to his countrymen and share the good life he received with the less privileged. Underlying such motivations appear a sense of self that is deeply connected to his family, country and God.
Theme 2: The Integral Components of Faith and Fate in Success

In recalling his years of training for high-level competition in professional boxing, Manny asserted the importance of total conditioning of the mind, body and spirit. Although boxers are known to subject themselves to intense and rigorous physical training in preparation for each fight, Manny emphasized that together with physical training comes mental and spiritual conditioning:

*The mind, body and spirit must be one... physically, mentally and spiritually integrated... I could be physically prepared, but if my mind is not trained it loses focus, then nothing matters... You also need to entrust everything to Him because as the Filipino saying goes, “It is for man to labor but it is God who grants benevolence.”*

However, Manny recognizes his obligation to work hard in order to do his part in training and competition. Beyond that, he acknowledges, “God alone decides the final outcome, His will prevails... only He knows how the fight will go, if you win or lose... just be sincere in your prayers.” This belief allows him to remain confident before each fight, knowing that he has done all the work expected of a great boxer, yet totally accepting of God’s will on the final outcome of the match. Manny admitted his desire to win and his hope that God will grant him victory. When asked if he gets nervous before a fight, Manny reiterated his belief in God’s will; thus, he is not overwhelmed with fear or anxiety before a fight, no matter how high the stakes are. As far as he is concerned, he did his part and God will take care of the rest.

While Manny asserted that the mind, body and spirit must all be conditioned through dedicated and deliberate training, he explicitly raised the primary importance of faith in God to his extraordinary success in the sport. It is noteworthy that he spent a significant amount of time on this topic, more than any other topic during his interview. He makes no secret about his faith, kneeling in prayer before and after each fight, and making a public declaration of his gratitude to God after each competition. Although many observers have dismissed these practices as mere religious rituals characteristic of a religious upbringing, Manny spoke of a more fundamental and enduring relationship with a God whose presence he experienced in different stages of his life, a God who granted him the opportunity to excel in boxing, and a God whose will is for him is “to bloom where he is planted.”

The related sub-theme on fate emerged as Manny explained his success in boxing. He expressed the view that some individuals were meant to thrive and excel in a particular sport. Furthermore, he asserted:

*No matter how much one desires and strives to succeed, if that was not meant for him, he will not attain it. Victory will certainly elude him. However, if it is his fate, he will attain extraordinary heights of performance; sometimes, even beyond one’s expectations.*
Theme 3: Sport Excellence Requires Absolute Determination

This theme emerged from what Manny considers as another fundamental component of achieving excellence in boxing. Since he believes that boxing is one of the most difficult of all sports, he asserts the need for single-mindedness in committing to consistent and disciplined training. According to him, when one decides to pursue a career in boxing, one should be totally dedicated to it because any form of hesitation will hinder success, “What is really needed, once you enter boxing, is to give your whole life to your boxing career because if you are half-hearted in entering it, you will not succeed.” In another part of the interview, he reinforced this by emphasizing that one hundred percent determination is the minimum requirement from the elite boxer; anything less will simply not suffice to achieve success: “If you are not 100% decided... it falls short... if you only give 99.9%, better not get into boxing. If possible, give more than 100%... 110%! That’s me.”

Manny disclosed how he studies for his sport by watching videos of great boxers in competition, scouting his opponents by viewing recordings of their fights, and reviewing his previous fights to ascertain his areas of strength and limitations. Just like a student intent on mastering examination material, Manny described how he thoroughly studies all the elements of his game. He explained that if a student wanted to ace the exam, he is expected to prepare well for it. Similarly, in his determination to perform well, Manny does all the “homework” expected of a diligent athlete determined to succeed.

Despite his acknowledged expertise in boxing, Manny appears to regard himself as an ongoing learner determined to master the sport. In using the analogy of a student preparing for an exam, Manny implicitly assigns great importance to the continuous learning required of him in pursuit of excellence in his sport. This mindset motivates him to seize every opportunity to grow and develop in the sport. Perhaps this could explain why he trains himself harder than anyone else, even exceeding what his trainer asks of him. Early in his career, he knew others could outsmart him, but he made sure no one could outdo him in hard work and discipline. He articulated this further in his book, “I knew there were plenty of people smarter than me, but I also knew no one could outwork me” (Pacquiao, 2010, p. 59).
Theme 4: Excellence in Boxing Involves a Distinct Form of Intelligence

Manny, just like the majority of Filipinos, puts a high premium on education. Once he fulfilled his responsibility to provide a good life for his family, Manny did not hesitate to complete his high school education as an adult and eventually earn a college degree in Business Management. He was already a national celebrity by then and did not have to earn a high school diploma and college degree to earn the respect of his countrymen. Yet he did. Later on, he took a certificate course in Development, Legislation and Governance at the Development Academy of the Philippines in preparation for his responsibilities as a Philippine Congressman. These episodes provide the context from which he drew much comparison between preparation for boxing competitions and preparation for school examinations.

Manny introduced the concept of *talino*, the Filipino term for intelligence, in explaining his concept of boxing intelligence. He asserted that boxing intelligence is a special form of intelligence that goes beyond academic intelligence. According to him, the student may still pass an exam, no matter how poorly he has prepared for it. Given enough time during the exam to think and remember what he reviewed, he could eventually figure out the answers, whether partially or completely, to the given questions.

However, in boxing, the actual fight is the ultimate test and the athlete does not have the luxury of time to figure out responses to rapidly shifting challenges posed by dynamic interactions between him and the opponent. A split second delay in thinking and reacting may cost him the entire match.
According to Manny, boxing intelligence requires sharp thinking and rapid decision-making while in motion and contact with an aggressive opponent. Strategic adjustments during a match are usually made out of instinct; such automatic movements resulting from long hours of intense training and study. Pain and injury should not even block out effective thinking in quick response; the mind must remain sharp throughout the competition. The athlete is not given adequate time to review and strategise during competition.

Therefore, Manny explained that the distinct intelligence required in boxing exceeds what most people consider to be the only form of legitimate intelligence developed in the academic setting.

To further affirm his point, he provided commentary while enacting moves and strategies that he typically made during fights:

*Intelligence is really needed (in boxing)*... Brains are needed [He points to his temple]... *It's different from studying. In studying, you can think and remember the answer during the test... In boxing, when the opponent hits you, you cannot take time to think of the solution.* [He now shifts his body movement to demonstrate thinking by pausing to seemingly search for the solution in his mind.] ‘Uhmm... should I move this way? Right?’ *It must be automatic! You have to be smart... your mind must be quick. Isn’t it in school, even if you are stupid, you still have the chance to think...* [Again, he acts out thinking during an exam.] *What could be the answer?* [He shifts his posture to address the researcher.] *You will try to figure out how to get the right answer, isn’t it? You have time to think. In boxing, you do not have time to think. You only have a split second before you get hit. You could be knocked out before you could even think* [He acts as if he has fallen to the ground]. *Your mind must always be ready... you must be well conditioned so that you are totally focused. When your opponent hits you... right away, in one to three seconds, you have to be able to counter-attack* [He moves around as if he is fighting in the ring], *think fast on what’s the best counter-offense.* "Totally confident about his boxing intelligence, Manny asserts, “Even while I am hit, my intelligence is not lost” [He points once more to his head].

At this point in the interview, I felt like a student listening to an expert, or like a novice receiving lessons from a boxing guru. I could sense that he was totally engaged in body, mind and spirit as he described his experience and I felt most privileged to witness this boxing legend spare some of his time to make sense to a non-boxer.
Implications for Asian Sport Psychology Theory and Practice

Several implications for theory and practice may be drawn from this study. The first implication comes in the form of a humbling recognition that a formal sport psychology program may be unnecessary to enhance the performance of extraordinary athletes whose remarkable development and progress do not include any form of mental training or psychological support. The prospective benefit of a formal sport psychology program remains a hypothesis that might be too risky to test at this stage in his career. In fact, a research mentor cautioned me from timing my research interview shortly before Manny was scheduled to leave for a big international fight, lest I introduce an extraneous variable in his training program and, consequently, jeopardize his chances of winning.

Perhaps she was teasing me about the potential impact of my research on an athlete of national interest, but it also nudged me about my assumptions of what sport psychology can do to further enhance or maintain elite sport performance. The truth of the matter is that Manny Pacquiao received no training on mental toughness, coping with pressure, stress, pain and injury, or achieving peak performance. It is precisely from this realization that we need to position ourselves as researchers and practitioners, not as experts entitled to assert our theories, but as novices open and eager to grow in the understanding of exceptional performers like Manny Pacquiao. He is truly the expert from whom we can draw much learning and insight, enriching the way we think and do sport psychology.

This brings us to the fundamental challenge of research and practice among exceptional performers to be authentic in our athlete-centered approach. Although we may agree that the athlete is the central focus in consulting, we may disagree on a similar path to research and knowledge production in the field. A review of the related literature on exceptional performance in sport reveals a preponderance of researcher-generated theories, hypotheses, factors and predictors that drive the investigative process (Baker & Horton, 2004). From the experiences of Manny Pacquiao, we can see that some of the universal principles underpinning sport expertise do not apply to him. To even begin to understand him requires the investigator to let go of assumptions regarding sport expertise or elite sport performance. Appreciating how he perceives the world and what he considers as meaningful and significant to his own development and progress as an exceptionally successful boxer, is the appropriate starting point for meaningful and relevant research and practice. Hopefully, this chapter provided some leads in that direction.

The second implication challenges us to integrate the nuances of culture into our research and practice. This invites us to go beyond assessing how we could be similar to or different from our Western counterparts, and honour the unique internal and external environment of the athlete. For instance, research on motivation and achievement has revealed that not all athletes across different cultures are driven by the self-determined and intrinsic motives espoused by most North American and European athletes (Schinke, Hanrahan, & Cantina, 2009).
The integration of culture in the theory and practice of sport psychology includes consideration of an athlete’s socio-economic background and spiritual orientation because they infuse the way the athlete makes sense of the world and consequently acts. In the first theme that emerged from the account of Manny Pacquiao, a compelling life purpose that was deeply rooted in his relationship with family, country and God was revealed. His purpose for pursuing boxing at its highest level went beyond self-fulfillment in defining the trajectory and intensity of his motivation and action. Thus, self-deterministic and intrinsic approaches to motivation and achievement may not effectively work with athletes like Manny whose culture defines the self in relation to family, community and God.

Additionally, Manny Pacquiao’s experiences challenge the notion that poverty breeds learned helplessness (Seligman & Maier, 1967); on the contrary, it nurtured many character strengths that he used to excel and succeed in elite boxing. Neither was it simply a case of the reverse condition of learned optimism (Seligman, 1991); his success resulted from character strengths nurtured in the context of adversity and far-from-ideal life circumstances. Although he received no formal psychological skills training, Manny intuitively recognized and developed the value of a well-conditioned body, mind and spirit. As such, he committed himself completely to training his body, while fully engaging his mind and spirit. We can attempt to dissect the specific components of his “program” but as far as Manny is concerned, everything in his life meaningfully contributes to who he is and what he has become.

It is also noteworthy that Manny Pacquiao’s connectedness to his early experiences of poverty was never severed but was actually strengthened over time.
Filipinos have a saying that may be loosely translated in English as “The person who does not look back to where he came from will not reach his destination.” This saying reflects the importance of keeping the pursuit of success always in the context of how one started, and remembering to stay connected to those who were part of that past. This belief includes a warning against dissociating oneself from the earlier stages of poverty by way of arrogant behaviour, lack of appreciation for those who were once part of a humble past, or excessive self-importance that ignores the contribution of others at the start of a career or enterprise. Mental strategies that build solely on personal achievement may therefore be met with resistance, as they appear to alienate the athlete from his humble beginnings and to those who were part of his success.

Determination as a recurrent theme in Manny Pacquiao’s account is likewise contextualized within a meaningful and purposeful life for others. Because boxing provided him with a way out of poverty, a sense of desperation associated with the survival of his family drove him to commit his whole body, mind and spirit to the “job.” Determination, as manifested in his experience, is nested within a network of meanings that include how he viewed himself consistently in relation to the significant people in his life, how he regarded himself in relation to a world that did not revolve solely around him or his needs, and how he perceived his success as an active response to divine favour.

Manny Pacquiao’s definition of boxing intelligence as similar to but distinct from academic intelligence also provides us with insight into what he regards as his mental strength; his keen ability for rapid information processing and effective decision making while in physical contact with an opponent. Although he did not downplay the importance of formal education, he argued for a special form of intelligence that deserves recognition. Perhaps, this could provide the cue for future research and practice to explore and clarify our understanding of sport intelligence within the domain of boxing and across the different sport disciplines. In a study by Gould, Dieffenbach and Moffet (2002) on the Psychological Characteristics and Their Development in Olympic Champions, sport intelligence was portrayed as the ability to analyse, being innovative, being a student of the sport, making good decisions, understanding the nature of elite sport, and being a quick learner. Apart from this, little research has been conducted to extend the discourse on sport intelligence.

The use of prayer and religious rituals to enhance performance has become an important consideration for sport psychology in the recent years (e.g., Watson & Nesti, 2005). However, such practices should be understood within a broader reality meaningfully experienced by the athlete, rather than simply categorized as a set of coping skills and mechanisms to enhance sport performance.

The central theme of faith and fate in the life of Manny Pacquiao reflects a fundamental relationship with a personal God who actively participates in his life. His practice of prayer before and after every fight, thanksgiving in all his circumstances, and frequent references to spiritual truths and values are not isolated rituals employed for the purpose of achieving a desired outcome; thus, they cannot be reduced to a set of techniques and strategies that enhance sport performance.
Manny’s faith pervades his worldview, allowing him to see his sport in perspective, providing him with the compelling purpose by which he pursues boxing, and strengthening his desire to share his success with his countrymen, especially with those who do not have much in life. Manny makes no secret about his success formula. As far as he is concerned, he is merely fulfilling his human part of a divine plan.

From a rational point of view, this God-orientation may run counter to the assertion that interventions should be grounded in maximizing athletes’ control over their own mental state, with the end goal of facilitating improved self-regulation and greater control over performance. Manny Pacquiao’s God-orientation may be construed as diminishing the active role and responsibility of the athlete in determining the outcome of performance. His prayers may even be labelled as “superstitious,” promoting a mindset that relinquishes internal control to someone else or to an external supernatural force.

However, despite the negative connotation of spiritual beliefs and practices as manifestations of an external locus of control that are largely discouraged in competitive sport, Manny Pacquiao’s experience suggests otherwise. Nothing in his performance shows that his internal control diminishes as he yields to the will of God.

On the contrary, his firm belief in God’s will appears to ignite his passion to give more of himself to honour the talent that was given to him.

This orientation actually reflects the Christian paradox of man totally dependent on God’s grace for any effectiveness or achievement, but completely committed to hard work and excellence as if the outcome depended on human initiative and effort (Mackey, 2006). Therefore, the believer is not led to an illusion of divine transformation exclusive of human participation and cooperation. Given this perspective, the only thing Manny relinquishes is an excessive attachment to the outcome of the fight. Even outside his spiritual orientation, this attitude has the psychological value of releasing the athlete from the intense desire to control or predict the outcome of competition, so that he may focus on specific performance tasks at every moment during a fight.

Perhaps, a reframing of premises for investigation and practice needs to be undertaken to view spirituality from how it truly makes sense to the elite athlete. We should be aware of our own biases in relation to spirituality and caution ourselves from imposing them on the athlete. Religion and spirituality are very sensitive issues to many athletes. A reflective awareness of these issues has the potential of bridging the initial distance between athlete and consultant to achieve greater rapport and trust between them. It is most appropriate to maintain a healthy respect for the spiritual orientation of the athlete by allowing him to initiate discussions and reveal his stance about such issues.
Summary

It was a great privilege to learn from Manny Pacquiao himself. Much can still be learned from him as he continues to scale the summit of professional boxing. A review of his account showed a lifelong process of harnessing character strengths that were developed in the context of great adversity. These character strengths supersede the psychological characteristics or mental abilities that most formal sport psychology programs hope to develop in athletes who aspire to succeed in the global arena of elite sport. They are not separate traits or abilities that predispose an athlete to success but they are manifestations of a particular worldview, characterized by a strong sense of purpose beyond the self, total determination in pursuit of that purpose, the development of a distinct form of intelligence required for success in sport, and a profound sense of faith that embraces one’s destiny as an active response to divine initiative.

Despite our tendency to search for universal principles that govern sport expertise and excellence, we have come to realize that every individual athlete has a unique perspective of the world, of himself, and of the sport. Some may prefer to call this a worldview, mindset, framework, or paradigm. Whatever we choose to call this internal reality, the athlete, within a cultural context, actively construes it. The appreciation of this perspective as the vantage point from which the athlete makes sense of events and circumstances allows us to understand his motivations, inclinations, choices, decisions, and actions toward specific goals. Hopefully, this key principle will better inform our future investigations and practice.

REFERENCES


PHOTO CREDITS

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Roar of the Lions: Strengths-based Consulting with Sri Lanka Cricket

Sandy Gordon

In

Secrets of Asian Sport Psychology

Edited by: Peter C. Terry, Zhang Li-Wei, Kim Youngho, Tony Morris, and Stephanie Hanrahan
Introduction

The Sri Lankan cricket team is the national cricket team of Sri Lanka and is administered by Sri Lanka Cricket (SLC). The team played its first international match in 1926 and, since being awarded Test status in 1981, has become a force in international cricket. Sri Lanka won the Cricket World Cup in 1996, the International Cricket Council (ICC) Champions Trophy in 2002 (co-champions with India), and was runner-up in the ICC World Twenty20 competition in 2009 and in consecutive Cricket World Cups in 2007 and 2011. The team’s current (October, 2013) ICC rankings for Test matches, One Day Internationals (ODIs) and Twenty20 competitions is 7th, 4th and 1st, respectively.

At the invitation of head coach, Tom Moody, and upon approval of the SLC board, I designed and conducted six group sessions with the Sri Lanka national team between June 2005 and February 2007 in preparation for the April 2007 Cricket World Cup, held in the West Indies. In what follows, the activities during each session are briefly summarized and collectively illustrate use of a values- and strengths-based approach to both team and individual development.

Consulting Relationship with the Head Coach, Tom Moody

I began consulting in professional cricket in 1987 when I was appointed mental skills coach at the Western Australian Cricket Association (WACA) in Perth, Australia and, at that time, Tom Moody was the youngest team member. In 1998, I was concurrently appointed sport psychologist to the Australian Cricket Board (now Cricket Australia), during which time the national cricket team, which included Tom, was successful in winning the 1999 World Cup. Having completed contractual commitments with Australia in 2001, I worked with the Indian national cricket team (2002-2005) and visited the sub-continent (Bangladesh, India and Sri Lanka) several times before joining Tom, who was appointed Sri Lanka cricket head coach, from 2005 to the World Cup in 2007.

The reason I have mentioned my long-standing working relationship with Tom Moody is because he knew me well enough to trust the new approaches I suggested to him, which at the time were quite radical in a traditional and conservative sport such as cricket. I therefore fully acknowledge that without his support for strengths-based approaches and his encouragement to others (e.g. SLC senior management, team captains and senior players) to apply them, my initiatives may not have been as effective, or even possible.
Strengths-Based Approaches in Sport

Recent articles on positive psychology in sport (e.g., Park-Perin, 2010) including my own (Gordon & Gucciardi, 2011) have reported how Martin Seligman (1999, 2011) pointed out that, historically, human endeavors have been characterized by fixing weaknesses. I believe the coaching process in sport is no exception. While a weakness- or deficit-based coaching approach typically focuses on identifying an athlete’s or team’s problems and fixing them, strengths-based coaching is about spotting and exploiting athletes’ and teams’ strengths. During strengths-based consulting the focus is on what is already working and because strengths are part of basic human nature - every individual and every team has strengths and deserves respect for having them - our areas of greatest potential are in the areas of our greatest strengths. While individuals and teams can develop from working on weaknesses, change and improvement is only possible when you are also working on your strengths.

Strengths-based consulting in sport can be regarded as being both an approach to consulting (i.e. strengths are used more effectively in the attainment of goals) and as a value-adding outcome of consulting (i.e. strengths-based consulting is used to enable the realization and development of an individual’s strengths) (Linley & Harrington, 2006; Linley, Woolston, & Biswas-Diener, 2009).

Research in non-sport settings has shown that, in addition to being more confident, having higher levels of energy and vitality (Govindji & Linley, 2007), and being more likely to achieve their goals (Linley, Nielsen, Wood, Gillett, & Biswas-Diener, 2010), people who use their strengths are more effective at developing themselves and growing as individuals than people who do not (Sheldon, Kasser, Smith, & Share, 2002).

Research also demonstrates that those individuals who use their strengths more often are happier, have higher self-esteem, experience less stress, are more resilient, perform better at work, and are more engaged at work (Linley et al., 2010). The case for using a strengths-based approach, therefore, is quite compelling.
Session 1: Colombo, Sri Lanka - June, 2005

Before meeting the Sri Lankan national squad for the first time, Tom and I had discussed with the team captain the importance of conducting a values-based cultural change session. Consequently, using a six-step approach, which I have described in full detail elsewhere (Gordon, 2007; 2013), we began by establishing the squad’s core values, and conducting a values enactment exercise. We then set performance and process goals that were aligned with desired results and outcomes and, finally, mission statements were established that provided the means to the end, or vision, which the squad entitled Roar of the Lions, to reflect the Sri Lankan national symbol – the Lion.

Using four core values - pride, enjoyment, commitment, and belief - players identified appropriate attitudes and behaviours in four team contexts i.e. at training, in the dressing room, on the field, and off the field. These were captured on a large travel-friendly poster, which subsequently travelled the world’s cricket venues and appeared in every changing room the national team populated leading up to the World Cup final in 2007. The poster served as an important and symbolic blueprint reminder to management, coaching staff and players, of the core values that drove the national team’s process goals.
Session 2: Melbourne/Perth, Australia - January, 2006

The purpose of the second session, held in Australia in two locations, was to introduce an Appreciative Inquiry (AI) approach to understanding the concept of high performing teams. AI is regarded as a positive, strengths-based operational approach to change, learning, and development, which begins by obliging athletes and management to choose ‘the positive’ as the focus of inquiry, and as the launching point for all that follows. I recently reported an AI case study that featured a cricket operations strategic planning event at the Western Australian Cricket Association (Gordon, 2011). According to Sloan and Canine (2007):

The AI philosophy and practice is in and of itself the ideal process for both enabling people in organizations to become more aware of their own strengths and abilities in ways that increase their effectiveness in all parts of their life and to create robust support for change in the client’s social system (p. 1).

The following assumptions about life, people and the change process itself, form the basis of an AI approach (Cooperrider & Whitney, 2005):

- In every society, organization, group or individual, something works.
- What people focus on becomes their reality.
- Reality is created in the moment, and there are multiple realities.
- The act of asking questions of an organization, group, or individual, influences the group or individual in some way.
- People are more confident and comfortable in their journey to the future (the unknown) when they carry forward parts of the past (the known).
- If people carry parts of the past forward, those parts should be what is best about the past.
- It is important to value differences.
- The language people use creates their reality.
Prior to the squad leaving Sri Lanka for their Australian tour, the coach and I asked both management and players to partner up and collect data on high performing teams using the interview guide illustrated in full in Table 1. Upon their arrival in Australia, I facilitated a two-hour meeting focusing on the data collected during interviews that were universally enjoyed by interviewees as well as by both management staff and players. This meeting was concluded with a discussion on goal setting specifically for touring Australia.

My observation at this time was that, because players and staff knew how to interact more positively with each other and the blueprint for all activities (Roar of the Lions) was receiving frequent mention, both group and individual consulting sessions on goal setting became much more effective. For example, team process goals for fielding, bowling, and batting practice became more precise, and included, respectively: “spend time in actual fielding positions on the field”, “own your bowling practice sessions - bowl in partnerships off a full run up”, “bat against high quality bowling as often as possible”. Examples of more precise individual process goals for fielding, bowling and batting, respectively, were: “practice a variety of stops (in-field) and dives (out-field boundary ropes)“, “foot placement half and half on the front line always (to avoid no balls)”, “practice variations of scoring shots to specific areas.”
Table 1. Interview Guide for an Inquiry into High Performing Cricket Teams

You are going to pair with another player and ask each other the questions that follow. As an interviewer, your job is to read the introduction to the topic, then ask the first question. Listen to what your partner tells you and make notes so you can share the information with the larger group.

**Question 1: High Performing Teams**

- Tell me about a time when you observed or were part of a high performing team. What did it look like, feel like?
- What stands out in your mind about how the team worked with each other?

**Question 2: Trust**

- Think of a time when there was high trust in a team or partnership. What factors were present to make trust possible?
- Think of a leader you trusted. Why did you trust him or her? What did they do that made trust possible?
- When have you worked in a team or organization that operates under the assumption that people can be trusted? What did they do differently from a team or organization that operates under the assumption that people can’t be trusted?

**Question 3: Relationships**

- When you have been a part of, or observed this type of team, how did the team manage relationships?
- How did this team handle conflict - how did they manage it?

**Question 4: Expect and Respect Differences**

- How did the team show respect and appreciation for the diversity within the team?
- When the team had differences, how did they deal with those differences?

**Question 5: Results**

- What was the process the team used to set their goals and divide the roles and responsibilities necessary to achieve those results?
- Who or what was the team? What was the situation? What did the team do to gain clarity? How did this clarity help the team achieve top performance?

**Question 6: Leadership**

- Describe the qualities, characteristics, behaviours, activities, and/or practices of the team that foster a ‘leaderful’ environment.
- Think of a leader who demonstrates leadership that supports a leaderful environment. Specifically, what does he/she do?

**Question 7: Learning/Mistakes/Celebration**

- Tell me about a time you were a part of a team that demonstrated they could learn together. Specifically how did they do it?
- If there was an ‘after-action’ review or an apology, who initiated it? How did the team react?
- How did the team put the lessons to use?
- How did this team celebrate success?

Two months later, prior to the first warm-up game of the Sri Lankan tour of England, during which Sri Lanka drew the three Test series 1-1 and whitewashed England 5-0 in the ODI series, I conducted a squad session that I have described in greater detail as a case study in a special issue on performance psychology in the Australian Psychological Society's *InPsych* magazine (Gordon, 2008). The focus of the meeting was “Discovering What Gives Life To SLC When It Is At Its Best,” which featured a combination of facilitation techniques, including Naming Elephants (Hammond & Mayfield, 2004) and Open Space Technology (Owen, 1997), as well as Appreciative Inquiry (AI).

Naming Elephants is a metaphor for bringing undiscussable issues into the open and making implicit ‘difficult’ conversations explicit. The main ‘elephant’ identified by all players was intimidation, negative and pessimistic communication to junior players by senior players, which had a negative behavioural impact on the team such as lowered morale among junior players, who switched off emotionally during both team meetings and games and suppressed ideas and thoughts of voicing contributions.

Open Space Technology is a group facilitation method comprised of four principles and one ‘law’ that allows small (or large) teams of players to say and do what they want in the time available and have self-organized discussions on anything that is important to them in a short time. Subsequently, coaches and players created a meeting agenda around the theme “What Gives Life To Sri Lankan Batting, Bowling and Fielding When It Is At Its Best?” During a five hour session (three hours over schedule) they had mapped out their England tour preferences for both training priorities and match tactics.

The session witnessed players and staff speaking to each other freely and in a solution-focused manner. One additional important outcome was a record of on-field, off-field and dressing room habits associated with best performances. This list, entitled *Habits SLC Has When At Its Best*, was finalized at the conclusion of the England tour and became an agenda item to re-visit during each of the subsequent three meetings that I facilitated.

Core habits and attitudes associated with managing tournaments included “leadership from within the team”, “team goals always trump individual goals”, “no excuses to lose (e.g. weather, travel, food)”, “respect weaker opposition (e.g. English County sides)”, and “focus on fundamentals.”
Session 4: Colombo, Sri Lanka - July, 2006

When the team returned home from England, the first group session with both the SLC national squad and management staff began with an inspirational audio-visual review of Test and ODI performances and achievements in the preceding 12 months. Prior to the successful England tour, Sri Lanka had defeated Bangladesh 2-0 and 2-1, respectively, in Test and ODI series in Bangladesh, and had lost at home to Pakistan 1-0 in two Test matches (one Test drawn) and 3-0 in a four game ODI series (one ODI drawn).

Everyone at this meeting was reminded of the values driving SLC (Roar of the Lions) and the processes of achieving self- and team improvement. Copies of the Habits SLC Has When At Its Best (April, 2006) document were also reviewed in detail and I noted considerable progress in the culture of the team and among both senior and junior players, compared to June 2005. For example, from what was previously a hierarchical top-down communication environment, characterised by expectations that senior players would tell younger players what to do and the latter would just follow, marked changes were observed. Younger players spoke up more often during team meetings and also looked to take more initiative during training.

Indicators of self-leadership were emerging, such as players taking much more responsibility for both their personal and professional development and relying much less on others, such as coaches or senior players. For example, ‘training buddy’ arrangements emerged among squad members and both senior and junior players were observed spending discretionary time supporting each other at the nets, in the weights room, and in the swimming pool. In addition, strengths-based conversations were overheard as players and coaches discussed ways forward both for the team and also for individual team members.
Session 5: Wellington, New Zealand - December, 2006

I arrived in New Zealand for this session in Wellington just in time to see the last wicket fall on Day 4 of the 2nd Test, won by Sri Lanka. Later that day I met with the coach and staff to discuss the agenda for a breakfast meeting next morning, which included the team manager, captain and vice-captain. The purpose of the meeting was to design a strengths-based team session later that day and to develop a metaphor that would characterize the team’s focus and efforts for the next six months. Subsequently, the full playing schedule leading up to the World Cup in June 2007 was presented and players were asked to decide on a theme that would express process goals for all games, beginning with the imminent ODI series against New Zealand.

Specifically, players were asked to determine both performance and process goals as well as outcome goals for fielding, bowling and batting based on what was already working. Both performance targets and process goals were identified to drive training and practice habits and in-house rewards/recognition. The purpose of this session was to keep players focused on improving both team and individual performances (controllable factors), which in turn would deliver the outcome goals (not directly controllable factors) that were challenging yet achievable.

To facilitate this three hour session, I began by reminding everyone of the strengths-based Appreciative Inquiry (AI) process used in England that resulted in Habits SLC Has When At Its Best.

However, since strategic planning specifically for the forthcoming six months was required, I introduced the SOAR technique, which stands for Strengths, Opportunities, Aspirations, and Results (Stavros & Hinrichs, 2009). SOAR incorporates AI principles and players were simply asked to pair up and discuss responses to each of the questions illustrated in Table 2.

<table>
<thead>
<tr>
<th>strengths</th>
<th>opportunities</th>
<th>aspirations</th>
<th>results</th>
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Table 2. The SOAR Process

<table>
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<tr>
<th>Element</th>
<th>Questions</th>
</tr>
</thead>
</table>
| **Strengths** | • What can we build on - what are our strengths in fielding, bowling and batting?  
• What is already happening that works?  
• What do we already do that is world class? |
| **Opportunities** | • From our existing strengths, what other opportunities are provided that we should focus our efforts on?  
• What new skills do we need to move forwards? |
| **Aspirations** | • Reflecting on our strengths and opportunities, who are we, who should we become?  
• What innovations or initiatives (i.e. tactics) would support our aspirations? |
| **Results** | • How will we know we are succeeding?  
• Considering our strengths, opportunities, and aspirations, what meaningful measures would indicate that we are on track to achieving our goals?  
• What indicators would create a score card that addresses our process goals?  
• What are the best rewards to support those who achieve our process goals? |

A final document prepared by the players, entitled *Api Wenuwen Api* (God Bless Sri Lanka), was sent to the coach, who prepared a formal template for everyone to refer to and apply immediately.
Summary to December 2006

I observed that both management and players seemed to have embraced the process of change that was necessary for SLC to achieve its outcome goals in 2007. The players’ shared choice and commitment was significantly tested in New Zealand. However, by re-visiting the values set in June 2005 - pride, enjoyment, commitment and belief - their collective confidence in closing their talent-achievement gap was evident. For example, younger talented players in particular had come to realise that being gifted or having potential was not enough and that to achieve the next level, and move from good to great, required a lot more personal effort and desire. The next session was scheduled for February, a session that would specifically focus on both individual and team game plans for the 2007 World Cup.


The team had just returned from a successful series in India when I arrived on Wednesday 21st February for my last session prior to the forthcoming World Cup in April, 2007. I presented the contents of a document, entitled World Cup 2007 Preparations, and spent time going through four exercises, illustrated in Table 3, that focused on the ideal performance state, mental toughness, dealing with pressure, and professionalism.
Table 3. World Cup 2007 Preparations

1. Creating Your Ideal Performance State (IPS)

<table>
<thead>
<tr>
<th>Pre-Game (day/night before; morning/afternoon before)</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>• What essential activities or behaviours do you engage in prior to games that you associate with your IPS. What do you feel you need to do? When?</td>
<td></td>
</tr>
<tr>
<td>• Which feelings or emotions do you associate with your IPS prior to games? How do you want to feel pre-game? How do you achieve this?</td>
<td></td>
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<table>
<thead>
<tr>
<th>During Games</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• What essential activities or behaviours do you engage in during games that you associate with your IPS? What do you feel you need to do?</td>
<td></td>
</tr>
<tr>
<td>• Which feelings or emotions do you associate with your IPS during games? How do you want to feel during games? How do you achieve this?</td>
<td></td>
</tr>
</tbody>
</table>

2. Mental Toughness: Task Awareness - Checklist

“When (batting, bowling, WK/fielding) what I need to do to play well is...”

Batting [ ] Bowling [ ] WK/Fielding [ ]

3. Dealing with Pressure and Adversity

• Identify pressure or anxiety-laden situations and remedy them.

“So, when/if (this happens)...” “I will do and say this...”

4. Professionalism

GAME vs • Pre-Game Performance Goal(s) (batting, bowling, WK/fielding)

After EACH Game: 3 R’s (review, retain, refocus)

• Achievement of Performance Goal(s)? (Yes or No)

REVIEW Stay with the day and the experiences - what happened?

RETAIN What did you learn from your performance, opposition, team mates?

Rate yourself on the following: (1 = very poor; 5 = excellent)

<table>
<thead>
<tr>
<th>Execution of personal game plan</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Execution of team game plan</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Creating IPS</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Maintaining IPS</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ability to energise</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Body language/communication</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My professionalism</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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REFOCUS Anything you or the team need to change for the next game?

Note. WK = wicket-keeping (see http://en.wikipedia.org/wiki/Cricket for details of the sport)
I also asked players to complete exercises on managing energy, managing their outlook, confidence, and individual goal setting for the World Cup, which were to be reviewed during the tournament. For example, three means of managing energy and reducing stress effectively included physical activity, healthy nutrition, and relaxation. While other support staff facilitated the former two, I provided a simple 10/10 deep relaxation routine/script (10 steps in 10 minutes), illustrated in Table 4, that all players appeared to embrace immediately.

Table 4. 10/10 Deep Relaxation Routine (adapted from Bull, 2006, p. 92-93)

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Find a place where you can sit or lie down comfortably, preferably with your head supported and where you will not be interrupted. It helps to try and relax your fingertips and your toes. Switch off your phone so that no one can contact you for the next 10 minutes.</th>
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<tr>
<td>Step 2</td>
<td>Put on some music which you find really relaxing - a personal music player is a useful accessory.</td>
</tr>
<tr>
<td>Step 3</td>
<td>Close your eyes and then spend a couple of minutes getting really comfortable and tuning into your body whilst switching off from the outside world.</td>
</tr>
<tr>
<td>Step 4</td>
<td>Now focus on your breathing rhythm. Count ten deep breaths to establish a slow, steady breathing rhythm. Each time you breathe out, feel more relaxed and feel some tension drain away. Inhale through your nose: count IN, TWO, THREE, FOUR. Exhale through your mouth: count OUT, TWO, THREE, FOUR.</td>
</tr>
<tr>
<td>Step 5</td>
<td>When you feel ready, focus on your right arm. Clench your fist tightly, hold while you count to five, and then slowly open out your fingers and relax your hand and arm completely. Feel your arm go heavy and sink into the floor or chair. Repeat this process for your left arm.</td>
</tr>
<tr>
<td>Step 6</td>
<td>Now focus on your right leg. Tighten the muscles in your leg, hold while you count to five, and then relax all the muscles completely. Concentrate on a heavy feeling throughout the length of your leg. Repeat the process for your left leg.</td>
</tr>
<tr>
<td>Step 7</td>
<td>Turn your attention to your face, neck and shoulders. Relax all the muscles in this area and in particular focus on smoothing out the muscles in your forehead. Relax your cheeks, your neck and the back of your shoulders.</td>
</tr>
<tr>
<td>Step 8</td>
<td>Focus on relaxing your whole body by concentrating on a relaxed feeling in your fingertips, toes and forehead.</td>
</tr>
<tr>
<td>Step 9</td>
<td>Spend a couple of minutes listening to your music, enjoying this relaxed feeling and imagining yourself in a place where you can feel completely relaxed and at ease. This may be on the beach, by a swimming pool, on a boat, in a forest, up a mountain, etc.</td>
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<tr>
<td>Step 10</td>
<td>Count down silently, and slowly, from 10 to 1. As you do, bend and stretch your arms, move your head from side to side and gradually bring yourself back. As you get to number one, open your eyes and tell yourself that you feel relaxed, rested and refreshed.</td>
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To manage their outlook during the World Cup I asked players to list people whose feedback they would want and trust, when and how they preferred the feedback (written, verbal, or CD) and in what areas they wanted feedback.

To create and sustain their own ‘personal winning environment’, I also asked players to write responses to “I should stop, start, or continue doing what...?” This linked to a ‘confidence account’ exercise I introduced to the team, during which players wrote responses to the prompt, “Prior to the World Cup, list...

- Your accomplishments and achievements as a Sri Lankan cricketer.
- Your natural talents and strengths as an International player.
- The extra value you add to the current side in terms of your professionalism, commitment, and attitude.”

During the World Cup, they were asked to “Read the above responses daily and ‘make deposits here’ i.e. add all the small and large successes achieved in each World Cup game”.

My final team session focused on key mental areas; namely, unshakeable self-belief, preparation prior to games, and focus during games.

The meeting concluded with a discussion on “Team Goal Setting for the World Cup” which identified the outcome goal (winning the World Cup), performance goals for batting, bowling, fielding and mental game, and respective process goals. This turned out to be an excellent experience for every player who participated in creating a template for winning the World Cup.

I also arranged a final meeting with team management staff - team manager, head coach (Tom Moody), assistant coach, physiotherapist, trainer, and analyst - to summarise details of the strengths approach we had introduced. These reminders, illustrated in Table 5, needed to be applied consistently during the World Cup by all concerned.
Table 5. Summary of Team Management Strengths-Based Approach

**An Appreciative Perspective**

- What is working in our ‘team’ (i.e. team management)?
- What gives life to the relationships we have? What seems right?
- How are we successful because of our dynamics?
- How can we achieve our greatest dreams together at the World Cup?

**Great Expectations - The Anticipatory Principle**

- What you focus on, believe, think, imagine, and act upon informs your relationships and what you can create, together.
- When we act from an expectation, we move towards what we anticipate. Individual anticipation affects our relationships.
- Collective anticipation impacts the direction in which a relationship and team (organization) moves.
- When we collectively create the anticipation of a mutual goal or vision, we tend to act and support one another in achieving that goal.
- Generating shared anticipation is a critical element in the success of any team undertaking.

**Signature Strengths**

Focus on what each player is good at. Help him exploit what he does best.

<table>
<thead>
<tr>
<th>Player’s name</th>
<th>His strengths include</th>
<th>How will I nurture these effectively during the World Cup?</th>
</tr>
</thead>
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Credit: Badger Swan/flickr/CC-BY-NC2.0
Summary to February 2007

All players in the national squad appeared ready for the World Cup and its myriad challenges, including pre-departure distractions such as last minute changes in squad selection, which (only) in Sri Lanka, has to be approved by the Government Minister for Sport. Team management impressed me in terms of their professionalism and consistency in supporting and challenging both senior and junior players. Such was the level of preparation and readiness of this strong and experienced squad that I was fully confident of a competitive performance in the West Indies.

Although the goal of winning the 2007 World Cup was certainly realistic, in the final it was Australia, who had dominated the whole tournament, who secured their fourth title, and their third in a row since 1999. The final of the ICC World Cup 2007 in Bridgetown, Barbados, however, will long be remembered for the farcical final overs of a broken contest due to rain delays played out in near-darkness. Good-naturedly, the Sri Lankans accepted the umpires’ verdict, returned home as heroes, and were left to reflect on what might have been had they learned how to play in twilight darkness!
Overall Summary

The processes and activities I have described above were made possible by a coach who believed in the transformative capacity of strengths-based approaches to individual and team performance consulting. While I have since witnessed similar transformations occur in non-sport settings (schools, public service departments, private companies) only time will tell if other sport coaches, teams, and individuals will embrace the potential that applied positive psychology undoubtedly offers.

REFERENCES


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Sandy Gordon PhD is a Professor of Sport and Exercise Psychology at the University of Western Australia, a Registered Psychologist, and a Fellow of the Australian Psychological Society (APS). His research interests include mental toughness, psychology and sport injury, and applied positive psychology. Sandy has contributed to coach education programs in over 10 different countries, including the Cricket Boards and national teams of Australia, India, Sri Lanka, and Zimbabwe, and has consulted with Hampshire County Cricket and the Western Australian Cricket Association. His consultancy work with Australian Football (AFL and WAFL), Basketball (NBL) and Football (Hyundai A-League) teams is ongoing.
Mental Training of the Chinese Diving Team for the 2008 Olympic Games

Zhang Zhong-Qiu

In

Secrets of Asian Sport Psychology

Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

There is no doubt that China is the most successful nation in the world during the modern era in the sport of diving. From the inception of the World Aquatics Championships in 1973, China has won 65 gold medals in diving events, five times as many as any other country. Since re-entering the Summer Olympic Games in Los Angeles in 1984, the Chinese diving team has won 33 gold medals out of a total of 201 won by China, more than any other sport. Team members have become household names in their own country and many divers have achieved superstar status.

China’s domination of international diving has created something of a psychological barrier for other nations. In the words of American diving reporter David Woods, “Part of the obstacle … for other athletes all over the world is not to be intimated … Before anyone can beat the Chinese divers, they’ve got to believe. I expect China will maintain its dominance for some time” (Chen, 2012).

The extraordinary achievements of the Chinese diving team are the result of training regimens and levels of sustained hard work that most divers from other countries could not endure. The divers train for more than 300 days every year, with their daily training including 7-8 hours’ work on technique, conditioning, and all the small details that help the divers to perform at their best when it matters most, at the major competitions. The words of Malaysia’s Pandelela Rinong, the 2012 Olympic 10m bronze medallist, exemplify the awe and respect that others divers have for the work ethic of the Chinese diving team, “The Chinese are just more determined to go all-out in training and competition. Athletes in other countries do not have the willpower to keep going” (Chen, 2012).
Chinese Sport System

In developing its approach to international sport, China has embraced the ethos of “ju guo ti zhi”, which represents whole of country support for the elite sport system. The essence of this approach is for central and local governments to use their power to channel adequate financial and human resources throughout the country to support elite sport in order to win glory for the nation. This system produces a huge financial and manpower investment into elite sport. For example, it has been estimated that China spent RMB700 million ($103 million) to produce each gold medal won at the 2004 Athens Olympic Games (Ma, 2010).

The training regimens and total commitment shown by Chinese divers have been the subject of criticism in the western media. This was particularly the case during the 2012 London Olympic Games when it was revealed that the parents of Wu Minxia, the first woman to win diving gold medals at three consecutive Olympic Games, concealed her grandparents’ deaths a year earlier and her mother’s long battle with breast cancer, for fear of disturbing her training. Wu herself expressed her understanding of her parents’ actions, “There may be distance from our families but the distance doesn’t make us feel we are far apart. I chose to be a diver to pursue this goal” (Ransom & McNeill, 2012). Many of China’s Olympians draw emotional strength from teammates, coaches and support staff when they are away from family and friends. Wu was quick to acknowledge the support she receives from her teammates, “We are just like a big family who all train together” (Ransom & McNeill, 2012).

Psychological Support

Scientific research and support services for the Chinese diving team has been reported previously in relation to the preparations for the 2004 Athens Olympic Games, although only in the Chinese language (Wang, Zhang, & Ren, 2007; Zhang, 2006). In the present chapter, the mental training program for the Chinese diving team in its preparation for the 2008 Olympic Games in Beijing, where the team won 7 of the 8 gold medals on offer, is explained. The Beijing Olympic Games obviously provided a home advantage for Chinese athletes but at the same time carried huge expectations of Chinese success. As a result, and especially given the close proximity of family and friends, the athletes felt much pressure to win their events.

Sport psychology training is an integral part of the overall training program for all divers in the Chinese national team. As part of the preparation for the Beijing Olympic Games, the psychology consulting team developed China’s first sports psychology website, launched in April 2008, which was specifically designed for Olympic athletes and their coaches. The website included a range of multimedia resources about sport psychology and facilitated direct communication between the athletes and mental health experts. The psychological consulting team for the 2008 Beijing Olympic Games included 22 practitioners from organisations such as the Institute of Psychology at
the Chinese Academy of Sciences and the Department of Psychology at Beijing Normal University. The online system allowed athletes to download sports psychology materials to their mobile phones, to send text messages to the sports psychology team, and to make appointments for consultation with their preferred sports psychologist to address individual issues. The privacy of the athletes was protected using an advanced system, similar to what banks use for VIP customers.

The sports psychology laboratory at the China Institute of Sport Science, where the author is based, includes a range of world-class facilities and equipment to support 18 national teams. Coach education is a big part of the service, in consideration of the fact that coaches are the architects of training activities and competition strategies. Regular lectures and workshops are hosted for coaches on a broad range of topics related to the psychological aspects of diving.

Four psychological approaches are widely used in supporting Chinese divers. These are Brief Solution-Focused Therapy, Imagery Training, Facial Expression Recognition Technology, and Yoga Training. The focus of this chapter is on describing how each of these approaches is used to support elite Chinese divers.
Brief Solution-Focused Therapy

Brief Solution-Focused Therapy (BSFT) is a goal-oriented approach that focuses on what athletes want to achieve rather than the problems they face, and on the present and the future rather than the past (see http://en.wikipedia.org/wiki/Solution_focused_brief_therapy). The therapist first invites the athletes to envision their preferred future and then assists them to take actions toward achieving it, either in small increments or large changes (Carpetto, 2008). To support this approach, a series of consultant techniques proposed by De Shazer (1985) are used, including normalizing, pre-session change questions, and pre-suppositional questions. Normalization is generally defined as a therapist’s use of indirect or direct statements that refer to client issues as ordinary difficulties of life rather than pathological manifestations. The goal of this strategy is to pre-empt the client’s view of their problems away from pathologic interpretations and towards viewing difficulties as a normal part of everyday life.

As a pre-session change question, BSFT therapists typically ask, “What changes have you noticed that have happened or started to happen since you made the appointment for this session?” This question has three possible answers. First, the client may say that nothing has happened. The second possibility is that things have started to change for the worse or have started to get better. The third possible answer is that things are about the same. The therapist could then ask something like, “Is this unusual, that things have gotten worse?” or “How have you managed to make things better?” These questions may lead to information about previous solutions and exceptions, and may help to move the athlete into a solution-focused mode. Pre-suppositional questions, such as “What things have been improving for you lately?” are usually asked in the second and subsequent sessions. By applying these techniques, the therapist can help the athletes achieve the consulting goal little by little.
BSFT Process

In BSFT there are four distinct phases. These are the problem-description phase, the developing a positive goal phase, the exception-seeking phase, and the feedback phase.

Problem Description Phase. In this phase, the primary task of the therapist is to gather information from the athletes, such as their values and beliefs. The therapist should be patient but, at the same time, consider ways to implement the next step with the information provided. Good listening is essential during this phase; it requires the therapist to concentrate intently so they do not miss any important information.

Developing a Positive Goal. Goal development is a positive process. In this phase, the athlete is asked to imagine a situation where all issues have been resolved. Then the therapist and athlete develop a feasible and practical script in a creative way. For example, where an athlete is uncertain of what they want to achieve, the therapist can help the athlete to clarify their ideas. Once specific goals have been clarified and understood, the therapist will assist the athlete to evaluate progress towards the achievement of the goal. For example, the therapist will use their expertise to evaluate information that emerges from discussions with the athlete and provide the necessary encouragement to help the athlete advance towards further changes.

Exception-Seeking Phase. A key principle of BSFT is to assist clients to see that the problem(s) they face may not be as severe as they might seem. A therapist will try to encourage athletes to describe what they could do differently to address current circumstances and work towards achieving a goal. In practice, we communicate with the athletes to help them understand that they may need to try different strategies to achieve the goal. The aim of this phase is for athletes to understand what worked for them in the past, and to help them gain confidence about future improvement. We encourage athletes to understand and accept themselves, and to create a positive self-concept, in order to promote healthy psychological development.

The difference between a previous solution and an exception is small, but it is significant. A previous solution is what an athlete has tried once, but discontinued. An exception is something that is beneficial for solving a problem, and this often happens spontaneously and without intention. BSFT may help athletes identify these exceptions by asking, “What was different for you before the problem existed?” The gives athletes the opportunity to view themselves from another perspective. It also represents a first step towards making athletes feel that they are capable of solving the problems, giving them a sense of control.
Consultation Feedback. Before providing feedback, both the therapist and athlete should pause to reflect on what has been said, what has been done, and which strategies have been applied during the consultation. Generally, feedback from the therapist to the athlete should provide evaluation, suggestions, and assignments. It is crucial to make an evaluation, emphasizing the progress and effort the athletes have made to address issues, which can improve the sense of accomplishment and self-esteem. It is not necessary that an evaluation will solve the problem, but it can improve the athletes’ self-awareness of their effort. Suggestions should be comprehensive, perhaps providing athletes with guidance not only on their physical and mental training but also on their future lives. Towards the end of the consultation, as well as providing an evaluation and making suggestions, assigning questions for athletes to consider prior to the next consultation, such as, “What do you think are your strengths and weaknesses?” or “Do you think your image of yourself affects your performance?” is also advantageous.

During preparations for the Beijing Olympic Games, BSFT was used with five members of the Chinese diving team to address issues that included pre-competition anxiety, lack of confidence, attention regulation, role orientation, motivation, and so on. Most issues had been resolved within an average of 3.5 consultations. De Shazer (1985) argued that BSFT inspires and guides clients, including athletes, to see the positive side of themselves and to expand this self-awareness to influence their thoughts, feelings, and behaviour, so that they develop the courage to transform their negative experiences into positive beliefs.

Given that athletes often face harsh, challenging environments such as undergoing boring, repetitive training far from home or competing against a talented field of opponents, it is necessary to develop strategies that are appropriate for the personal circumstances of the athletes. Athletes and coaches are often more concerned about progress, improvement, and performance, and less concerned about weaknesses and problems. In the context of trying to address issues of concern to athletes at a time when they need to maintain a demanding training and competition schedule, BSFT is a simple and effective therapeutic approach.
Imagery Training

Research shows that imagery training is frequently applied by coaches and athletes for a variety of purposes (Martin, Moritz, & Hall, 1999), and also that it is effective in enhancing performance (Curran & Terry, 2010). Anecdotally, many elite athletes have acknowledged how imagery training has contributed to their success (Zhang, 2005) and decades of research have confirmed the benefits of imagery training on skilled physical performance. Although studies of the positive effects of imagery for athletes are fairly common, there is a paucity of investigations of elite athletes, especially those who compete at an Olympic level. Therefore, we explored the effect of imagery training on the quality and stability of the Chinese divers’ motor skills.
Case Study #1

During preparation for the Beijing Olympic Games, three 10m platform divers participated in an imagery program delivered by the sport psychology team. On the basis of objective analysis of performance and interviews with the coaches, specific elements of performance that required improvement were identified for each diver. Laboratory imagery training underpinned field training, in that laboratory-based practice was conducted 2 or 3 times before being transferred to the diving pool setting.

Based on relevant theories and the characteristics of the sport, we developed a diving-specific, Chinese-language version of the Vividness of Visual Imagery Questionnaire (VVIQ; Marks, 1973), which was completed by the three divers before and after the imagery intervention. We also used the Dartfish™ performance analysis system, which takes the form of a camcorder technology package that allows immediate feedback to learners using digital video, to provide objective data of all changes to technique. The three athletes reported significant improvements in imagery vividness following imagery training, but more importantly their performances also improved significantly. After several weeks of imagery training, performance of difficult technical dives by the three athletes, as assessed by total score, had increased by 23%, 25% and 23%, indicating that imagery training was associated with significantly greater consistency of performance. After several weeks of personal imagery training, in both laboratory and field training settings, the performances of the three divers had improved by a competitively-meaningful margin.
Facial Expression Recognition Technology (FERT)

Facial expression is the motion of muscles in the face, including eye muscles, facial muscles and mouth muscles. These movements convey emotional signals to other people and represent important objective indicators in the study of emotion. Also, as the external representation of human emotions, facial expression plays an important role in interpersonal communication. Facial expression acts as a medium to transmit interpersonal emotions accurately and without words or bodily movements. Facial expressions have a bi-directional relationship with subjective feelings, not only do expressions reflect our feelings but they can also influence them. Seminal experiments have shown that participants who make specific positive facial expressions can enhance their subjective feelings (Ekman, 1970). Researchers agree that the movement of facial muscles is the reaction of the nervous system and the facial muscles to the internal and external environment, leading to various facial expressions. Therefore, facial expression, as a form of emotional activity, has a physiological basis.

Physiological Basis of Facial Expression

Facial expressions involve the geometric distortion of facial features. Abundant facial expressions can be produced, depending on the specific facial structure. The structure consists of different tissues including the bones, muscles, and skin covering. These tissues have visible striations, so they constitute the physiological basis of facial expression. Facial muscles are innervated by the 7th and 5th cranial nerves, the nuclei for which lie in the brain stem. The FERT system (Matsugu, Mori, Mitari, & Kaneda, 2003) is based on facial recognition algorithms that identify facial expression by extracting landmarks in the form of features such as the position, size, and/or shape of the eyes, nose, cheekbones, and jaw from a photograph of the subject’s face. The features are then used to search for other photos with matching features. Other algorithms normalise a gallery of photos and then compress the face data so that only data useful for face detection remains.

One of the earliest successful FERT systems is based on template matching techniques applied to a set of salient facial features, providing a sort of compressed face representation. The expression recognition process has four stages: acquisition and preprocessing of the human face image; expression detection; expression feature extraction; and expression classification. A model-based feature extraction method is used to establish an accurate physical model. The human face is also modelled as a deformable 3D mesh. Based on six facial feature points, the expression is identified by matching the facial deformation with the physical model.
Case Study #2

A male 10m platform diver, who won multiple medals at Olympic, World Championship, and World Cup levels, was experiencing unstable performance during critical moments of major competitions, especially when encountering his closest international rivals. His performances in training were excellent and his self-confidence was generally very high. The FaceReader 3.0 Facial Expression Analysis System (Noldus Information Technology, 2007) was applied to compare the facial expressions of the diver (Q) and his main competitor (M) in the World Cup final during the critical moments before take-off in Rounds 1-6.

![Figure 1. Q’s Emotions from Round 1 to Round 6 Based on FERT](image-url)
Results highlighted the generally negative characteristics of Q’s emotions over the six rounds (see Figure 1). In particular, his angry expression progressively increased, peaking at 39.4% of his overall facial expression in Round 5. By comparison, M’s calm expression was dominant, accounting for 29.6% of his overall facial expression, the highest proportion of his emotion component. We also compared Q’s facial expressions before take-off in the semi-finals and the finals, which showed that his negative emotions before take-off in the finals were significantly higher than in the semi-finals, suggesting that his arousal level rose above optimal during the final.

In addition, we used several standardised psychological tests, including the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975), the Internal-External Locus of Control Scale (Nowicki & Duke, 1974), and the Athlete Coping Styles Questionnaire (Carver, Scheier, & Weintraub, 1989). Results indicated that Q’s emotions tended to fluctuate easily, that his self-control was relatively poor, and that he tended to use problem-solving coping strategies and a self-focused attentional style when he was under pressure.

FERT analysis showed that M’s emotion components were calm-based accompanied with a small percentage of fear and disgust in critical moments, suggesting that his intensity of motivation and arousal level were maintained at an appropriate level during the dive, facilitating consistent performance. By comparison, Q’s emotions were characterized by high levels of anger, fear and disgust before take-off, suggesting that his pre-dive arousal level was too high. This led him to pay excessive attention to one part of the whole movement, misallocating conscious resources, destroying the automation of the dive, and resulting in poor performance.

Based on the above analyses, we provided Q with a targeted intervention lasting several weeks. Comparing his evaluations before and after the intervention, we found that his degree of calmness increased and his excitement and somatic anxiety were reduced significantly. Through systematic mental skills training, Q developed improved emotion management skills, reduced his incidence of negative emotional responses, and increased his peace of mind. His performances became more stable as a result.
Yoga Training

Yoga originated in India but it is now practiced all over the world. Yoga training promotes the idea of a sound mind in a sound body and was included as part of the mental training program to help the diving athletes learn emotion regulation, with a particular emphasis on remaining calm in competition environments. In a Chinese diving context, yoga training first prioritizes a strong body and then focuses on integrating physical and mental harmony. The Olympic Games is a tremendously stressful environment and athletes often experience high levels of anxiety that can lead to poor performance and ultimately psychological burnout. With this in mind, the diving athletes readily accepted the yoga sessions as a popular training method.

Background music during yoga provides a creative outlet to help athletes release their emotions, assist them to cope with stressful situations, and regulate their moods. It is important to ensure that during yoga there is adequate sunlight, that the environment is clean, and that there are no distractions. Fresh air is especially beneficial for the breathing exercises that are inherent to yoga. Melodious background music and a pleasant environment will enhance the positive effects of yoga training.

One of the most important benefits of yoga is that it helps athletes with their spiritual life, by offering guidance about how to live in a proper way, and how to deal with competitions. Athletes often learn to become more patient from yoga exercises, and better understand the value of gentleness and forgiveness. Yoga encourages relaxation and so helps to reduce levels of cortisol, the stress hormone, in the body. The breathing exercises during yoga may help to improve the function of the nervous, circulatory, and respiratory systems. We also find that yoga can assist injured athletes, by easing aches and pains in the body via the breathing exercises and by practicing various yoga postures.

Credit: courtesy of Zhang Zhong-Qiu
Yoga Breathing

Yoga breathing consists of a series of exercises designed to meet the body’s needs and keep it in vibrant health. In the respiration phase, oxygen is inhaled, which travels through our bodily systems, then carbon dioxide is exhaled and toxic wastes are removed from our body. Through respiratory practice, the oxygen and carbon dioxide content in the body is balanced. Yoga breathing involves first inhaling deeply from the abdomen and then through the middle and upper chest areas. It then involves exhaling from the chest until it becomes empty and falls and then continuing to exhale from the abdomen as it draws inwards completely. Yoga breathing is proposed to bring more oxygen into the blood and the brain, controlling the secretion of prana, the Sanskrit word for “life force.”

Meditation Training

Meditation is generally an inwardly-oriented, personal practice that involves invoking or cultivating a feeling or internal state. The term meditation can refer to the state itself or to the practices and techniques used to cultivate the state. Meditation focuses on calming the mind, not by removing stimulation but rather by directing attention to one healing element, which may be a sound, a word, an image, or one’s own breathing. When the mind is “filled” with the feeling of calm and peacefulness, many psychological benefits can accrue. The benefits associated with meditation include:

- Increased brain wave coherence, which is associated with greater creativity, improved moral reasoning, and higher IQ;
- Decreased anxiety;
- Decreased depression;
- Decreased irritability and moodiness;
- Improved learning ability and memory;
- Increased feelings of vitality and rejuvenation;
- Increased happiness;
- Increased emotional stability.
Case Study #3

Thirteen diving athletes (male = 7, female = 6; age = 16 ± 2.9 yr.) participated in yoga training in the lead-up to the Beijing Olympic Games. Yoga sessions were delivered by an experienced, professional yoga coach, once a week for about 1 hour. Before and after each session, electrocardiograms (i.e., electrical recording of heart rate and rhythm) were recorded for 5 minutes, with the athletes maintaining the same posture each time. Mood responses were monitored before and after each session using a Chinese-language version of the Profile of Mood States (POMS; Zhu, 1995).

After yoga sessions, the divers’ heart rate variability was reduced, indicating that yoga had strengthened the activity of the autonomic nervous system, and promoted balance between the sympathetic and parasympathetic nervous systems. Mood responses were enhanced after yoga training, with scores for anger, confusion, depression, fatigue, and tension significantly reduced, and scores for self-esteem and vigour significantly increased. Our experiences with the diving athletes led us to conclude that yoga training promoted emotion management, improved autonomic nervous system function, and reduced stress.

Summary

In this chapter, based on the experience of assisting the preparation of the Chinese diving team for the 2008 Beijing Olympic Games, it has been explained how Brief Solution-Focused Therapy (BFST) can assist with pre-competition, non-adaptive psychological issues; how imagery training can have a positive impact on the improvement of motor skills and the stability of performance; how Facial Expression Recognition Technology (FERT) can play a role in the analysis and regulation of emotional responses of the divers in competition; and how yoga training became a common and accepted way for athletes to release both physical and psychological pressure. All of these practical and effective methods of mental training were provided for the athletes and coaches of the Chinese diving team, who achieved remarkable success in the 2008 Beijing Olympic Games and other major international competitions. This impressive record continued through to the 2012 London Olympic Games, where China secured 6 of the 8 diving gold medals available, and the 2013 World Championships, where 9 of 10 gold medals were won by China. The Chinese domination of international diving shows no signs of ending.
REFERENCES


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Golf in Taiwan: A Case of Family and Social Influences on Talent Development
Frank J. H. Lu and Roanne W. P. Lee

In
Secrets of Asian Sport Psychology
Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

Taiwan is a small island of 35,883 km$^2$ in East Asia, populated by various ethnic groups, with a Chinese majority, an Aboriginal minority, and a small number of new immigrants, mostly from elsewhere in Asia. Golf was introduced to Taiwan during the Japanese colonization from 1895 to 1945 and became popular following Taiwan’s economic boom in the 1980s.

Renowned professional golfers from Taiwan include Hsi-Chuen Lu, Tze-Chung Chen, Chien-Soon Lu, and Ai-Yu Tu. For example, Miss Ai-Yu Tu won the Ladies Professional Golf Association (LPGA) Japan Tour seven times between 1982 and 1991. More recently, Chin-Shen Hsieh, Chang-Tin Yeh, Wei-Tze Yeh, and Wen-Ter Lu have won many regional titles on the Asian and European Tours, making the golf world aware that Taiwan does a good job of producing professional golfers.

However, no other Taiwanese golfer has come close to emulating the success of Yani Tseng, who has dominated the international golf arena and rose to become the brightest star in women’s golf.
Yani Tseng

In 2011, Yani Tseng became the youngest player to win five major LPGA championships, and was ranked World #1 for 109 consecutive weeks (14 February 2011 - 24 March 2013). Yani’s journey to the pinnacle of golf provides an example of how family and social agents can positively influence talent development.

This chapter chronicles how the influence of family and friends has helped her to achieve success and also explores how sport psychology has underpinned her success. We collected data from books, newspapers, magazines, and internet reports, and also interviewed her university golf coach, Professor Ting-Heng Sung, and her first coach, Mr. Kao Bo-Hsiung.

Her Early Life

Born and raised in northern Taiwan, Yani had a colourful and happy childhood. Her father, Mao-Hsi Tseng, was manager of a petroleum company and the owner of a 5000-member golf ranch. Her mother, Yu-Yun Yang, was a full-time housewife and a part-time golf caddie. Yani’s parents had different hobbies, interests, social and educational backgrounds, but they had one thing in common, they were enthusiastic golfers. Mr. Tseng even had the nickname of “King of the Taipei Golf Club,” which indicates his own golf prowess.

Before she embraced golf, Yani was an ordinary child. During her kindergarten years she engaged in the usual childhood activities, pretending to be a princess and performing on stage, singing and dancing with other children, playing hide-and-seek, and drawing fabulous pictures. Naturally, she sometimes went to her father’s ranch to fool around with golf clubs and balls. As a toddler she held a driver that was taller than her, but even at that age she was swinging at golf balls. When she was 5 years old, her father gave her a #7 wood. She played with that club often, but rarely using a conventional swing. At the age of 6, she joined a children’s golf tournament, won nothing, but had a wonderful time with the other children (Wang, 2011).

Although Yani only played golf for fun, her parents were aware of her talent. As she grew, her parents recruited a coach for her, Kao Bo-Hsiung, when Yani was 8 years old. Mr. Kao was a former Taiwanese golf champion. Although he won no international golf tournaments, Mr. Kao was a knowledgeable golfer and an excellent mentor.

He taught Yani a firm stance and a stable swing, but took an unusual approach to training an aspiring international golfer. According to his philosophy, physical fitness is the foundation of golf. He criticized Asian golfers for emphasizing golf techniques and skills but ignoring fundamental physical fitness. He said these golfers may be proficient when they are young because of their good skills, but they will stagnate when they get older.
When Yani was in elementary school she trained with Mr. Kao for three hours a day. Her daily training schedule included a variety of fitness activities and games. To make physical conditioning fun and playful he sometimes joined in and competed with Yani. Mr. Kao believed that if Yani were equipped with powerful physical fitness it would be easier to integrate golf skills and techniques into her performance on the golf course. After two years of training, Yani became extremely fit and started to outperform her peers. Yani’s physical fitness was impressive. For example, once when she lost a friendly bet to Mr. Kao, the cost was 800 push-ups, which Yani completed without complaint.

In terms of skills development, Mr. Kao had a special training program. He taught Yani not only how to master the basic skills of golf, but also how to perform shots with varied angles and trajectories. His view was that a top golfer must be able to overcome unexpected situations on the course. To overcome whatever obstacles occurred, he taught Yani to make a simple swing but produce diverse routes to the green. He analyzed major golf championships in a studio with Yani, asking her to imagine herself competing in such situations and how she would handle them. After the analyses, they moved onto the course to practice. Such analyses, on-course training, plus thousands of repetitions of practice shots, filled Yani’s mind with rich content knowledge of golfing skills.

Yani rebelled a bit in Grade 7. One day she skipped regular training and went to a billiard parlour. Mr. Kao caught her there but did not punish her. Instead, he explained the similarities and differences between billiards and golf. He used biomechanical principles to explain how to play both sports. After this explanation he let Yani try to apply the knowledge and she improved quickly in billiards. Later she stealthily enrolled herself in a local tournament and won the title of “New Rising Star of Billiards”. Yani’s father heard about the story and was very upset, but at the same time he was happy to have such a talented daughter.

While receiving Mr. Kao’s instructions and training, Yani enrolled in several youth golf programs offered by local clubs and golf schools abroad. Her father sent Yani to compete in the United States when she was only 12 years of age. Then, at the ages of 14 and 16, she attended the Hills Golf Academy in Queensland, Australia, where she made lots of friends, learned many new skills, and generally improved her golf knowledge. Her father invested much time and money to accompany, care, and travel with Yani, playing a crucial role in the development of her golfing talent.
Parental Influence

Bloom’s (1985) talent development model and other sport talent models (e.g., Côtê, 1999; Durand-Bush & Salmela, 2002; Gould, Diffenbach, & Moffett, 2002) have indicated that talented performers typically need strong support from parents. Yani was no exception. Her achievements were influenced deeply by her parents, especially her father. Her parents not only provided meticulous care, time, and money to support Yani’s training and competitions, they also offered emotional support whenever it was needed.

Her father was an energetic, passionate, and outgoing gentleman. He had been an excellent baseball player in elementary school, but because of poor family conditions had not been able to dedicate himself to his sport. Instead, he stopped his education and ran a petroleum business with his older brother, which improved his family’s financial position. As Mr. Tseng became wealthier, he began to play golf, winning many prizes at local clubs. Due to his natural hospitality and generosity, he made many friends of high socio-economic status including senior company executives, high-ranking government officials, golf club managers and owners, and elite golfers. These social networks provided Yani with great opportunities for her golfing career.

Mr. Tseng was very perceptive in cultivating Yani. He understood golf and knew that if he wanted Yani to be successful, he had to invest in her financially. He paid high tuition fees to recruit the best golf coaches and English tutors for Yani. According to Mr. Tseng’s philosophy, a good coach saves time in terms of learning, and a good English teacher helps Yani eliminate the language barrier.

“There is no free lunch!” he said. “Paying tuition fees represents your respect for professional expertise. At the same time Yani learned to take responsibility for learning. If everything were free, coaches and teachers may not be so serious when they teach Yani and Yani herself may not be serious about learning either” (Wang, 2011, p. 102).

Yani learned golf quickly from Mr. Kao and learned English efficiently from English tutors. Mr. Tseng said the meaningful investment not only saved time, but also made golf a serious matter for Yani.

In addition to providing Yani with regular training, Mr. Tseng sent Yani to the Youth Talented-Golfer Program offered by the Sun-Rise Golf & Country Club in Taiwan, from 1997, when she was 18 years old, until 2002. The youth golf program enhanced Yani’s ability in every aspect of golf. In addition, Yani’s father planned her future development. He considered domestic training to be just the foundation of Yani’s international competitiveness, and so he decided to send her back to the Hill Golf Academy in 2003 and 2005 (each trip costing about US$7,000). These extra learning opportunities allowed her to become familiar with international environments, developed her language and social skills, and taught her many other things that could not be learned at home.
In 2002, the Taiwanese Golf Association (TGA) organized a pre-Asian Games training camp, and although Yani was not a qualified delegate, her father paid the TGA to allow Yani to have the opportunity to train with the other golfers. In the same year, Yani’s father paid her travel expenses so that she could compete in a U.S. youth golf tournament. In 2003 and 2004, Yani’s father again paid her travel expenses to allow Yani to compete in the U.S. amateur Public Links championship. In 2004, she defeated the talented youth golfer, Michelle Wei, to win the championship.

In 2008, Yani won the McDonald’s LPGA title, becoming the youngest ever champion.

Yani’s father had a clear philosophy regarding the education of children. He valued positive attitudes and lessons learned as much as he valued winning, and desperately wanted Yani to learn life lessons from golf. He took the view that if Yani could not be a successful golfer, he wanted her to be a successful coach or manager. When Yani exhibited her talent, he taught her to learn from competition errors and failure.

“Mistakes are good opportunities for young people to learn,” he said. “Young people need to tolerate mistakes so they can learn from them” (Yang, 2011, p. 98).

Yani’s father had grown up in a traditional Chinese culture that was strict and harsh when children made mistakes. However, he eventually relinquished his traditional paternalistic leadership of Yani’s golf development.

Once, after Yani had played very poorly at a weekend tournament, her father was very upset and yelled at her, “I spent 130 US dollars to let you play this weekend, and you made so many bogeys” (Yang, 2011, p. 14). Yani burst into tears and answered back immediately. Neither yielded, making things worse. Neither spoke to the other for a couple of weeks. Fortunately, Mr. Tseng realized that this situation was not right for his daughter’s golf development.
He observed that many Western parents hug their children whether they win or lose. He learned that Eastern authoritarian leadership uses many negative words that may discourage children.

Therefore, he changed his behavior from blaming and criticizing to caring and encouraging. “I was not used to it at first,” he said. “I learned to love with a smile, but being gentle was difficult for me” (Yang, 2011, p. 57). Having made the change in himself, he realised that many parents put too much pressure on their children.

“They put expectations on children because they want them to do something that they are unable to do at their ages, and this is not fair to children and creates a huge burden for them, which, in turn, makes children cheat when playing to win their parents’ hearts” (Yang, 2011, p. 58).

He commented that of the many “golden rules” of parenting talented children, a positive child-parent relationship is one of the most important.

Interacting with good coaches, trainers, and other golfers made Yani an experienced and skillful golfer. Yani learned from her parents’ education and from the daily behaviours that shaped her attitudes, visions, and psychological make-up.
Psychological Make-up

Sport psychologists who have studied the world’s top athletes have identified many distinct personality traits, including confidence, resilience, competitiveness, a hard-work ethic, mental toughness, determination, and commitment (Gould et al., 2002). Yani possesses these personality traits as well as some additional traits, the most notable of which are described below.

High achievement-orientation

In Asia, especially in countries influenced by Chinese culture, people are taught to be humble and modest. Yani, however, is not. She is a highly achievement-oriented golfer. She talks publically about what she will achieve and often the words come true. For example, when she was 10 years old, she challenged a famous Taiwanese domestic golfer, Mr. Hsieh Min-Nan, to a putting competition. Yani’s challenge made people laugh. In 2002, she visited the USA for the first time and watched the U.S. LPGA Open. After she returned to Taiwan, she mailed a postcard to her home-stay father back in America. The postcard was drawn by Yani herself with a picture of the U.S. Open trophy with the statement, “This trophy is to be awarded to Yani Tseng.”

In 2005, she competed in the USA in numerous amateur and professional tournaments and became well-known on the professional circuit. However, she felt that some established golfers tended to ignore her. She returned to Taiwan and in a media interview she commented that “I will beat these people until they know me!” In 2007, she qualified as a professional golfer with the United States Golf Association (USGA) and in an interview with the Taiwanese media at the airport on her departure said “I have set a goal to win the U.S. Open Championship within two years.” In 2008, she was interviewed by the Taiwanese media again and commented “Ha! This time I have changed my goal. I will win the U.S. Open Championship within one year.” She won that title before the year was over. In 2009, Yani was still far from being the world’s best golfer but one day, as she watched the then World #1 Lorena Ochoa in competition, she commented to a friend, “I won’t let her stay in that place for too long!”

Yani has had many seemingly boastful statements reported in the Taiwanese media. Her ambitious goals and strong achievement-oriented tendencies show similarities to other famous sporting stars. Former World #1 male golfer Tiger Woods and legendary heavyweight boxer Mohammed Ali made similar big statements. Such champions are confident in their ability and know they can achieve their goals. Perhaps the big talk inspired them to single-mindedly put all their energies into the pursuit of their goals and dreams.
Energy and passion

Yani inherited her father’s energy and passion. She is interested in everything. She uses every opportunity to discover and to experience different things. Her coach, Gary Gilchrist, said Yani is a life-loving and passionate young lady. She not only loves golf but also many other sports, including billiards, basketball, tennis, and swimming. When visiting Australia for a golf tournament, she went to watch the Australia Tennis Open. When visiting the USA she watched a live National Basketball Association game. She is also a Major League Baseball (MLB) fan and often takes the opportunity to watch games live. She is the favourite fan of Taiwanese MLB pitcher, Chien-Ming Wang, of the Washington Nationals. In tennis, she said her role model is all-time great, Roger Federer. Yani loves sports, life and people.

Coachability and intelligence

Yani is good at imitating and learning from others. Once she has observed other players’ performances, she learns quickly from them. Her first golf coach, Mr. Kao, said Yani is highly coachable, “Ordinary kids may need to be taught three times to learn a simple skill. Yani just needs a few seconds to master it.” She learns quickly not only in golf but also in billiards, tennis, basketball, and many other sports. She knows how to take the opportunity to learn. When she was 13, she competed in the Asian-Pacific Youth Golf Tournament and lost to a Korean golfer. She stayed at the golf course that afternoon and volunteered to be her victor’s caddie. Her father asked her why, wondering if she felt any shame in doing that.

She replied, “Not at all, I can observe her performing at close quarters. This is a great opportunity to learn” (Yang, 2011, p. 31).
Outgoing and playful nature

Stereotypically, Asian golfers, male or female, are seen as shy and timid. Yani is different. She is an open-minded and outgoing young lady. Like her father, she loves laughing and spending time with friends.

Former women’s golf champion, Annika Sörenstam, has become her best friend. Yani even bought Annika’s house in Florida. She first respected Annika Sörenstam, Susan Peterson, and Lorena Ochoa as role models, and later Yani became good friends with them. She has Korean friends in golf, such as Se Ri Pak, Jiyai Shin, and Na Yeon Choi. Japanese elite golfers such as Ai Miyazato and Ueda Moshiko also rank among her good friends.

When with her friends, Yani likes to have fun and wears Mickey Mouse ears to amuse people. Although no scientific study has explained how such an outgoing and playful personality contributes to elite sport performance, Yani has said that competing with familiar friends reduces the pressure she feels.
Psychological Skills

As the World #1 ranked golfer, Yani refined her psychological skills during training and competition. She had been taught psychological skills during early experiences with coaches, but many of the skills she has learned from tough competitive experience. Yani is good at imagery and at developing pre-competition mental plans. She has a tremendous ability to retrieve previous successful experiences from memory and to visualise the exact path of long distance putts. In early 2012, she participated in the Honda LPGA Thailand, the Kia Classic, and the RR Donnelley LPGA Founders Cup. In all three championships she slipped well behind her opponents in the first two days. However, because of her amazing long putting ability and persistence, she battled back to win all three titles on the final holes. Professor Ting-Heng Sung, the head golf coach of the National Taiwan Sport University, emphasized that Yani uses imagery to rehearse every shot before actually hitting the ball. This psychological skill has enabled her to succeed during critical moments in competition.

In addition to basic psychological skills such as imagery, goal setting, and arousal regulation, Yani has also learned several important psychological skills from experts and other golfers. One of her most significant learning experiences came when she was working with sport psychologist, Dr. Deborah Graham. In the 2009 U.S. Open, Yani experienced a serious setback when she failed to make the cut into the final two rounds. She viewed it as a terrible experience because she had been so confident in her game and was ranked the World #2 player at the time. Her confidence and self-esteem were threatened and she struggled to deal with such a poor performance, crying in front of audiences and journalists. Her father and coach tried to comfort her, but they had little effect. She then decided to consult with Dr. Graham.

After several discussions with Yani, Dr. Graham realized that her golf was being disrupted by negative self-talk, such as “Don’t hit it into that bush,” or “If this shot goes there it would be a disaster.” Dr. Graham taught her to turn these negative thoughts into positive ones. The most important change, however, was that she taught Yani to focus solely on the shot at hand and ignore what might follow. In addition, Dr. Graham used goal setting to adjust Yani’s mental state and attentional focus. She taught her to track daily experiences by writing down every shot and every result. She wanted Yani to set goals for every shot, every match, and every tournament. Once a goal was set, Yani focused on the goal rather than thinking about what might happen. By combining goal-setting and concentration skills, Yani found her performance improved.
In addition to Dr Graham’s psychological interventions, former golf champion Annika Sörenstam significantly influenced Yani’s attitude and mental preparation.

Once, Yani invited Annika to her house and asked her how to be a world champion golfer. Annika, in turn, asked Yani, “What do you do right now to be the best?” Annika told Yani that to be the World #1 golfer she must attend to the whole process of training and competition. If the entire process is well-prepared and organised, it eventually leads to good results. She taught Yani several things about being the best golfer in the world. Specifically, she taught her to maintain a positive perspective.

“Whenever bad things happen,” Annika said, “interpret these things as providing good opportunities for change” (Yang, 2011, p. 73).

Further, she wanted Yani to adjust her mental state before, during, and after competition. She advised Yani to maintain good physical health and fitness. She used the success puzzle as a metaphor, with every piece of the puzzle being important.

Some of the pieces of the success puzzle include daily training, rest and sleep, nutrition, competition plans, travel, pre-competition rehearsal, as well as monitoring her interpersonal atmosphere. Annika’s message was that when all the pieces of the puzzle are put in the right place, success will eventually come.

Talking to Annika changed Yani’s attitudes toward life management, training, and competition. Yani matured and became more insightful about her golfing career, eventually understanding that to be the world’s best golfer she needed to be strong mentally, physically, and technically, with all three factors complementing one another.

Yani learned much from Annika’s private lessons. The lessons not only taught her to prepare for golf systematically, but also got her to see golf competition and training as a holistic process. Yani’s change of attitudes and mental states in daily life, training, and competition made her a more mature player and person, and a good fit for the modern women’s golf arena.
Summary

We used the case of Taiwan’s best golfer, Yani Tseng, to explain how psychology underpins a successful golf career. Her early life experiences confirmed that environmental (social and physical) and parental influences significantly affect talent development. Her learning experiences and social support helped her to build a solid foundation for elite performance. In addition, her family and social networks shaped her positive psychological make-up that has lead to her success. Finally, psychological skills learned from coaches, sport psychologists, and other golfers made her almost invincible during her reign as the World #1 female player.

By the end of 2012, Yani was feeling the pressure of competing as the World #1 player and experienced an extended form slump, which saw her slip out of the world’s top-40 ranked players, as of January 2014.

In Yani’s own words, “I did put more pressure on myself when I was in that position, a lot more than I can carry” (Robinson, 2013). Despite this setback, she maintains a positive mindset about the future, “So, now I just try to focus on myself and enjoy it out there. I’m just learning to be patient. I know my game is there but I just need to keep trusting my game and believing I can do it. I think one day that will all come together. It doesn’t matter how long it takes, when it comes it comes” (Robinson, 2013).

It will be interesting to see what the future holds for Yani Tseng and her golf career.
REFERENCES


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Mental Training of the Chinese Gymnastics Team in Preparation for the Beijing Olympic Games

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In

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Introduction

The inexorable rise in standards in the sport of artistic gymnastics sets an increasingly high demand for psychological competence on the part of the athletes. Successful performance in major competitions, especially the Olympic Games, depends not only on advanced technical training and physical conditioning, but also on the stability of psychological factors. The setback experienced by the Chinese gymnastics team at the 2004 Athens Olympic Games, where China won only one gold medal, shocked the nation and deflated the Chinese gymnastics community.

An assessment of the reasons for the team’s underperformance in Athens attributed the poor showing primarily to the gymnasts’ unstable mental states. Factors such as excess stress, emotional disturbance, and low psychological tolerance, which were exhibited by some gymnasts during the competition, were identified as seriously affecting the execution of even the more basic gymnastic techniques, and bringing about some unexpected errors. For example, in the final of the team competition in Athens, one gymnast fell on nearly every piece of apparatus. Given the precise nature of the sport and the tiny margins for error, psychological issues are a perennial challenge for all gymnasts, in that a stable psychological state is required to be able to compete at the same level in competition as achieved during training.

Within the rapidly-developing world of gymnastics, and against a backdrop of frequently-revised international rules, increasingly-demanding performance levels, and ever-improving international competitors, the Chinese gymnastics team faced a significant challenge at their home Olympic Games in 2008. As one of the Chinese teams with the potential to secure gold medals in Beijing, the gymnasts were faced with high expectations in their home country and abroad. In response, the team wanted to live up to these expectations, bring honour to their country, and fully display the charm of gymnastics to the world.
Although the Chinese gymnasts were among the best in the world, they faced formidable competition in the Beijing Olympic Games from opponents in the USA, Japanese, Russian, and Italian teams. As the sport psychologists appointed to support China’s gymnasts, the authors of this chapter had responsibility for helping to strengthen the overall competitiveness of the team and improving its prospects of success. As things eventuated, the Chinese gymnastics team won 14 medals, including nine gold medals, from the 14 artistic gymnastics events in Beijing, which represented China’s most successful performance ever. The men were especially dominant, producing seven gold medals, while the women’s team captivated television audiences around the world in winning the team event for the very first time. In this chapter, we provide an account of the psychological preparation and support for the Chinese gymnasts in the lead-up to the 2008 Olympic Games.

Prior to the 2004 Athens Olympic Games, no systematic and well-directed research or psychological support had been provided for the Chinese gymnastics team. The complexity of gymnastic techniques, the danger of the moves, and the variability of the competition environments created a clear need for the structured development of psychological skills among gymnasts. For example, they needed to understand how to cope with the intense atmosphere in international venues, especially the psychological pressure of competing at a home Olympic Games in Beijing; how to deal with their own successes and failures as well as the successes and failures of teammates and opponents; and how to face the particular challenge of qualification rounds.
These considerations meant that the gymnasts needed a high degree of psychological stability to be able to excel in a fierce Olympic competition environment and challenge for gold medals. In competition, the gymnasts complete 4 (women) or 6 (men) events. Women compete on the vault, floor exercise, balance beam, and asymmetric bars, whereas the men’s event comprises the vault, floor exercise, parallel bars, rings, high bar, and pommel horse (see http://en.wikipedia.org/wiki/Artistic_gymnastics). Consistent, high-quality performance on every apparatus relies not only upon outstanding technical competence, but also stable mental states. Therefore, a key task was to develop a strategy to strengthen the gymnasts’ stability in training and competition and to enhance their all-round competitiveness, in order to maximise the probability of success at the Olympic Games.

The intervention program took into account the typical range of scenarios the gymnastics team would face, the personalities of individual gymnasts, and the demands of specific forthcoming competitions. The intervention was designed to strengthen their competition skills by implementing standardised psychological measurements, using sophisticated technological devices for mental training and testing, providing individualised psychological counselling, training in bidirectional emotion regulation, and assisting with mental preparation prior to major events.
Team Psycho-Education

Basic knowledge about sport psychology was imparted to the team via a lecture series to improve understanding of the psychological demands of their sport. Mutual understanding was fostered and trust was built between the gymnasts and the support team through this psycho-education program, which paved the way for the smooth development of the mental skills training that followed.

The first lecture was titled “Psychology of Success in Gymnastics,” which provided the coaches and gymnasts with a preliminary understanding of the psychological component of athletic success, and the benefits that mental training could bring to the team. Participants responded positively to the lecture, which created enthusiasm for further sessions. A second lecture on the “Purpose and Significance of Psychological Testing” increased their awareness of the role of psychological measurement, laying a foundation for the systematic monitoring that followed. A third lecture on “Overcoming Common Psychological Barriers” helped the gymnasts gain understanding of some of the common psychological issues they might face in daily life and training, and presented them with a range of coping strategies.

A fourth lecture on “Imagery Training for Gymnasts” gave the gymnasts a preliminary understanding of the role and methods of imagery, increasing their receptiveness to using imagery practice in training and competition. The final lecture, on the theme of “Embracing Competition with a Positive Mindset,” was attended by gymnasts preparing for major competitions during the lead-up to the 2008 Olympic Games. Through these presentations, the gymnasts learned to appreciate the psychological attributes they needed to develop before participating in major competitions.
Psychological Measurement and Monitoring

A range of psychological and physiological indicators were used to assess each gymnast and to provide baseline data that facilitated the identification of objective changes in their psychological characteristics and mental states. To develop a comprehensive database of information about the gymnasts, an extensive battery of standardised measures was used over the four year period of the intervention. These measures included Chinese-language versions of well-known personality tests, such as the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975) and the NEO Personality Inventory (Costa & McCrae, 1992); neurological assessments such as the Mini Mental State Examination (Folstein, Folstein, & McHugh, 1975) and the Uchida-Kraepelin test (Kashiwagi et al., 1985); measures to assess the traits of attention distribution, attention span, and attention stability (Qiu, 1990); and a custom-designed Multiple Psychological Testing Software to test the willpower and volitional characteristics of the gymnasts.

Changes in psychological states were assessed using measures of electroencephalography (EEG) and heart rate variability (HRV). The Spirit EEG biofeedback monitoring instrument was used to acquire the rhythm, amplitude, and wave of the electrical activity of the brain, which closely aligns to emotional and attentional activity. A biofeedback training system was used to teach the gymnasts how to actively control their own EEG activity, which helped to relieve fatigue, prevent insomnia, and enhance imagery and attentional skills. Additionally, a Self-generated Physiological Coherence System (SPCS) that used HRV as an indicator of emotional states was used with the gymnasts. The SPCS had powerful gaming functions, which allowed the gymnasts to play a variety of computer games as a novel way of training their emotional control, focus, and ability to cope with setbacks.

Test results were fed back to coaches and gymnasts, helping them to develop an objective view of themselves and discover their psychological strengths and weaknesses. Through this extensive monitoring program, psychological profiles of each gymnast were created and entered into an information database, which acted as a point of reference for the sport psychology team and the coaches, as they developed training, management, and education programs for the gymnasts. During the period of the intervention, we monitored more than 50 gymnasts and provided individualised case reports after the tests. The testing formed the basis for developing targeted mental training programs and personalised psychological services for these gymnasts. We found that the measures of attention, willpower, and personality provided a valuable reflection of the psychological characteristics and mental skills of elite gymnasts, and concluded that EEG and HRV could be used both for biofeedback training and for evaluating changes in psychological states.
Mental Training Methods

Based on our analysis of gymnastics and its competition environment, and after considering the specific circumstances and individual needs of the gymnasts, the following mental training methods were selected for inclusion in the intervention.

Attention Control Training

Relaxation training based on deep breathing techniques was combined with computer game software as a form of mental training to improve attentional stability (Ding, 1998; Ma & Zhang, 1998). The training was designed to develop the ability to lock focus on fixed targets (e.g., instructions, imagery, or movements) without becoming distracted by irrelevant stimuli.

Learning Routines Through Imagery

Gymnastics routines were divided into 8-10 action links, and one or two concise words were used for each action link to provide performance cues and to direct attention (Ding, 1998). Coaches checked the appropriateness of the cue words and worked with the sport psychology team to refine them where necessary. The gymnasts recited the cues silently while mentally practicing the routines, until they were committed to memory and could be applied in training and competition.

Biofeedback Training

Information about biological functions related to psychological and physiological processes, such as electromyography (EMG), galvanic skin response, skin temperature, heart rate, blood pressure, and EEG, was displayed to athletes in visual and/or audio form. The gymnasts were trained to become aware of this biological information and consciously control their own psychological and physiological activities. Most biofeedback training occurred in the psychology laboratory although, where competition conditions permitted, we would use portable biofeedback instruments in the competition arena and conduct on-site biofeedback with the gymnasts.
Psychological Counselling

Individual counselling was provided to help the gymnasts maintain a positive outlook on life, enhance confidence in competition, correct irrational beliefs, stimulate motivation and overcome psychological barriers in training and competition, and adjust emotional states. Psychological methods, including cognitive restructuring, switching roles, positive thinking, and strengthening merits, were used to help gymnasts change destructive or distracting cognitions, and to establish new philosophies about training, competition, and life generally.

Pre-competition Adjustment

Both the psychological demands of competition and the characteristics of different gymnasts were considered when helping gymnasts enhance their confidence prior to competition. The goal was for each gymnast to commence competition in the right frame of mind and a positive emotional state. Psychological adjustment prior to competition involved boosting confidence and establishing psychological countermeasures to help the gymnasts plan for various stressful or unexpected situations.

Enhancing Confidence

Confidence was enhanced by reminding gymnasts of their strengths and their previous successful performances, setting attainable goals for competition (such as the completion of a set of high quality routines), and developing the habit of positive thinking. Activities included visualising successful performances, looking at pictures of their own excellent skill execution, and using cue words to boost morale and engender a sense of dominance prior to competition.

Psychological Countermeasures

The gymnasts created databases of possible incidents that might happen and a range of methods they could use to deal with them. They created a psychological countermeasure database not only for routine issues related to competition but also for unexpected situations. The former referred to issues that the gymnasts were certain to encounter when participating in competition (e.g., arriving at the Olympic village, the day before competition, and the night before competition). The latter addressed issues that might or might not happen (i.e., “what if?” scenarios) and provided psychological and/or behavioural countermeasures to implement when unpredictable events occurred (e.g., if pre-competition training had not gone well, or if a teammate performed poorly).
Psycho-Cultural Development

Sports training is a process of educating athletes, in which the coach plays the principal role of educator. Coaches’ educational philosophies are reflected in various aspects of how they train the gymnasts, which may exert a decisive impact on the development of the athletes. The age of female gymnasts involved in national training ranges from 14 to 18, a time when they are developing rapidly, accumulating life experiences, and hoping that others will respect their intentions, judgments and personalities. The rapid development of adolescents’ self-awareness can be a turning point in character development. Therefore, great care was taken in deciding how to praise the gymnasts and how to make the most of their positive qualities.

Appreciation education is a coaching practice that focuses on athletes’ strong points, progress, potentials and successful experiences rather than their setbacks, weak points, problems, and failure experiences. It can produce the social-psychological mechanism reflected in the Pygmalion Effect, whereby the greater the expectation placed upon the person, the better they perform (Rosenthal & Jaconsen, 1992). High expectations of the gymnasts by the coaches are also reflected in strong emotional support provided by the coaches for the athletes, creating a collaborative, supportive atmosphere. Due to the high expectations, the coaches tend to provide feedback to the gymnasts with praise and encouragement. Coaches answer the gymnasts’ questions thoughtfully and respectfully, giving them timely assessment and detailed feedback regarding their performance.

Appreciation education is seen as an essential element in developing gymnasts’ potential. Praise and encouragement promotes a strong sense of confidence in the athletes from an early age. By understanding the psychological characteristics of each gymnast, the coaches are better equipped to encourage them when necessary and give them tolerant criticism when they make errors.
Building the Psychological Culture

A positive psychological culture was promoted within the team by organising a range of daily activities. These activities included music, games, reading, starting a journal or website, and special features such as psychological education and sending birthday wishes. These activities helped the gymnasts improve their general knowledge, enhance team cohesion, create a pleasant atmosphere in training, and promote the physical and mental development of gymnasts.

A harmonious relationship between the gymnasts and the coaching staff was a key factor in achieving success. Two athletes in the team had experienced relationship issues with their coaches. Our task as psychologists was to teach the gymnasts to respect, trust, and adapt to their coaches’ behaviour. Within the team, conflict with coaches was seen as detrimental for the athletes’ performance and actively discouraged. When the gymnasts found it hard to meet the coaches’ demands, we would try to defuse their emotions as soon as possible by offering timely intervention.

Positive and Constructive Thinking

Gymnasts’ thoughts are important to their athletic performance. Positive thinking is beneficial for individual growth and is almost a precondition for maintaining a good attitude. For example, gymnasts should readily accept criticism from coaches and should never resist the coaches’ advice. In addition, before completing a routine, the gymnast should mentally rehearse how to do it well instead of thinking about what might happen if they are not successful. Positive and constructive thinking was a high priority and seen as one of the cornerstones to success.
Dealing with Success and Failure

Gymnasts inevitably face success and failure in competitions. How to properly respond to success and failure was an important focus of our psychological counselling. For example, after one of the female gymnasts won the all-round title in the national championships, we encouraged her to extract the maximum benefit from her win by, for example, writing down the reasons for the successful outcome, repeatedly visualising her performance to build confidence for future competitions, identifying the gap between her and her opponents, and getting her ready to do it all over again. To those who didn’t succeed in competition, we encouraged them to face loss by identifying problems and working out solutions. Rather than fearing failure, we encouraged the gymnasts to treat it as a learning experience that would help them be better prepared next time.

Response to Injuries

Injuries are an occupational hazard that every gymnast must face from time to time. Therefore, it was a common task to help the gymnasts to cope when injuries occurred. Firstly, we encouraged them to face injuries in a positive way, adapt quickly to their new circumstances, and focus on strategies that would assist recovery. Secondly, we used injuries to cultivate a spirit of perseverance, thereby turning a disadvantage into an advantage. In sum, our objective was to help the gymnasts speed up their recovery with a positive attitude and, by doing so, make them mentally stronger.
Training Efficiency and Success in Competition

The gymnasts, especially the females, started intensive training at a very young age, which often limited their educational experiences. Teaching them how to make better use of their mind to improve training efficiency and success in competition was an important task shared by the coaches and the sport psychology team. We taught them to remember success and forget failure. For example, during training they would quickly review and reinforce performances after successful execution, using imagery techniques. They would also analyse the reasons for mistakes made, visualise correcting those mistakes, and constantly strengthen successful routines in their minds. These practices helped them improve training efficiency and perform successfully in competition. In addition, the prominent gymnasts were given a “psychological counselling diary.” Coaches required the gymnasts to update their diaries every day and monitored them regularly. In this way the gymnasts reflected on their daily training and developed the ability to use their minds more effectively.

Competition Routines

Competition routines often involve complex cognitive strategies and behavioural responses, which are usually applied in the preparatory phase of self-paced events. By developing personalised and meaningful self-control strategies and preventing negative thoughts and internal and external distractions, the gymnasts were better able to control their emotions, thoughts, and performances, thereby creating a sense of internal harmony. Consistent competition routines help athletes achieve optimal arousal and attention before and during competition (David et al., 2003).

The objective of developing competition routines is to personalise preparation in terms of the nature of the event, the gymnasts’ individual characteristics, and their preferences. After a competition routine had been individually tailored, we examined its effectiveness in training and competition, progressively improving it to achieve a high degree of consistency, automation, and flexibility of application. Competition routines generally contain five components. First, the preparatory phase involves adjusting physical and emotional parameters to the optimal point for each individual, often by means of abdominal breathing. The second component is imagining a perfect competition routine and the feelings associated with such a performance. Next, self-talk focuses on relevant external cues or internal thoughts. Fourth, the gymnast starts the competition in a calm state of mind. Finally, the gymnast evaluates the quality and result of their performance.
Targetted Pre-Olympic Preparation

Participating in the Beijing Olympics, the Chinese gymnasts enjoyed an obvious home advantage, benefitting from a familiar climate, geographical convenience, and great local support. The apparatus and venue were familiar, thousands of Chinese in the audience cheered for them, and even the judges may have been more positively disposed towards them and hesitant to impose penalties. However, the main disadvantage of competing at home lay in the greater psychological pressure to perform well.

Competing in a “mother tongue” environment, the amount of verbal information received by the Chinese gymnasts was almost guaranteed to increase exponentially. This had the potential effect of burdening them with the thought that “I must not fail. I must not lose face before the home crowd,” which would tend to push their focus towards thoughts of winning or losing, and distract them from the competition process and techniques. This could have resulted in the gymnasts focusing on concerns beyond their control (e.g., focusing on the result of the competition rather than the process, looking forward to future achievements, over-considering the role of judges, caring too much about external evaluations). In turn, this could lead to decreased confidence in completing tasks (e.g., thinking about difficult and unfavourable conditions, forgetting their own merits, worrying about possible effects of poor performance).

On the issue of coping with pressure, our philosophy was to develop gymnasts’ awareness and ability to deal with pressure on a regular basis. Ultimately, it was important that the gymnasts understood that pressure from the external environment was not going to disappear. Instead, they needed to strengthen their ability to cope with it. To prepare them to deal with thoughts such as “I must not fail” during the Games, the gymnasts were given stringent targets for skill improvement in everyday training. For example, if a gymnast made a mistake, he or she was required to perform the correct movement 5-10 times. Sometimes, even the entire team was required to accompany the gymnast in doing the same skills. Such harsh demands pushed the gymnasts to live with the thought that “I must not fail” in advance of major competitions and to become accustomed to having that thought.

To assist the gymnasts to cope with the high expectations of the people around them, we encouraged them to reframe their understanding of those expectations. For example, we explained that other people had high expectations of them because they were perceived as having the necessary talent to succeed and people had trust in them. In return, they should reward those people with their performances. In this way the gymnasts’ attention was transferred back to the process of performance rather than the outcome of the competition.
Emotional Strain in the Olympic Environment

Excessive tension is often caused by negative thoughts (e.g., worry, fear, or concern), perceived threats (e.g., severity of behavioural consequences), unrealistic expectations, setbacks, external stimuli (e.g., the roar of the crowd), or unexpected incidents. To address emotional strain, the gymnasts were taught to use cognitive regulation and restructuring to overcome the interference of negative thinking, and the systematic training of emotional adjustment and control to overcome excessive tension (Ma & Zhang, 1998; Yin, Ding, & Chen, 2000).

Mental Fatigue and Psychological Recovery

Gymnasts have to regularly withstand a high physical load and intense psychological demands, bringing with it the risk of staleness and burnout. Therefore, great importance was attached to physical and psychological recovery. We used a variety of techniques to enhance this recovery. We provided relaxation to music for the gymnasts using Bandari or Chinese classical court music. These musical choices were adopted to promote relaxation, calm the nervous system, and thereby accelerate psychological recovery (Komatsu, 1995; Skille & Wigram, 1995). A second technique we used was a body-sense vibration music bed. The bed converted music sound waves into physical vibration massage, so the gymnasts listened to the music with their whole body, inducing the brain to secrete endorphins and achieve rapid relaxation and elimination of physical and mental fatigue. The bed senses the low-frequency signals inherent in the music, amplifies them, and converts them into physical vibration. The sense of vibration provides a strong effect in the form of psychological and physiological pleasure, which quickly creates mental relaxation and eliminates fatigue (Wigram & Dileo, 1997).
Formulation of “Olympic Guarantee” Plans

In light of the issues the gymnasts would likely encounter during the Beijing Olympics, including the extreme pressure to perform well, moments of confusion, and crises of confidence, we developed “guarantee plans” to ensure that each gymnast would have experts upon whom they could rely and detailed plans to which they could refer before and during the Olympics. These plans and support systems gave the gymnasts greater confidence to compete.
Summary

The intervention program provided for the Chinese gymnastics team in the four years prior to the 2008 Beijing Olympics team was judged by all concerned to have been a great success, given that the team won 9 gold medals and 14 medals in total. Paying close attention to the characteristics of gymnastics and by applying fundamental theories of psychology, the interventions included systems for monitoring the psychological condition of the gymnasts, a psychological countermeasure database, and the creation of a positive psychological culture. Technology-assisted mental training strategies and individualised psychological counselling greatly enhanced the gymnasts’ mental stability in training and during competition. A battery of systems for psychological monitoring of elite Chinese gymnasts was developed, providing a reference for the establishment of psychological profiles of China’s elite gymnasts in preparation for the 2008 Olympic Games and for future Games.

Winning the Olympic team events for both men and women in Beijing gave the Chinese gymnasts the opportunity to come to terms with their painful failure four years earlier in Athens. Huang Yubin, Head Coach of the Chinese gymnastics team, praised the psychological control of the team in Beijing, “the veterans kept the team psychologically stable, and the newcomers also did their job well” (Yu, 2008a). Pommel horse gold medallist, Xiao Qin, said that winning the team event and the host of individual gold medals that followed had “finally released the pressure that had built up for so many years” (Yu, 2008b). Following the success of the intervention, similar techniques were used when preparing China’s gymnasts for the 2012 London Olympic Games. Even without the home advantage, the Chinese team topped the gymnastics medal table again with 5 gold medals and 12 medals in total, retaining its grip on both the men’s and women’s team titles in the process.
REFERENCES


VIDEOS

148 Very sad moments in gymnastics  www.youtube.com/watch?v=21aVW9TdUrE
149 China’s Golden Girls: Beijing 2008  www.youtube.com/watch?v=FFz_QRCCGY
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155 Chinese Gymnastics Training Montage  www.youtube.com/watch?v=ywTOEZjr6zUB1is7-TL_dNwXAOc9fHvC-3ck1gF_J9M11hZbuaM
158 Cheng Fei Story  www.youtube.com/watch?v=S0HmakYxK6c
158 Deng Linlin - You’ll Be In My Heart  www.youtube.com/watch?v=dKXjNP4LCZ2E
159 The Olympic Dream  www.youtube.com/watch?v=6OtmIcJPYQ0&list=TLu42HpJEs6m-Lt3RKW13WuExolWBUBo4
162 Chinese Gymnastics Team - 2012 Olympics  www.youtube.com/watch?v=F3wJ3z61-RP8

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Judo in Japan
Katsuaki Yamamoto, Ritsuko Imamura, and Hirohisa Isogai

In
Secrets of Asian Sport Psychology
Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

Judo is more than a sport in Japan, it is an integral part of the culture of the country. As a martial art, judo is proposed to contribute to the healthy development of mind and body as well as to the cultivation of a well-rounded character. With these benefits in mind, judo is promoted in Japan and around the world as an ideal activity for males and females of all ages. The founding father of judo, Dr Jigoro Kano, proposed that “Judo is a teaching for life itself and with it we learn to overcome the pitfalls and obstacles of everyday living.” Judo is part of the physical education curriculum at Japanese schools as a life-long activity, and there are approximately 190,000 registered judo players in Japan.

Olympic Achievements

Judo became an official Olympic sport at the 1964 Tokyo Olympic Games for males and at the 1992 Barcelona Olympic Games for females. Japan is the birthplace of the sport and the country’s judo players have traditionally produced excellent performances in Olympic competition. Japan ranks first in the world for the number of Olympic gold medals won (36) during the period from 1964-2012, as well as the total number of medals won (72). This record of achievement is both a source of pride for Japan and an enduring source of pressure on the country’s national judo team to continue to excel in Olympic and other major international competitions.

This chapter presents a brief overview of the historical developments of judo and provides an explanation of its popularity. We then address how sport psychology is positioned within Japanese judo, outline a mental management program, and describe the involvement of mental training consultants in the sport. Finally, we present case studies relating to mental skills training and psychological support for two Olympic judo players.
Historical Development

Judo was established in 1882 when Dr Jigoro Kano opened a *dojo* (training hall), referred to as *Kodokan*, at the Eishoji Temple in Tokyo. Kano had previously trained in jujutsu, a fighting sport descended from ancient Japan. Having studied various ancient forms of self-defence and making many modifications and improvements, Kano established systematic techniques and instructions for his new form of jujutsu, which he called judo. This breaks down into “ju” (gentle) and “do” (path or way), or the way of gentleness. Kano’s primary goal was to assist students of judo to become better human beings. The two guiding principles of judo — inner tranquility (*Seiryoku Zenyo*) and outer harmony (*Jita Kyoei*) — encourage students to strive to achieve a sense of being at peace with themselves and the world.

Judo was introduced into Japanese schools as an extracurricular activity around 1887 and as a formal subject in 1931. The sport was also adopted as part of the curriculum to train police officers and became widely used in the armed forces, companies, and local dojos. Judo was prohibited in Japanese schools immediately after World War II because of the order made by postwar occupation forces to prohibit all martial arts. The All-Japan Judo Championship was reestablished in 1948, the All-Japan Judo Federation was formed in the following year, and judo was reintroduced into schools in 1950. Nationwide competitions among students became popular, leading to wider dissemination than in prewar times. The postwar dissemination of judo to overseas countries resulted in the 1st Judo World Championships in 1956 and its inclusion as an Olympic medal sport eight years later. Article 1 of the International Judo Federation’s regulations includes a sentence stating that “the IJF acknowledges what was founded by Jigoro Kano as Judo” recognising that the event in 1882 was the birth of judo in the world.

As well as an Olympic sport, Judo is seen as an educational activity that emphasises human development, rather than winning or losing. Thoughts and sayings reflecting this emphasis include “beginning with a bow and ending with a bow,” “flexibility overcomes stiffness,” “efficient use of energy,” and “mutual prosperity for self and others.”
Flexibility Overcomes Stiffness

Flexibility overcomes stiffness is an important concept in judo. The phrase refers to controlling the opponent by using the power of the opponent. With this technique, a smaller person is able to defeat a bigger person. We sometimes see a small Japanese athlete throwing down a big overseas athlete, which is a vivid demonstration of this concept.

Efficient Use of Energy

Judo promotes efficient use of physical and mental energy. Power can be created by using the movements or weight shift of the opponent. Dedication to judo and ascetic training helps to establish the ability to use energy efficiently. Judo players are encouraged to use economy of effort to neutralize an attack and are encouraged to apply the same principle to daily living, using their energy efficiently for the purpose of doing something beneficial for the world.
Mutual Prosperity for Self and Others

Another principle promoted through judo is that mutual trust and assistance has mutual benefits and leads to collective prosperity. Involvement in judo is proposed to cultivate a spirit of working towards the creation of a world where both self and others prosper. Devoting oneself to judo to help develop these ideals is considered to be important in Japanese culture.

The original collection of 40 throwing techniques in judo are referred to as *Gokyo-no-waza* (see Figure 1). A full list of throws and other judo techniques recognized by Kodokan can be found at http://en.wikipedia.org/wiki/List_of_Kodokan_Judo_techniques

![Gokyo-no-waza](image)

*Figure 1. Gokyo-No-Waza: 40 original throws.*
All-Japan Judo Federation (AJJF)

The AJJF has made sustained efforts to promote and disseminate judo to the public, on the grounds that the sport contributes to the healthy development of mind and body, and helps to cultivate a well-rounded character. The AJJF has also sought to strengthen and train national-level athletes who aspire to become the best in the world, as well as to nurture and improve the quality of instructors. Training young judo players and developing high-quality instructors are seen as important tasks to secure a strong base for the future of Japanese judo. Programs promoted by the AJJF focus on physical strength, judo technique, mental training, nutritional guidance, and physical conditioning.

To accredit instructors, seminars are held in all 47 prefectures of Japan with the emphasis on safety and basic skills. A qualification system for instructors was refined and implemented in 2013. Attempts to further improve the quality of judo instructors include coaching seminars delivered by the Japan Sports Association, workshops for community instructors co-sponsored by the Japan Budo Council, and the promotion of activities by female instructors in the community. Support is also provided in judo for people with visual impairment, the “Kids Judo” initiative, as well as the many national judo competitions held every year in high schools and colleges for both genders.

In regards to international relations, exchanges are promoted by inviting overseas teams to Japan and dispatching instructors to overseas countries. In addition, Japanese officials who attend major international events are actively supported. With deepening relationships and exchanges with the International Judo Federation and judo organisations in various countries, information on judo is collected, analysed, and disseminated. The development of judo throughout the world is regarded by many as Japan’s responsibility.

Credit: Kevin Butt/flickr/CC-BY-NC-2.0
Mental Management Program

The Sports Medicine Committee of the Japan Sports Association began a study on the mental management of athletes to enhance athletic performance for the 1984 Olympics. Results from this study were used for various types of sports, and the term “mental management,” referring to self-management of the mind, was introduced to many sport organisations in Japan. Training for athletes in Japan has traditionally relied on strict practice and physical training only, with scientific training given little attention. Only general mental concepts such as “will power” and “patience” are emphasised in this traditional way of thinking. Specific methods to control the mind, such as attention control and maintenance of proper activation levels, were not seen as part of athlete development. This is ironic because psychological considerations and specific techniques for self-control were explained in traditional Japanese martial arts, represented by the “Gorin-no-sho” (Book of Five Rings) by Musashi Miyamoto, which was written around the year 1645 (see http://en.wikipedia.org/wiki/The_Book_of_Five_Rings).

Mental management for judo involves a scientific and logical way of thinking, unlike the times when training relied only on experience. Contemporary mental training techniques for athletes, including relaxation, imagery, attentional control and mood profiling, are incorporated into the mental management program. In international judo events, it is important to properly control one’s own mindset by dealing with pressure from the surroundings, focusing attention at critical moments, and creating or maintaining the optimum level of psychological arousal by relaxing or increasing activation as necessary. It is now accepted in the Japanese judo world that athletes need to learn these and other mental skills to be able to reliably demonstrate their physical abilities to the maximum. Mental management programs for instructors and coaches include leadership, motivation, and stress management strategies. Mental management programs unique to Japan have been established, based on approaches used in Europe and the USA. One example is the Mental Management Program for Mental Stability, an excerpt of which is shown in Box 1.
Box 1: Excerpt from the Mental Management Program

To achieve good competition results you need to prepare your mindset, taking into consideration your daily living and training, as well as the period before, during, and after the competition. Training for mental stability consists of two parts. The first is a relaxation program involving biofeedback, autogenic training, and breathing techniques. The second is developing a clear mind in daily life and competition, using imagery training to create the best mindset for competition. Adequate skills practice, physical conditioning and psychological preparation are necessary to perform at your best. There are many ways to develop psychological skills, but also try to generate a clear mind before competition.

A long time ago, a samurai organized his belongings and exercised abstinence before he risked his life on the battlefield. By doing this, he was able to fight with all his strength without leaving his mind with his family or daily life. Clearing your mind before competition can assist you to have a clear mind during competition, resulting in a clear mind after the competition, and a sense of fulfillment that you completed the competition without regret.

Before leaving for the competition, you are encouraged to complete unfinished tasks, finish the tasks you can, and ask colleagues to attend to the rest. Tidy up and clean your desk and room, so that your mind will not be cluttered by thoughts of home. By preparing the best you can for daily life, practice, and competition, you can have a perfectly clear conscience and enter competition without worrying about the results.
Psychological Interventions

Six support staff were appointed by the Japanese Olympic Committee and the AJJF to support A-ranked Japanese athletes designated for special training to prepare for Olympic and World Championship events. The support staff included two doctors, a mental training consultant, a fitness coach, a trainer, and a dietitian. The roles of mental training consultants and other support staff become increasingly important during an Olympic year. There have been many cases, not limited to judo, where young first-time Olympic athletes failed to perform to their true potential for psychosocial reasons such as competition anxiety, the burden of expectation, and relationships with coaches. With Japan being the home of judo and the strong public interest in the sport, gold medals are expected as a matter of course. Judo receives more attention than most other sports, therefore pressure from the media weighs heavily. Although Japan has produced many Olympic champions in judo, on the flip side there have been many examples of Japanese judo players who fell short of public expectations due to their inability to cope with the pressure inherent in the Olympic environment. Case studies are provided of psychological consultations with judo medallists, one male and one female. Yoichi Kozuma and Katsuaki Yamamoto conducted the psychological consultations with the male and female athlete, respectively.
Case Study #1: Men’s Olympic Team

Kozuma provided psychological support to the Japanese men’s judo team, starting at a training camp four years out from the 2004 Athens Olympic Games. A program of goal-setting, relaxation, psyching-up exercises, visualization, concentration training, positive thinking, and mental preparation for competition was delivered to the whole team. Kozuma participated in all training camps for the judo team, and travelled to various competitions within Japan and overseas. At the Olympics four years later, the team excelled, winning three gold medals.

As mental training was a relatively new concept for the athletes and coaches, an introductory seminar was provided to introduce them to the principles of sport psychology. Data were collected from all team members using two standardised psychological tests to assess motivation and other psychological factors. Mental training sessions were delivered at all training camps for the team as a whole, and individual counselling sessions were also offered. Mental training was integrated into the daily schedule of the training camps. Athletes met at 07:00 every day for morning exercise with psychological conditioning. Activities included attitude training, laughing, listening to relaxing music, discussion with a partner, breathing control using karate techniques, meditation, and reproduction of their best performance in slow motion.

Morning exercise was followed by 15 minutes of walking, so that athletes had the opportunity to talk with each other. Open communication between the mental trainer and the athletes was seen as very important, and so Kozuma ate breakfast with the athletes after walking and time was set aside to converse with athletes for one hour at the training venue prior to the start of training. Training sessions occurred in the mornings and afternoons during the camp. A 15-minute mental preparation routine was taught to athletes and practiced before all training sessions. Eventually, athletes were responsible for conducting their own mental preparation and to use the method they had been taught to prepare for training and competition.

Athletes were observed during training sessions to assess their attitudes and mindset. They were provided with feedback, which was then used in the goal-setting process. An opportunity for athletes to talk with each other about their attitudes toward training was provided after the afternoon session, followed by a visit to hot springs with the athletes. Getting into hot springs is a traditional Japanese...
A judo player never wants to appear vulnerable to an opponent, and so it is strictly prohibited to show emotion. Therefore, athletes do not express emotions such as pain or pleasure during competitions or training. Athletes were taught psychological skills involving psyching-up and relaxation exercises to develop their ability to control emotions. Although music is used by athletes in some countries, listening to music during training was resisted. Music in the Japanese judo culture is seen to detract from the seriousness of the sport and distract attention. Therefore, psychological warm-up or cool-down with music never occurred. It was completely out of the question at the national team level. Listening to music might be a common arousal control technique in Europe and the USA, but it does not fit in the world of Japanese judo.

Judo is a one-on-one sport in which those athletes who are not participating wait patiently until it is their turn to compete. Imagery techniques were taught to the athletes to implement during this waiting time. They were encouraged to visualize the weaknesses of opponents and imagine the specific techniques that would be effective against the opponent during the impending contest. This technique was readily incorporated into athletes’ routines while they were waiting to compete.

To prepare for international contests, simulation training was conducted for the team on the day before competition. All aspects of the forthcoming competition were reproduced, including the actual competition schedule, recording of fans shouting at the venue, and announcements in foreign languages. Everything, including the wake-up time, weigh-in, breakfast time, and transportation time to the venue of competition was incorporated. With this simulation training, the team became physically and mentally prepared for competition scenarios prior to the actual event. The simulation training and the imagery-based preparation routines during wait time were innovative concepts that had never previously been accepted in the judo world. The athletes steadily acquired effective psychological skills as a result of this mental training program.
Case Study #2: Female Olympic Medallist

Katsuaki Yamamoto, the psychological consultant, had experience of providing mental training for judo in the past and was accredited by the Japanese Olympic Committee. His consultation work began with the athlete before she was selected as a first-time Olympian. Consultations were held not only with the athlete, but also with others who were significant influences on her. The team manager, coach, and the athlete’s mother were all contacted to form a trusting relationship via regular communication. Interviews with the athlete combined with observation of training at her high school dojo helped Yamamoto understand the athlete’s psychological and behavioural characteristics.

Her self-analysis indicated psychological characteristics such as her insistence to train hard, a winning-is-everything attitude, a strong performance orientation, concern about relationships within her team, and a tendency to be easily influenced by suggestion. She practiced meditation, respiration control, and imagery training daily, and felt that she was equipped with mental toughness in addition to solid judo techniques and physical strength. She achieved good results in the lightweight class at the World Championships, and her quick movements and sharp techniques garnered attention from the public, resulting in the expectation that she would be selected as a member of the Olympic team. Therefore, a 4-month intervention with sessions conducted once a week was implemented. Her initial goal was to be selected as an Olympic team member by winning the Olympic trials.

The intervention focused on five areas of concern: a tough training schedule, relationships within the team, psychological preparation for the trials and the Olympics, attentional and behavioural control during practice and competition, and dealing with the mass media.

To address concerns about the demanding training schedule, her mood responses were monitored once a week using the Profile of Mood States (POMS: McNair, Lorr, & Droppleman, 1971), to help detect staleness and prevent overtraining (Kuipers, & Keizer, 1988; Yamamoto, 1990). With the athlete’s permission, mood profiles were communicated to the coach to assist with decision-making regarding fine adjustments to training load. This approach continued through six training camps after the Olympic team had been selected.

In regards to the athlete’s concerns about relationships within the team, all male and female members of the team attended lectures on sport psychology that covered topics such as mental stability, optimum level of awareness, goal-setting, imagery rehearsal, attention and concentration, muscle relaxation, positive thinking, cue words, switching mindset from practice to competition, and performance routines. Enhancing the psychological skills of the entire team seemed to reduce her concern about intra-team relationships and diminish the psychological burden.
To address attentional and behavioural control during practice and competition, advice was provided in cooperation with her coach to develop her concentration skills by identifying attentional cues and thoughts relating to point of focus, eye line, offensive and defensive techniques, and high-risk retreating moves. In terms of the mass media, the problem was associated with the excessive number of interviews, so media requests were managed by having to be made in writing, to avoid disturbing concentration during competitions and practices.

Mental rehearsal using imagery formed an important part of her planned competition routine from the first competition bout to the final championship bout. The competition plan included how she would occupy herself in the rest week before the Olympic competition began, and what she would do during the 3-minutes wait time immediately preceding a bout. Advice was given to reflect on her performance in the previous bout (1 min.), consider tactics for the next bout (1 min.), and then relax by lying on her stomach to recharge energy.

Figures 2 to 5 show the POMS profiles for the athlete assessed 10 days before the Olympic trials (Figure 2), 1 day before the trials (Figure 3), during the Olympic training camp (Figure 4), and prior to the competition at the Olympic Games (Figure 5). POMS scores were used to assess her responses to training, and specific recommendations were based on responses to individual questionnaire items and her profile across the six POMS factors of tension, depression, anger, vigour, fatigue and confusion. Vigour scores peaked, as planned, prior to the Olympic trials and the Olympic competition itself (see Figures 3 and 5). Fatigue reached its peak during the training camp (Figure 4), as confirmed by her parents, and excessive training was suspected. Therefore, relevant coaching and support staff were advised to limit the training burden and allow her to make adjustments at her own pace. Although the training activity level increased before the competition phase at the Olympics, a classic "iceberg" profile (Morgan, 1985) was maintained (Figure 5). Tension and anger scores were high in the lead-up to the Olympic trials (Figure 2) but subsided closer to the trials (Figure 3) and remained in the normal range in the Olympic environment. Depression and confusion scores remained in the normal range throughout. Having successfully navigated the Olympic trials, the athlete lost in the final of the Olympic competition by a very narrow margin, earning the silver medal. Since then, she has won two Olympic gold medals.
Summary

The sport of judo has maintained its traditional popularity in Japan. Judo is incorporated into physical education classes as part of the school curriculum, with the competitive nature of the sport increasing when it is practiced as an extracurricular activity. The ongoing accomplishments of Japanese judo athletes at major international competitions such as the Olympic Games and World Championships give courage, energy and inspiration to the Japanese public.

In this chapter, we covered the development and dissemination of judo in Japan, a system of training not only for athletes but also instructors, along with two case studies of interventions with Olympic judo athletes. The incorporation of sport psychology consultants into the traditional world of Japanese judo has been a gradual process. The demand for highly-qualified consultants to be available to support coaches and athletes over the long term has grown. Qualified consultants who are available to immediately respond to issues identified by coaches, to accompany teams to international competitions, and to provide support to individual athletes at mutually convenient locations are increasingly valued as part of Japan’s attempts to maintain its position as the dominant force in world judo.

REFERENCES


VIDEOS

page

169  Judo for Kids  http://vimeo.com/35494707

169  101 Judo Games Trailer  www.youtube.com/watch?v=Ub4-YfEGmgg

169  Japanese Olympic Judo Compilation  www.youtube.com/watch?v=rrfDHbxi6l

178  Tadahiro Nomura - The Warrior - Judo Compilation  www.youtube.com/watch?v=0TSRwpbtbo

180  Judo - Women’s 63KG - Beijing 2008 Summer Olympic Games  www.youtube.com/watch?v=onlAQ_yaO4w

181  Judo - Men’s +100KG - Beijing 2008 Summer Olympic Games  www.youtube.com/watch?v=3Y6wU2JdD0

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175  Keiji Suzuki in the final of All-Japan Judo Championships in 2007 by Gotcha2, used under a Creative Commons Attribution-ShareAlike 3.0 Unported (CC BY-SA 3.0) licence, from http://en.wikipedia.org/wiki/Keiji_Suzuki

176  2010 World Judo Championships - Thierry Fabre Vs Takamasa Anai 2 by XIIIfromTOKYO, used under a Creative Commons Attribution-ShareAlike 3.0 Unported (CC BY-SA 3.0) licence, from http://commons.wikimedia.org/wiki/File:2010_World_Judo_Championships_-_Thierry_Fabre_Vs_Takamasa_Anai_2.jpg

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The Filipino Invasion of Pool: Setting New Standards in the Game

Maria Luisa Guinto-Adviento

In

Secrets of Asian Sport Psychology

Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

The Philippines is often considered to be the pool capital of the world because many of the top players in the sport come from this small group of islands in Southeast Asia (Maniego, 2006). Filipino players are known for their exceptional mastery of the game and innovative strategies that have revolutionized the way the sport is played.

Pool refers to a family of cue sports played on a table with six receptacles, called “pockets”, located around the perimeter “rails” of the table. Players use a stick called a “pool cue” to strike a cue ball, which in turn strikes object balls. The goal is to drive the numbered object balls into the six pockets. The games vary according to which balls are legitimate targets and the specific requirements to win a match (World Pool-Billard Association, 2004).

The so-called Filipino invasion of the sport began with Jose “Amang” Parica, who rose to prominence in the 1980s with his devastating offensive weapons on the pool table, earning him the nicknames, King and Legend. By the mid-1980s, the Filipino invasion of the sport was in full force, with Efren Reyes at the forefront and the younger protégé Francisco Bustamante close behind him. Soon, they were followed by a large number of other Filipino players who captured world titles, individually and as a team.

Pool is a game where strength and height don’t matter, but where skill and strategy are of primary importance. Understanding the reasons why Filipino players excel in pool is a perennial challenge that many have addressed from different disciplines. This chapter contributes to the discourse on this topic from the vantage point of two of the most respected Filipino cue artists who figured at the front line of the Filipino invasion, Efren “Bata” Reyes and Francisco “Django” Bustamante.
Efren “Bata” Reyes

Fellow professional pool players revere Efren Reyes because of his range of expertise across the different cue sports of 9-ball, 8-ball and 1-pocket, a rare phenomenon even among the elite of the sport. He is known as The Magician for his amazing tricks on the pool table and for the phenomenal shots that he produces at clutch moments. Efren Reyes has taken out championship titles in the World Cup, International 9-Ball Tournament, and World 9-Ball Open and has led the Philippine team to victory in the World Team Billiards, Asian Games, and Southeast Asian Games.

He was the first Asian to be inducted into the Billiard Congress of America Hall of Fame in 2003 and pool’s own elite players recognized him as the “best player of all time” (Mangahas, 1996). More than a decade later, another survey among pool professionals re-affirmed his status as the best player of the game, “Efren Reyes. He’s the best. Hand’s down. Nobody else comes close. Anyone surprised?” (“Pro Peer Review,” 2007, p. 36).

Francisco “Django” Bustamante

Francisco Bustamante reached the pinnacle of his illustrious career when he captured the highly-coveted World Pool Championship in 2010. After winning his final match, he stated, “Finally, I am complete as a pool player. Everyone dreams to be a WPA World 9-ball champion” (abs-cbnNEWS.com, 2010). In the same year, he joined his close friend, Efren Reyes, as the second Filipino inducted in the Billiards Congress of America Hall of Fame.

A 23-year veteran of the game, Bustamante has won prestigious tournaments such as the World Pool League Championship, World Pool Masters, Munich Masters, German 9-Ball Championship, All-Japan 9-Ball Championship, and Derby City Classic 10-Ball Challenge, making him one of pool’s greatest international stars. He is renowned for his astonishing break power, “He’s a small guy, but his timing is so strong, he gets the maximum force out of his movement on the break. That’s why he can outbreak guys three times his size. It’s kind of like Tiger Woods when he drives” (“Pro Peer Review,” 2007, p. 38).
What Makes Filipinos Great Pool Players?

Efren Reyes and Francisco Bustamante have each earned their mythical place in the annals of the sport. Together they have erected the most formidable challenge to any contending team. In 2006, they captured the World Cup of Pool, beating the favoured Americans Earl Strickland and Rodney Morris in the finals. Three years later, they asserted their powerful tandem once more when they claimed the title in 2009 at the expense of the strong German duo of Ralf Souquet and Thorsten Hohman. This chapter focuses on what has propelled them to extraordinary levels of performance in the game, individually and as a tandem. The objective is to gain authentic insight into the support systems and programs of these exceptional performers, especially those components that are specific to their cultural and sport context.

Pool was introduced to the Filipinos by their American colonizers. It was a game initially played by U.S. military personnel as recreation. It did not take long before the Filipinos took to the game naturally. Because the game was suitable for gambling, it became popular among the out-of-school youth and jobless men who played the game on improvised or homemade pool tables. With nothing else to do, these pool devotees would spend all their time playing the game. Endless hours on the pool table built in them the stamina, persistence, and thorough knowledge of the game that are characteristic of many top Filipino players. Most of them were initially jobless, but in pool they found a “job” that provided them income from the money games. The money game is not just a pastime or a form of recreation for the Filipino; it puts food on the table and is their lifeline to survival. It is within this socio-economic context that the careers of Efren Reyes and Francisco Bustamante flourished.

Given this background, it is not surprising that formal psychological services were never part of their development and progress, individually or as a team. As such, there are no sport psychology secrets to disclose. The search for insights to inform our research and practice comes instead from examining their experiences and reflecting on what it took for them to reach the summit of their sport. The main resource of learning in this chapter comes from Efren Reyes and Francisco Bustamante themselves who both agreed to share their life stories in a study entitled, What Makes a Champion: A Narrative Analysis of Filipino Elite Athletes’ Storied Lives (Guinto-Adviento, 2011).
The Framework of Investigation

The study utilized narrative inquiry to frame the entire investigation. The basic premise of narrative inquiry affirms the value of storytelling as integral to a meaningful life. Narrative psychologists assert that human life may be described as a series of random and disjointed events unless a story is woven to connect the events into a coherent whole. Consequently, stories reveal our ways of organizing, interpreting, and finding meaning by ascribing agency to the characters that figure in our lives and by assuming causal links between events that emerge in our recollection (Smith, 2008).

The narrative used by an individual to organize a set of facts into a coherent story provides the meaning by which actions are perceived to precede or follow events. Narrative psychologists claim that much of what we understand about human behaviour and mental processes can be fully unfolded from stories (Polkinghorne, 1995). As such, researchers and practitioners are encouraged to pay close attention to the stories people tell. If we are to understand how distinguished pool players like Efren Reyes and Francisco Bustamante have become the champions they are and recognize the psychological processes that underlie their championship, then it makes sense for us to look closely into their life stories.

The Narrative Interview

Efren Reyes and Francisco Bustamante were each asked to narrate his life story as a champion in the sport. The general flow of the narrative interview was triggered by the following request and question: “Kindly tell me the story of how it all started for you as a player of the sport. How did you come to be the champion that you are now?” After each had completed telling his life story, follow-up questions were asked to clarify issues that needed further elaboration. Both interviews were recorded and transcribed. The analytical steps in narrative analysis as proposed by Lieblich, Tuval-Mashiach and Zilber (1998) served to guide the research. Only those findings that bear relevance to our research and practice in sport psychology are presented in this chapter.
Finding Coherence in the Narrative of Efren “Bata” Reyes

The life story of Efren Reyes invokes the saga of a local hero who struggled through hardships and limitations to achieve victory, not only in the sport of pool, but in providing a better life for his family as well. Born into a very poor family, the five year old Efren and his father left their hometown to live and work with an uncle who owned a pool hall in Manila. When the customers left at night, Efren played the game on his own, pretending to be like the grown up players he watched all day. He was not yet tall enough then to see the top of the pool table, so he stacked up empty cases of soft drinks and used them as a movable platform so that he could manoeuvre around the table while struggling to handle a cue stick longer than he was. At the end of a long day of work and play, the pool table served as his bed.

By the age of nine his exceptional skills had made him a favourite pawn of enterprising adults who won money betting on him and passed on a small percentage of their winnings to the young prodigy. Soon, dropping out of elementary school in favour of the game became a practical option for him. By the time Efren reached his early 20s, he was acknowledged as the best player in the land. His next target was to test his talent in the United States. An American serviceman had already seen him play in the Philippines and had spoken about him to other pool enthusiasts in the U.S. Thus, they knew his name, but no one else had seen his face.

To ensure his reputation would not precede him, Efren concealed his name with an alias when he signed up for his first tournament. When he won the competition, he was about to get away with his cover until he mistakenly signed his real name for a fan requesting his autograph. Compelled to admit his true identity, Efren Reyes was quickly tagged as “the man from another planet” because he displayed skills on the pool table that had not been seen before by the American players. His win was significant because he became the first Asian to win in a U.S. pool tournament. Suddenly, Efren found himself in the largest arena of the sport to showcase his genius and earn the biggest prize money of his time.

However, unethical managers preyed on Efren to rob him of his fair share of earnings. On several occasions, they either ran off with the entire prize money or gave him less than his promised percentage. This would have been a hard blow on Efren who made his sole source of income from pool, and to lose it to mercenary managers must have been a major setback. However, his storytelling simply mentioned these episodes as unfortunate incidents or “bad luck” that were eventually reversed in his favour with the coming of an honest manager who continues to handle his career to this day. Nowhere in his narrative did he dwell on these undesirable occurrences. They were accepted as temporary crises that he simply had to weather until the next break came.
Among all his victories, Efren considers his 1999 World Pool Championship as a defining moment for him, as it brought much honour to the sport and to his country. Although he had secured other big wins in the past, this was the first time his championship game was televised nationwide. Filipinos stayed up late at night and into the morning to follow his game. When he captured the crown in Cardiff, Wales to establish the Philippines as a world power in the game, a pool craze in the country ensued. “Bata” Reyes became a household name and his image was used to endorse well-known Philippine brands. Parents no longer discouraged their children from playing the sport that had long been associated with the out-of-school youth and the jobless. Indeed, pool had become a legitimate sport worthy of his countrymen’s pride and support.

Efren found much fulfilment in this victory but found the limelight too much to take on a regular basis. While he enjoyed the attention given to the sport, he admitted in his trademark toothless smile, that the flashbulbs from cameras strained his eyes and the long queue of autograph signing exhausted his hands. He could never get used to the attention he would get wherever he went ever since he was recognized at that 1999 World Pool Championship. His continued humble ways have endeared him further to his countrymen, especially among the masses who regarded him as their hero.

The individuality of Efren as the main protagonist in his story stood out in his sheer determination to take charge of his life and steer it away from the life of poverty into which he was born. He did not look outside the confines of his lot to find his own liberation and prosperity. Instead, he took the only thing he had — his mastery of the game — and nurtured it to perfection, consequently redirecting the course of his destiny. The image of the very young Efren taking the empty cases of soft drink bottles and using them as his portable platform to manoeuvre around the pool table revealed his innate ingenuity that would serve him well in pool and in life.
With his single-minded approach to his goal of achieving a life away from poverty, Efren immersed himself completely in the game and committed every waking hour to it. He constantly watched and learned from older players at his uncle’s pool hall, and then practiced unceasingly until he would fall asleep on the pool table. Totally engaged in every component of the game, Efren developed a special intimacy with pool and all its elements. He related to the objects of the game as if they were long-time friends he had known well since he was five years old. As a result, he developed an enormous repertoire of knowledge, skills, techniques, and strategies to crack every puzzle on the pool table. In his own words, Efren described his experience:

*Of course, ever since I was a young boy, I would play from the time I wake up in the morning, and then I would play again when I came home from school. Before I sleep, I play again. Thus, I knew all the conditions of the pool table -- in the morning, in the afternoon, in the evening. They run the ball differently during the different times of the day . . . Sometimes, the ball is light; at other times, it could be heavy. The ball can become heavy. Even the pool table can be moist . . . isn’t it, when there is dew? That’s why it gets moist and then it runs (the ball) differently. When the ball hits the table, it can jump . . . I played them all, from morning to night, I played with them. Even the cue stick that we handle -- it gets moist when it’s tired, just like when your hands get very tired and they start to tremble. And then when you do not use it, and it rains, it gets cold, isn’t it? So the cue stick becomes moist even when it is stored. Then of course, I wipe it when I have to use it already. It’s important that when you play it, it should slide well on the pool table.*

Some of those who have attempted to explain Efren’s magic on the pool table have resorted to myths on how the gods of the game must have witnessed the young boy sleeping on the sacred pool table, working by day and playing by night. Thus, according to their myth, the gods agreed to endow him with special powers in the game that no other human would ever possess. Despite this imaginative rationalization of Efren’s extraordinary competence in the game, it makes sense that someone who found work, play and rest on and around the pool table would master the game with all his senses. Efren Reyes never had enough of the game. He was unrelenting in his desire to know the ins and outs of the game. Nothing escaped his attention; thus, he discovered strategies to overcome every dilemma that appeared on the pool table.

Furthermore, playing money games took on a different meaning to Efren. Winning put food on the table and paid for the bills of his extended family. Losing meant coming home empty-handed to a large family who relied solely on his prize money. Pool was not his pastime; it was his full-time job, it was his life. Therefore, it comes as no surprise that he mastered and perfected it well enough to make a good living out of it and revolutionized how the game is played.
With limited opportunity in life, Efren could have easily taken the path of indolence or crime characteristic of the topless and tattooed men who littered the street alleys where most open pool halls were located during his youth. However, Efren’s heroic journey emerged early in life as he took a different trajectory toward another destination, precisely because he flourished in the very situation that limited his choices in life. There was nothing else but pool for Efren. He carved his own niche within the only option he had in life. Hardships and disappointments failed to derail him from his quest as he kept his focus on the ultimate prize, in the firm belief that his persistent efforts would pay off.

As such, his story progressed steadily toward his goal of attaining a good life for his family as he was establishing himself as the best in the sport. Failures and disappointments did not faze Efren because they were accepted as integral to pool and life. Rising from defeat and bouncing back from adversity was the only way for him to continue his mission. Thus, he became one of the best pressure players in the world.

Further reading into the life story of Efren revealed four focal themes that establish the coherence of his narrative.

First, by developing his initial inclination for the sport into a passion, Efren discovered the key to his liberation from poverty.

Second, in the process of following his passion, Efren totally committed himself to mastery of the game, developing extensive knowledge and skill that no-one else could rival.

Third, victory came from the dual achievement of a good life for his family and his legendary status in the sport. His ultimate satisfaction came from his family enjoying the fruits of his labour and from the prestige that came from his extraordinary feats in the sport.

Fourth, challenges were considered inevitable in his life but his belief about their temporary status relative to his long-term goal, and his focus on what he had rather than what he did not have, kept him steadfast in optimism to move on and embrace the challenge.

These focal themes recurred throughout the narrative of Efren Reyes, providing links to decisions, actions and events, and ultimately, a sense of integrated whole to his life story.
Finding Coherence in the Narrative of Francisco Bustamante

Francisco Bustamante’s life story conjures an incredible journey of one man who also rose from the depths of poverty to the heights of prosperity through the game of pool. It had always been a difficult life for Francisco and his siblings who had to contend with their father’s measly income from building toilets and planting rice. However, instead of resigning to his fate, he aspired for a life of comfort and prosperity for himself and his family. Fascinated by the activity and the exchange of money in the game as he worked in his sister’s pool hall, Francisco found his ticket to a better life. Every night, shortly after the last patron had left the pool hall, the young Francisco would grab a cue stick and practice by himself.

His innate toughness appeared initially as defiance when he dropped out of high school to play pool and when he left for Manila to take his chances in the big city. It always broke the hearts of his parents whenever he would follow his desires instead of heeding their advice, but being the youngest of eight siblings, he somehow got away with his apparent defiance. Soon, his competence matched up with the veteran local players of the land and Francisco took the next step out of the country to take on bigger competitions and higher prize money.

After an impressive finish in a big local competition where he faced off with the veteran Jose Parica for the finals, this young whiz got an invitation from Parica who sponsored him to enter a tournament in Japan. He performed well enough to get the attention of a Germany-based Filipino who offered to take him to Europe where money-rich tournaments awaited. True to form, Francisco took his chances in a foreign land.

His early show of defiance served him well at this stage of his career. Leaving everything behind, he ventured into unknown territory. With no visa to enter Germany, Francisco had to endure a 20-kilometer walk in darkness to cross the border through mountainous trails. When he finally reached Germany, he was advised to avoid policemen who would surely have him deported should his illegal status be exposed. However, he simply refused to give up on his quest for a better life, even under harsh weather and work conditions in Europe.

In order to survive in between competitions, Francisco worked part time in a pool hall of a restaurant called Rick’s Café to entice customers to play the game and patronize the business. When the number of customers increased as a result of his presence, the Indonesian café owner wanted Francisco on a full-time basis. His Filipino manager struck a deal with the Indonesian businessman, and for the price of $6,000 Francisco was, in effect, “sold” to the café owner. After that business transaction, he never saw or heard from his Filipino companion again.
How Francisco learned to communicate with his Indonesian employer and his German clients is another story in itself. For the first two years, he could not speak to anyone since he only knew Filipino. He got by through sign language and a few German terms. Through persistence, hard work, and a great deal of humour, Francisco eventually learned to speak their language and endeared himself to his German clients. In time, his boss allowed him to return to the Philippines to secure a visa that would allow him to re-enter Germany legally. Within a week, his papers were completed and Francisco returned immediately to Germany where he stayed for a total of 14 years. He established himself as one of the best pool players in the country, winning more than 400 tournaments during his stay there, including the Munich Masters and the German 9-ball championship. Looking back at how he managed to compete in many tournaments while working at Rick’s Cafe, Francisco stated:

I don’t know how I managed but it’s as if I never got tired . . . because every week, I had tournaments and I was still teaching . . . I did not get tired of playing, I just kept thinking to myself, ‘Ah, I need to win, if not, I won’t have money’ -- just like that. Of course, I went there to earn money -- that’s it. That’s what enters my mind, how to earn money . . . It was really hard but at the end of it, there was prosperity.

Francisco’s seeming defiance during his younger days eventually emerged as mental toughness during his pool career. This characteristic became most evident at the 2002 World Pool Championships when he was jolted with an urgent call from his wife who broke the news of their youngest daughter’s sudden death. Totally devastated, Francisco wanted to forfeit his bid for the championship. However, with encouragement from his family and peers, Francisco accepted that he could not do anything anymore to restore the life of his daughter and decided to dedicate the rest of the tournament to her instead. He summoned all the physical, mental, and emotional strength built over the years and proceeded to demolish several luminaries in the last 16, in the quarter-finals, and in the semi-finals. He led most of the way during the finals but his last miss allowed his opponent to return to the table and finish the tightly-contested match.

Despite this painful loss, it revealed Francisco’s inner strength developed through years of battling against poverty, of taking his chances with every opportunity available to him, and of sticking it out through difficult circumstances in anticipation of a better life. Thus, his victory at the 2010 World Pool Championship became even more significant as it represented, not just the attainment of an elusive prize to reach the summit of his career, but also the triumph of his unbeatable spirit, and the ultimate victory of a lifelong quest.

In the context of his steady advancement in sport competence and financial security, Francisco’s narrative took on a progressive plot. Losses, hardships and trials did not disrupt his single-minded approach to his overall goal of providing a life of prosperity for his family while earning his status among the elite players of the sport. Defeat and adversity did not discourage him; instead, they were accepted as essential in sport and life. Despite his best efforts, Francisco acknowledged that luck, external circumstances, and God’s will, all affect the ultimate outcome of events. Thus, even in defeat, he was able to maintain a solid self-confidence and a positive outlook of life in order to resume his quest with sustained discipline and determination.
Although Francisco’s story appeared to centre on his fearless pursuit of a life out of poverty, his narrative was not just about a great individual who defied all odds to pursue his dream. Even after he left his hometown in search of a better future, he continued to show profound concern for, and strong connection with, family and community. His earnings were always shared with his family, even after he married and settled with his own family. He continued to honour his ties with his town mates and countrymen long after he left the Philippines. Francisco’s life story depicted a network of human relationships that defined him as a champion. He was deeply connected, not only to important people in his life, but also to his roots in poverty. Francisco took responsibility over the welfare of those who were not as privileged as him. He also considered it an achievement to bring honour to his country whenever he won.

His enduring friendship with Efren Reyes, with whom he willingly shared, not just his room during tournaments, but his prize money as well, further affirmed the value of relationship over and above material wealth.

Five focal themes emerged to provide coherence to the narrative of Francisco Bustamante.

First, in developing his natural inclination into a passion for the sport, Francisco discovered his gateway to a life of prosperity, not only for himself, but for his family as well.

Second, his courage to take chances in life developed in him an internal toughness that worked to his advantage in pursuing opportunities and moving on from adversities.

Third, in his firm belief in determination and hard work, Francisco put a high premium on persistent effort to get to his desired outcome.

Fourth, victory for him meant the attainment of a good life for his family and the achievement of prestige among his peers in the game. Defeat, on the other hand was accepted as inevitable but never considered as derailing his pursuit of goals.

Fifth, rootedness in the past was important for Francisco because it ensured that he would reach his destination. Staying grounded in his early experience of poverty kept him humble despite his accomplishments. As the main protagonist in his own life story, Francisco is victorious in his quest for a good life.
Implications for Research and Practice in Sport Psychology

Primary and secondary influences on sport expertise

From a narrative framework perspective, the primary and secondary influences on the development of sport expertise, in the literature (e.g., Baker & Horton, 2004) are relevant only to the extent that they are contextualized in a storied life. The importance of inherited qualities or learned competencies in sport expertise may be highly dependent on the meanings ascribed by the champion to these qualities and competencies.

For instance, the primary influence of heredity on sport expertise (Baker & Horton, 2004) becomes significant only to the extent that the champion recognizes it as integral to his or her quest for championship. Nowhere in their life stories did Efren and Francisco allude to any form of inherent talent or giftedness in the sport. Instead, a firm belief on the value of their discipline and hard work emerged consistently in both life stories. Although it is still possible that they were simply unaware of the innate qualities that predisposed them to their chosen sport, their perception of the situation and the meaning they attached to what they perceived to be their lack of advantage appear to be the more salient in determining the trajectory of their motivation and effort. As such, it is the meaning ascribed to their inherent advantage or disadvantage in sport and in life that ultimately matters in the pursuit of championship.
Similarly, the role of familial support and instructional resources identified as key secondary influences in the skill development of elite athletes (Baker & Horton, 2004) has been shown by this narrative study as salient only to the extent that they are acknowledged and valued by the champion. Neither Efren Reyes nor Francisco Bustamante had parents who encouraged them in the sport. They were too busy earning a living. They had no time to watch or cheer them on as their children developed and excelled in the game. They even felt sorry for their sons for dropping out of school to play pool. They only appreciated the careers of Efren and Francisco after experiencing the benefits resulting from their hard work. Yet, nothing in their life stories indicated that Efren or Francisco bore any resentment toward their parents’ lack of support for them. On the contrary, they both took the initiative of providing for their respective families, acknowledging their utter poverty, and the need to support them in their old age.

The same may be said for coaches and mentors. Efren Reyes and Francisco Bustamante developed and progressed in the sport without the benefit of any coaching. They simply watched others play and learned vicariously from them. They spent hours on their own improving on what they learned from others and from their own previous games. Watching strong and weak players provided the informal coaching that guided them throughout their careers. They worked on what these observed players “taught” them. In effect, each one discovered and nurtured the “inner coach” within himself. Related literature provides no adequate explanation regarding the absence of coaches in the lives of exceptional athletes like Efren and Francisco. However, their stories suggest that the absence of coaches does not necessarily hinder the development of sport expertise. Given the context and perspective of Efren and Francisco, the apparent disadvantage actually triggered greater reliance on self-discipline and determination to advance in skill and competence.

**Motivation as the driving force in exceptional performance**

The current theorizing on what drives elite athletes to push themselves beyond mental and physical exhaustion centres on the construct of motivation as the internal or external force that initiates, directs, or intensifies persistent behaviour in deliberate training. The present narratives offer an alternative view on what drives elite athletes to exceptional performance, suggesting that Efren Reyes and Francisco Bustamante were more than willing to commit to years of deliberate training once they were able to recognize its instrumental value in achieving their goals in life. Deliberate training was driven and sustained by powerful goals that integrated personal aspirations with sport-specific performance objectives. For Efren and Francisco, succeeding in pool meant achieving two meaningful goals: a better life for their respective families plus status and prestige among the elite performers in the field. Their stories suggest that deliberate training, pursued with sustained discipline and determination, must be professionally and personally meaningful to the athlete, as a way to achieve in sports and in life as well.
Passion in sports

A strong fascination or inclination for pool stood out as a focal theme in the narratives of both Efren Reyes and Francisco Bustamante. This early manifestation of positive regard for the sport eventually developed into passion for the game. Vallerand (2007) defined passion in the context of sport as “a strong inclination toward an activity that people like, find important, and in which they invest time and energy” (p.1). He proposed that if athletes were to devote many years or a lifetime to sport, they must love the activity so intensely that they would pursue it even during difficult times. He tested his proposition with basketball players and dramatic arts performers and found a direct relationship between passion and deliberate training, and an indirect relationship between passion and performance (through deliberate training).

From the narratives of Efren and Francisco, passion emerged as the compelling driving force behind their self-initiated discipline and determination. Deliberate training was simply one of the activities both of them willingly undertook without prodding from anyone else because they were passionate about the game of pool and the provisions it provided for a better life. This brings the discussion to the interrelationship between passion and a dual goal orientation. Passion for the sport, combined with the desire to achieve sport-specific and personal life aspirations, provided the compelling force that directed and intensified the lifelong quest for championship. For Efren and Francisco, it made a lot of sense to pursue excellence in pool because it was their currency for financial security and professional success. Thus, the affective disposition (passion) toward the sport and the cognitive evaluation (dual goal orientation) combined into a potent motivating force that drove them to pursue greatness with discipline and determination.

Storytelling as investigation and intervention

Drawing the life story of an exceptional athlete provides more than the usual background information required in consultation. From a life story, the focal themes of an athlete’s participation in high level competitive sport can be clarified to illuminate the decisions, assumptions, actions, and events relevant to his sport performance. This becomes a very important step in facilitating self-awareness as essential to self-mastery, and consequently, to self-regulation.

In examining their own life stories, athletes may be guided to discover the thoughts, feelings, and actions that lead to successful outcomes, thereby generating their own blueprints for success. Similarly, they may be guided to reflect on the cognitive, affective, and behavioural precedents of unsuccessful outcomes, so that they may either avoid such precedents or assign new meanings to these outcomes.

While the literature acknowledges the potential cathartic and therapeutic benefits associated with storytelling (Pennebaker, 1997), the link between the development of personal resilience and storytelling, particularly in the field of sport, has not been established. Insights from this discussion direct our future research and practice to explore how storytelling could facilitate the development of personal resilience and provide opportunities to celebrate the toughness of the athletes who recount how they managed, flourished, or thrived in adversity.
Summary

The Filipino invasion of pool is a phenomenon captured via individual life stories contextualized in the story of the sport in the country. Introduced to Filipinos by their American colonizers, the game easily evolved into a form of gambling that mostly enticed the out-of-school youth and the jobless, both of whom had all the time to hang out in makeshift pool halls in alleys, street corners, parking lots, sidewalks or any open space where people were willing to play the game. Every game has a money bet on it, including side bets from onlookers or bystanders who take their chances on those who are actively playing the game. Practice in the game simply required constantly playing money games.

Such was the context of the life stories of Efren Reyes and Francisco Bustamante, and many of the Filipino invaders of the game. In order to understand the pool player, the sport psychology researcher and practitioner must appreciate the cultural context in which the sport and the player thrives. Both Reyes and Bustamante have become local heroes in the eyes of their countrymen because they represent their own stories of liberation from varied forms of poverty. The endless hours they spent on the pool table have given them a wide range of knowledge and the skills that remain unparalleled by their foreign opponents who play the game for reasons other than a desperate attempt for survival. Their accomplishments have given a new face to the sport, drawing it out of dark alleys into well-lit malls, clubs, and cafés. As forerunners in the Filipino invasion of the game in the United States, they have essentially conquered their conquerors, not through physical strength and power, but through skill and strategy on the pool table. The narrative investigation of the life stories of Efren Reyes and Francisco Bustamante provides a fascinating insight into how their stories develop within a socio-cultural context and how this context was transformed by their stories.
In conducting narrative analysis as a research end or as a means to inform practice, one important area of understanding includes, not only the presence of key people in their lives, but the absence of those who might be expected to be in their lives. The absence of technical and mental coaches in the life stories of Efren Reyes and Francisco Bustamante invites us to reflect on what we have always thought to be key characters in a successful athletic career. Although we can hypothesize that their development and progress would have been made more efficient with the introduction of systematic training in the physical and mental aspects of the sport, this remains a presumption that may be difficult to investigate within the paradigmatic frame of the scientific method. Nevertheless, we may continue to draw insight and learning from their narratives and from those who continue the Filipino dominance of pool. While it is not the objective of narrative inquiry to produce universal principles across life stories, it would certainly deepen our textured understanding of what it means to be an exceptional pool player within a specific context.

REFERENCES


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<td>Two incredible shots from Efren Reyes TO WIN! <a href="www.youtube.com/watch?v=epOlyshGJsJU">link</a></td>
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<td>Billiards Sages Exhibition @ Carom Cafe, NYF Efren Reyes vs. Torbjorn Blomdahl by Philolpe M. Chiasson, used under a Creative Commons Attribution 2.0 Generic licence (CC-BY-2.0), from <a href="http://www.flickr.com/photos/55317941@N00/7734757758">link</a></td>
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Maria Luisa Guinto-Adviento PhD is a faculty member and mentor at the Ateneo de Manila School of Medicine and Public Health (ASMPH). As a member of the pioneering batch of registered psychologists in the country, she is a founding member of the Association of Sport and Exercise Psychology of the Philippines (ASEPP) and a Fellow of the Psychological Association of the Philippines (PAP). From her extensive work with recreational and competitive athletes emerged her continuing investigation on what makes the Filipino a champion, a series of studies on what makes individuals and teams achieve extraordinary feats across various performance domains.
Rowing in Australia

Jeffrey W. Bond

In

Secrets of Asian Sport Psychology

Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

The Australian Institute of Sport (AIS) was established in Canberra with funding from the Australian Government in mid-1981. The role of the AIS was to provide the very best coaching, sports science and medicine support, training facilities, and administrative support resources in order to assist the development of internationally competitive Australian athletes.

When I commenced as Head of Sport Psychology at the AIS in early 1982, I was responsible for establishing the Sport Psychology Department within the fledgling Sports Science and Medicine Centre, and for the provision of psychological support services to the coaches and athletes awarded AIS residential training scholarships across 8 sports and 120 athletes (subsequently to grow to 36 sport programs and some 700 elite athletes). In line with the growth in the number of AIS sport programs and an increase in demand from across Australian sport in general, the Sport Psychology Department grew to employ up to 12 psychologists and interns.

In addition to a typical professional appointment system where athletes could self-refer or in some instances coaches or AIS medical professionals could refer an athlete for psychology consultations, AIS sport psychologists were integrated on a day-to-day basis within different sport programs. We provided educational workshops on key performance principles, conversed regularly with coaches, consulted individually or in small groups with athletes and/or coaches, conducted small applied research projects (sometimes as part of a multi-disciplinary sports science/medicine team), attended training and conditioning sessions, accompanied teams to national and international competitions, and generally were involved in all aspects of preparation, competition and post-competition debriefing.

I consider that we were very privileged at the AIS because our job descriptions and day-to-day activities were very strongly focused on athlete and coach development and elite performance. We were an integral part of the sport system in Australia and we had ongoing access to coaches and athletes as well as the benefits associated with being in a multi-disciplinary sports science and medicine centre. Not only did coaches and athletes seek us out, we were also able to facilitate varying levels of integration and involvement within AIS and national sport programs because of our defined role, our co-location and our ongoing presence.

Against the backdrop of moving to the AIS and establishing the sport psychology program from very humble beginnings in 1982, I will chronicle in this chapter my work with the AIS and Australian rowing teams over a 13-year period from 1991 through 2004. This included assisting AIS rowers in their preparations for the Barcelona Olympics in 1992, holding accredited positions as sport psychologist to the rowing teams at the Atlanta (1996) and Sydney (2000) Olympic Games and several World Rowing Championships up until 2002.
Rowing at the AIS

The AIS rowing program commenced in Canberra in 1984, partly based on the success gained by the Australian Olympic rowing team in Los Angeles (1 silver and 2 bronze medals) and partly because of the impressive impact brought about by the employment in 1979 of an ex-Romanian as Head Coach of Australian rowing.

Reinhold Batschi was arguably responsible for facilitating and leading the rise of Australian rowing in world terms over a 25+ year period. Through his roles from 1984 as Head of AIS Rowing and Head Coach of the Australian and Olympic rowing teams, he influenced the growth in international performances of Australian rowers in a very significant way. Arguably the peak of his influence was realized at the 1996 Atlanta Olympic Games where Australia topped the rowing medal table with 2 gold, 1 silver and 3 bronze medals.

I was fortunate enough to work with Reinhold and his various teams from 1991 through to 2004, a most exciting period for Australian and AIS rowing. There was a strong relationship between the AIS and national rowing programs. AIS coaches often doubled as national coaches for World Cup regattas, World Championships and Olympic Games. Rowers were either based in Canberra as AIS scholarship holders or trained in their home locations spread around Australia, coming to the AIS Rowing Centre for national training camps from time to time. AIS sport scientists and medical staff provided professional services to both AIS and national teams.
Australian Rowing Environment

The selection process for Australian World Championship and Olympic rowing teams was amongst the most complex and stringent of any sport in the country. A series of national selection trials, including ergometer tests, 5 km and standard 2 km races, were conducted annually leading into major international events. National crews/squads were initially selected from a combination of crew and seat racing (the latter where crews were modified sequentially by introducing a new rower and racing until accurate figures indicated the fastest combination). There were times when seat racing would continue whilst crews and squads were training and competing internationally at World Cup and other smaller regattas, right up until the very final preparations for a World Championship or Olympic Games competition. Rowers (and coaches) were placed under great stress, not only in training, but also in attempting to win through the selection process. Then the really difficult training began as the selected crews entered the final phase of preparation for competition.

Typically the Australian team traveled overseas for a series of training camps and World Cup regattas leading into the major international championships (World Championship or Olympic Games). The team traveled with approximately 75 rowers, coaching staff, sports science and medicine personnel, and team managers. It was a major logistical exercise to move this large team plus their boats and other equipment from various international training camp locations to lead up and major regattas. The team usually travelled for periods of between 8 to 13 weeks at a time, with all of the associated challenges of travel, such as maintaining equipment and adjusting to new accommodation and training venues, whilst having to make final crew selections from the various squads and then peaking the crews, fine tuning the settings on the boats, enhancing overall team cohesiveness and final on-water training, and eventual competition performances.
My Role as Rowing Team Psychologist

My role as the touring team sport psychologist was to work 24/7 with all members of the team and to make a positive contribution to overall team and individual crew cohesiveness, work intensively with the Head Coach and crew coaches, consult regularly with individual and small groups of rowers, and assist the other members of the team staff to manage the pressures and issues they faced. It was not uncommon for example, for sports medicine professionals from private practices to join the team at various stages of the competition tour. It was understandably difficult for private practitioners to be absent from their practice for lengthy periods of time.

The national rowing team typically employed a rotational system for these professionals to ensure overall medical and physiotherapy coverage across the tour whilst recognizing the demands of private practice. Incoming practitioners occasionally attempted to make a positive impact by over-servicing the athlete group. Others found it difficult to feel integrated within the team if they arrived part way through the tour. Others simply struggled with the pressure to balance the demands from coaches to get athletes back in the boat, whilst looking after the medical needs of the athlete. Part of my role was to provide support and advice to the coaching staff and the medical professionals.

The location for program delivery varied considerably. Standard consultations were held in a room at the team hotel where, for example, an athlete might present with symptoms of anxiety associated with an upcoming regatta, another might raise the issue of interpersonal conflict with a member of her crew, whilst another might be working on his pre-race and during-race plan. Other sessions involved impromptu discussions during travel to and from the training or competition venue, or breaks during rowing training (I spent a good deal of time in various crew coaching boats). Sometimes discussions were held over lunch or coffee post-dinner, at other times formal workshops or team/coaching activities were facilitated, and many formal visualization/mental rehearsal sessions were conducted with individuals or crews. There were important regular evening meetings with individual crew coaches or groups of team coaches over a quiet drink away from the team hotel. Many good decisions were made or an important message delivered during these informal and relaxed coach meetings.

I believe it was essential for a team sport psychologist to maintain ongoing communication with the coaching staff, both for the purpose of passing on relevant information and also for picking up on where the ‘hot spots’ might be within the team. On occasions, I would be included in disciplinary meetings alongside the Head Coach when, almost inevitably, the pressure had become too great for a coach, crew or a rower and an irrational decision had led to unacceptable behavior.
Overview of the Rowing Sport Psychology Program

The following section briefly outlines the major aspects included in the rowing sport psychology program that was provided during preparation, international travel and regattas:

- **PSYCHOLOGICAL PROFILING** - I have been an avid supporter and user of Nideffer’s Test of Attentional and Interpersonal Style (TAIS; Nideffer, 1976, 1977) for the past 30+ years. I found it to be a very satisfactory means of identifying both individual attentional style and for gaining an understanding of additional psychological factors associated with an individual athlete’s (or coach’s) behavior and performance under high stress. I found the use of the TAIS to be very beneficial for my various rowing clients. For example, the results helped me to better understand the unique psychological characteristics of individuals and to assist athletes and coaches to develop detailed and individualized warm up and race plans based on their TAIS profile which we later used as the basis for high quality visualization and debriefing. For example, a rower with a high score on the scale measuring the tendency to become distracted and overloaded by external cues under high pressure, might be advised to include specific narrow focus points (such as arm/ hand position, angle of blade entry, etc.) at critical stages of the race where becoming externally distracted has been a source of technical errors in the past.

![Figure 1. TAIS Profile for an Olympic Rower](image-url)
This sample TAIS profile for an Olympic rower (see Figure 1) shows high scores on the need for control (CON), physical competitiveness (P/O) and risk taking (BCON). He has a very strong desire to compete and win, to control others and his environment and if necessary to take whatever risks are required for success, combined with a very strong tendency under competition pressure to experience external overload (OET) and difficulties maintaining a narrow focus of attention (low NAR). Because of this rower’s difficulties in competition with external overloads/distractibility (being too aware of other boats and distracted by noise from other crews and the crowd), he struggled to maintain a clear narrow focus on his technique, made mistakes and ‘forgot’ critical aspects of his race plan.

**MINDSET PROFILING** - I have always been very interested in gaining insights into an individual’s competition performance mindset. I believe that the mindset of an athlete or coach is very predictive of how the individual thrives, merely copes, or experiences performance decrements under the high pressure of competition. I believe that the more the individual knows about aspects of their core motivation and how it might impact performance motivation, the better they might develop effective strategies for competition. Together, we would explore key elements of their motivation. For example, in my view there is a critical balance issue when it comes to the juxtaposition of an individual’s motivation to achieve success and their motivation to avoid failure. This balance impacts directly on their capacity to maintain a task- or process-oriented approach rather than an outcome-oriented mindset under high stress, and also affects their ability to control their inner voice and ultimately their composure. I believed that it should be possible for an athlete or coach to move from a position of seeing international competitions as somewhat threatening towards a position of wanting to seize the opportunity and thrive in the international sporting environment.

**AROUSAL CONTROL AND COMPOSURE** - I adopted the rather simplistic Yerkes-Dodson (1908) model of arousal and performance in my ongoing work with rowers. I found over the years that the vast majority of coaches and athletes across all sports seemed to grasp the concept of being under-aroused, over-aroused or in their ideal performance zone. The simple inverted-U model clearly shows the relationship between arousal level and performance in a way that Australian athletes and coaches can understand. I worked with rowers and coaches to develop effective arousal adjustment and composure under pressure strategies. For example, a rower might have developed and practiced specific muscle relaxation techniques whilst rowing. These might include being able to reduce muscle tension across the shoulders on the recovery stroke (as the blade is feathered and the rowers slides the seat forward to prepare for the entry of the blade on the next stroke).
I found that composure could be enhanced for many rowers with a well-developed and practiced race plan, based on their respective attentional profiles. The key objective for the rowers was to execute the perfect race plan and in so doing, produce the desired outcome at the completion of the race. A focus on executing the process (i.e., the race plan) rather than ruminating about the possible outcome provided an antidote to loss of composure. A key objective for me has been to encourage athletes and coaches to have a repertoire of arousal monitoring and adjustment strategies that they can take into performance situations by integrating them into performance-related routines.

**EMOTIONAL CONTROL** - It was back in the early 1980’s when I first read William P. Morgan’s article on the importance of mood states in athletic performance (Morgan, 1980). I began using the Profile of Mood States (POMS; McNair, Lorr, & Droppleman, 1971, 1992) and short versions of the scale, in my work with Australian swimmers during the 1980’s. Since then, there has been a great deal of research in the area of mood and emotional state profiling in elite sport (see Beedie, Terry, & Lane, 2000; Hall & Terry, 1995; Terry, 1994). I did not collect a lot of formal mood state data from rowing teams, but I did work with individual rowers on the issue of monitoring moods and emotional control strategies during preparation phases of training. I found that specific mood adjustment strategies suited different individuals. For example, some rowers responded positively to music, others to visualizing colours (e.g., blue for calmness, red for aggression), some to mild forms of exercise (warm-up), and others to socializing with those who elevated their moods. A refocus onto specific process goals and short forms of relaxation seemed to assist rowers who appeared to be very nervous, anxious, frustrated or angry. Being in close proximity to coaches and rowers during international tours made it reasonably easy to assist those individuals for whom emotion regulation was critical.
• **CONCENTRATION STRATEGIES** - The old adage that it is essential for athletes to focus on ‘the right thing at the right time’ in elite sporting performances has been proven to me over and over again. My belief is that many of the seemingly technical errors we see in elite sport often have their roots in the area of concentration focus. I have always proposed that for highly talented athletes who have received years of technical training only to find it break down under high stress competition conditions, the answer may not lie in simply more technical training. Rather, there will be a great deal to be gained by investigating the athlete’s performance mindset (motivational profile) and attentional profile (Nideffer, 1976). It may be that an excessive fear of failure, subsequent loss of arousal control and an inappropriate focus of attention will provide clues to effective solutions.

I profiled the attentional styles of rowers and their coaches and worked with them to develop a range of practical concentration strategies for application in the high-pressure international regatta environment. Based on a rower having good awareness of their attentional style and the importance of maintaining effective levels of arousal for the performance at hand, strategies I introduced involved the usual arousal control adjustment followed by a shift in focus away from the predicted area of attentional breakdown. For example, a rower with a very high TAIS score on the tendency to become internally overloaded under pressure would develop a strategy based on recognizing the early warning signs of an internal overload, taking one or two centering breaths (to lower arousal), then purposefully shifting focus of attention to an appropriate external process cue, such as forcefully pointing the toes at the end of the drive phase of the stroke.

• **PERFORMANCE ROUTINES** - The concept of race planning has existed in sports like rowing and swimming for a very long time. What I believe I brought into the Australian rowing environment was a more comprehensive and systematic approach to race planning. I encouraged coaches and rowers to extend their plan outside the actual 2000 metre race to include the pre-race (on land) preparation, the warm up, paddle to the start, waiting for the roll call, and start. The main body of the race would be broken into meaningful segments identified by the coaches and his crew. At the other end of the race I included the immediate post-finish phase, the warm down and return to the boat shed. All phases were to be clearly segmented and included appropriate technical, mental and physical cues (see Figure 2). For example, an appropriate technical cue during the mid-race segment might be to focus on a clean and crisp entry of the blade into the water at the start of the drive phase of the stroke. A mental cue might be to focus on the feeling of relaxation during the recovery stroke, while a physical cue might be to focus on an explosive leg drive early in the drive phase of the stroke.
<table>
<thead>
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<th>Race Stage</th>
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<th>Physical Focus</th>
<th>Mental Focus</th>
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<tbody>
<tr>
<td>Warm-up</td>
<td>Work on stroke length and catches</td>
<td>Get heart rate up</td>
<td>Relaxed, positive visualization</td>
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<tr>
<td></td>
<td></td>
<td>Feel strong</td>
<td></td>
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<tr>
<td>Paddle to Start</td>
<td>Short race pace</td>
<td>Strong drive</td>
<td>Reinforce crew</td>
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<tr>
<td></td>
<td>Piece</td>
<td>Piece</td>
<td>Relaxed recovery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Get heart rate up</td>
<td>Race rhythm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feel strong</td>
<td>Relax into holding area</td>
</tr>
<tr>
<td>Start</td>
<td>Connection</td>
<td>Back set</td>
<td>Control arousal</td>
</tr>
<tr>
<td></td>
<td>Blade depth</td>
<td>Weight on feet</td>
<td>Ready to explode</td>
</tr>
<tr>
<td>Start Signal</td>
<td>Leg drive</td>
<td>Fast and strong</td>
<td>Quick together</td>
</tr>
<tr>
<td></td>
<td>Pressure through stroke</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Quick slide</td>
<td></td>
<td></td>
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<tr>
<td>0-250m</td>
<td>Ease out stroke length</td>
<td>Shoulders down</td>
<td>Relax on recovery</td>
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<tr>
<td></td>
<td>Finish position</td>
<td>Breathing</td>
<td>Smooth</td>
</tr>
<tr>
<td></td>
<td>Catch angle</td>
<td>Weight over</td>
<td>Precise</td>
</tr>
<tr>
<td>250-500m</td>
<td>Drive position</td>
<td>Long and strong</td>
<td>Relax</td>
</tr>
<tr>
<td></td>
<td>Finish position</td>
<td>Transition to mid-race rhythm</td>
<td>HR settle</td>
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<tr>
<td></td>
<td>Follow stroke</td>
<td></td>
<td>Comfortable</td>
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<tr>
<td>500-1000m</td>
<td>Respond to technical calls</td>
<td>Mid-race rhythm</td>
<td>Smooth and long</td>
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<tr>
<td></td>
<td>Blade entry and exit</td>
<td>Strong leg drive</td>
<td>In sync</td>
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<tr>
<td>1000-1500m</td>
<td>Legs, hips, back</td>
<td>Stroke rate and</td>
<td>Feeling strong</td>
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<tr>
<td></td>
<td>Work catches</td>
<td>rhythm</td>
<td>Eyes in boat</td>
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<tr>
<td>1500-1750m</td>
<td>Stroke length</td>
<td>Strong leg drive</td>
<td>Begin to build</td>
</tr>
<tr>
<td></td>
<td>Quick catches</td>
<td>Relaxed recovery</td>
<td>Together</td>
</tr>
<tr>
<td>1750-2000m</td>
<td>Stroke rate and length</td>
<td>Respond to effort calls</td>
<td>Thrive on the challenge</td>
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<tr>
<td></td>
<td>Finish stroke</td>
<td>All out now</td>
<td>Work together</td>
</tr>
<tr>
<td>Post-finish</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Breathing</td>
<td>Savour the moment</td>
<td></td>
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<tr>
<td></td>
<td>Muscle relaxation</td>
<td>Congratulate team mates</td>
<td></td>
</tr>
<tr>
<td>Paddle to Landing</td>
<td>Maintain technique</td>
<td>Sit tall</td>
<td>Let emotions flow</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ease out lactate</td>
<td></td>
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*Figure 2. Race Plan for an Olympic Rower*
In addition to performance planning, I was very keen to encourage individual rowers and crews to ensure that there were logical and effective post-race and post-regatta debrief plans in place. Traditionally, the sport psychologists accredited with Australian Olympic teams struggled to implement formal debrief programs before the end of the Games because the athletes were difficult to find as they either celebrated or commiserated after their performances. I was very interested in reinforcing the need for effective debriefing and the inclusion of this in the normal logistics surrounding rowing competitions.

I found that coaches and rowers at the AIS and on various Australian teams were very open to building their skills and applying them to the race preparations in conjunction with their prepared and well-practiced race plans. I have very fond memories of numerous race plan visualization sessions with rowing crews.

Historically, the most famous Australian rowing crew is the ‘Oarsome Foursome’ (multiple Olympic medals from 1992 onwards), a men’s straight four (no coxswain). They were what I would call ‘masters’ of race planning.

At their peak in Atlanta in 1996, they demonstrated a great ability to visualize a successful race plan from both inside-out (internal) and outside-in (external) perspectives. They were very competent at using all of the visualization ‘tricks’ to enhance the vividness and quality of their imagery. These included using slow motion, zoom, stop frames, single frame advance, 360 degree rotations around the boat as they ‘rowed’ down the Olympic course, realistic race calls, etc. They did manage to execute their plan perfectly in 1996 as the final race unfolded exactly as they had visualized. From their outside lane they forged ahead of the field in the last 200 metres in a great come-from-behind effort to take the gold medal.
• **CRISIS INTERVENTION** - The mental health of the rowing community is generally very positive, although the advent of lightweight rowing (where the average crew weight for men is 70 kilograms and for women 57 kilograms) certainly impacted on the existence of various forms of eating pathology. As is so often the case across all elite sports, most eating pathologies in rowing are kept well and truly undercover. Where a rower did self-disclose, referral to others with specific professional expertise was indicated. Rowers, like all other elite athletes, experience performance-related anxiety, depression related to injury, non-selection, poor performance and other off-water issues, crew/team dysfunction and conflict among crew members and between individual rowers and their coach. My role included working in all of these areas with varying degrees of success.

I have very strong memories of being part of an inquiry, instigated by the Head Coach, into a complaint by a rower about the excessive stress brought about by conflict between a crew and their coach, and amongst the crew members. This discussion took place immediately prior to the team moving into the Olympic village and there was obvious concern about the impact of the rower’s request to be released from the team and to head home on the next plane. My role, as determined by the Head Coach, was to take a forceful position with the rower in the resolution of this issue. The Head Coach made it very clear to the crew coach that this situation should never have developed to this stage. After listening to the inputs of the crew coach and the individual members of the crew, I informed the rower that there was no possibility of release from the team, and that the rower should sit in the boat and follow the crew coach’s instructions, pull very hard on the oar handle and not complain. I explained that there was a potential Olympic medal beckoning and that the needs of the crew, the entire rowing team and the country, were more important than the challenges of an individual rower in managing the associated stresses. This decision was understandably not welcomed by the rower, but the final outcome was an Olympic gold medal! Most would have thought that the complaining rower might have at the very least acknowledged that the decision taken during the enquiry meeting was in retrospect the correct one, but this was not forthcoming. In fact, the rower refused to speak to me again and to this day all attempts to resolve the situation have failed.
DEVELOPING A HIGH PERFORMING TEAM - Most Australians clearly remember the highly publicized and hotly debated ‘meltdown’ in the women’s eight final at the 2004 Athens Olympics. In this race one rower exceeded her physical and mental tolerances, stopped rowing and collapsed in the boat within 750 metres or so of the finish line. The reactions of her crew mates and coach clearly demonstrated the fractures in crew cohesiveness.

There were many challenges facing the desire for high levels of team cohesiveness across Australian Rowing teams. Aside from the existence of discreet boat categories (sweep/sculling, singles, pairs/doubles, fours/quads, eights, coxed and straight boats, heavyweight and lightweight, and men’s and women’s teams), all with their own goals and specialist coaches, there was the issue of sheer bulk of numbers. As would normally be the case, at the individual crew level there were signs of the standard ‘forming, storming, norming and performing’ (Tuckman & Jensen, 1977) at various stages during the preparations for major events. At the larger team level, the team would go to great lengths to bring the entire team together for special dinners and events. At times there were specific activities designed to enhance team cohesiveness and, periodically, special speakers and events were introduced.

Rowing regattas at Olympic Games rarely take place in a venue close to the centre of major cities. We always found ourselves located in an athletes’ ‘sub-village’ sometimes many kilometres from the central Olympic action and resources. We were unable to attend the Opening Ceremony (rowing heats took place on the first day of Olympic competition) or gain the benefit or otherwise from living in the main Olympic village and enjoying the vast resources provided to most Olympic athletes and coaches. We learned to be very self-contained and in Atlanta, for example, we planned and conducted our own ‘Olympic Opening Ceremony’. Our team dressed in their official marching uniforms and marched into the ‘stadium’ to the strains of typical Olympic music. The coaches and team staff dressed and acted as key Olympic officials (with some very funny speeches). Some athletes donned costumes of their own design and performed for their team, and so on. We even staged our own fireworks display, which was no mean feat given the tight security and understandable sensitivities about possible bomb threats, etc.

MANAGING THE TRAVEL COMPONENT - Over the years of my employment at the AIS, I researched the literature for information about minimizing jet stress and jet lag. Australian athletes travel regularly to international competitions in the northern hemisphere, so effective travel strategies are of interest to many coaches and athletes. We all understand what it feels like to be jet lagged after flying across time zones, but there is also the issue of jet stress to be addressed. Jet stress occurs during international flights because of the dehydration associated with pressurized and air conditioned cabins, uncomfortable seats, endless background noise, questionable food, and the demands associated with stopovers and transit lounges. I saw part of my role to educate coaches and athletes about the potential impact of jet lag and jet stress and to propose specific strategies for the minimization of both. Preparation for international travel and comprehensive ‘what if...’ discussions became a regular pre-departure feature of many Australian teams, including the rowers.
‘Secrets’ to Success as the Rowing Team Sport Psychologist

In attempting to explain some of the factors that contribute to success as a team psychologist, it is important to acknowledge the complexity of extended team involvement and the interactions between various facets of the rowing sport psychology program. The list of key messages and brief explanations that follow are not in priority order, but hopefully they contribute something of value to the overall theme of this book.

- The senior leadership position I held within the AIS and the experience I had obtained over previous years working with other high profile sports placed me in a very strong position with the rowing coaches and athletes. The fact that I was available across the years leading into important international competitions and could immerse myself in all aspects of the rowing environment was an outcome of my role at the AIS. This situation enabled me to commit the time and effort to be with the teams and to understand coaching goals and philosophies, and the technicalities and logistics of the sport.

There were a number of personal qualities and beliefs that I suspect aided my acceptance and integration with Australian rowing teams.

- I believe that one needed to be practical and logical in approach and communication with clients, minimizing the use of the technical jargon associated with our profession and only using theoretical models and frameworks where they added value and could be readily understood by coaches and athletes.

- My experience would suggest that it is very important for the team psychologist to exhibit a strong drive for peak performance that mirrors that of the coaches and athletes. This combined with a high level of commitment to the team and preparedness to contribute in multiple ways to the effectiveness of the team sits very comfortably with elite sport clients. I was never very precious about sticking steadfastly to my role as a psychologist. If there was a need for a driver or someone to temporarily fill another role for the team, then I considered this to be part of my engagement. As long as the additional role did not compromise my capacity to fulfill the expectations of my position, I was happy to contribute to the overall team effort. On many occasions I was pleased to see that additional roles often opened up useful opportunities to input key sport psychology messages.

- I took a deliberate decision to identify and align with the Head Coach and the team as my primary clients, rather than individual rowers. Whilst I respected and empathized with the needs of individuals and their desire for peak performance, I was always conscious of the overall needs of the team, led by the Head Coach.

- My position on the confidentiality of information was made clear to all of my clients, such that individuals understood that they could consult with me in a confidential and supportive environment, but any key issues that were likely to impact the greater team’s performance were likely to be taken forward (with appropriate consent) to the Head Coach. The culture that I reinforced was that we were all part of the same team, striving relentlessly for the same outcomes.
• I have always believed that sport psychologists must adopt a ‘no credit’ approach to their work. By that I mean that the glory and recognition associated with competition performances rightly lies with the athlete and coach, not with others who provide support, however significant the contribution might be perceived to be. My role was clearly in the ‘engine room’ of the team, and I was more than happy to take a low profile. This enabled me to remain calm under pressure and to consistently provide objective feedback and an unemotional view of situations.

• In parallel with this belief I have always espoused the view that as a sport psychology professional we cannot fall into the trap of placing athletes on a pedestal, or playing favourites because of the perceived high status of particular athletes or coaches. To me, elite athletes are not unlike any person from any walk of life who dedicates a significant portion of their lives to excelling at something.

• I took particular care in getting to know my rowing client(s), and to view the client (athlete, coach or team staff) as a whole person with all of the challenges that we all have to face. My experience was that when a highly trained and talented elite athlete struggles to cope, there is more often than not something that is problematic for the athlete in their non-sport life. I believe that we do a disservice to our clients if we narrow our focus only onto their role as an athlete or coach.

• I believe it is very important for a sport psychologist to be careful about engaging in any form of technique coaching. Once we have become educated about a sport and have spent countless hours sitting with coaches and athletes, it is all too easy to slip into a part-technical coaching role. This can be a very dangerous temptation. For example, in my work with the rowers, I always included the crew coach in race plan visualization sessions. I left it to them to work with their rowers on appropriate technical calls during race plans.

• An important skill for a sport psychologist working in team environments is to be able to identify what I call the ‘cultural architects’ within the group. Not all of these people have appointed leadership positions, but they do exert a significant influence over the attitudes and behaviors of those around them. I took care to target these individuals, be they coaches or athletes, as I felt that if I could enlist their support it would make my job more effective and impactful.

• I found that I needed to accept that not all coaches are strong supporters of sport psychology or the presence of a sport psychologist on touring teams. Because of my ability to be immersed in the rowing scene over long periods of time, I could afford to be patient in targeting the few non-supporters amongst the coaches and athletes. I was able to wait for the teachable moments that inevitably arose. I did spend considerable amounts of time and effort in cultivating my relationship with coaches, athletes and team staff. All were possible sources of relevant information that might allow me to intervene before potentially difficult situations had developed into something more than they needed to be.
• The rowing sport psychology program was deliberately developed to be logical, practical, focused on performance, and integrated into training and competition. Because of my ongoing involvement in the sport, I was able to write rowing-specific materials for the coaches and athletes, enhance my group workshops and meetings with specific rowing examples, and to be around the team and individual crews and coaches to reinforce the key performance principles at relevant times, such as race debriefs.

• There are times when the team psychologist is tested by a range of factors, including poor performance by clients, lack of support at crucial times, and the general stresses of traveling with teams and being away from family for extended periods. I maintain that there are four key pillars, derived from some of the current research on mental toughness in elite athletes, that sport psychologists should revisit during times of uncertainty and high challenge. There are times on tour with teams where it is possible for the sport psychologist to take time out to reflect on self-belief (Do I really value myself and believe in the contribution I can make?), motivation (Why am I doing this and what amongst the complex team environment is meeting some of my motivational needs?), focus (What needs to be my key focus, and what is the most important and relevant?), and mindset (Am I seeing the opportunities in the current situation, and have I adopted and implemented a glass half full, thriving-on-the-challenge mindset?).

• ‘Patience is a virtue’ is a very old saying, and very applicable in the case of the touring sport psychologist. Getting the balance right between remaining calm and patient (the art of waiting for the right moment or the next opportunity) and displaying the appropriate sense of urgency and strong drive for performance is a delicate tightrope to walk, but essential when working with elite teams.
Summary

As I look back over the period 1991 through 2004 I have many fond memories of my time with the AIS and Australian Rowing teams. There is little better in professional practice as a sport psychologist than being privileged enough to be ‘in the trenches’ at the frontline of international sport. It also occurs to me that sport psychology contributions are but one part of the giant jigsaw that requires completion before the very best international performances occur.

I’m very humbled to have been asked to contribute a chapter to what I believe will be a book full of insights and stories from the ‘engine room’ of elite sport. I’m not sure if the above key messages qualify as ‘secrets’ of applied sport psychology practice at the international sport level, but the list above does include most of the factors that might have contributed to any successful contributions that I might have made as a sport psychologist to the overall team effort across the 13 or so years of my involvement with Australian rowing. Of course I value very much what I learned from the coaches and athletes and I believe that those talented and hard-working people have value-added immensely to my experience and knowledge as a sport psychologist.

It is my pleasure to have been invited to contribute to this book and I sincerely hope that there may be something within the text that the reader finds interesting. As I have often said to groups of athletes and coaches participating in one of my workshops: ‘If you learn just one thing from this experience that helps you to become even better or more knowledgeable tomorrow than you are today, then it has been worth the time and effort you have committed to being part of this workshop’.

REFERENCES


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Rugby in New Zealand
David Hadfield

In
Secrets of Asian Sport Psychology
Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

New Zealand is a small country with a population of under 4.5 million people, hidden away down at the bottom of the South Pacific. Most who visit the country rave about its natural beauty, ranging from fjords and glaciers, to upland deserts, geothermal geysers and active volcanoes, to beautiful swimming beaches and some of the best snow skiing in the Southern Hemisphere.

As beautiful as the country may be, however, there is one thing that New Zealand is better known for even than its scenery and that is its prowess at the sport of rugby union. For those unfamiliar with rugby, it is a rough, tough game of physical contact played by two teams of 15 players over 80 minutes. It’s like non-stop American football without the helmets, the padding, and the advertisement breaks - except that players cannot pass the ball forwards. It is perhaps the ultimate combat team game, where players rely upon each other completely.

New Zealanders started playing rugby within 30 years of the first European pioneers arriving in the 1840s and took to it like ducks to water. The tough, physical game was perfectly suited to hard-working, hardy pioneers, most of whom worked long, strenuous hours on the land. Since then, the game has become deeply embedded into New Zealand culture. It is said that when the All Blacks, the New Zealand national team, lose (which is not that often) the local stock market goes down, and when we fail at the World Cup (which has been our Achilles heel - winning only twice in seven attempts, most recently in 2011) the whole country goes into depression.

The All Blacks brand - the black jersey and the silver fern - is known worldwide, creating one of the most instantly recognised international sporting teams. Since 1903, the All Blacks have notched up an amazing 75% winning record against all opponents, an unparalleled international sporting record. To put New Zealand rugby’s performances into the context of playing resources, the country currently has 27,374 senior male rugby players, compared to the following numbers for its four greatest international competitors - England 166,762; France 110,270; South Africa 109,878; and Australia 39,380. It is also fair to point out that each of our great competitors has significantly superior national economies and financial resources to New Zealand.

So it’s true to say that, in rugby, New Zealanders well and truly punch above their weight!
New Zealand Rugby in 2012

Rugby became a professional sport in 1995, which brought (as if it wasn’t important enough already) an even greater focus on high performance. Currently, New Zealand professional players play in three different competitions. Firstly, if players make the All Blacks squad, they play internationals against other countries, including a yearly round-robin competition against Australia, South Africa, and for the first time in 2012, Argentina - a competition known as The Rugby Championship. Traditionally, the international games have been scheduled in June and July, with international overseas tours taking place in November and December. Secondly, they play in the SANZAR Super 15 professional competition, which includes five New Zealand teams, five South African teams and five Australian teams. This competition takes place in the first half of the year. Although each Super 15 team is independently run, the New Zealand Rugby Union (NZRU) centrally contracts players and coaches. Lastly, there is an internal New Zealand competition (currently called the ITM Cup) which is played from August to October. Due to financial challenges, this latter competition is becoming increasingly semi-professional, rather than fully professional. Few All Blacks are now able to play in the ITM Cup due to timetable clashes, but it remains a high-quality competition.

The NZRU also supports two age-group teams - the New Zealand Secondary Schools (for players still at high school and under 18 years of age), which plays annual fixtures against Australian teams, and the New Zealand Under-20 team, which competes in the International Rugby Board (IRB) Junior World Championship. Prior to 2008 there were separate international Under-19 and Under-21 competitions. Since the inaugural IRB Junior World Championship in 2008, New Zealand has won it every year until 2012, when they were pipped 22-16 by host nation South Africa in the final.
Sport Psychology in NZ Rugby

As in most countries and most sports, top New Zealand rugby coaches over the years have, to a greater or lesser extent, been amateur psychologists. The coach who presided over New Zealand’s first World Cup triumph in 1987, the legendary ex-All Black captain (and farmer) Sir Brian Lochore, has described himself as a “bush psychologist” in some of the fascinating conversations I’ve had with him. Sir Fred Allen, the famous All-Black coach of the 1960s (who died at the ripe old age of 92 as I was writing this chapter), was renowned for his man-management and motivational skills.

Sport psychology as a discipline began in New Zealand in the middle to late 1980s at Otago University with Ken Hodge (who completed his PhD with Dan Gould at the University of Illinois) and in Canterbury with Graham Felton and Gilbert Enoka. Not too long after that, Gary Hermansson and I began working with teams and individuals in the lower North Island. Since then, sport psychology (or mental skills training) has gradually grown as a discipline, as have the number of practitioners operating in the field. Both Hodge and Hermansson have worked with a number of Commonwealth Games and Olympic Games teams, while Enoka is probably our highest profile mental skills coach, having worked with the All Blacks for many years now, the Black Caps (New Zealand cricket team), and the Silver Ferns (New Zealand Women’s netball team), among others.

Performance analysis of the All Blacks’ failure to win the rugby World Cup between 1987 and 2011 led to reviews that, as far back as eight years ago, indicated that the mental skills of the players and their ability to cope with pressure and deliver performances when it mattered had been found wanting. Since then, there has been a growing focus on mental skills across elite levels of New Zealand rugby. Much of what the All Blacks have done in the mental skills area prior to the 2011 World Cup win remains hidden, but I know that they have worked hard on dealing with the huge public expectations of the team, composure and effective decision-making under pressure, and leadership. Currently, most of New Zealand’s semi-professional and professional rugby teams have at least some input from a sport psychologist or mental skills coach, as do the rugby academies of each of the 14 major rugby unions in New Zealand. The uptake of sport psychology varies throughout the country, driven, as it is elsewhere, by the coaches’ perceptions both of the need for and the effectiveness of the discipline and its practitioners.

Under New Zealand’s 2003 Health Practitioners Act, anybody who is not a registered psychologist is now forbidden to use the word psychologist in their title, which has meant that some of us who previously called ourselves sport psychologists have been forced to use another title - mental skills coach being the one that I prefer. Over the last nine years, Mike Chu (until 2011, NZ Rugby’s High Performance Coach Development Manager) has been a prime driver of sport psychology both within rugby and in other sports. Mike has not only been an advocate for sport psychology and mental skills as a discipline, but has also organised and helped to organise professional development opportunities for those working in the field. His move to Rugby Canada was a big loss for mental skills/sport psychology in New Zealand.
An Outline of 13 Years in Rugby

My early experiences in the mental side of sport were as a cricket coach. I coached semi-professionally in the late 1980s and early 1990s and introduced mental training to the young players with whom I was working. Because I had a good deal of credibility with the players, they were keen to take on board the ideas I had for them. The work I did was mainly performance profiling, visualisation, and relaxation. I also got involved early on with establishing team culture, vision, values, and protocols.

After finishing my post-graduate degree in psychology and starting work as a lecturer in sport psychology and coaching at Massey University in Palmerston North, my first work in rugby was in 1998 with the Wellington team that played in the ITM Cup, then called the National Provincial Championship (NPC). This work consisted of just a couple of sessions with the team, talking about successful team goals and culture and assisting the players to come up with what they wanted to achieve from the season and what sort of values they wished to guide their behaviour.

My first real immersion in a team came in 1999 when I started to work with the Wellington Lions (an NPC - now ITM Cup - team) and then got leave from my university to work full-time for four months with the Hurricanes (then a Super 12, now Super 15 team), based in the capital city of Wellington. Sport psychology was new to the players and didn’t fit with many of the players’ perceptions of themselves as tough, macho men playing a hard, rugged game. There was a strong perception, despite my best efforts, that in order to sit down and talk with me there must be something mentally wrong with them. A good number of players were unreceptive and a few distinctly unwelcoming, despite the fact that I had played rugby myself for many years and knew the game very well. Of course, I had received no tuition as to what I should be doing and how I should be doing it, and was really just “following my nose.”

My real focus was in working with the head coach, ex-All Black captain Graham Mourie, to improve what we saw as a distinctly inferior team culture around professional behaviour. I was heavily involved with drawing up and facilitating the development of the team vision and values document which was a combination of management of “non-negotiables”, such as honesty and punctuality, and other values that the players proposed and signed off on as being important to them. I focused on staying in the background and pitching in and helping out wherever I could around the team, while trying to build relationships with players. There were some players who saw benefit in what I had to offer and approached me and I was delighted to work with those players, but I’d have to say they were a minority. It was tough going at times and I know I wondered whether what I was doing was worthwhile but, as head coach, Graham was completely supportive of me and unfailingly encouraging. As a result of meeting and working together during this time, Graham and I have become close friends - a friendship I value enormously.
When Graham finished as Hurricanes head coach at the end of 2002, my tenure finished also. I set up my own consultancy around that time, and for the past 10 years I have worked as a freelance mental skills and coaching consultant throughout New Zealand and offshore, having worked also in the United Kingdom and France. For the past decade, I have been used as a resource coach by the NZRU, working between 60 and 100 days per year with coaches, players, and teams throughout the country. I have, at various times, worked with every provincial (ITM Cup) side in New Zealand and all but one of the Super 15 teams, primarily the Crusaders (by far the most successful professional team in New Zealand and arguably - over the last 15 years - the best provincial or club team in the world), and the Hurricanes.

I have also done stints with the Black Ferns (the multiple world champion New Zealand woman’s rugby team) and a small amount of work with the New Zealand rugby 7’s team (the most successful team in rugby 7s history). I have worked with World Championship winning NZ Under-19 and Under-21 sides and have been fully immersed in the NZ Under-20’s programme since its inception in 2008. Last year, for the first time, I was also involved in the NZ Secondary Schools team’s programme, which consisted of a three-week campaign that ended with two games in Australia, the last of which was a test match against Australian Secondary Schools.

NZRU Player Development

The status of mental skills has changed considerably in rugby. There is now wide recognition of the “mental pillar” in rugby performance. Across New Zealand rugby, we use a six-pillar approach to rugby performance (see Figure 1):

![Figure 1. The Six Pillars of Rugby Performance](Credit: Womensrugby/wikimedia commons/CC-BY-SA-3.0)
• **TECHNICAL** - this pillar refers to skills, including individual skills, such as catching and passing, running with the ball, evasion skills, tackling, kicking, “clean-out” at the breakdown, lineout throwing (for hookers’); and group skills such as lineout jumping and lifting, scrumming and mauling.

• **TACTICAL** - this pillar is best described by a pyramid I have developed and use as a guide for coaches and players in developing the players’ tactical skills (see Figure 2). The model is based on the principle that the vast majority of decisions made by rugby players are intuitive decisions made subconsciously in response to the cues that are presented to them. These decisions are trained and develop with experience at training and from games, and involve procedural knowledge (ten Berge & van Hezewijk, 1999). There are some decisions in which players have time to choose and select from a list of options (e.g., deciding whether to kick for territory or to kick for goal from a penalty, or a player deciding which back move to call from a scrum), but once the game is underway, decisions are reactive in nature. However, all of these intuitive decisions require foundational (declarative) knowledge (ten Berge & van Hezewijk, 1999). The more clarity and accuracy in the underpinning knowledge, the better informed will be the intuitive decision. Added to the model is the player’s ability to focus, scan effectively, and communicate.

![Figure 2. Guide for Developing Players’ Tactical Skills](image)

• **PHYSICAL** - this performance pillar refers to the normal strength and conditioning aspects of rugby performance, such as aerobic and anaerobic fitness, strength, speed, power, flexibility, agility and balance.

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1 A hooker in rugby union is a front row forward, usually with a number 2 on his/her jersey, who typically throws the ball in at the lineout. Other information about the sport of rugby union can be found at: en.wikipedia.org/wiki/Rugby_union
• **MENTAL** - the mental pillar is discussed in detail below.

• **NUTRITION** - this performance pillar consists of basic diet, performance nutrition (around training and competition), skinfolds/body composition, hydration, and supplements.

• **HOLISTIC** - this pillar concerns off-field factors such as career planning and development, financial management, insurance, personal organisation and leadership. The NZRU philosophy is that players’ careers may be short, and alongside the New Zealand Rugby Players Association (NZPA - which is jointly funded by professional players and the NZRU), they have a responsibility to assist players to prepare for a life after rugby. Each Super 15 team has a full-time Professional Development Manager whose role is to support players’ holistic development.

The six-pillar approach is used as a template for NZ Rugby’s elite player development programme. The NZRU have developed an on-line individual performance plan (IPP) system, which is centrally controlled and contains all pertinent player data, including contract details, information across all six pillars, and medical data. This information can only be accessed by authorized staff working with the players at that time. The players are entered into the database as young as 16 years of age and the on-line system is used by all elite coaches, players, and support staff for performance planning, goal-setting, and reviews.

In general, most specialists (e.g., mental skills coaches, strength and conditioning coaches, nutritionists) use a three stage model: **education** - outlining key principles; **application** - how to put these into practice at training and in games; and **support** - one-on-one support for players across the full gamut of issues associated with each pillar. This is certainly the approach I take with my own mental skills programmes.

**Connecting with Players**

I vividly remember an early experience that was very humbling and taught me one of the most valuable lessons I’ve ever learned when it comes to the educational side of sport psychology. I had given an hour-long morning presentation to a group of 17-year-old rugby players who were involved in a two-day development camp and I was due to give another half hour presentation at the end of the day.

Around 3 p.m. (five hours after I finished my presentation), I asked one of the players, a Maori boy, what he had taken out of my presentation that he could use in his rugby. He looked more than somewhat blank, tried to tap into his memory banks and, after an uncomfortable 10 seconds silence, came out with - “I remember one thing - fire in the belly and ice in the head.”

As the little metaphor I had introduced about fire in the belly (physical intensity and aggression) and ice in the head (mental composure and decision-making clarity) had only taken two or three minutes of the 60 minutes I had spent with the boys, I realised that the other 57 minutes may have been, for many, of pretty limited use. There is nothing like a healthy dose of humility to focus the reflective mind!
There is much written about differing learning styles (visual, auditory, verbal, kinaesthetic, etc. see www.learning-styles-online.com), and I believe that being multimodal in your delivery is important. Access to video, music, and use of modern technology opens up tremendous opportunities to connect with young players. What is more important, however, is being as vivid, memorable, and humorous as possible. With regard to education sessions, I have also come to believe that “little and often” is the way to go rather than lengthy sessions.

In their terrific (2008) book Made to Stick, which I highly recommend to anyone who presents to groups, Chip and Dan Heath offer sound advice when seeking to ensure information “sticks” in the memory of the listeners and mobilises behavioural change. They use the acronym SUCCES to describe key elements of successful presenting:

- **SIMPLE** - ensure you get across the core idea simply; don’t confuse the key message; prioritise what you want to get across and exclude irrelevant material.

- **UNEXPECTED** - get their attention by doing or saying something surprising and then take advantage of their attention by great teaching; open “gaps” in their knowledge by tantalising them with something they may know, and then fill in the “gaps” in a pertinent, meaningful way.

- **CONCRETE** - ensure your ideas are concrete, that they are tangible and clear; make certain that the players know exactly what they will need to do to put it into action and how they can do it.

- **CREDIBLE** - make your ideas believable; bring credibility with you (teams you’ve worked with, results you’ve had); offer it to players by letting them know about successful players who do what you are suggesting they should try; use research and data (but personalise it).

- **EMOTIONS** - get them to care about your ideas by making them feel something; bring your idea to life in a way that players will feel excited and intrigued when they hear them and help them understand how they will feel differently when they put your idea into practice.

- **STORIES** - tell stories and use metaphors that connect with players and bring your ideas to life. An old friend, who is a committed Christian, always told me that the reason Jesus used parables was that they bypassed the mind and went straight to the soul. I’m not sure about that, but I am utterly convinced of the power of well-told, vivid stories to get players to act on ideas. I also believe that the use of metaphor (whether they be verbal, visual, kinaesthetic, or other) is a hugely powerful teaching tool and one that I use every day.
My Current Approach to Mental Training

The framework for mental training that I use is shown in Figure 3 and explained in detail below:

![Figure 3. Mental Training Framework](credit: Ross Weidland | CC-BY-NC2.0)

Character and Values

Rugby is an ultimate team game and no team in New Zealand except the All Blacks has epitomised a successful team culture better than the Crusaders, New Zealand’s Christchurch-based Super 15 team. In the 16 years since the first year of professional Super rugby in 1996, when they finished last, the Crusaders have won seven titles, been beaten finalists three times and made the semi-finals on three other occasions. They have failed to make the play-offs just three times (1996, 1997, and 2001). Even in 2011, when their home city Christchurch was devastated by an earthquake that cost over 180 lives, hundreds of millions of dollars of damage and untold human misery, a year when the team lost their stadium to earthquake damage and they had to play every game away from home, living out of a suitcase and away from loved ones, they still made the final. It was an astonishing testament to character and team ethos.

The Crusaders have developed a culture of sustained excellence that is unparalleled in Super Rugby and stands proud among any professional sport anywhere in the world. Some of the “secrets of their success” are really pretty obvious – top class coaching (notably world class coaches such as Wayne Smith and Robbie Deans, and now Todd Blackadder), world class players (e.g., Andrew Mehrtens, Justin Marshall, Leon MacDonald, Richie McCaw, Dan Carter, Brad Thorn), great captains (Todd Blackadder, Reuben Thorne, Richie McCaw), top-class recruitment and development structures, and a team that has had, over the years, a deeper understanding of their game plan than any other team, but importantly a greater understanding of why they play the way they play. In my view, the other key success factor has been that they have recruited on character for many years. They have put an unapologetic focus on the personal values of the players they have recruited - a policy that might be described as “character first, ability second.”
The upshot has been a team that is not only highly successful, but enjoys reputations of being a group of “good blokes”, which transcends what they achieve on the field. This has been strengthened year by year by leaders (I think of senior players as a “magnet group” who attract players to do what they do and aspire to their standards in the same way that metal filing are attracted to a powerful magnet) who vouchsafe and nurture the culture, and will hold to account anyone whose behaviour is not aligned with team goals and values. I have learned that, in rugby, if you want to build a dynasty, it must be built on values and character. For the last several years, I have put a huge emphasis on the development of character in the academies and the national teams with which I have worked. I get the boys to identify the core values and, more importantly, the behaviour of a good human being, and bring these to life with examples, stories, and video. There are many academic definitions of culture that talk about norms, values, and beliefs, but to me it can be simply defined as “what’s the way we do things around here.” The players need to understand clearly the boundaries of acceptable (above the line) behaviour and unacceptable (below the line) behaviour.

There are many ways of symbolising goals and values, and I have been heavily involved in developing “themes” for many teams over the last 20 years. Of course themes are not necessary, but they can assist bonding and buy-in and can really add spice to the team ethos. They must be pertinent and the team must feel a sense of connection (and be involved in the theme development in some way), otherwise you may do more harm than good. The world champion NZ Under-20’s rugby team has used themes for its campaign each year. The 2011 tournament was in Italy and the team’s campaign motto was “where he stands I stand; where he goes I go” echoing the words of NZ prime minister Peter Frazer in 1939 when committing New Zealand to support the United Kingdom and the Allied cause at the start of World War II. We used military themes and researched the young men who left New Zealand to fight on the other side of the world, and then built meaning for the players in the analogies. A team and management photo illustrating the theme is shown in Figure 4.

Figure 4. Theme Poster Used With the NZ Under-20 Team
In 2010, the NZ Under-20’s used the theme of a pack of black wolves. The accompanying motto was poet Rudyard Kipling’s famous line, “...the strength of the pack is the wolf and the strength of the wolf is the pack.” We linked strongly into themes of working together, trust in each other, and everybody “nailing” their job. Two slides from the team presentation are shown in Figure 5. Each year I have put together PowerPoint presentations that link pictures, photos of the players, and music to bring the team’s vision and values to life and provide “stickability” and meaning. The players really enjoy it.

I have many times used the concept of True North as a metaphor for team vision and values. The concept is (before the days of GPS) that if you are lost, you pull out your compass and it will tell you which way to go. In the same way, if you have clarity about, and commitment to, the team’s goals and values, decision-making becomes simple. I say to the players “if it’s taking you True North (i.e., if it’s going to help you achieve your goals and is aligned to your values) then do it; if it’s talking you away from True North, don’t do it; if you’re not sure, ask someone.”

To reinforce the True North concept, I also use the model in Figure 6 as a self-awareness and accountability tool. I draw it on a white board and ask players to come up to the board and put their initials in the sector they believe they occupy and put the team in the sector they believe the group occupies, based on current behaviour.

I have found that although it’s critical to establish cultural norms, it’s equally important to use some system that allows a check-in to ensure that everybody is living it day by day. To do this, players must remind themselves of what True North is, self-reflect, and then hold themselves accountable in front of their team-mates. I normally engage with the outliers, initially by posing the question to them, “What is it about what you/we are doing that leads you to put us so far away from True North?” This strategy typically leads to a solution-focused discussion about what to do to move forward.
Success characteristics

Books in the popular press, such as The Talent Code (Coyle, 2009), Talent is Overrated (Colvin, 2008), Bounce (Syed, 2010), Talent is Never Enough (Maxwell, 2007) and Outliers (Gladwell, 2008) and the work of Anders Erikson among others, have all clearly indicated that talent alone is never enough.

For athletes to succeed they must also have a range of what I call “success characteristics”. Some of these characteristics may be thought of as psychological qualities, but I prefer to teach them as separate constructs to performance psychology skills.

I have adapted material from the aforementioned books and my own experience to construct a programme that I have entitled (after John Maxwell’s book) Talent is Never Enough, which I teach to the NZ Under-20’s team using video, quotes, group discussion, and a bit of guidance from me around each of the success characteristics.

These characteristics include belief, focus, initiative, purposeful practice, teamwork, coachability, resilience, and awareness.
Performance Psychology Skills

At a gathering of mental skills coaches and sport psychologists, organised by the NZRU a few years ago, we challenged ourselves to come up with a simple template that we could use to educate our youngsters around mental skills. My definition of simple is “everything you need and nothing you don’t” but I’m not quite sure we managed that level of simplicity. Perhaps there are some important constructs that we have omitted but, for better or worse, we split the mental skills pillar into three categories:

- **PERFORMANCE PREPARATION** - routines and rituals, belief/confidence, visualisation, “cleared the decks”, “ticked the boxes”, ready to go.

- **PERFORMANCE FOCUS** - intense focus on pertinent cues, confidence, distraction control, intensity, switch-on/off.

- **PERFORMANCE REVIEW** - performance profiling, proactively reflect on performance, build strengths, tweak areas of weakness, constantly improve.

With regard to performance preparation, I have found the metaphors of “clearing the decks” and “ticking the boxes” to be very effective (see Figures 7 and 8).

Clearing the decks is a metaphor for clearing the mind of all extraneous thoughts and images prior to performance by adhering to a well-worn routine. Ticking the boxes is about using the performance pillars as a guide to ensure that nothing has been left to chance and that every aspect of performance has been honed, prepared and warmed up.
I tell the players the old story:

Every morning in Africa a lion wakes up. It knows it must run faster than the slowest antelope, or it will starve and die. Every morning in Africa an antelope wakes up. It knows it must run faster than the fastest lion or it will die.

The moral of the story is that when the sun comes up in Africa, it doesn’t matter whether you are a lion or an antelope; you’d better hit the ground running. If you don’t hit the ground running when the whistle goes, you won’t die. But your dreams may die, your hopes and aspirations may die and so may those of your team.

If all 15 players on a team have cleared their decks and ticked their boxes, they have a good chance of “hitting the ground running” when the referee blows the whistle.
Hypnosis and the Subconscious

As a practitioner, I have been deeply influenced by cognitive behavioural psychology (Albert Ellis, Aaron Beck, Jeffery Young, and others) and also by humanistic and existential psychology (especially Viktor Frankl). However, over the past decade I have become extremely interested in mind/body psychology - the power of the mind to influence our physiology. One of the tools I have used now for many years is hypnosis. I stumbled upon it through my frustration at not being able to effectively help athletes change deeply imprinted beliefs and habits. I now wish I had learned about it many years ago. I have been using hypnosis for over 10 years now and have had great success with a large number of elite rugby players. I use hypnosis in a number of ways:

- As an adjunct to everything else I know and use;
- Performance confidence;
- Motivation;
- Dealing with difficult situations on or off-field;
- Anxiety management;
- Arousal control;
- Helping with pain/healing in conjunction with medical staff;
- Self-esteem;
- For assisting athletes with in-game decision-making;
- Ingraining new techniques/moves/sequences;
- Breaking unhelpful habits and thinking;
- Creating “anchors” for a number of situations including confidence, focus, and relaxation.

For those unacquainted with hypnosis (and there is still much ignorance about the subject), it has two basic parts. The first part is the induction, which is the process of getting into a hypnotic state. The second part is using suggestions, stories, and metaphors, and establishing anchors to mind/body states. Once players understand that hypnosis is a collaborative exercise and that they retain control during the experience, most are keen to try it.

There are myriad ways to induce hypnosis, but with rugby players I have found that rapid inductions (http://www.hypnoticinductionsblog.com/arm-drop-induction-training/; http://www.adam-eason.com/) are by far the easiest and most successful.
Once the whole hypnosis process is explained, rapid inductions (which are often used by stage hypnotists) allow me to induce a very quick state of hypnosis. Although I have used hypnosis to assist players in many areas, the use of hypnosis to create “anchors” is one of its most powerful applications. A neuro-linguistic programming (NLP; Grinder & Bandler, 1983) technique, anchoring involves creating a physiological link to an emotional, cognitive, or physiological state.

For example, for players who are struggling with confidence, I would use hypnosis to take them back to a time or a game when they were playing extremely well and felt “on top of their game” and extremely confident. When players report that their confidence is very high, I will have them access the anchor (which I normally pre-arrange with players). The anchor could be touching their thumbs and forefingers together, touching an earlobe, clinching their fist, or anything else that appeals to them. I will do this several times while the players are in a hypnotic state. Then I will bring them out of hypnosis and check to see that the anchor has been successfully created.

For me, one of the joys of working in rugby is its multicultural nature. New Zealand’s indigenous people, the Maori, have long been exceptionally talented rugby players, but over the last 30 years the influx of Pacific Islanders (largely Samoan and Tongan) who have immigrated to New Zealand has provided a wealth of new talent. My experience is that Polynesians (Maori and Pacific Islanders) are natural, gifted candidates for hypnosis. Whether it’s their long tradition of oral history or the fact that they are naturally respectful to their elders, I’m not sure, but I have found almost without fail that modern Polynesian athletes take to hypnosis and hypnotic techniques like a duck to water.

Summary

My father told me when I was a youngster that I would be the same person in five years’ time as I was today except for the books that I read and the people that I met. I’ve never doubted that he was right. I continue to learn every day from the athletes with whom I work, from coaches and from my peers, and the books and journals that I continue to read.

I hope that this book will help you along your path and that this chapter has given you some small insight into some of the work that is going on in New Zealand rugby and aspects of my favoured approaches and techniques.
REFERENCES


VIDEO

page

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PHOTO CREDITS

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ABOUT THE AUTHOR

David Hadfield MA works as a high performance, coaching and mental skills consultant in New Zealand (NZ) and offshore. He has been a resource coach for the NZ Rugby Union for more than 10 years, working with NZ Super Rugby teams, ITM Cup teams, NZ Black Ferns women’s team, NZ Under-20s, and NZ Secondary Schools teams, among others. He has also worked with many other elite athletes and teams including the NZ Track Cycling team and has mentored many high performance coaches. Many years ago, David played and coached cricket at representative level and also played club and representative rugby.
The Haka and New Zealand Rugby

An aspect of All Black and other New Zealand representative rugby teams that has fascinated, annoyed, scared, and inspired opposition (as well as many others) for over a century has been the pre-match performance of the haka.

A haka is a posturing dance of New Zealand’s indigenous Maori people which is traditionally used for a variety of purposes. The haka can be used for entertainment, for celebration of great deeds, to farewell someone leaving (or at a funeral), to welcome those returning from a journey, and as psychological preparation for warfare.

The haka that is most recognised both in New Zealand and internationally is the Kamate, Kamate haka composed by the famous Ngati Toarangatira chieftain Te Rauparaha.

Early in the 19th century, Te Rauparaha was on the run from an enemy war party from the Ngati Te Aho tribe who wanted to catch and kill him as retribution for Ngati Te Aho people killed and eaten by Ngati Toa warriors under Te Rauparaha’s leadership some years earlier. As he was pursued across the central plateau of the North Island, fellow chief Te Wharerangi helped him hide in a kumara (sweet potato) pit and then instructed his wife Te Rangikoaea to sit on the pit entrance. In Maori tradition, female genitals contain considerable power against danger, and while most men would have refused to sit under a woman, Te Rauparaha had no such inhibitions (and afterwards used this fact to add to his reputation, rather than diminish it). At one stage, Te Rauparaha thought he would die, and then he thought he might get away with it and survive, then later he again felt he would be found and killed, then, finally he thought he would make it out from the pit in one piece - and did! This is reflected in the words of the haka and in his happiness to see the sun.

After the enemy failed to find him in his hideaway and moved on, Te Rauparaha climbed out from the kumara pit. Soon thereafter, to celebrate his fortunate escape, he performed Ka mate, Kamate (composed while he was hidden in the pit) in front of Te Wharerangi (who was notable for his profuse body hair) and his Rotoaira people (Burns, 1980).
This is the haka with a translation:

<table>
<thead>
<tr>
<th>Maori</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kamate Kamate</td>
<td>It is death It is death</td>
</tr>
<tr>
<td>Kaora Kaora</td>
<td>It is life It is life</td>
</tr>
<tr>
<td>Kamate Kamate</td>
<td>It is death It is death</td>
</tr>
<tr>
<td>Kaora Kaora</td>
<td>It is life It is life</td>
</tr>
<tr>
<td>Tenei Te Tangata Puhuruhuru</td>
<td>This is the hairy man</td>
</tr>
<tr>
<td>Nana i tiki mai whakawhiti te ra</td>
<td>Who caused the sun to shine again</td>
</tr>
<tr>
<td>Upane Upane</td>
<td>One step upwards</td>
</tr>
<tr>
<td>Upane Kaupane</td>
<td>Another step upwards</td>
</tr>
<tr>
<td>Whiti te ra</td>
<td>The sun shines!</td>
</tr>
</tbody>
</table>

This haka was first performed by the new Zealand Native (Maori) team who toured Great Britain in 1888 and then in 1905 by the “Originals” All Black side before their test matches. Since then it has become synonymous with the All Blacks and is by far the best known of all Maori haka. Furthermore, it has become a celebrated symbol of identity for all New Zealanders and is performed around the country and by New Zealanders overseas on a daily basis to celebrate, entertain, mourn, or in sport, to lay down a gauntlet. Although it is Maori in origin and in language and comes from the Ngati Toarangatira tribe, it has now become a part of all New Zealanders whatever their ethnicity or skin colour.

The words spoken by the leader that often precede the haka give instructions as to how it should be performed:

- *Ringa ringa pakia* — Slap the hands against the thighs
- *Uma tiraha* — Puff out the chest
- *Turi whatia* — Bend the knees
- *Hope whai ake* — Let the hips follow
- *Waewae takahia kia kino* — Stamp the feet as hard as you can
Obviously rugby is a war-like game and Kamate is clearly a war dance. It is spiritual, in that it comes from the hearts (manawa) and spirits (wairua) of those doing the haka. When the All Blacks, the NZ rugby 7’s team, the NZ Under-20’s or NZ Secondary Schools team do the Kamate haka, they are communicating to the opposition: we are strong; we have a proud tradition and represent our nation and those who have gone before us; we are together; we are ready to go into battle; we will fight until the end; we lay down a challenge to you! New Zealand representative players these days are trained by knowledgeable Maori haka teachers who explain the origin and meaning (tikanga) of the haka to the players, talk about its significance, and teach them how to do it correctly. The players spend considerable time training the haka until the teacher is satisfied.

Opposition react to the haka in various ways. Most face up to it and accept it as a challenge. I have not spoken to many All Black, NZ rugby 7’s, or NZ Under-20’s opponents, but I’m convinced that most are stimulated and motivated by it, while I’m sure there have been times when opponents have been intimidated somewhat by it (some probably more than somewhat!). It is done less to intimidate the opposition than it is to “psyche up” the New Zealanders, but there is no doubt that it is intimidatory by nature.

In August 2005, the All Blacks unveiled a new haka called Kapa o Pango. The team saw Kapa o Pango as expanding the All Black’s tradition of haka and a contribution to the team’s heritage. The new haka has some wider Polynesian elements, speaking to the fact that players of Pacific Island heritage are now widely represented both in the All Blacks and across New Zealand elite rugby and it was felt that the new haka, while composed by a Maori (Derek Llardelli) and spoken in Maori, incorporated more accurately the ethnic reality of current All Black rugby teams. Since then this haka has been performed from time to time (the team decides when they will do it), but Kamate remains the preferred haka. My own view is that there would be an outcry if the traditional Kamate haka was replaced.

All Black and other New Zealand representative rugby players are well aware of the significance of the haka and are proud to perform it passionately and well. There is no doubt that players are aroused, both physically and emotionally, by performing it. Most are pretty “pumped up” after completing the haka and ready to go into battle. Some players (mostly backs rather than forwards) have reported to me that they felt over aroused after doing the haka and needed to take some deep breaths to calm themselves down before the match begins. As mentioned in my chapter, I use a metaphor of “fire in the belly, ice in the head” to describe how rugby players must be aggressive and intense with their bodies, but composed mentally. Some of the players who know this metaphor tell me that after the haka, the “fire” can creep up past the shoulders and melt the “ice” in the head - leading to over-arousal and poor decision-making (especially players in key decision-making positions such as half-back and first five-eighth). For most though, the haka gets them just where they want to be: feeling powerful, proud, confident, committed, and ready to “hit the ground running”. 
For all New Zealand players who wear the black jersey with the silver fern, the haka is a special taonga (treasure) that they respect immensely for its power and significance and for what it has meant to New Zealanders and to New Zealand rugby for over a century. They do the haka with pride and passion, paying homage as they do it to all the players who have worn the back jersey in the past. As emotional and physical pre-cursor to the playing of the ultimate combat team sport in the world, it brings the players together as nothing else can and it prepares them to go into battle on the rugby field and give of their very best for the 80 minutes of the game. Long may it continue!

Note - for the author, the haka has special significance because my great-great grandfather Octavius Hadfield was the first missionary (arriving in 1839) to arrive on the Kapiti Coast north of Wellington where much of my family still lives. This was the area under the control of Ngati Toarangatira chief Te Rauparaha, the composer of Kamate. Octavius had a 13 year friendship with the great chief which was ended with Te Rauparaha’s death in 1851. Te Rauparaha gifted a tokotoko (talking stick) to Octavius which is still proudly cared for by my family.

REFERENCES

VIDEO
All Blacks Haka vs Fiji Cibi
www.youtube.com/watch?v=db5NupD1Rg0

PHOTO CREDIT
Te Rauparaha 1840s by R. Hall, used under a Public Domain Licence, from http://commons.wikimedia.org/wiki/File:TeRauparaha1840s.jpg
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All Blacks iPhone Wallpaper by Rob.Masefield, used under a Creative Commons Attribution-NonCommercial 2.0 Generic (CC-BY-NC 2.0) licence from http://www.flickr.com/photos/33264358@N00/6127191282
Tokotoko in cabinet, courtesy of David Hadfield
Sailing in Israel

Boris Blumenstein and Iris Orbach

in

Secrets of Asian Sport Psychology

Edited by: Peter C. Terry, Zhang Li-Wei, Kim Youngho, Tony Morris, and Stephanie Hanrahan
Introduction

During the past 60 years, since the establishment of the state of Israel, sports have played an important role in the development of the country. Israeli sport has had significant achievements, winning medals at the European, World, and Olympic levels. Elite Israeli athletes, including Olympic level performers, receive professional support from the Elite Sports Department, which is sponsored by the Ministry of Education, Sport, and Culture, and the National Olympic Committee. The Elite Sports Department and the Ribstein Center for Sport Medicine Sciences at the Wingate Institute provide professional services, including medical, scientific, and psychological support to elite athletes and their coaching staff. These sports science support services are regarded as an important factor in the success and development of Israeli sport.

Basketball and soccer are the most popular sports in Israel with the largest number of participants at all levels. However, in Olympic sports, the most successful achievements have been in sailing and windsurfing. Among the total of seven Olympic medals that Israeli athletes have won during the period 1992-2012, three medals have come from windsurfing, including Israel’s first ever Olympic gold medal in 2004.

With access to four major bodies of water in Israel - the Mediterranean Sea, the Red Sea, the Dead Sea, and Lake Kinneret - sailing and windsurfing are very popular in the country. Israel has a large number of young and elite sailors and windsurfers, several role models who have succeeded at the highest level, modern training centers in Tel-Aviv, Eilat, Sedot-Yam, Haifa, and Lake Kinneret, numerous experienced coaches, and good management provided by the Elite Sports Department and the National Sailing Federation. These factors are considered to be the foundation for recent and future success.

In this chapter we present and discuss the psychological preparation provided for sailors and windsurfers in Israel. Based on personal experience from four Olympic Games, we briefly describe the history of sailing and windsurfing in Israel, present psychological skills training (PST) programs specific to these sports, and provide examples from our practical work.
Israel’s Achievements in Sailing and Windsurfing


Continuing this successful trend, Shahar Tzuberi, achieved a bronze medal in the European Championships in 2008, an Olympic bronze medal in 2008 in Beijing, and gold medals in the 2009 and 2010 European championships. His fellow national team member, Nimrod Mashiah, achieved third place in the 2010 World Championships, which prolonged their competition for a ticket to compete in the 2012 London Olympic Games. Shahar Tzuberi eventually won selection to compete in London, but disappointingly finished in 19th place.
The dominant figure in women’s windsurfing in Israel, and indeed globally, is Lee Korzits, who has been the world champion four times. She won her first world title as a 19 year old in 2003, sustained a devastating back injury in 2005 that kept her out of the sport for five years, before reclaiming the world crown in 2011 and 2012. Korzits represented Israel’s best hope for a medal in the 2012 Olympic Games, and although she finished a disappointing 6th in London, she went on to win gold at the 2013 World Championships in Brazil.

In the 470 sailing class, Israeli athletes have also achieved significant success. Nir and Ran Shental won the first major international medal for Israel in sailing; a bronze at the 1995 World Championships. In 2000, Anat Fabrikant and Shani Kedmi, were fourth in the women’s 470 event at the Sydney Olympic Games. Vered Buskila and Nike Kornecki achieved European bronze medals in 2001 and 2004 and a European silver medal in 2005. In 2008, they were fourth in the Beijing Olympic Games. Men’s 470 sailors, Gidi Kliger and Udi Gal, achieved World Championship bronze medals in 2007 and 2008, and Gidi Kliger and Eran Sela won European silver medals in 2010.

Overall, during the period from 1992 to 2012, Israel won 6 European, 11 World, and 3 Olympic medals in windsurfing and 3 European, 4 World and 1 Olympic medal in 470 class sailing. For a small country of fewer than 8 million people, with a relatively recent tradition in sailing events, these achievements can be seen as a significant record of success.
Psychological Support Program

The first author provided psychological services for Israeli windsurfers and sailors from 1992 until 2008, and most of the sailors and windsurfers named in this chapter were involved in the psychological support program. A specific program for windsurfers and sailors was developed based on two existing Israeli psychological programs: The Wingate Five-Step approach (W5SA; Blumenstein, Bar-Eli, & Tenenbaum, 1997) and the Learning-Modification-Application approach (LMA; Blumenstein & Orbach, 2012a).

The Wingate Five-Step Approach

The W5SA is a self-regulation technique incorporating biofeedback (BFB) training. This technique teaches athletes to transfer the psycho-regulative skills learned in sterile laboratory settings to real practice and competition settings, utilizing regular testing and various simulation activities (Blumenstein & Bar-Eli, 2005; Blumenstein, Bar-Eli, & Tenenbaum, 1997). The W5SA has five stages:

(1) Introduction

The first step takes place in a laboratory setting, where the athlete is introduced to the various pieces of psychophysiological equipment. This includes 5-8 group meetings (i.e., coaches and athletes) and 5-8 individual meetings, 2-3 times a week, with each session lasting about 25-30 minutes. Athletes are taught to regulate their mental state by observing their own psychophysiological responses on the screen. The main goal of the introductory step is to achieve a stable process in which athletes relax for 2-3 minutes, maintain deep relaxation for 5-10 minutes, and then rehearse excitation for 2-3 minutes. In addition, psychological techniques, including self-talk and autogenic training (http://en.wikipedia.org/wiki/Autogenic_training), are introduced and practiced.

(2) Identification

In the second step, the goal is to identify and strengthen the athlete's most efficient response modality in terms of BFB, based on the athletes' psychophysiological characteristics and the sport discipline. Galvanic skin response (GSR), electromyography (EMG), and heart rate (HR) measurements have been found to be useful for sailing, which requires both cardiopulmonary and cardiomuscular endurance (Blumenstein, Bar-Eli, & Tenenbaum, 2002). In this step, athletes must be able to perform, in the laboratory setting, the required relaxation-excitation cycle quickly, accurately, and reliably. This step includes 10-15 individual or group meetings, lasting 30 minutes each.
(3) Simulation

In the third step the athlete performs the learned skills within different simulated training situations. This step includes 10-15 individual or group sessions that include BFB training with imagery on the beach and in the boat (e.g., planning competition situations, such as pre-start and start). In individual meetings, the emphasis is on concentration training on the beach and in the boat (e.g., self-talk, imagery, breathing, and BFB training with a portable device).

(4) Transformation

In the fourth step athletes mentally prepare for a specific upcoming competition. The material learned and rehearsed by the athletes in Steps 1-3 is transferred to actual training settings, using portable BFB devices, in contrast to the laboratory setting in which the previous steps were conducted. This phase of the mental training is conducted in the boat during training and between races for approximately 10 sessions. It includes relaxation, imagery, and recovery with a portable GSR/BSB device. The main purpose of this step is to enable the athlete to simulate real future competitions, as described in Example 1.

(5) Realization

In the fifth step, athletes apply the mental techniques during competitions. The main focus is on pre-start support, planning competition scenarios (on shore), and recovery between races. Athletes begin by applying the procedure in 3-5 relatively less important competitions (e.g., national regattas) until they are ready to employ the technique for more important competitions (e.g., international regattas). This ensures that athletes gradually learn to cope with increasingly difficult situations and to become less crisis-vulnerable. The examples overpage show applied work with sailors, indicating the last three steps of the W5SA, which demonstrate the transformation from laboratory setting to training and competition.
Wingate 5-Step Training

Example 1: The Simulation Step

Event: 470 Class
Place: Sport Psychology Laboratory, Wingate Institute
Date and Time: Friday, 13:00-13:50

Introductory Part
Developing sport motivation and positive thinking

Main Part
- MUSCLE RELAXATION with portable EMG/GSR: 3 times x 1-2 minutes each.
- CONCENTRATION with portable GSR/BFB: 5 times x 30 seconds each.
- IMAGERY with verbal comments:
  - SITUATION 1
    1 minute before water start, actual water start, and best performance 1 minute after start: 2 times
  - SITUATION 2
    30 seconds before water start, actual water start with portable GSR/BFB: 3 times.
  - SITUATION 3
    1 minute before water start, actual water starts with GSR/BFB: 3 times.

Final Part
Relaxation with music for 10 minutes.
Example 2: General Pre-competition Weekly Mental Training Program

The General Pre-competition Weekly Mental Training Program is based on the Transformation and the Realization steps described earlier.

**Sunday and Monday:** Concentration exercise on beach (5 minutes); Muscle relaxation in boat (4-6 times x 1 minute); Brief relaxation after training with portable GSR/BFB (5 minutes).

**Tuesday:** Homework with portable GSR/BFB, brief relaxation-excitation cycles (2-3 times x 1-3 minutes).

**Wednesday:** Imagery on shore (technical elements); Information exchange and communication in boat before and during start (2-3 minutes); Mental recovery after training with portable GSR/BFB (15-20 minutes).

**Thursday and Friday (competition day):** Concentration exercise in boat (20-25 minutes before start, 2-3 minutes); Imagery before start (2-3 times x 1-3 minutes); Relaxation after race with portable GSR/BFB (1-5 minutes).
The Learning-Modification-Application Approach

In recent years, we have worked intensively with a newly-developed program, known as the Learning-Modification-Application (LMA; Blumenstein & Orbach, 2012a) approach. This approach is based on biofeedback training and the periodization principle of sport training (Bompa & Haff, 2009). The LMA approach includes three steps that accompany seven different stress distractions to prepare athletes to cope with a variety of stress situations.

In the first step, *Learning*, the sailors acquire fundamental psychological techniques in a controlled, sterile, laboratory setting, to achieve the goal of teaching them the basic foundations of each psychological strategy, using biofeedback support. Part of the training during the Learning stage is provided under light stress distractions, including positive and negative verbal instructions, such as “good work”, or “another mistake?”

In the second step, *Modification*, the objective is to perform relatively short psychological strategies quickly and precisely, in laboratory and training settings. This practice is provided with more challenging stress distractions, such as performance of relaxation and concentration in progressively shorter time limits, from 5 minutes to 1 minute.

Lastly, in the third step, *Application*, some of the psychological techniques continue to be practiced in the laboratory, but most of the techniques are transferred to daily practice. The stress distractions used in the laboratory focus on creating conditions similar to the real world, such as competitive noises and pictures.

The LMA approach is based on the periodization principle and adds a planning timeline tool to athletes’ overall preparations. Therefore, the LMA approach is linked to, and incorporated within, athletes’ training periodization phases throughout the season. For example, the Learning stage of the LMA is linked with athletes’ general preparation, the Modification stage of the LMA is linked with athletes’ specific preparation, and the Application stage of the LMA is linked with athletes’ behaviour during the competitive phase (Blumenstein & Orbach, 2012a, 2012b).
Long-term Psychological Skills Training (PST)

Long-term PST was provided to the sailors throughout the training season and was provided in laboratory, training, and competition settings. Usually, the first contact between the sport psychologist and the sailor was arranged through the elite sport department. The first few meetings were conducted in the laboratory with the goal of establishing a good relationship with the sailors and the coach. To understand the environment in which the sailors trained, the first author attended practice sessions at sea for over a month. During this period he spent time with the coach on the boat and learned various aspects of sailing training and competition. This knowledge gave him the competence to identify the most appropriate times during training that allowed for psychological interventions. More specifically, he focused on teaching psychological interventions, such as relaxation and recovery to be used after training (and later, between races and between competitions), optimization of pre-start emotional state, concentration during the 5-10 minutes before the water start, and self-confidence during competition. Moreover, in this period, several lectures were provided for coaching staff and athletes, on topics such as sport motivation and sailing training, psychological interventions in sport, psychological skills and competitions, and mental preparation for practice and competition. It is important to note that the first author had the full cooperation and support of the coaching staff, who believed that the mental training program had a positive effect on the sailors and was a valuable additional tool to improve performance. Parallel to our visits during practice training, sailors began to learn basic psychological techniques in the laboratory setting.

Laboratory setting. In the initial 6-week period we focused on teaching self-regulation techniques, such as relaxation, imagery, self-talk, focusing attention, and biofeedback training using the W5SA approach. Later, we modified basic techniques according to the demands of the specific sport and event. For example, imagery sessions were relatively short and were combined with training for concentration during the water start (1 minute each exercise); short relaxation of 3-5 minutes with imagery, in which athletes imaged for 10-30 seconds the prerace phase, actual water starts, and their best performance during the 1-2 minutes after the start of the race. During this period, we met with the sailors twice per week in the laboratory setting and twice per week in training.

For the team events, we asked the two athletes who partnered in a boat to independently give us a roadmap of a competition race. The roadmaps included the competition plan from start to finish, identifying potential problematic points. For example, during the starting point sailors had to work on the decision-making process, regarding which strategy they should choose, along with relaxation and recovery.

Credit: Jack Zalium/flickr/CC-BY-NC-2.0
their corresponding behaviours. We developed a prestart routine that included necessary verbal information to be communicated when the boat was in the prestart position, applied exercises for optimization of concentration and arousal levels, and mutual aid and cooperation strategies before and during all races (i.e., avoiding mutual accusation). Moreover, in this period, some questions linked with training motivation, teamwork issues, and decision-making during races were discussed.

**Training setting.** During this 2-month period, we met with the sailors 3-4 times per week and provided them with mental training sessions both on the beach and on the coach boat. On the beach, we gave special attention to athletes' relaxation after long and hard sea training. The main goal of this intervention was recovery. All interventions were accompanied by portable BFB equipment, using EMG/GSR channels. Usually, during weekend meetings, we worked on relaxation sessions lasting 20-25 minutes and we sometimes accompanied the relaxation with music. Athletes also practiced short relaxation using portable GSR devices for 3-5 minutes at home.

On the coach boat we concentrated on short relaxation sessions of 1-3 minutes with imagery, in which the sailors imaged themselves 20-30 seconds before the beginning of the race, during the start, and their best performance 1 minute after the race had started. This extended period of training had a positive effect on coach-athlete relationships and improved the training and competition atmosphere. In addition, the coaches noted that they significantly improved their psychological knowledge and self-confidence.

**Competition setting.** The first author accompanied the sailing team on numerous training camps and competitions, such as the European and World Championships, the Olympic Games, and various international regattas. No two competitions were the same, which provided added challenges in terms of psychological preparation. Often, based on the situation, we made decisions and accordingly gave recommendations to be applied specifically on that occasion. However, overall, the sailors became more focused, self-confident, stable, and medal-oriented. We consider that this was because the sailors progressively learned to apply the behavioral models and mental skills during stressful real-life competitions. The first author consulted the sailors on minor issues that were not part of their regular mental preparation, according to the specific demands and situation.

Sometimes psychological interventions were applied to a specific issue based on a request from the coaches. The example in Figure 1 demonstrates such a case in which the dilemma revolved around the decision-making process on the start line. The psychological work was tailored specifically to the issue and the intervention took place mainly under training conditions.
Example of a Specific Short-term Intervention

Here we present a case in which the coach of a sailing 470 team requested urgent psychological support. After analyzing previous competitions, the coach highlighted the impact of incorrect decision-making and a problematic relationship between the two sailors, which negatively affected their performance. The first author visited the marina, met and talked with the sailors, and joined them for sea training on the coach boat and later on the sailors’ boat. The experience of taking part in numerous sea training sessions helped to clarify the relationship between the sailors and the coach, and to collect information about their communication, leadership, decision-making, and stress management.

One key issue was to understand challenges the sailors faced during a race. Therefore, each athlete provided a road map of a competition race, including the optimal path from start to finish, identifying specific, potentially problematic points. For example, during the starting point the sailors had to work on their decision-making process, regarding which strategy they should choose, along with their corresponding behavior. Another example involved a curve in the path in which the sailors had to decide in which style they had to “attack” the mark (i.e., float) representing the starting line, while considering other boats, as illustrated in Figure 1.

![Figure 1. Decision making for the start of the race](image-url)
The sailors and their coach identified the starting spot as an important and problematic point, given that a good start can determine the performance level of the whole race, and a bad start is an additional stress factor to deal with during the race. Therefore, we helped the team to develop an optimal prestart routine in order to establish a controlled and effective mental state. This assisted the sailors to focus on the important acts to be performed before and during a race. Together with the sailors, we developed a basic Plan 1 and a reserve Plan 2 (see Figure 1). The sailors practiced the plans through imagery. Initially, the practice took place on the beach and later in the boat. The sailors practiced the starting scene together, while we verbally marked three important time points: 1:40-1:50 minutes prestart, 45-50 seconds prestart, and 10-15 seconds prestart. During that time, the sailors verbally practiced the commands and actions they had to perform during a real race. They practiced this scene 4-5 times during each meeting, for one month. Then the team practiced this imagery exercise on the boat, and finally applied the plan during competitions.

The goal of Plan 2 was to give the athletes an additional option in case problems arose during Plan 1. Plan 2 was shorter than Plan 1 and started from the 50 second prestart point. The difference in time gave the sailors the opportunity to identify a problem and to allow them enough time for change and modification. The skipper was the only one who could make the decision whether or not Plan 1 should be replaced with Plan 2.

We also provided the sailors with one-on-one consultation meetings, the goal of which was to improve the concentration and self-regulation skills of the individual sailors. The psychological techniques included concentration exercises with GSR/BFB, muscle relaxation, self-talk, BFB training, goal-setting and positive thinking.
Summary

• Sailors and their coaches benefit from psychological knowledge and apply it in practice especially when they trust the sport psychology consultant who is perceived to be part of the team.

• For trust to exist, the sport psychology consultant should understand the coaches’ and athletes’ personalities, and the demands of sailing training and competition, including wind direction and sea conditions. The sport psychology consultant should be patient, calm, and cooperative, with an excellent sense of humour.

• The sport psychology consultant should discuss the psychological plan and meet with the coaching staff on a regular, daily or weekly basis. The goal of this interaction is to exchange ideas, experiences and psychological knowledge to improve athletes’ training programs and psychological readiness.

• Psychological consultations should be provided in three settings:
  - Laboratory setting (i.e., sterile condition);
  - Training setting (i.e., during actual practice);
  - Competition setting (i.e., before and between races, after competitions).

• The training setting is the main field for psychological support in sailing and windsurfing.

• Sport psychology consultants who work with sailors and windsurfers should always be available and time-flexible, prepared to attend for half days 3-4 times per week, on the coach boat or beach regardless of the weather conditions. In addition, the sport psychologist should attend international competitions 5-6 times a year or more.

• These secrets are, of course, relevant for other sports, although in sailing and windsurfing they are particularly significant.
Conclusion

In this chapter we have described how we, as sport psychology consultants, worked with sailors and coaches to help those dedicated to Israel’s success at the elite level globally to have the best chance to achieve their goals. Through the commitment of substantial time and expertise, we are confident that we made a noteworthy contribution to the success of Israeli sailors at the highest level over a period of years. One key to the success of this work has been the expert application of biofeedback training that has marked the career of the first author. We hope that this chapter helps readers to recognize and develop their own psychological approach and style with sailors and windsurfers in their country.

REFERENCES


VIDEOS

247 Wingate: Israel’s Premier Sports Facility  www.youtube.com/watch?v=aerA0_OksWlc.com/

248 Gal Fridman talks about his Olympic journey  www.youtube.com/watch?v=k7GQmsag8Ac

248 Israel’s Olympic hope - Windsurfing  www.youtube.com/watch?v=17iqq8838BI

249 Lee Korzits picks up gold medal in Australia  www.youtube.com/watch?v=l5e_UtnjyMg/

249 Israel’s Olympic hope - Sailing Vered Buskila  www.youtube.com/watch?v=6Uneg3e3n4U

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250 First meeting with the women’s 470 sailing team and a windsurfer to explain about biofeedback. Photo courtesy of Boris Blumenstein.

251 Portable GSR/BFB device used outside the laboratory. Photo courtesy of Boris Blumenstein.

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Shooting in India

Peter C. Terry and Alberto Cei

In

Secrets of Asian Sport Psychology

Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

Shooting sports have become increasingly popular in India with more than 2,700 athletes participating at the 2013 national championships. By comparison, most countries would attract at best only a few hundred competitors to their national championships. The performances of the Indian shooting team have improved dramatically in the past decade, to transform the country into one of the dominant forces in world shooting.

India topped the medal table for shooting at the Commonwealth Games of 2006 and 2010, won an Olympic silver medal at the 2004 Olympic Games, its first ever individual gold medal at the 2008 Olympic Games, and backed up these successes with silver and bronze medals at the 2012 Olympics. There can be little doubt that India has become a force to be reckoned with in the shooting world and looks set to climb to even greater heights over coming years.

In this chapter, we explore some of the psychological factors that have contributed to the international success of Indian shooters. Both authors have, at various times, provided psychological support for the Indian shooting team and have observed at first hand the progress that has been made. They have also worked for many years with other international shooters, including the national teams of Australia, Italy, Great Britain, Ireland, Iran, Malaysia, and Singapore. We chronicle the support provided for the Indian shooting team and discuss psychological factors that influence shooting performance. To give these accounts greater authenticity, we have faithfully reproduced the views of the shooters themselves, in their own words where possible, to explain the psychology of sport shooting.
Psychological Demands of Shooting Sports

Shooting is one of the most psychologically challenging of all sports, requiring a level of precision and consistency that must border on perfection to challenge for medals at the international level. As an example, to score a 10 in the air rifle event it is necessary to hit an area with a diameter of only 0.5 mm (about 0.02 inches) from a distance of 10 m. On five occasions in international competition, men have scored the maximum 600 points from 60 shots, including twice by the Indian shooter, Gagan Narang. On no fewer than 15 occasions have women recorded the maximum 400 from 40 shots, with Indian shooter Suma Shirur among them.

At the Olympic Games, the shooting program includes 15 events, five events each for rifle, pistol, and shotgun, organised by the International Shooting Sport Federation (ISSF). The competition format and regulations of all the events contested at the Olympic Games, World Championships, World Cup Series, and other ISSF-endorsed championships can be found at www.issf-sports.org/theissf/championships/olympic_games.ashx

There is considerable variation between the different shooting events in terms of their specific psychological challenges. For instance, pistol and standing rifle events require, above all else, the ability to remain statue still, with solid body posture yet differentiated muscle tone, whereby the shooter maintains tension in some muscle groups and relaxation in others. The precision inherent in these events is so great that even a heartbeat creates deviation between weapon and target, and so shooting between heartbeats is the required norm.

In comparison to rifle and pistol, shotgun events are much more dynamic, requiring the shooter to move the gun rapidly but smoothly to hit a fast moving target. Hence, when shotgun shooters call “pull” to release the clay target, they need the precise physical control and empty mind characteristic of all shooting events, but should retain an element of the hunter about them, ready to track and “kill” the clay.

All shooting events demand mastery over physical and mental processes. Excess tension, negative emotions, and random thoughts are the enemy of all shooters.
For many shooters, thinking too much and over-analysing a relatively simple process is a significant and all-too-common problem. As shooting psychologists, we spend much time devising strategies to reduce cognitive activity, trying to assist shooters to maintain a quiet mind, free from the clutter of unproductive thoughts, excess analysis, and self-recrimination. We often wish there were an on/off switch in shooters’ brains. The list of things that commonly distract shooters is seemingly endless. Table 1 shows a typical list of distractions reported by shotgun shooters.

Table 1. Common Distracting Thoughts for Shotgun Shooters

<table>
<thead>
<tr>
<th>Distraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>The crowd behind me were too noisy</td>
</tr>
<tr>
<td>The light changed during the round</td>
</tr>
<tr>
<td>The microphones did not pick up my call</td>
</tr>
<tr>
<td>I was doing fine until the delay when the trap malfunctioned</td>
</tr>
<tr>
<td>Sweat was dripping onto my glasses</td>
</tr>
<tr>
<td>Why did that target not break?</td>
</tr>
<tr>
<td>I’m shooting so well, this is easy</td>
</tr>
<tr>
<td>My heart is beating so fast</td>
</tr>
<tr>
<td>I missed my first target, now I’m panicking</td>
</tr>
<tr>
<td>I don’t like this range</td>
</tr>
<tr>
<td>I always have a problem with the second round</td>
</tr>
<tr>
<td>The referee is too old to see the targets properly</td>
</tr>
<tr>
<td>The targets have not been set up correctly</td>
</tr>
</tbody>
</table>

Adapted from Cei (2009)
The views of Australia’s Michael Diamond, one of the greatest shotgun shooters of all time, on the process of successfully hitting a clay target during flight, offer rare insights into the psychology of shooting. One of the challenges of the Olympic trap event is to have the confidence to allow the target, a 110 mm (4.3 inches) clay disc travelling at 100 km/h (62 mph), to begin its flight, to see it clearly, and to follow its path before pulling the trigger.

Anxious shooters will often “jump the gun,” reacting to the flash of the clay as it leaves the trap house and getting in front of the target. Diamond explains the process:

*There’s a compartment in my mind, a sight picture. You can actually see everything coordinating together. It almost appears in slow motion … You can see the little red dot (the sight) on the end of your gun approaching the target, go past the target. You pull the trigger and turn it to dust …*

*The trick is, when you’re calling for that target, when the target appears, I can see it round, I can see it perfect, like it’s sitting just there on top of that trap house … That’s where the game begins and ends. It’s won and lost right there. If you don’t see it — if you see a flash or a blur — you’re done.*

*If you’re looking in the correct spot, the human mind and the eyes can see anything that you want them to. You’ve got to give them the information so they can process it. It’s about shutting out your emotions and your feelings (Coomber, 2008).*
Time Management During Rounds

In Olympic trap, a round involves shooting one target from each of five stations and continuing in this manner until 25 targets have been completed. There are normally six shooters on the range simultaneously who call for their target in turn. Shooters know where the target will emerge from but they do not know in which direction it will be heading (left, right, or straight). Each shooter has to wait for about 40-50 seconds between targets or longer if, as frequently happens, a delay occurs (e.g., the microphone fails to pick up a shooter’s call, a trap malfunctions, a target breaks as it leaves the trap house, a shooter claims that a target called a miss by the referee was actually hit).

Time management during a round is critical. A consistent between-shot routine provides the foundation for maintaining focused attention and is universally regarded in the shooting world as a crucial element of achieving international success.

Between-shot routines are highly individualised and there is no single routine that will be effective for every shooter. Some elements of a routine are common to all Olympic trap shooters. In the time between shooting at one target and calling for the next, it is necessary for every shooter to eject the spent cartridge(s), reload, move to the next station, get into position, and raise the gun to the shoulder before calling for the target. Also, at some stage during a round, a shooter will normally tip more cartridges into the pocket of the shooting jacket, take a few sips of water, and towel down hands and face. Idiosyncratic elements of a routine might include switching the gun to the non-trigger hand when moving stations to relax the trigger arm, placing the gun over the shoulder to relax both arms, polishing parts of the gun, or conducting a quick check of equipment by re-adjusting jacket, sunglasses, hat, and towel.

Other more subtle elements of a routine are less obvious, but probably more important. These elements may include maintaining a consistent body language, slow controlled breathing, mentally rehearsing the movement and rhythm of the next shot, saying a silent word of encouragement such as “trust yourself,” singing silently to avoid random thoughts, and ensuring a brief moment of complete stillness before raising the gun to the shoulder.

In addition, there is a need for mini-routines for specific challenges, such as after missing a target, for an interrupted routine, when a no-target is called by the referee, or when recommencing the round after a delay. For example, the scenario of missing a target will be faced by all shooters; the challenge is to ensure that the damage is not compounded as a result of an emotional response, negative body language, self-recrimination, or thrown cartridges. Routines become especially important during the final five targets of a round, when the potential for a shooter to start considering the score for the whole round rather than the next target grows exponentially and focus on the here and now is often lost.
Mental rehearsal of the rhythm of the shot is seen by many as a critical element of an effective routine because it increases the probability of going through the process of calling for the target, seeing the target clearly, moving the gun through the target, and pulling the trigger with a rhythm that is not too fast and not too slow. As Michael Diamond explained, “I try to stay in touch with rhythm and timing because timing is absolutely everything in our sport” (Tan, 2012).

Another critical element of an effective routine is to try to reduce the competitive pressure during the walk from Station 5 back to Station 1. This walk is generally seen as a time to take some deep breaths, relax the arms, and to move slowly but purposefully with the aim of arriving at Station 1 ready to refocus attention on the next target. When working with trap shooters, we typically spend a great deal of time helping to identify, refine, and monitor effective between-shot routines until they become second nature for the shooters.
Behavioural Imperatives

Given the disciplined nature of shooting events and the intense psychological challenge of international competition, over the course of 15 years working with Olympic shooters, the first author has developed a series of behavioural imperatives for the trap event in the form of a list of “shooting commandments” (Table 2). The qualities of control, consistency, precision, and patience should pervade the entire performance of a shooter; these commandments contribute to those qualities.

Table 2. List of “Commandments” for Trap Shooting

<table>
<thead>
<tr>
<th>Commandment</th>
</tr>
</thead>
<tbody>
<tr>
<td>You compete against a machine; you should try to be a machine. The sport is hard enough without your emotions making it harder.</td>
</tr>
<tr>
<td>No reactions are allowed. Show the same response, hit, miss, or second barrel.</td>
</tr>
<tr>
<td>A second barrel kill is a gift. Say “thank you” and move on.</td>
</tr>
<tr>
<td>Shooting is a small picture sport. Shoot targets one at a time by controlling 25 small pictures and let the big picture take care of itself.</td>
</tr>
<tr>
<td>Thinking too much is your enemy. Analysis has its place but not during a round.</td>
</tr>
<tr>
<td>The river of your thoughts flows strong. If unwanted thoughts comes floating along, don’t fight them, replace them with the thoughts you want.</td>
</tr>
<tr>
<td>Breathing is a key skill for shooting. Learn to control your breathing.</td>
</tr>
<tr>
<td>Patience and discipline are your two greatest allies. Your routine will see you through, but ensure that you have a good routine.</td>
</tr>
<tr>
<td>If something disturbs your routine or you feel an element of doubt, then start your routine again. Know your restart point.</td>
</tr>
<tr>
<td>Learn to love adversity. No shooter likes bad light, wind, or rain. Know that you will handle them better than your opponents.</td>
</tr>
<tr>
<td>Your overall performance is defined by your worst round. Show mental resilience when things are not going well.</td>
</tr>
<tr>
<td>Poor officiating happens. Stand up for yourself, but do not get frustrated.</td>
</tr>
<tr>
<td>Make shooting an oasis of peace even if your life is chaotic. Deal with the other stuff later.</td>
</tr>
<tr>
<td>Do not get involved in anything that causes a delay. Wait patiently until the problem is resolved.</td>
</tr>
<tr>
<td>Predictions often come true. What You See (in your mind’s eye) Is What You Get (remember WYSIWYG).</td>
</tr>
<tr>
<td>Have a clear image of you at your best as a competitor. Give this image a name.</td>
</tr>
<tr>
<td>Find a song that sums up your quest and/or inspires you.</td>
</tr>
</tbody>
</table>
Finals Focus

The format of an Olympic trap final gives each shooter only one shot at each target rather than the two allowed during qualification rounds.

As a result, the psychology of a final is different to the five qualification rounds and it is not uncommon for shooters to feel rushed in a single-barrel final. Working to assist a shooter to prepare for the prospect of an international final, the second author was faced with the scenario of a shooter who had previously displayed a tendency to rush shots in finals due to the anxiety of feeling that there was less time to hit the target with only one cartridge. On several occasions this tendency had cost the shooter a podium finish.

The initial suggestion was to mentally rehearse the correct rhythm of the movement a few seconds before calling for the target. Having practiced this strategy during single-barrel training rounds, results were disappointing and the shooter continued to feel rushed. He looked focused and ready to call for the target during these simulated finals, but too many of his shots continued to miss the mark. After further discussion, it became apparent that his external focus prior to shooting was less than optimal. His gaze was too narrow and fixed on where the target emerged. Consequently he saw a flash rather than a clear picture of the target and hence his shotgun movement was too fast and far from smooth.

With this new awareness, the shooter discontinued the pre-shot mental rehearsal that had provided no beneficial effect, and instead adopted a slightly broader focus of attention before mounting the gun. More specifically, he continued to look at the same spot just above where the target emerged, but had a “softer” focus so that his vision was broader, taking in the 2-3 m to the right and left.

The immediate effect of this change was that the shooter saw the target moving more slowly than before, picked up its flight more clearly, and the movement of the shotgun to the target became smoother. Henceforth, this softer focus became a crucial element of his pre-shot routine and he would only mount the shotgun once he had achieved this “open glance” as we referred to it. He became meticulous about spending time to achieve this type of focus on every target and his performance in single-barrel finals improved as a result.
Case Study #1:

**Manavjit Singh Sandhu** (Olympic Trap World Champion 2006, World Cup and Commonwealth Games Gold Medallist).

Manavjit Singh Sandhu is India’s most successful Olympic trap shooter and one of the world’s finest exponents of the sport. His rise to become world champion in 2006 represents, thus far, the pinnacle of a successful career that has also seen him win World Cup and Commonwealth Games gold medals, four Asian Championship titles, and four Asian Games silver medals. He is a 3-time Olympian and the 2007 recipient of the *Rajiv Gandhi Khel Ratna* award, India’s highest honour for achievement in sport.

His career in shooting sports started early, after his interest was developed as a child in the footsteps of his father, who was also an international level shooter. Sandhu gives much credit to the central role played by his parents in providing him with opportunities, during which his natural shooting talent was unearthed, and also for helping to shape his personality. He also identifies a strong desire to win as a third very important dimension pushing him to be involved in sport shooting. For Sandhu, the psychological demands of shooting seem to fit like a glove with what he regards as his inherent psychological characteristics. By his reckoning, most of the psychological skills required to shoot well have always been present, and his years of training have simply optimised them. The longevity of his success, from his first major win at the 1998 Commonwealth Games in Kuala Lumpur, Malaysia, through to his success at the 2014 World Cup event in Tucson, Arizona, points to a strong and continuing competitive nature.

Sandhu regards, as one of his secrets, his superior cognitive attributes, including fast reflexes, good hand-eye coordination, and a natural ability to aim and connect with moving targets. At the same time, he has recognized the truth in the old saying that talent alone is never enough (see Maxwell, 2007), and therefore has long since resolved to work harder than other shooters to develop his natural ability to the highest level of which he was capable. In this respect, he is a classic example of the 10,000 hours of deliberate practice rule for the development of world class expertise in sport (Ericsson, Charness, Feltovich, & Hoffman, 2006). The long hours of practice eventually crystallise the essence of successful performance into misleadingly simple words that capture all that has gone before. For Sandhu, and many other great trap shooters, the secret of hitting a 110 mm diameter target travelling at 100 kph in an unknown direction, has become nothing more complicated than “watch (the target) and move.”
In tandem with his strong competitive nature and burning desire to win, which is by no means unusual amongst successful people in any walk of life, is his resilience and ability to cope with defeats and setbacks, a less common and perhaps more valuable attribute, which has been shown to lie at the heart of mentally tough competitors in sport (Crust, 2007). Sandhu is almost the embodiment of poet Rudyard Kipling’s famous approach to triumph and disaster, treating these two imposters just the same. In his words, “How to handle victory and defeat is the essence of a sportsman.” In his reactions to setbacks and disappointments, he retains the attitude that “one must look at the next opportunity to win after a loss.” He uses his renowned sense of humour to avoid taking the losses too seriously, instead focusing on the next opportunity to win.

Sandhu adopts a similar approach to victory, taking it in his stride and remaining mindful that every medal won potentially raises expectations for the next victory, leading to self-induced pressure that could have negative consequences. His coping strategy involves not taking the wins any more seriously than the losses, but remaining relaxed and philosophical about whatever the result brings. In the extremely achievement-oriented world of elite sport and given his self-acknowledged competitive nature, this approach is far more easily said than done. That Manav Sandhu appears to achieve such equilibrium of mind, body, and soul is no mean achievement and speaks volumes for his depth of character.

He has roared back into world-class form recently to win the gold medal at the ISSF Shotgun World Cup event during April 2014, where he overcame Michael Diamond in the final and consigned another former Olympic champion, Russia’s Alexei Alipov, to the bronze medal. Sandhu reflected that “Competing head to head with two Olympic champions on a single day and getting the better of both was indeed special. However, I feel that in shooting one simply tries to shoot one’s own target and then the score speaks for itself. Psychologically, it can be intimidating shooting against legends, but I did not let that trouble me” (“Gold shows,” 2014). His simple philosophy of focusing solely on the process of hitting his own target successfully and giving no thought to what his opponents are doing has served him well throughout his career.
Time Management Between Rounds

In international competition, there is usually an hour or more between rounds and managing this time effectively plays an important part in determining performance. Typically, coaches hold a post-mortem with their shooters immediately after the round is over to identify the good and not-so-good aspects of the performance. Thereafter the shooters return to their allocated base camp for some down time, to rehydrate, eat a snack, and relax, switching off from the contest temporarily. Some will read a book or listen to music, others will play cards or chat; some are gregarious whereas a few will isolate themselves completely. The strategy used is largely one of habit or personal preference, although the typical routine is for each national team to create its own little oasis of calmness, relaxation, and positivity, providing a refuge from the psychological rigours of the competition, helping the shooters to refresh, recharge their emotional batteries, and refocus before re-entering the fray. Coaches and support staff usually take responsibility for securing the best location for the team “headquarters” and will guard them with terrier-like fervour if another team encroaches too closely.

Around 30 mins prior to the start of their next round, many shooters will schedule a quick massage, after which they will put on their shooting jacket, gather gun and ammunition, and head to the range to refocus and await their turn to shoot. This between-round period is when much of the on-site support from a sport psychologist occurs. It affords time for relaxation sessions, mental rehearsal, venting of emotion, counselling when necessary, or reminders about pre-arranged routines or behavioural imperatives. Part of the art of the sport psychologist is to know when to offer an intervention and when to leave the shooter alone. Holding back and waiting to be asked for advice is usually the best approach.
Mood Profiling

Our moods influence many things in sport and in life. Moods affect how shooters respond to the various situations they might encounter during a shooting competition and, ultimately, how they perform. As part of his consultancy work with international shooters from various countries, the first author has regularly profiled their mood responses using the Brunel Mood Scale (Terry, Lane, Lane, & Keohane, 1999; Terry, Fogarty, & Lane, 2003; see www.moodprofiling.com). Compared to normative mood data for athletes generally (Terry & Lane, 2010), international shooters from India, Australia, Great Britain, Ireland, Malaysia, and Singapore have, on average, tended to report lower scores for tension, depression, anger, fatigue, and confusion, and report vigour scores very close to the norm (see Figure 1).

This pattern of mood responses among international shooters can be interpreted in several ways. It could, for example, be seen as an indicator of good mental health among shooters (see Raglin, 2001). Alternatively, given that most data were gathered during periods of international competition, it could reflect the tendency of shooters to suppress their feelings, especially negative ones, at such times due to the dispassionate, controlled demeanour required of them by the demands of sport shooting. Finally, it is possible that the stereotypical personality of the calm, introverted shooter, largely devoid of emotion (Coleman, 1980), is evident in reality and explains the observed mood profiles.

Regular mood profiling of individuals, especially at the competition venue, can quickly help to identify when a shooter’s mood is less than optimal. Anger, confusion, or depression scores elevated above what is normal for an individual usually signify a potential threat to performance, as do very low vigour and/or very high fatigue scores. The format of international shooting competitions, where events usually extend over a period of 1-2 days, gives opportunities for intervention in the form of brief, solution-focused techniques (Pichot & Dolan, 2003) or even just an opportunity for a shooter to ‘get something off the chest’. The ability to implement short-term mood regulation strategies, for example through humour, music, massage, or just by listening to the shooter (see Terry, Dinsdale, Karageorghis, & Lane, 2006), is a valuable asset for all those who play a supporting role with elite performers.
Case Study #2:

**Rajyavardhan Singh Rathore** (Double Trap Olympic Silver Medallist 2004; World Cup Gold Medallist 2004, 2006; World Record holder)

Colonel Rajyavardhan Singh Rathore is an officer and a gentleman. Known by most on the international shooting circuit simply as “Chilly,” he became a national hero in 2004 as the first Indian athlete to win an individual Olympic silver medal in any sport since 1900. His achievement in the double trap event (see [http://en.wikipedia.org/wiki/Double_trap](http://en.wikipedia.org/wiki/Double_trap)) in Athens paved the way for his teammates to follow, “Rathore changed me; his silver ensured gold became my possibility. It’s what Indians need to do, feed off each other’s success” (Bindra, 2011, p. 183).

My first visit to India was in 2001, to work with Chilly. I (first author) immediately observed his unquenchable thirst for knowledge about all things shooting. At each training session he recorded every word I said, always coming back the next day with a host of questions, “What is the best way to clear my mind before calling for the target? Do you think I should try to be the Iceman or the Peaceful Warrior during competition? What should I do to avoid getting angry after a miss? Should I analyse my hits and misses during the round?” We spent many hours discussing these and other similar questions. Twice during that trip, Chilly equalled the then world record score of 194 from 200 targets in training competitions, which I think confirmed to him that he had the talent to succeed at the highest level. The following year he rose to international prominence at the 2002 Commonwealth Games by beating three Olympic champions, Australians Russell Mark and Michael Diamond and Great Britain’s Richard Faulds, to secure the individual title and, with Moraad Ali Khan, the pairs gold medal as well. He successfully defended his Commonwealth Games individual title in 2006.

I have vivid memories of Chilly during the 2004 Olympic Games in Athens. I was a member of the Great Britain team but, with all shooters bunched together in a shared changing room, I observed at close quarters how he prepared for his finest hour. He was a picture of self-sufficiency, quietly going about his business, enjoying the camaraderie of his double trap rivals but somehow remaining apart from the others, almost serene amid a maelstrom of excitement and anticipation. In the Olympic competition Chilly retained his composure to recover from a poor second round and
qualify for the final in 5th position, with an unspectacular score of 135 from 150 targets. In the final, Ahmad Al-Maktoum of the United Arab Emirates was the runaway winner of the gold medal but Chilly applied himself manfully to edge out Wang Zheng of China for the silver medal by a single target, finding just the right balance of calmness and aggression. His modest final score of 179 from 200 targets demonstrated the old maxim that to win medals you don’t necessarily have to shoot well, just well enough.

Until recently, Chilly was a Special Forces officer in the Indian Army, incredibly fit, who carries with him an aura of calm authority. In Athens, he truly was a peaceful warrior. He appeared relatively unburdened by the expectations of others, despite the hype of the Indian media. Perhaps only he and those closest to him truly believed that he could break the mould for an Indian shooter. Being devoid of a support team typical of other nations (e.g., coaches, physiotherapists, masseurs, fitness trainers, psychologists) perhaps made it easier for him to retain the precious simplicity and clarity of thought that is easily lost in an Olympic environment.

Chilly worked relentlessly to improve his shooting, often practising on the range long after others had gone home. I recall working with him at the 2005 World Championships in Lonato, Italy where he rehearsed his gun mount more than 1000 times an evening in his hotel room. Post-2004, he started to fiddle endlessly with his equipment, looking for innovations or adjustments that might possibly give him a slight technical edge over his competitors. I remember him fashioning a homemade grip for his gun from some strange concoction of sawdust and glue, to ensure that his trigger hand was always in precisely the same position. He then changed the shotgun that had won him the Olympic medal in favour of a high-ribbed version more akin to that used by Al-Maktoum. His search for a technical advantage did not pay off, however, and the more variables he introduced into the technical equation the more confused the situation became. Eventually, his driven approach and relentless work ethic saw him burned out by the time of the 2008 Olympic Games. He took the 2009 competition season off but gradually worked his way back to prominence, equalling the world record in late 2011 with a score of 148 of 150 to win the Asian Championships. Col. Rathore left the Indian Army in September 2013 to embark on a career in politics, and in May 2014 made a successful political debut by gaining election to Congress in a landslide victory.

The Indian shooting community should not despair at the loss of one of its iconic members because there may be another Rathore in the Indian team before too long. Chilly’s son Manav, just 12 years old at the time of writing, is already showing a precocious talent for the sport. It will be interesting to see what his future holds for both father and son.
Neurofeedback Training

Neurofeedback training is a process whereby real-time displays of electrical activity in the brain is fed back via electroencephalography (EEG; see http://en.wikipedia.org/wiki/Electroencephalography) to help individuals learn to regulate their own neural processes. When applied with shooters, a preliminary step in the neurofeedback process is to identify the EEG activity associated with best shots and worst shots (Loze, Collins, & Holmes, 2001). The next step is to devise a program of neurofeedback training for the shooter that rewards EEG activity associated with best shots and inhibits EEG activity associated with worst shots. Rewarding the shooter for achieving optimal neural activity can occur using an audio signal, a visual representation, or by progressing through a video game when the desired EEG patterns are present. Neurofeedback training has been shown to provide significant improvements in rifle shooting performance (Rostami, Sadeghi, Karami, Abadi, & Salamati, 2012) and was used extensively by Abhinav Bindra in his successful quest to become India’s first Olympic shooting champion (see Case Study #3).

It should be noted that optimal neural activity for shooting varies across events and between individuals. Rifle and pistol shooters generally benefit from lower frequency EEG activity in the alpha range, representing relaxed awareness (see Figure 2), whereas slightly higher frequency neural activity in the high alpha to low beta range, appears to be advantageous for shotgun shooting, with the optimal position within this range being dependent upon individual differences (Terry & Mahoney, 2009). Research in the area of neurophysiology has identified that expert rifle shooters show “decreased involvement of cognition with motor processes” in the time period immediately preceding trigger pull (Deeny, Hillman, Janelle, & Hatfield, 2003) supporting the benefit of generating a quiet mind when shooting.

![Image of a shooter receiving neurofeedback training](https://example.com/neurofeedback.png)

Note. SMR = sensorymotor rhythm.

**Figure 2.** EEG frequencies and associated arousal states.
Beijing 2008

To facilitate mental rehearsal of the Olympic competition, it is common to visit the venue some months in advance of the actual competition to make a short video of the facilities. Typically, this visit occurs during the “test event” that is scheduled as part of the ISSF World Cup series early in the same year of the Olympic Games. In the case of the Beijing Olympic Games, this event was held during April 2008, four months in advance of the Games.

This test event gave all the shooters an opportunity to get a feel for the venue and the idiosyncrasies of the range. The first author filmed a short video of the shotgun range, which was still under construction during the test event, to provide the shooters with an aide-mémoire that would make their mental rehearsal just that little bit more realistic (see Beijing Range video).
Case Study #3:

Abhinav Bindra (10 m air rifle World Champion 2006, Olympic Champion 2008)

To understand Abhinav Bindra’s achievement in becoming the 2008 Olympic champion it is necessary to understand something of the man himself and the circumstances surrounding his journey to the very top of his sport. This case study will hopefully convey his single-mindedness and incredible attention to detail, but for greater depth of insight the reader is referred to his beautifully crafted autobiography, A Shot at History: My Obsessive Journey to Olympic Gold (Bindra, 2011).

By his own admission, Bindra is obsessive about every aspect of his shooting, his gun, his technique, his nutrition, his body, and his brain. His approach to preparation is a perfect example of covering all three slices of the performance pie – skill, physical conditioning, and psychological readiness (Karageorghis & Terry, 2011) - which he integrates imaginatively into a varied range of activities.

The cornerstone of his rifle shooting art is a rock solid technique that will not break down in the emotional melting pot of Olympic competition. Bindra is obsessively meticulous and patient about honing his skill and untiring in his willingness to practice until every minute aspect of his routine is perfected and automated.

From 2001, Bindra’s technique was, in his words, “analysed, stripped down and rebuilt” by his coaches, Gaby Buehlmann and Heinz Reinkemeier, a risky but necessary strategy if he were to become a consistently great shooter. Just changing the position of his hips from 11 o’clock to 12 o’clock to the target took three years to incorporate fully. The differential muscular tension required - no tension in the neck, minimal in the shoulders, just enough in the legs to lock the knees, relaxed feet - took endless hours for his mind and body to master. His “exquisite muscular dance,” as he describes it, also involves an educated right trigger finger that instinctively differentiates between the 20 grams of pressure to prepare for firing and the 30 grams required to release the pellet, a right arm tense enough to hold the gun absolutely still, a relaxed left arm with a wrist that does not bend. To help master such complex muscle control, Bindra used an ultrasound machine to actually “see” the muscles as he tried to activate them.
Unlike many shooters, Bindra places strong emphasis on his physical fitness, regularly including twice-daily workouts in his training schedule, or testing his endurance during all-day hikes in the Bavarian Alps, or putting himself through brutal commando training just a week before the 2008 Olympics. His rationale for doing so was founded on the belief that his capacity to retain the necessary balance, clarity of mind, body awareness, and muscular control at the most critical moments of competition would be enhanced if he were in prime physical shape. Moreover, overcoming the sometimes extreme psychological challenges that were built into his physical conditioning laid the foundation for genuine belief that he would win in Beijing. Bindra tells of the sublime moment standing atop a pole 40 feet high during commando training in Munich when he was forced to conquer his fears, trust his safety harness, and step off into thin air. This experience bolstered his self-belief hugely, “Winning a medal, I told myself, cannot be tougher than this, it cannot be scarier” (Bindra, 2011, p. 159).

Bindra is renowned for his willingness to try any psychological strategy that might provide even the tiniest performance enhancement. In his preparations for the Beijing Olympics, he spent many hours in a flotation tank, meditating and visualizing a successful performance at the Olympic range. He also simulated the range, which was unusually large, by renting a marriage hall in his home town of Chandigarh, and rehearsing his Olympic performance there. Similarly, he replicated the unusual dark wood panels behind the targets and the very bright lighting of the Olympic range on his range at home.

Perhaps his most significant mental training initiative was to travel to South Africa to work with sport psychologist Tim Harkness. Bindra completed about 150 hours of neurofeedback training, where Harkness monitored EEG, muscle tension, skin conductivity, and respiratory cycles to help Bindra learn to generate the psychophysiological state associated with his best shooting. His preparations for Beijing also involved training to shoot under pressure, coping with distractions such as flags popping up in his line of vision, rattles shaking while he shot, or Harkness shouting “miss, miss, miss” while he prepared.
Bindra’s Olympic simulation training continued at a training camp in Munich where, in his words, he became “a method actor polishing my craft before a Broadway opening” (Bindra, 2011, p. 155). He cycled 45 minutes to the range instead of driving to replicate the time to travel from the Olympic village to the Beijing range. He rehearsed walking onto the finals range with a relaxed, open posture rather than the defensive, cross-armed posture that characterised his body language during his disastrous 2004 Olympic campaign. He regularly practised firing 10 shots in three minutes to strengthen his ability to find the required balance and mindset quickly. His coach deliberately changed the sight on his rifle to test whether he could cope with the stress of fixing it under extreme time pressure.

Multiple dress rehearsals of the final were conducted, with every conceivable scenario rehearsed. Most of all, the final shot in the final was simulated over and over again because it represented the precise moment when years of hard work would either culminate in glorious victory or dissolve into bitter disappointment. When that decisive moment in Beijing finally arrived, he released his victory-clinching 10.8 shot in just a few seconds, so well-rehearsed had that final shot been.

In becoming the first Indian in history to win an Olympic gold medal in any individual sport, Bindra was transformed into a role model for an entire generation of Indian shooters, one or more of whom will surely follow in his wake.
Influence of Role Models

Every successful sport system thrives on having successful role models who inspire the next generation of athletes. There is no doubt that Rajyavardhan Singh Rathore’s Olympic silver medal in 2004 provided an enormous shot of self-belief for the whole of the Indian shooting community, demonstrating conclusively that Olympic success was within India’s grasp. Many subsequent achievements by the Indian shooting team, notably Abhinav Bindra’s 2008 gold medal in Beijing, have been attributed to a greater or lesser degree to Rathore’s Olympic breakthrough.

Anjali Bhagwat, a Role Model of Success for Female Indian Shooters

Another role model for Indian shooters, especially females, rifle shooter Anjali Bhagwat has exerted a positive influence on those who followed.

Known as Arjuna of India (India’s shining light), Bhagwat is regarded as one of the country’s greatest female athletes of all time.

 Ranked World #1 in 10 m air rifle (http://en.wikipedia.org/wiki/10_metre_air_rifle) during 2002, she won the 2003 World Cup Final with a world record score of 399/400. A 3-time Olympian, Bhagwat won a total of 31 gold, 23 silver, and seven bronze medals during her international career, including 12 Commonwealth Games titles. Such a record of achievement made her a potent role model of success for all Indian shooters.
Commonwealth Games 2010

The Commonwealth Games were held on Indian soil for the first time in 2010 when Delhi, the country’s capital, hosted the event. Given the team’s success in 2006, where India topped the medal table with 16 gold medals, expectations were high among the Indian public that this level of success would be repeated. These expectations placed additional pressure upon the Indian shooting team, which they felt acutely.

In helping to prepare some of the Indian shooters, the second author used a variety of techniques, which are summarised in Table 3.

He emphasised the potentially stressful nature of a home Games and the need to replenish emotional reserves in the month preceding the competition, using the analogy of a camel preparing for a long trip across the desert, gathering its energy before setting off. Avoiding people and situations that create stress, remaining at the shooting range only for the time required for coaching, and using relaxation sessions twice daily, were highlighted as integral elements of the competition strategy. Expending mental and physical energy during periods on the shooting range was inevitable but the goal away from the range was recovery, recovery, and more recovery. As things eventuated at the 2010 Delhi Commonwealth Games, India once again headed the medal table for shooting with 14 gold medals and 30 medals in total.
Table 3. Preparation of an Indian Shooter for the 2010 Commonwealth Games

<table>
<thead>
<tr>
<th>Goal: To be focused before the round (after the physical warm up):</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Visualisation of your shooting action</td>
</tr>
<tr>
<td>• Rehearse moving the gun to the target</td>
</tr>
<tr>
<td>• Mentally rehearse your shooting rhythm while walking to the range</td>
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<table>
<thead>
<tr>
<th>Goal: To be focused during the round</th>
</tr>
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<tbody>
<tr>
<td>• Maintain the same between-shot routine on each station</td>
</tr>
<tr>
<td>• For example, open the gun, eject the cartridges, take one deep breath, and mentally rehearse your rhythm. Do this routine meticulously, especially for the last five targets, after a mistake, and every time you are anxious or not completely focused</td>
</tr>
<tr>
<td>• Take a few deep breaths while walking from Station 5 to Station 1</td>
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<table>
<thead>
<tr>
<th>Goal: To train your focus during the round</th>
</tr>
</thead>
<tbody>
<tr>
<td>• At home or elsewhere, mentally rehearse your round. Start with just the first five stations and, after a few days of daily exercise, add another five stations</td>
</tr>
<tr>
<td>• In one month, you should be able to mentally rehearse the whole round</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal: To cope with the single-barrel final</th>
</tr>
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<tbody>
<tr>
<td>• Maintain the same shooting rhythm that you have with two shots</td>
</tr>
<tr>
<td>• If you do not feel ready, open the gun and restart your pre-shot routine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal: To succeed at the 2010 Commonwealth Games</th>
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</thead>
<tbody>
<tr>
<td>• Spend your time only with people who create positive feelings for you</td>
</tr>
<tr>
<td>• Stay in an environment that enables you to stay relaxed and comfortable</td>
</tr>
<tr>
<td>• Avoid people and situations that you find stressful</td>
</tr>
<tr>
<td>• Stay at the shooting range only for time necessary for coaching and/or competition, then leave</td>
</tr>
<tr>
<td>• Repeat your relaxation exercises twice each day, especially during the final two weeks prior to competition</td>
</tr>
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Credit: Connor Mc’ermottroe/flickr/CC-BY-NC-SA-2.0
Case Study #4:

Heena Sidhu (10 m air pistol World Cup Final 2013 Gold Medallist, world record holder)

Heena Sidhu has broken new ground for a female Indian pistol shooter by winning the gold medal at the 2013 ISSF World Cup Final in Munich, Germany and setting a world record score in the process. She only qualified for the event at the last minute because the three shooters ranked above her all withdrew for personal reasons; fate offered her an opportunity that she grasped with both hands. That win signalled the start of a run of form that saw Sidhu become the World #1 ranked shooter in her event, the 10 m air pistol (see http://en.wikipedia.org/wiki/10_metre_air_pistol), another first for an Indian shooter. Her rise to the top of the world rankings in early 2014 came on the back of victory in the Asian Championships and a silver medal in the first ISSF World Cup event of the season in Fort Benning, USA. Sidhu explained the delicate psychological subtleties of her event,

“In shooting, you have to concentrate on the micro movements; movements that people can’t even see and only the shooter can feel. Even a 1 mm movement on your part can land the shot in the 8th ring which really is a disaster for us. Because of these micro movements, people can’t relate to the sport, they don’t understand what is going on... they only see a shooter standing and taking a lot of time just to release that shot. Why is he taking that long, what is he trying to do, or what is going on in the shooter’s mind isn’t something that crosses the spectator’s mind” said Sidhu. “When you talk about micro movements, your focus is inwards - you are trying to control every little thing that is happening within your body. It is not outwards like it is in football where for example you have to focus on your team-mates or the opponents. We don’t have that in shooting. Shooting is all about me, myself, and my talent” (Agotra, 2014).
Sidhu is coached by the legendary Ukrainian, Anatolii Piddubnyi, former coach of the Soviet team that dominated pistol shooting in the 1980s. Like most coaches, Piddubnyi is a stickler for consistency of preparation and routine. In particular, he emphasises physical stability and muscle tone to produce a stable technique that will withstand the harshest tests of major international competitions.

“He is not one of those people who will tell you to shoot 10s and 9s. He is more bothered about how you shoot them and if you are able to repeat it again and again. You need to be consistent. How you pick up your pistol, how you come down, what is your body stability, have you fixed the muscle tone. He breaks everything down into little parts that we can monitor and he makes us work on every aspect” (Agotra, 2014).

Such attention to detail is a pre-requisite for success in pistol shooting and indeed in shooting sports generally. High quality, precise preparation has become a hallmark of the Indian system in the past decade, in no small measure due to the influence of overseas coaches and sport science specialists. Many of the international experts have been employed at considerable expense by the shooters themselves in their quest for glory, such is their commitment to excellence. This strategy has certainly paid off for Sidhu.

“Even under pressure when other people collapse... because he has trained my muscle tone so much my body doesn’t collapse. My heart may be pounding and the pressure may be building up but the muscles stay true. That is what he has taught me” (Agotra, 2014).
Sidhu’s approach to shooting exemplifies many of the principles espoused by sport psychologists. She proclaimed that

“My job is to become the best shooter that I can be, to reach my potential. If in that process I’ve become the World #1 then that’s good” (Deo, 2014).

In saying this, she expressed a clear task orientation (using self-improvement as the reference point for progress) rather than an ego orientation (focusing on victory over opponents; Roberts, Treasure, & Balague, 1998). This approach proved effective for her in securing a World Cup silver medal in Fort Benning, when her form started to waver in the final. She retained her composure by re-affirming the simplicity of the challenge via positive self-talk,

“Even if I just shoot my average it will be good enough for a medal. I told myself that and that’s what happened” (Deo, 2014).

Sidhu has adapted to the new rules of Olympic shooting, implemented in 2013, whereby finalists start on level terms rather than carrying their qualification score forward, much quicker than most of her competitors.

“(At first) I didn’t like the new rules because it was a big change overnight. You start the final round on zero points, and the whole game had changed” she acknowledged (Agotra, 2014).

Her Canadian sport psychologist, Pierre Beauchamp (see www.mindroomsp.com), encouraged her to view the change differently, “You can either love it or hate it and rest assured 80 percent of the people are going to hate it. So if you can love it and be the 20 percent then you have already eliminated 80 percent of the competition.”

Sidhu implemented his advice, “So you just hypnotize yourself to like it and I did. I sort of talked to myself. And it was true, 70-80 percent of the shooters who were shooting awesome scores under the old rules ... their scores have come down a little in the qualifying rounds and a lot in the finals after the new rules came into effect. So it worked for me” (Agotra, 2014).

The achievements of the new breed of Indian shooter has created its own pressure in the form of expectations of future success from the Indian public and from the shooters themselves.

Sidhu acknowledges that her meteoric rise from international hopeful to World #1 in a period of just five months is an exceptional achievement, but she is aware that a different type of challenge awaits.
“At this point, I feel that I am the biggest competition to myself. Because it is not easy to perform after winning so many medals and breaking the records and being the world number 1. I know I am going to be the favourite when I go to any competition. So it is not easy living up to everyone’s expectation and your expectations too. So I think this is another sort of different challenge that I am going to face from this point on. I am not looking at anybody, I am just concentrating on what I am doing. And so far that has been good enough” (Agotra, 2014).

With her words, Sidhu encapsulates two of the most important principles in sport psychology.

The first principle, often referred to as “controlling the controllables,” involves focusing efforts on making sure that the things within your own control are done well and ignoring all those things over which you have no influence.

The second principle refers to focusing on the process of what you are attempting rather than its outcome, in the knowledge that if the process is right the outcome will take care of itself.

Whether Sidhu will be able to follow her own advice remains to be seen. Having missed out on reaching the final shootout between the top eight qualifiers at either of the ISSF World Cup events during June 2014, it is clear that it will be no easy challenge.
Summary

As a source of national pride, shooting has become one of the most important sports in India. The Indian shooting team continues to thrive and the number of Indian shooters challenging for medals in international competition continues to grow. In this chapter, we have attempted to provide insights into the psychology of sports shooting and to describe the nature of the support provided for the Indian team.

Although India still has a long way to go before it becomes a powerhouse sporting nation (aside from cricket), shooting probably represents its best chance of securing future Olympic medals and establishing itself as one of the toughest nations to beat in international competition.

REFERENCES


VIDEOS

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277 Rajyavardhan Rathore equals world record www.youtube.com/watch?v=Pyy0T5JxKzA

277 Shooting prodigy Manav Aditya Rathore www.youtube.com/watch?v=dGwRag0fQdQ

279 Beijing Olympic Shooting Range, April 2008 http://vimeo.com/user/10756933/review/100967876/a122c96437

280 Bindra biography www.youtube.com/watch?v=84CIIt5D0oQ

282 Bindra gold www.olympic.org/videos/bindra-wins-india-s-first-individual-gold-medal

286 Know your stars: Heena Sidhu www.youtube.com/watch?v=TrWpCraNu4w


290 Sodhi wins World Cup Final 2011 www.youtube.com/watch?v=um7YinTC1yg

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266 Suma Shirur; courtesy of Indianshooting.com, from www.indianshooting.com/index.php?parent_name=&option=com_zoom&Itemid=200&page=view&catid=41&PageNo=1&Ekey=8&hit=1

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Short-track Speed Skating in Korea

Kim YoungHo and Yun YoungKil

In

Secrets of Asian Sport Psychology

Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

The Republic of Korea has excelled historically in the Olympic Winter Games, especially in speed skating events. Since the introduction of short-track speed skating as an Olympic sport in the Albertville Games of 1992 through to the Sochi Games of 2014, Korea has won 42 Olympic short-track medals, 12 more than China, its nearest rival. In this chapter we provide an analysis of the reasons for Korea’s impressive record of international success in short-track speed skating. In doing so, we highlight some of the key features of the training and competition environment for speed skating in Korea and present case studies that detail the experiences of many of Korea’s Olympic champions.

Training Environment

In common with other successful Asian nations, an important factor that underpins Korea’s strength in short-track speed skating is the extremely demanding training system. Athletes typically attend training three times a day from the early grades of elementary school through to becoming national team members. This level of commitment from an early age requires that parents become dedicated to the daily schedule of their child athletes, beginning with very early morning training sessions through to the final session late into the evening. The competitive atmosphere among Korea’s speed skating community does not allow much time for other activities, and the intense atmosphere created during training sessions by the coaches is very demanding. The shared experience of such a rigorous routine over the long-term has the positive effect of creating a close bond between the coaches and their athletes.
Role Models

Another factor that contributes to success is the close proximity of the young athletes with their heroes in the Korean national team. Athletes from elementary school to the professional ranks train together in the confined environment of short-track ice rinks. During training sessions, young athletes naturally get to rub shoulders with Olympic medallists and to experience first-hand the level of training required to become an Olympic athlete. By having close access to so many successful role models, the younger athletes become desensitised to any fear or apprehension they may hold about competing in the Olympics or striving for international success. With Olympic champions preparing together with younger athletes in the same venue, training sessions become a source of energy that assists the newer additions to the national squad to adjust psychologically to the tension that is often inherent in the Olympic Games and other international environments.

Collective Unconscious

Many nations are renowned for excellence in specific sports, such as Brazil for soccer, USA for basketball, and Jamaica for track sprinters. Just looking at the uniform of the powerhouse nation has the capacity to strike fear into opponents. By the same token those who wear a uniform associated with a proud record of international success typically feel a great sense of confidence and an obligation to continue the winning tradition.

The famous psychologist Carl Jung claimed that individual personalities derive from more than genetic characteristics and personal experiences. People also think and behave according to the collective unconscious; that part of the mind containing memories and impulses common to people more generally, of which individuals are not consciously aware. The collective unconscious may be shared by any given society, a smaller group of people, or even the whole of humankind, and is the product of ancestral experiences.
For speed skaters in the Republic of Korea, the collective unconscious is inherently positive. The history of Korean skating is a collective experience of success passed on to new skaters. Being without fear and feeling confident on the start line and during races makes winning easier. In addition to inheriting the collective unconscious of champion skaters, novice athletes also have the opportunity to model themselves closely on the behaviours and habits of the senior athletes in the team.

The experience of being part of a system that has already won many Olympic medals helps to demystify the process of winning and imprint expectations of international success in the minds of young athletes who are relatively new to short-track speed skating. This unconscious process can be powerful, allowing athletes to turn a contest against a renowned foreign skater into an event that is not overly daunting. The junior Korean skaters inherit a pedigree that makes international success accessible.

Hence, it is relatively easy for Korean short-track skaters to feel confident during international competitions. Being closely involved during training activities on a regular basis with other skaters who have a record of success at the highest level and experiencing their success vicariously can significantly enhance their own confidence. This confidence is especially strong if they believe that the Korean champions they see every day at training are just like them, effectively evoking the reaction, “If they can do it, I can do it.”
Learning to Win

As international successes by the Korean national team are accumulated, the national athletes who qualify to participate in major competitions such as the Olympic Games readily develop skills that help them to manage the competition preparation process. Korean speed skaters who participate in the Olympic Games for the first time have already competed multiple times against Olympic medallists during the elimination rounds in Korea. The tension experienced during selection for the national team typically matches or even exceeds that experienced during major international competitions, assisting the desensitisation process.

As Korean skaters often train together, the less experienced athletes get many opportunities to learn from their more experienced teammates. Moreover, because of the close interaction between domestic teams, there is fierce competition between the athletes and coaches from the various teams. This intense competition within Korean skating seems to create an environment that promotes innovative strategies and techniques that move the sport forward and, in the process, enhance Korea’s prospects of international success. For example, for the 1998 Nagano Olympic Winter Games in Japan, Korea’s Kim DongSung and Chun LeeKyung adopted an innovative “blade-push” technique (pushing the skate forward at the finish line), which was developed during domestic competition and helped them to become Olympic champions. In the women’s relay event at the 2002 Salt Lake Olympic Winter Games, the gold medal was secured using a technique that slightly bends the skate blade to the left to optimise centrifugal force when cornering.

The large number of athletes and coaches in Korea who compete to develop technical and strategic innovations engenders an open attitude towards adopting new techniques and competition strategies. Although it is not easy to adopt novel techniques and tactics in competition, the Korean speed skaters approach such challenges with confidence. The previous accomplishments at the Olympic Games have created a culture of challenging oneself to be innovative and to try new approaches.
Extrinsic Rewards

There is a well-developed reward system for successful Olympic athletes in the Republic of Korea. This system includes offering large financial bonuses and substantial lifetime pensions to Olympic medallists. The value of the bonus and the pension varies according to the colour of the medal. Bonuses for gold medals are USD$50,000 and life pensions can be up to USD$833 per month (see Han, Kim, & Hong, 2014). Coaches also receive substantial financial payments and life pensions based on the success of their athletes. Additional bonuses may also be provided by the federation, corporations, and the Korean Olympic Committee. Overall, the lure of substantial financial rewards provides a powerful motivational force for Korean speed skaters and their coaches.

An additional extrinsic reward, at least for the male skaters, relates to military service. All men in the Republic of Korea are obligated to complete two years of military service. If athletes win an Olympic medal, however, they only have to finish basic training and are exempted from the remaining statutory period of service.

Extrinsic rewards in the form of financial bonuses, pensions and exemption from completion of military service all contribute to the relentless work ethic of Korean short-track skaters. The proposed detrimental effect of extrinsic rewards on intrinsic motivation (Cerasoli & Ford, 2014) is occasionally apparent in the Korean system, whereby some athletes who have worked incredibly hard to win an Olympic medal appear to lose their motivation after having achieved their goal.
Lessons from Korean Medallists

CASE STUDY: CHO I EUNKYUNG

Achievements:
- 1 gold and 1 silver medal in 2002 Olympic Winter Games
- 1 gold and 1 silver medal in 2006 Olympic Winter Games
- World Champion in 2003 and 2004
- 2 gold and 2 silver medals in 2003 Asian Winter Games
- 5 gold medals in 2005 World University Games

Reflections on Olympic Success

After experiencing my first Olympics, I attempted various competition preparation strategies for other contests, which allowed me to find what suited me. I figured out the traits of opponents, and psychologically ignored the opponents who were worse than me, also excluding them as rivals when doing imagery training. Because of my confidence, I began to feel quite relaxed. Maybe because of this factor, my athletic performance improved during training, and because of the improved athletic performance, I started to be less tense. I think my coach and I became a lot closer. I used to feel quite distant. Because of the attention I got from overseas athletes, my confidence grew even more.

I remember I felt a lot of pressure when I faced a serious new challenge, or in other words, when I competed against athletes who had better performance results than me. After experiencing my first Olympic Games, however, I did not feel fear any longer, but instead felt confident and mentally strong. That is why I got better and how I eventually produced good results.

I continuously ordered myself in my mind, “It is nothing,” “I can do well,” “Let me take this opportunity that is given to me.” I had positive thoughts in my mind, and I relaxed my mind by listening to music alone rather than spending time with others. That is how I relieved my tension and how I spent time to prepare for competition.

I think it was the repetition of this process that made me feel confident after each race. And when I had to race against other athletes who had less athletic ability than me, I even felt arrogance in my mind believing that none of them could defeat me if I did well. But I think this sort of thinking can be dangerous, although it allowed me to do well in some aspects.
Benefits of Experience

Participation in the Olympic Games has the potential to generate significant tension in athletes. Choi recalled this kind of negative experience.

*I was barely able to see the coach and head coach, and their voices were drowned out by cheers, and I could only vaguely see them waving. Also because of the extreme tension, I was not able to control my own body.*

When athletes experience highly pressurised scenarios on a regular basis in the competitive arena, they learn to deal with nervousness and tension. Weber’s law states that the just-noticeable difference between two stimuli is proportional to the magnitude of the stimuli (see [http://en.wikipedia.org/wiki/Weber%20%20Fechner_law](http://en.wikipedia.org/wiki/Weber%20%20Fechner_law)). Therefore, it can be assumed that regular exposure to negative psychological experiences during training and competition reduces, and perhaps eventually eliminates, the probability of athletes feeling high tension during major competitions. Choi mentioned the reduction in negative psychological reactions that she experienced.

*As I got more experienced (in the Olympics), I felt comfortable at the start line, and it was even funny sometimes to see other athletes worried, and I even laughed when my head coach played jokes.*
The experience of participation in the Olympic Games seems to make it easier for most athletes to feel confident and strong. However, perhaps there is something more self-assured in athletes from an early age that differentiates between those who become Olympic champions and other athletes.

I remember the day of the world junior elimination rounds in 3rd grade of middle school. It was my birthday but because of the superstition that says you should not eat seaweed soup before a competition, I hesitated deciding whether to eat it or not. I decided to eat it and I won the competition. After that I no longer had any jinxes, and I began to think I can do whatever I decide to do from then onwards.

International accomplishments do not necessarily lead to ongoing success. Choi talked about the pain of failure due to over-confidence after participating in the Olympic Games.

I often had the tendency to ignore the domestic competitions. I guess it was because there was a huge difference in level and other athletes were afraid of me. After that, I did not aim to participate in domestic competitions, and I sometimes lost in domestic competitions because I was over-confident.

Success and failure provide different experiences for athletes but both may be helpful in improving athletic performance in the long-term. Given the world-class level of Korean domestic competitions, all up-and-coming skaters experience their share of defeats. Those who learn from those experiences and eventually make their way into the Korean national team have learned some valuable lessons along the way.

Sustained Effort

The skaters of the Republic of Korea set challenging goals for training and competition, and put sustained, intense effort into accomplishing their goals and overcoming difficulties in the process. Olympic champions Kang YunMi and Jin SunYoo highlighted the importance of effort in their growth as athletes.

I believe the athlete who succeeds in the end is not because of talent but because of effort. I think only those who were never satisfied with their athletic performance and who endlessly put effort into trying to reach the top in the Olympic Games got the medals in the end (Kang YunMi, 2006 Olympic gold medallist).

I thought to myself when I did badly in competition, “You did not do well in the competition so take a break,” but when I only had a little time left before a competition, I tried to control myself not by doing what I should not do, but rather by doing more exercise when others slept (Jin SunYoo, 2006 Olympic gold medallist).
Goal-setting

Goal-setting, intention of effort, and personal tenacity influence the degree of hard work skaters put into accomplishing goals. Olympic champion Ko GiHyun provided an example of her strategy for goal accomplishment.

I had to start my daily training at 5:30 and for that, I had to leave at 5:20 and run a few laps around the field. I went to the rink from 6 and I thought if I start my training earlier than others I can make more laps each day, I can run 2 laps in the morning and 4 in total per day. If I do it for 1 month, it will be 120 more laps. This is how I thought about it. It was not my purpose, but rather it was my way of living (Ko GiHyun, 2002 Olympic gold medallist).

Another Olympic Champion, Jeon DaHye, affirmed the benefits of goal-setting.

It was setting the goals for the Olympic Games and the World Championship rather than willingness that allowed me to become a top athlete, and as I accomplished my goal, I had more willingness and became more motivated (Jeon DaHye, 2006 Olympic gold medallist).
Relentless Training

Fitness is an important factor in athletic performance and short-track speed skating is no exception. Korean skaters have less than ideal body types compared to skaters from other countries. For instance, most Korean skaters are of modest stature with short legs and small feet. However, rather than allow this body build to frustrate them, Korean skaters constantly work to make up for their disadvantages and to strengthen their advantages.

*It seems if you have good fitness, you can use techniques comfortably. Though it does not apply to the one who only has good technique but has no power, it applies to the one who has good fitness because they can defeat their opponents despite lack of technique* (Kang YunMi, 2006 Olympic gold medallist)

Fitness provides the fundamental base for adopting techniques. However, athletic performance that is based only on fitness is subdued by other factors as one moves up the ranks of competition (Yun, 2010), Kang YunMi mentioned the change in the role of fitness during her sporting career:

*I won medals every time I participated in competitions because of my fitness. I relied on fitness in middle school and high school, where there were not many others who had good power and fitness in my grade. But as I became an adult, it was impossible to excel only with power and fitness* (Kang YunMi, 2006 Olympic gold medallist)
The testimony of Jeon DaHye reinforces the notion that the willingness to train when others don’t often lies at the heart of success.

When I started my training after coming back from injury 2.5 months ago, I never thought about anything else. Though everyone else took breaks for 30 minutes before lunch and another 30 minutes before dinner after finishing training, I did not like to waste that 30 minutes, and what I did was I directly went to eat meals right after training and when everyone else had dinner, I went for training… (Jeon DaHye, 2006 Olympic gold medallist)

Although physical condition is a major predictor of performance in many sport events, the advantage of physical condition rapidly weakens after high school, and its contribution to athletic performance becomes only a fraction of what it was during junior competition (Yun, 2010). Nevertheless, Korean skaters recognise that fitness, physical condition, basic skills, and advanced techniques are indispensable factors needed to excel in sport. Korean skaters can master basic skills and more advanced techniques at a relatively young age due to long hours of training. Yi HoSuk mentioned the role of repetitive training.

I remember I tried to practice a skill over 100 or even 1000 times to master it. I repeated it over and over. (Yi HoSuk, 2005-2006 ISU Seoul World Championship gold medallist).
Collective Intelligence

Successful Korean skaters have developed collective intelligence about competitive strategies, and they willingly share that knowledge with younger athletes. Short-track speed skaters from the Republic of Korea have tended to favour a strategy in which they come from behind to take the lead late in the race. As the collective intelligence has been constructed, skaters have tended to use effective strategies spontaneously in competitions without prior planning. This process is identical to the spontaneous usage tendency indicated by research on gifted persons (Benito, 2000).

Creative intelligence, analytical intelligence, and contextual intelligence (see Sternberg, 2000) are closely related to the environment experienced in training or competition. Contextual intelligence is related to competitive strategy, adapting to the environment, and coping with unexpected situations. Analytical intelligence involves the process of finding the optimal solution after briefly analyzing and judging the situation. Olympic champion Park HyeWon highlighted the necessity of analytical intelligence in competition.

*If you don't make quick decisions, there are many cases in which the competition is over without having done anything. Thus it is necessary to be able to make quick judgments. It is necessary to decide what kinds of moves to make by watching the opponents* (Park HyeWon, 2002 Olympic gold medallist).
The ability to analyze the situation and to find optimal creative solutions is paramount. Creativity is defined as the individual ability to generate new and appropriate ideas, methods, interpretations, or actions (Sternberg, 1988).

The athletes who consistently do well discover something in the situation that they can resolve. Guys like An HyunSoo watch competition videos a lot. He analyzes races by watching competition videos... So, the guys who do well develop their own unique methods (Jeon DaHye, 2006 Olympic gold medallist).

Talented athletes improve the quality of their athletic performances with their own methods, using their creativity to discover new techniques and strategies. Top athletes are always learning.

It seems that learning abilities differ even when the same things are taught. There are some guys who can quickly understand what is being taught and other guys who take a long time to understand what is being taught and make no changes. The guys who do well seem to understand well... Maybe they really do understand well... (Jeon DaHye, 2006 Olympic gold medallist).

I saw many of my teammates who were really good. I had a lot of things to learn from my sister-like teammates. As I observed them closely, I improved, and I won the gold medal in the Asian Games and I steadily got better... (Lee HoSuk, 2007 Asian Winter Games gold medallist).
Summary

The short-track speed skating team of the Republic of Korea performs consistently well on the international stage. The team typically includes a balance of experienced Olympic medallists and younger athletes who grow as competitors as they interact with their elite teammates.

The clear goal of winning gold medals in the Olympic Games is nurtured even during elementary school. The automation of technique through long hours of repeated high-intensity training, while at the same time learning to be flexible in the event of unexpected situations, creates a collective intelligence that maintains Korea as a powerhouse in short-track speed skating.

The coaches devote their time to developing various innovative strategies and tactics such as the “blade-push” technique that changed the colour of the medal won at the finish line in the Nagano Olympic Games. The athletes put in laborious efforts, some training more than three times a day, and pride themselves on believing they are the best in the world and confident that they can defeat anyone. The process of elimination rounds in the Korean selection trials is perhaps fiercer than at the Olympic Games, so they do not feel undue pressure in the Olympic environment. Some of the Korean short-track speed skaters are interested in extrinsic rewards such as pensions or the elimination of military service, while other skaters desire only to have their names recognized in short-track speed skating history. Collectively, these factors make it highly likely that Korea will remain at the forefront of short-track speed skating for the foreseeable future.
REFERENCES


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Table Tennis in Singapore: A Case Study of Success

Emily Ortega

in

Secrets of Asian Sport Psychology

Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

It was an epic moment in the history of table tennis, the day when underdogs Singapore toppled mighty China to win the women’s team crown at the 2010 World Championships. It was almost unfathomable. How could Singapore, a tiny nation of five million people, upset China, the giants of world table tennis with its population of 1.35 billion?

On the final match-winning point, Singapore’s Feng Tianwei looked up to the heavens and screamed with pure joy and exhilaration. Even now, that image of her celebrating the team’s victory can still make my hair stand on end. That very day, I was sitting in the spectator stands in Moscow with the rest of the support team, cheering and screaming the team on from the very first to the very last point. I was extremely privileged to play a support role, as the team’s sport psychologist, in an event that helped Singapore to create sporting history.

I remember standing near the warm-up venue after the women’s team final and hearing an official from the International Table Tennis Federation (ITTF) tell every single person he met, “Singapore beat China!” The reaction was always a gasp of disbelief. I stood there with a knowing smirk on my face. Indeed, Singapore had defeated China at its own game, but it was not good fortune that brought them the title. Singapore’s World Championship campaign was planned with detailed precision and executed with confidence, aided only by the sprinkle of luck that every team needs.

The secrets of Singapore’s success in table tennis are largely linked to its East meets West approach. To understand the success of the Singapore table tennis team, it is important to first understand the Singapore sports system and the support structures that have been put in place to engender excellence in the sport of table tennis.
Sport Singapore is the governing body for sports in Singapore, overseeing the operations of more than 60 National Sports Associations (NSAs). The Singapore Table Tennis Association (STTA) is one such NSA, which focuses its efforts on developing table tennis players for high performance, on youth development, and on promoting mass participation in the sport. The Singapore Sports Council supports its NSAs with funding as well as providing technical support, such as sports management, sports science, and sports medicine.

Established in 1931, the STTA has, in recent years, overseen much progress by Singapore in international competition. In 2000, Singapore had a taste of Olympic success when table tennis player Jin Junhong made it to the women’s singles semi-final for the first time, finishing a respectable fourth at the Sydney Olympic Games. Since then, table tennis has become one of the more important sports in Singapore. In 2004, team mate Li Jiawei repeated this feat by finishing fourth in the women’s singles event at the Athens Olympic Games. One Olympic cycle later, a breakthrough was achieved at the 2008 Beijing Olympic Games, when the women’s table tennis team won Singapore’s first silver medal. Li Jiawei again finished fourth in the singles event.

Success continued in 2010 when the Singapore team won the World Table Tennis Championship for the first time, creating one of the biggest upsets in the history of the sport by defeating China, which had won 16 of the previous 17 world titles. In the 2012 London Olympic Games, the Singapore team continued its wave of success by winning two Olympic medals for the first time ever, the women’s team bronze medal and an individual bronze medal in the singles event from team captain, Feng Tianwei. To date, three of the four Olympic medals won by Singapore have come from table tennis. The record of achievement continued at the 2013 Commonwealth Table Tennis Championship, with Team Singapore bringing home a haul of six gold, two silver, and two bronze medals, stamping its authority in the sport by winning a medal in every single event.
This build-up of success did not occur by chance. Significant financial backing totalling several million dollars per year from the Singaporean government and a range of corporate sponsors has enabled the STTA, under the influential leadership of its President, Dr. Lee Bee Wah, to establish Singapore as a genuine international contender in the sport of table tennis. The STTA has worked hard over the years to develop a strong squad of players, to establish a vibrant junior program to provide a pipeline of talent, and to put in place a comprehensive support structure to promote sporting excellence. One aspect of this support and development is a dedicated training facility in the Toa Payoh district of the country, where the national team players train and live, making table tennis the only sport in Singapore to have a fully-fledged residential training facility.

The national team train at Toa Payoh twice a day, usually six days a week. The facility also has a hostel to house the national athletes, offices for STTA staff, and a classroom for off-court sessions. The facility is located within a larger sporting hub, at the Toa Payoh Sports and Recreation Centre, allowing the table tennis players to utilise neighbouring facilities for their strength and conditioning and cross-training work, including a stadium with soccer field and running track, a well-equipped gym, and an Olympic-sized swimming pool.

The support and planning by the STTA has been integral to the wave of success achieved by the national team. On top of that, Singapore offers the world’s largest financial bonus for an Olympic gold medal, of one million Singapore dollars (Soh, 2012). This huge monetary incentive serves as a powerful motivational tool to entice local athletes to work extra hard to win at the world’s greatest sporting event.
Case Study of Singapore’s Success

With a good support structure in place, the success of the Singapore women’s table tennis team has been built upon a solid foundation and hence did not come as a surprise. There were four key elements to the success of the team: a comprehensive training program delivered by the best coaches, a strong social support network, a comprehensive sports science program, and meticulous preparation.

Secret to Success #1: Comprehensive Training and Coaching

The Singapore women’s table tennis team that created history in 2010 included Feng Tianwei, Wang Yuegu, Sun Beibei, Li Jiawei, and Yu Mengyu. All are China-born Singaporean citizens who have been training and playing in Singapore, on average, for over six years. Many sceptics in Singapore may argue that they are not locally-raised talents, but there is no denying that all five players have honed their skills and sharpened their competitive edge in Singapore. They are all products of the STTA’s comprehensive training and development program.

The women’s table tennis team has been coached by the dynamic duo of Zhou Shusen and Jin Junhong. Coach Zhou was the head coach of the women’s national team for four years from 2009, before stepping down in 2012 after the London Olympic Games, handing over the reins to his younger deputy, Coach Jin, who currently serves as the head coach for the women’s national team. Both were formerly successful international players with vast playing and coaching experience to share with their charges.

Coach Zhou, who was in his late 60s when he took over coaching the Singapore team, had previously coached the China national women’s team as well as the Zhejiang and Beijing women’s teams. It was clear that everyone involved in Singaporean table tennis revered Coach Zhou. Lee Bee Wah, President of the STTA, summed up this sentiment with the words, “Zhou acts like our players’ father. He is so experienced that we should follow all he says. He has shared a lot of experiences with the players” (“Meritorious Table Tennis Veteran”, 2013). Undoubtedly, Coach Zhou’s wealth of technical and tactical knowledge helped all the team members to significantly improve their skills and tactical play, and his amiable personality made it easy for players and support staff to engage in lively discussions with him.
Coach Jin was Singapore’s first Olympian in table tennis. She competed at the 1996 Atlanta Olympic Games and finished fourth at the 2000 Sydney Olympic Games. She has won numerous international accolades in table tennis. A trailblazer of women’s table tennis in Singapore, Coach Jin paved the way for her current squad of players, and they in turn respect and admire her as a big sister. This coaching duo complemented each other well, forming a formidable coaching partnership that addressed all the aspects required of an elite table tennis team.

From the perspective of sport psychology, effective interpersonal relationships are a key issue in elite sport, especially relationships between players and coaches, but also relationships with teammates and support staff (Jowett & Poczwardowski, 2007). I was in a position to observe at close quarters the interpersonal relationships between all those involved with the Singapore women’s table tennis team, both in the training environment and at competitions. Because the players, coaches, and support staff appeared to interact well with each other and nobody raised concerns to me about team harmony, this was not an aspect that I felt needed to be addressed further by explicit sport psychology techniques. Nonetheless, I would identify effective interpersonal relationships as an important psychological consideration in establishing a positive team environment, which was certainly central to the team’s success.

The team’s training regimen is extremely rigorous. For six days a week, the team devotes almost the entire day to improving skills, honing technical abilities, and building mental strength. The coaches take the time to understand each player’s strengths and weaknesses and design every training session to develop the individual needs of players. Sparring partners are brought in from around the world to help players improve the game. In table tennis, learning how to play against different opponents with varying playing styles is pivotal. The game is played at lightning speed and hence players need to be quick to read the pattern of the game and the tactics of the opponent, and then decide on the best way to overcome the player at the other end of the table. To ensure they can deal with this, the training program is geared towards making the players physically fit and mentally challenged to cope with a variety of situations that may occur in competition. In this way, training is designed to enhance players’ confidence by allowing them to gain experience in the techniques and tactics needed to compete against their most challenging international opponents in a non-threatening, home-based environment.

Along with the rigorous training program, the team has an even more demanding competition schedule. At least twice a month, the players travel overseas to participate in ITTF-sanctioned competitions, so that they can gain valuable points to improve their world rankings. With better rankings, the players tend to get better draws in competitions, and this in turn provides them with more opportunities for success. In addition, experience of playing against the best players in the world in the cauldron of high-level competition gives players increased confidence that they can compete and win against the world’s best anywhere and at any time. Probably the first step to beating the previously unbeatable Chinese women was giving Singapore’s players the belief that they could win.
With such a demanding training and competition schedule, rest and recovery is extremely important. The players are allocated an almost sacred period of time to take a nap during the day and, wherever possible, adequate rest time is provided during training and competition to allow the players to recover both physically and mentally. During international travel, all players in the team are monitored closely by the support staff to help them to adjust quickly to time zone changes. Massage is a very popular recovery modality with the Singapore team because it relaxes both mind and body, preparing the players for another day of training and competition.

Research has shown that anxiety is often an obstacle to peak performance (Hanton, Neil, & Mellalieu, 2011). To perform optimally in a sport like table tennis, which involves delicate and precise skills combined with explosive speed and power, the players need to be relaxed and calm yet alert and energetic. Anxiety and confidence are often considered to be two sides of the same coin (Hanton et al., 2011). Thus, the combination of opportunities to build confidence in training and competition against the world’s best table tennis players in the most stressful competition environments, along with physical therapy to help relax body and mind, has great potential to prepare players for peak performance at the biggest competitions, including the World Championships and the Olympic Games.
Secret to Success #2: Strong Social Support Networks

For many years, the STTA has functioned like a traditional Asian extended family. The STTA staff and players look after and care for each other just like a family would, providing strong social support for everyone, especially the players. This is particularly important because many of the players leave their friends and families in China at a young age to train in Singapore. Hence, this family-run approach helps to fill the void created by moving away from existing social networks, enabling the players to fully concentrate on training and competing.

Being an elite athlete requires tremendous discipline, hard work, and sacrifice, and all this cannot be done without support from loved ones. Table tennis players travel frequently to participate in ITTF Pro-Tour events, the World Cup and World Championships, as well as other major international competitions. This hectic schedule can be exceptionally challenging for the players as they make table tennis their number one priority in life. The STTA supports the players through these challenging times just as a family would and this helps the players achieve more balanced day-to-day living in what would otherwise be deemed to be unforgiving lifestyles.

Again, from the perspective of sport psychology, social support has been shown to be an important factor that influences sport-specific coping (Petrie, 1993), general well-being (Smith, Smoll, & Ptacek, 1990), and even sports performance (Freeman & Rees, 2009). I paid close attention to the organisational structure within which the Singapore women’s table tennis team operated. The family-style approach that was evident seemed to work well. The sense of well-being associated with players’ lifestyles and the activities that supported them during training and competition appeared to help the players to cope with the demands of elite sport in general and, more particularly, to cope with the pressure of competition at the highest level. I monitored stress and anxiety among the players as part of my role, judged that social support from the family-style environment in Singaporean table tennis had a very positive influence on the players, and concluded that the existing approach should be encouraged. Hence, I played my part in nurturing and promoting the strong social support that was given to the players without introducing explicit psychological techniques to enhance a process that was already working well.
Secret to Success #3: Comprehensive Sports Science Program

A comprehensive sports science program was developed specific to the needs of the athletes, encompassing sport psychology, nutrition, physiology, biomechanics, sport medicine, and strength and conditioning. The sports science program was integrated with the team’s periodisation plan, to ensure that the needs of the group as a whole were not compromised in catering to the needs of each individual athlete.

Over the years, a support team of sports scientists and sports medicine personnel has been built around the national team to promote rapport and trust among the support team and the athletes and coaches. The national team has a core group of sports trainers who take turns in providing support for the players to help prevent or manage injuries locally and on overseas trips. In Singapore, the national players have access to a sports medicine physician and physiotherapist. They also have the assistance of biomechanists to analyse their own performances and the performance of their opponents. Sport psychology has been another mainstay in the training programs for national table tennis players, together with sport nutrition and strength and conditioning. The sports scientists and sports medicine personnel also function as part of the team’s social support network, much like their extended families.

The sport psychology program has focused primarily on individual interventions and performance troubleshooting to try to maximise the potential of each individual player. Given that the team members were taught basic mental skills for peak performance in their earlier playing years, the psychological interventions during my involvement with the national team were able to be highly individualised, encompassing personal counselling, training support, competition support, and biofeedback training. To help gain the trust of the players, I travelled with the team often for competitions and training camps. I also regularly attended the national training centre in Toa Payoh to interact with the players and coaches. This approach, whereby the sport psychologist becomes an integral part of the team, continued when the table tennis squad had a different sport psychology practitioner attached to them in 2012.
During individual consultations, I worked with each player to fine-tune their mental game, identifying personal strengths and weaknesses, and clarifying gaps that each player could strive to fill, in order to become a more resilient competitor and to stay in control of their emotions. Biofeedback training was conducted using Heartmath emWave software. I taught players basic breathing techniques to achieve a state of coherence, where they were able to breathe at resonance frequency. This process involves taking slow deep breaths from the diaphragm such that the breathing rate is synchronised with the heart rate. Each player went through four sessions of biofeedback training, focused on improving their breathing techniques for recovery in-between points as well as before and after games.

The players’ support team of managers, sports scientists, and other specialists adopt a policy of making doubly sure to take care of all the needs of the team, allowing the players to focus purely on playing their very best. This team behind the team consistently works hard and in unison with the clear objective of doing everything possible to assist the team to perform at their very best.

It was within the scope of this comprehensive sports science program that the majority of the sport psychology work occurred. Because the support was individualised, the work conducted with each player was different. This required me to be widely versed in a range of psychological techniques to address the diverse issues that players raised. I also had to be willing to search the literature when players brought up issues with which I had no previous experience, or to talk to colleagues with expert knowledge of a specific topic. A key feature of the work I undertook was the extensive periods of observation of group interactions, during which time I recognised the positive nature of the interpersonal relations between players, coaches, and the support team, and the social support provided for the players by others in the Singapore table tennis family.
Secret to Success #4: Detailed Preparations

In preparation for the 2010 World Table Tennis Championships, the coaches left no stone unturned in the lead-up to the competition. The players were involved in a high-intensity training camp for a period of one month, with the specific purpose of preparing the team to peak at the competition. In addition to the traditional skills of table tennis and physical training, strength and conditioning sessions and weekly competition simulations were built into the training program.

The coaches ensured that each player had adequate training and sparring opportunities to prepare to compete against their opponents at the World Championships. This involved meticulous research on their potential opponents and on their own players through observation, tracking player progress, and video analysis. Every match played was recorded and tagged by the biomechanists, and then saved to a cloud computing database so that the players could review the videos no matter where they were in the world. Access to videos of their next opponent was also readily available on this database.

Once the team had arrived at the World Championships in Moscow, before each day of competition, all the players would gather in the coaches’ room for a meeting. The coaches provided every player with comprehensive information about their respective opponents, giving them detailed tactical tips for game play. Players were also given video-recorded matches played by their opponents, and would prepare for each game by thoroughly analysing their opponents, developing their own game plans and strategies, and mentally rehearsing their forthcoming matches.

Psychologically, the focus of the players was strictly one match at a time. At no stage during the World Championships, until the final of course, were they thinking about playing and beating China. The focus was always on the next game only and everyone encouraged one another to play well, generating a very positive environment. There was a strong element of teamwork as the players willingly shared information about opponents their teammates were going to face, giving each other tips on how to better compete against them. The prevailing ethos was that it was not each woman for herself, but the whole of the Singapore women’s team versus the next opponent.
Even as the team progressed through the rounds, there were no celebrations in the Singapore camp. Everyone stayed focused on the objective of winning every match as a team. After each round, it was always straight back to the drawing board to prepare for the next round of matches. This encompassed being disciplined in their sleeping, eating, and recovery habits; taking full responsibility for their own physical and psychological well-being. Wherever feasible, the support team took the players out for simple Chinese dinners where they could eat familiar comfort food even though they were in Moscow. The mental approach to the competition was exactly the same as it had been at the training camp, to keep everyone focused on one match at a time. I monitored each player informally and worked closely with the sports trainer to get feedback about each player on a daily basis, trying to ensure that every individual was in an optimal mental state. When discrepancies emerged, I quickly addressed them with the player(s) involved via individual sessions.

According to Singapore Team Manager, Eddy Tay, a different mentality pervaded the team compared to previous championships, resulting in the players having a strong belief that they could beat China this time.

In his words, “A lot of times, when we met them in the finals we lost 3-0, 3-1, but we kept telling the Singapore players that one day we would beat them .... So, during the training, we kept drilling this into them - to have this mindset that we’re able to beat them ... Tianwei was trailing in the first match but she was fighting for every point ... when she won the match, it really gave a lot of confidence to Yuegu going into the second match. She had never beaten that China girl before ... but suddenly they felt that the past doesn’t count, that although we have lost so many, many matches, it’s like a fresh start” (Yin, 2010).

After the historic win in the final of the 2010 World Championships, the team had to rush off to the airport to fly home that very same night. The trophy was happily passed around the bus and the atmosphere on the bus was truly euphoric, everyone wearing silly grins on their faces, filled with laughter, and the air lingered with smells of the favourite snacks being devoured as reward for all their hard work and effort.
Summary

Prior to the 2010 World Championships, Singapore had lost to China on numerous occasions. By learning from past failures, the players, coaches, support team, and management never gave up hope on the dream of one day beating China. The combination of factors discussed in this chapter, of which the four “secrets” were paramount, helped every player to feel confident that the team could beat the Chinese even in the cauldron of a World Championship team final. Every player and everyone working with the team believed it was possible and this shared belief became a reality with hard work and perseverance to defy the odds and create a moment of sporting history. Since 2010, everyone associated with the Singapore women’s table tennis team has continued to apply the same approach, which has helped to keep Singapore at the forefront of the women’s game internationally.

The victorious Singapore women’s team returned home from the 2010 World Table Tennis Championships as national heroes. Their triumph in Moscow and their successful 2008 and 2012 Olympic campaigns produced an upsurge in the popularity of, and support for, table tennis in Singapore. Hosting the 2010 Youth Olympics Games gave Singaporean sport another welcome boost, with Isabelle Li Siyun securing a table tennis silver medal for Singapore in the women’s singles event. This string of successes for the Singaporean women’s table tennis team has not only written a memorable chapter in the country’s sporting history but also augurs particularly well for the future of the sport in Singapore. Even the normally modest Zhou Shusen reflected back on his 2009-2012 period of tenure as head coach of the Singapore women’s table tennis team as “the most glorious four years throughout my whole sport’s career both as a player and a coach” (“Meritorious Table Tennis Veteran”, 2013).
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Taekwondo in Korea
Han MyungWoo

In
Secrets of Asian Sport Psychology
Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

Taekwondo is now a global sport practiced in more than 200 nations, and can rightfully claim to have achieved worldwide impact. Taekwondo is a traditional Korean martial art that teaches much more than physical fighting skills. It is a well-developed discipline dating back several thousand years, combining diverse physical and spiritual elements to unify mind and body, originally used by ancient warriors. More recently, taekwondo has been recognized as a good way to enhance quality of life for the general population.

The unique characteristics of taekwondo have made it a popular sport with an international reputation; it was adopted as an official medal sport at the Summer Olympic Games from 2000 onwards. Korea is the most successful nation in Olympic taekwondo history, having won 10 gold, two silver, and two bronze medals. In the biennial World Taekwondo Championships, up to and including the 2013 event, Korea has won 217 medals (158 gold, 30 silver, 29 bronze), more than twice as many as the next most successful nation.

This chapter will first provide a general overview of taekwondo, including an explanation of its meaning and offer some reasons for its global popularity. Next, historical developments of taekwondo will be described briefly. Then the various physical and psychological demands of taekwondo will be elaborated in greater detail. Finally, case studies from Korean Olympic medallists will be provided to promote understanding of the psychological perspectives involved in the performance of elite taekwondo athletes.
What is Taekwondo?

Taekwondo is one word in Korean, consisting of three parts, each representing a unique meaning. Tae refers to “foot,” “leg,” or “to step on.” Kwon indicates “fist,” or “fight.” Do means the “way,” or “discipline.” Taekwondo therefore literally means “the right way of using feet and fists,” but it has inherent connotations of controlling aggression in others and keeping the peace because taekwondo also means “to put fists under control” or “to step on fists.” Hence, a more complete meaning of taekwondo is “the right way of using all parts of the body to stop fights and to help build a better and more peaceful world.”

Why is Taekwondo so Popular?

It is intriguing that people all over the world have embraced the sport of taekwondo, a Korean martial art. There are various martial art styles in other Asian countries, such as judo (Japan), wushu (China), and kalari (India), but taekwondo differs from these other martial arts in many aspects, some of which are worthy of mention. Taekwondo is dynamic physically with active movements that utilise the entire body. People are often dazzled by the attacking techniques, especially those involving high, fast foot movements, such as spin kicks.

Taekwondo emphasises the principle of alignment between mind and movement. Trainees are encouraged to make their minds peaceful and to synchronise their bodies to their minds. Taekwondo promotes a unity between body, mind, and life, by teaching trainees to bring harmony to their lives and a devotion to the society to which they belong. Trainees are taught to respect themselves and others while practicing taekwondo, on the basis that mutual respect is the foundation for building peaceful societies. In short, taekwondo helps to integrate physical, psychological, and moral principles, which appear to be at the heart of its global appeal.
A Brief History of Taekwondo

Taekwondo has evolved over thousands of years through four different historical periods; the ancient times, middle ages, modern ages, and the present day.

Ancient Times

It is well-established that martial arts existed in ancient times for the dual purposes of self-defence and the struggle for survival. The three kingdoms of Koguryo (37 BC - 668 AD), Paekche (18 BC - 660 AD), and Silla (57 BC - 935 AD) were bitter rivals who fought each other regularly in attempts to gain hegemony over the Korean peninsula. Martial arts were an integral part of the training of military leaders and warriors engaged in these wars, and contests were held during festive days and military rituals. The origin of taekwondo can be traced back to two different styles of ancient martial arts, known as subak and taekkyon.

Middle Ages

After unifying the Korean peninsula, the Koryo dynasty (918 - 1392 AD) built strong national defence capabilities to protect against invasion from surrounding countries. Taekkyon was a compulsory element in the selection of military cadets, and soldiers who mastered taekkyon techniques were often promoted to higher ranks. Martial arts were used to prepare soldiers for hand-to-hand fighting situations but, with the advent of gunpowder and related weapons during the latter stages of the Koryo dynasty, support for martial arts waned.
Modern Ages

The Chosun dynasty (1392 - 1910), being founded on the ideology of Confucianism, placed more importance on literary arts than martial arts. Nevertheless, Taekkyon was still popular and contests were held to select soldiers and for royal entertainment. Foreign invasion during this period brought awareness of the need to revive Korean’s military training, and in 1790, the MuyeDoboTongji (translated as Comprehensive Illustrated Manual of Martial Arts) was published, a version of which is still in print today (Park & Yi, 2009). The fourth volume of the book entitled Hand-fighting Techniques included illustration of 38 motions, which are similar to those of modern taekwondo movements.

During the period of Japanese colonial rule over Korea from 1910 - 1945, taekwondo was officially prohibited in the country, although its methods and philosophy were secretly handed down by the masters of the art until Korea was liberated after World War II.

Present Day

After liberation, the Korean people began recovering their cultural identity and self-reliance, with traditional activities resuming their popularity. Martial arts experts began opening taekwondo gymnasia all over the country and taekkyon master Song DukKi, presented a demonstration before Dr. Syngman Rhee, the first President of the Republic of Korea, on the occasion of his birthday. Subsequently, about 2,000 taekwondo masters travelled to more than 100 countries to share their knowledge of the martial art. Modern day taekwondo has eleven commandments that guide participants (see Table 1).

| Loyalty to your country | Respect your parents |
| Faithfulness to your spouse | Respect your friends |
| Respect your brothers and sisters | Respect your elders |
| Respect your teachers | Never take life unjustly |
| Indomitable spirit | Loyalty to your school |
| Finish what you begin |

Table 1. Eleven Commandments of Modern Taekwondo
The Kukkiwon (World Taekwondo Headquarters) was established in the country’s capital, Seoul in 1972 to be used as the site for various taekwondo competitions following the nomination of taekwondo as a national martial art in 1971. In 1973 the World Taekwondo Federation (WTF) was established and the biennial World Taekwondo Championships were organized. The WTF became an IOC-recognized sports federation in 1980. Taekwondo was admitted to the Asian Games as an official event in 1984, was an Olympic Games demonstration sport in Seoul in 1988 and Barcelona in 1992, and became a medal sport for the first time at the Sydney 2000 Games. The 2012 London Olympics included 128 taekwondo athletes, 16 in each of eight weight classes (four for men and four for women). Taekwondo has been confirmed for inclusion in the 2016 Olympic Games in Rio de Janeiro.

Elite Taekwondo in Korea

The Korean national team is the most successful in the history of Olympic taekwondo, although given that the sport originated in Korea this is unsurprising. However, the tag “birthplace of the sport” does not adequately explain these accomplishments. To gain a full understanding of the reasons underpinning Korea’s success in taekwondo, it is necessary to look a little deeper. It is often said that to be selected as a Korean national team member for taekwondo is almost as difficult as winning the World Championships or Olympic Games, such is the depth of talent in the country. Therefore, gaining selection to the national team signifies to athletes that they have made a significant step towards becoming the best in the world in their sport.

Being selected to the Korean national taekwondo team brings with it psychological changes for the athletes involved, typically in the form of enhanced self-esteem and a great sense of pride at becoming a national delegate in the country where taekwondo originated, which leads to increased self-confidence in international competitions. At the same time, selection to the Korean national team almost automatically provides the athlete with a significant new challenge and additional burden of expectation of becoming the best in the world.
Complete Dedication to Taekwondo

Korean athletes who have won medals in the Olympic Games or World Championships have frequently reported that attempting to become the best taekwondo player in the world acted as a powerful motivator for them, enhancing the spirit of being “all-in.” It is expected that Korean national team delegates will make sacrifices and devote their lives only to taekwondo for lengthy periods of time, in order to achieve the goal of winning medals in major international championships. As they only get a chance to win a medal once every two or four years, many have had to commit to eight years of total dedication to taekwondo to get that chance in the Olympic Games. This complete dedication to being the best in the world compels an athlete to make every possible effort to accomplish their goal. Generally speaking, the more committed the athlete is to taekwondo the more patience and persistence the athlete shows, which is considered to be another embodiment of the spirit of being “all-in”.

Government-driven System and Relentless Training

After the selection process run by the Taekwondo Association is concluded, the Korea Olympic Committee (KOC) oversees the subsequent process of preparing athletes. Working with the Taekwondo Association, the government provides intensive training camps for the national team members. In addition, the KOC governs and supports all of the administrative concerns for the athletes and coaches on the national team. The athletes and coaches lodge together with delegates from other sports in the National Training Center in Taenung, located in the eastern part of Seoul. The training is rigorous and very demanding, usually involving three sessions per day. Many athletes begin practice at 04:30 or 05:00 and almost all athletes practice late into the evening as well. All Olympic medallists have reported that they had practiced individually until late at night to overcome their weaknesses.

The Korea Institute of Sport Sciences (KISS; http://www.sports.re.kr/eng/), a government-affiliated organization, was established in 1989 for the purpose of helping national team athletes and coaches. KISS includes a “field application system” whereby a team of researchers and support staff are assigned to particular sports. The KISS support team for taekwondo provides information for the national team members in many ways. Through their regular meetings, KISS personnel and Korean national team coaches discuss the strengths and weaknesses of the team with the aim of enhancing performance. For example, a taekwondo-specific psychological skills training program has been developed by the support team and delivered to national team members. The skills taught include concentration, motivation, imagery, confidence, anxiety regulation, goal-setting, and relaxation. Additionally, personal counselling is offered to athletes as required. Also, KISS researchers have implemented taekwondo-specific equipment that facilitates accurate and objective assessment of the speed and power of different type of taekwondo kicks.
Extrinsic Rewards

The Korean Government offers two kinds of extrinsic rewards for the national delegates, including athletes and coaches. One is in the form of monetary rewards, including permanent pensions, and the other is exemption from military service for male athletes. If an athlete wins a medal at an international competition such as the World Championships, Asian Games, or Olympic Games, a point score is awarded to that athlete according to the perceived value of medals in each competition. The point score for the athlete continues to accumulate for as long as the athlete continues to win medals in international competitions. Once an athlete reaches a certain point score set by the government, then the athlete qualifies for a life pension paid by the government. The same points system applies to national coaches as well. In addition, the sport association, the company, or the team to which the athlete belongs also provides the athlete with a financial bonus (see Han, Kim, & Hong, 2014).

Although North and South Korea used to be one nation, they were divided into separate countries after the Korean War (1950 - 1953). The Republic of Korea (South Korea) is a democratic country, and the Democratic People’s Republic of Korea (North Korea) is a communist country. They are in a quasi-state of war, remain heavily-fortified, and often confront each other. As a result of this situation, South Korea requires all Korean men to complete a mandatory two years of military service (the mandatory period is seven years in North Korea). However, if a male athlete wins a medal at the Olympic Games, he is exempted from military service apart from the basic training. Therefore Korean male athletes have an additional motivation to win medals, especially at the Olympic Games. According to the Korean National Training Center records, more than 1,100 national athletes were granted this privilege up to the 2012 London Olympics. Ironically, this incentive can have a negative effect on the intrinsic motivation of athletes, and there are many examples of taekwondo players who made great efforts to win Olympic medals, but subsequently lost interest in the sport afterwards.
Prevalence of Taekwondo in Korean Society

Involvement in taekwondo is extremely widespread in Korea. Most children are raised under the influence of taekwondo as part of their general education. Almost all Korean men participate in taekwondo from childhood to their twenties, including during their military service period. In the military, all soldiers are expected to reach to the Cho-Dan (first grade of black belt) for the purpose of national defence. There are a huge number of taekwondo gymnasia all over the country with trainees of both genders and across the age span. The rate of female participation in taekwondo has increased significantly in recent years. In addition, taekwondo has evolved from an elite sport to a sport for all, awakening the physical, psychological, and moral influences mentioned earlier. Taekwondo has penetrated deep into the Korean psyche, not only as a beloved elite sport in international games and a source of much national pride, but also as a friendly sport in the everyday lives of Korean people.

Access to Coaching

In Korea, young people who show promise in taekwondo can readily gain access to be taught by excellent coaches. Their accumulated experiences and know-how are willingly handed down to the younger generation of taekwondo players. Thus, at all ages, it is not difficult to get technical or tactical advice from experienced coaches to help overcome athletes’ weaknesses. These young promising athletes also have many chances to see and meet elite athletes during their training, which provides the young players with their own role models of success, creating a shared vision of how to become the best in the world, and planting a seed that may grow into the spirit of being “all-in”.

view video: Taekwondo Korean kids

Credit: Jeon Han/flickr/CC-BY-SA 2.0
Credit: Jeon Han/flickr/CC-BY-SA 2.0
Accumulation of Research in Taekwondo

Considerable research has been conducted in Korea, which has investigated various scientific aspects of taekwondo. Populations that have been studied have ranged from elite athletes to children and the elderly. The topics of investigation have included taekwondo-specific questionnaire development (e.g., Lim, 2005; Lim & Cho, 2007), physiological effects (e.g., Byeon, Kwon, & Park, 2008; Kim, Stebbins, Chai, & Song, 2011), nutritional considerations (e.g., Lee, Kim, Kim, Kwon, & Kim, 2002; Shin, Kim, Park, & Park, 2010); biomechanical analysis (e.g., Ha, Choi, & Kim, 2008; Kim, Kim, & Im, 2011; Kim, Kwon, Kwon, & Yenuga, 2010; Wasik, 2011), psychological variables (e.g., Kim, Park, & Chung, 2012; Kukkiwon, 2011; Lim, 2009) and issues from an historical point of view (e.g., Kim, 2006; Kukkiwon, 2006).

The diverse findings about taekwondo that have been produced by researchers in Korea and elsewhere have provided coaches with insightful information to inform technical and tactical innovations and to assist them to devise new training ideas. For example, a study by Kwok (2012), who compared the strategies of taekwondo medallists and non-medallists at the 2010 Asian Games, showed that although roundhouse kicks were favoured by most competitors, medallists implemented push kicks, back side kicks, and reverse kicks significantly more frequently than non-medallists. The WTF and Kukkiwon have recently made efforts to collate important knowledge from the accumulated research and to deliver it to coaches by publishing it in a way that makes it easily accessible.
Lessons from Korean Olympic Champions

Given that Korean taekwondo players have won so many medals in international competition, there is great potential to learn more about the psychology of taekwondo from what they have to say. The following quotes, which are gathered together into themes, were taken from press interviews with several Korean Olympic champions.

The first theme refers to the spirit of being “all-in”, which means setting very challenging goals, making huge personal sacrifices, enduring endless repetitive practice, and showing indomitable spirit in competition.

- I have strived to concentrate on my goal, to be the best in the world by obtaining the gold medal in the Olympic Games. In order to accomplish my goal, I trained and trained and trained from dawn to late at night. Nothing can be gotten without personal effort (Jung JaeEun, female, 57kg gold medallist at the 2000 Sydney Olympics).

- I have given blood and tears in my Olympic Games endeavour. I don’t think anyone in the world sweated more than I did for four years ... and I think my efforts were rewarded (Lee SunHee, female, 67kg gold medallist at the 2000 Sydney Olympics).

- I have devoted and placed my passion, effort, and everything into taekwondo. It took me eight years to stand at the top of the Olympic victory stand. Looking back on those days, I am overwhelmed with emotion (Moon DaeSung, male, 80kg, gold medallist at the 2004 Athens Olympics).
The development of appropriate competition strategies includes analysing the strengths and weaknesses of opponents and oneself to prepare fully for future competitions. The planned competition strategies are rehearsed and reinforced via extensive physical and mental practice.

- I have especially focused my efforts on making up for my weak points. Emphases were on 1) doing weight training for the development of physical fitness, 2) analysing possible opponents’ strengths and weaknesses, and 3) developing counter attack skills against possible opponents’ patterns (Jung JaeEun, female, 57kg gold medallist at the 2000 Sydney Olympics).

- For this Olympic Games I have focused on strengthening my strong point (right spin-kick). I practiced over 800 times of Balchagi (kicking) a day. I thought that this kind of repetitive practice of basic skills would decide the destination of the gold medal. And this thought was proven to be true (Jang JiWon, female, 57kg, gold medallist at the 2004 Athens Olympics).

- I thought having the inside position would be the key to winning the final match, I tried to do so. And it worked perfectly (Kim KyungHun, male, 80kg, gold medallist at the 2000 Sydney Olympics).

- I analyzed him (my opponent) in various ways and prepared well enough to win. I coolly followed the strategies I had planned. I waited for his attack and gave counter attacks in the inside position. It worked perfectly to get the score. That was how I won against him (Son TaeJin, male, 68kg gold medallist at the 2008 Beijing Olympics).
Many athletes expressed that they felt a pressing need to win a medal. Sometimes this reflected the burden of expectation from the Korean media and public, and at other times represented their sense of obligation to the coach, teammates, or others close to them. Often, after winning a medal, the athletes emphasized the importance of social support and explained the important roles that other people had played in their success as athletes.

- I had to win desperately because the senior in my team who had been selected as a delegate had given up his position to me due to his injuries. Because the senior had given me not only technical advice, but also tremendous social support, I wanted to repay what I owed to him (Kim KyungHun, male, 80kg, gold medallist at the 2000 Sydney Olympics).

- I really want to express my deep gratitude to those who supported me in many ways. Especially, I thank my parents who have brought up and cared for me so far. Also, I really want to thank the coaches who have helped me overcome a 4-year slump. Without their dedication and support, I could not have achieved my dream. I really want to repay their kindness and favor out of gratitude (Jang JiWon, female, 57kg, gold medallist at the 2004 Athens Olympics).

- I was in a deep slump and in trouble after I had failed to be the national delegate after the final selection process for the 2000 Sydney Olympic Games. For a fairly long time I couldn’t concentrate on taekwondo. My coaches and important others helped me a lot to overcome those difficulties. Thanks to their excellent advice and help, I re-challenged to become the national delegate (Moon DaeSung, male, 80kg, gold medallist at the 2004 Athens Olympics).

- I don’t think that I got this gold medal for myself alone. Coaches not only have sacrificed their lives, but also prepared for this Olympics with me. I owe them this glory. I wanted to pay them back by winning this competition, to show what they had taught me. I think I made it (Son TaeJin, male, 68kg, gold medallist at the 2008 Beijing Olympics).
Medallists frequently mentioned the fighting spirit they brought with them into competition. Every player in taekwondo is exposed to critical moments of injuries and pain during competition because of the power of the kicks and punches they exchange. As a result, withdrawal from a competition due to injuries is not uncommon. Nevertheless, the Korean medallists who were injured during their competitions refused to give up. Instead, they continued to show their fighting spirit.

- Although I was injured during the match, I risked additional injuries for the victory and overcame this difficult situation. I thought I could win against her because I might have practiced the basic skills more faithfully than she did (Hwang KyungSeon, female, 67kg, gold medallist at the 2008 and 2012 Olympic Games).

- When I was injured during the match I pledged to myself “to bear the pain with clenched teeth and to focus on the game not on the pain” (Moon DaeSung, male, 80kg, gold medallist at the 2004 Athens Olympics).

Every medallist had, by virtue of becoming an Olympic champion, clearly demonstrated the ability to overcome psychological pressure, control emotions, maintain focus on the things that were important and ignore the potential distractions. Most importantly, during contests, if things were not going their way they were able to refocus on what they had to do right now.

- Because I lost two points in the first round, I was perplexed and lost my temper. At that time, my coach advised me not to be so excited and to calm down. And he told me, “Let’s refocus and do one thing at a time” right before the second round began and it was very effective. After calming myself down, everything was better than before. As a result I won the match. Because the athlete in the final was a new face, I managed the game carefully but I was not overly tense or excited (Jang JiWon, female, 57kg, gold medallist at the 2004 Athens Olympics).

- Korea has obtained three gold medals in this weight category in three Olympics since taekwondo had been adopted in the Olympic Games. Therefore, every Korean thought that I would take a gold medal. That was why I was under big pressure to win. Due to this psychological pressure, I lost two points to Nicholaidis (Greece) and was behind him psychologically as well. At the start of the second round, I emptied my mind and promised to myself “to forget about the score or the result, but to attack for a big point using my kick techniques.” Using this strategy, I could focus again and find my chances. I fought back to tie the score (4-4) and thought that I could find another main chance. Eventually, I got a golden opportunity and delivered my kick 18 seconds before the match was over (Cha DongMin, male 80kg, gold medallist at the 2008 Beijing Olympics).
Many of the Olympic medallists commented on how they strived to maintain a positive belief system no matter what the circumstances. This even extended to interpreting their dreams in a positive way, especially when the dreams could be interpreted in negative ways as well. They also used this positive belief system as a way of reorganising their tactics to win.

- Many times before important competitions I dreamed about winning. In my dreams, I usually win first prize and it turned out to be true in most cases. I competed with the feeling that I was not alone because I had the Korean people who were cheering with all their might for me. I thank the Korean people. (Lim SuJeong, female, 57kg, gold medallist at the 2008 Beijing Olympics).

- In fact, I had a hard time in the final match. That is, I was ahead (2-0) against Lopez (USA), my main rival in important competitions in recent days. However, I was under severe pressure to win this bout, which resulted in extremely high tension and competitive anxiety. I lost my focus and Lopez got two points in a row. Thinking of what she (Lim) said in my dream, I refocused again on what I had to do in the match. An automatic and momentary kick using my right leg hit his upper body and got one point two seconds before the bout was over. This was the deciding gold medal kick. It was so dramatic that it still hasn’t hit me yet. (Son TaeJin, male, 68kg, gold medallist at the 2008 Beijing Olympics).
Summary

Taekwondo is Korea’s national sport loved not only by Koreans but also by large numbers of people around the world. Taekwondo has global popularity because of the technical expertise and the unique unification of body and mind. Since 2000 when taekwondo was adopted as an Olympic sport, Korean athletes have earned 10 gold, two silver, and two bronze medals. The highlight was four gold medals (two weight classes each for males and females) in the 2008 Beijing Olympic Games. This success in taekwondo is in part related to the fact that Korea is the birthplace of taekwondo, where it has been practiced for thousands of years. Additional contributors to that success are the players’ complete dedication, a government-initiated rigorous training system, extrinsic rewards, a collaborative supportive environment, excellent coaches, and accumulated research.

The quotes from the Korean Olympic taekwondo champions suggest that these athletes show many positive psychological characteristics, including the capacity to endure endless hard training, persistent efforts motivated by an “all-in” spirit, development of proper competition plans, a keen sense of obligation, a feeling of gratitude to those who help them, a fighting spirit in the face of injury and adversity, the ability to overcome psychological pressure, control emotions and remain focused, and the maintenance of a positive belief system.

Although Korea has historically dominated Olympic taekwondo it is uncertain whether this can be maintained given that numerous countries in the world have been copying Korean techniques and training systems. Furthermore, many countries have been scrambling to invite excellent Korean coaches to train their athletes. The technical gap between Korea and other countries has been narrowed, which is why the Korean taekwondo coaches feel the pressure to produce more excellent results at the 2016 Olympic Games in Rio de Janeiro. Some of the coaches even paint a gloomy picture of the possibility of no medals. The improvement of taekwondo knowledge and skills in other countries will challenge the ability of the Korean taekwondo team to maintain their history of superiority. That dominance is already in question with Korea winning only one gold medal in taekwondo at the 2012 Olympic Games after having produced four Olympic champions in 2008.
REFERENCES


Han, MyungWoo PhD served as a member of the Managing Council of the International Society of Sport Psychology (ISSP) and Secretary-General of the Asian-South Pacific Association of Sport Psychology (ASPSAP; 1997-2001). He was the first sport psychology consultant appointed to the Korean National Archery Teams (1996-1998). MyungWoo received his PhD in 1992 from Arizona State University and his major research areas are performance enhancement, and quality of life in sport, education and work, across the lifespan. He is frequently invited to speak about his research to the Korean media. He reached second grade of black belt in taekwondo and enjoys playing badminton and table tennis in his free time.
Track Cycling in Australia

Georgia Ridler

In

Secrets of Asian Sport Psychology

Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

Track cycling is the flagship of Australian elite cycling. Its heritage is long and successful, with a record of achievement at the highest level that is second to none in Australian sport. The Australian Track High Performance Program maintains two distinct disciplines, endurance and sprint. This chapter focuses on my work with sprint cycling. Track sprint cycling involves individual and team events raced on indoor or outdoor velodromes. Track bikes have fixed gears and no brakes. In sprint events, athletes generally use large gears that take enormous power to get going. With fixed gears, cyclists are forced to continue to pedal, even when slowing down. Speeds of 40-60 km/hr are common in endurance track cycling events, while speeds of up to 80 km/hr are common in sprint track cycling events.

Sprint cycling includes pure sprint events such as the individual and team sprints; long sprints such as the 500 m and 1000 m time trials and the Keirin. Training varies according to the type and number of events being raced. Sprint track cyclists generally focus on short, high quality repetitions with long recovery periods, as well as strength training to build lean body mass. For the longer sprint events, athletes also include some extended sessions and endurance rides. Training is focused and explosive, as are the personalities of some of the riders.

Australian sprinters have been successful in competitions at the highest level for decades, winning many medals at World Championships, Olympic Games, and Commonwealth Games. Some of the most memorable champions include Ryan Bayley (dual Olympic Champion), Shane Kelly (4 times World Champion) and Anna Meares (dual Olympic Champion). The formation of the Australian Institute of Sport (AIS) track cycling program with a base in Adelaide has enabled athletes and coaches to produce outstanding results at the Olympic Games (14 gold, 18 silver, and 17 bronze medals), World Track Championships (4 gold, 5 silver, 7 bronze), and Commonwealth Games (89 gold, 58 silver, 39 bronze). The track sprint program is managed by a head sprint coach who conducts the day-to-day planning, coaching, and competition preparation for the sprint team and is supported by a team of sport scientists, physical therapists, and sports medicine experts, including a sport psychologist. This chapter chronicles the highlights, challenges and some of the lessons learned during my work with Australian Cycling from 2004 to 2006.

In January, 2004 I was invited to work with the Australian Track Sprint Cycling team at the AIS training centre in Adelaide, South Australia. The head coach at the time was looking for some support to deal with the varied personalities in the team and to better understand the team dynamics. The squad ranged from 18 year old women through to 30 year old men with varying energies and attitudes. At the time, I was employed as a full-time sport psychologist with the South Australian Sports Institute (SASI). In this role I was responsible for providing sport psychology services to six SASI sports and the AIS Cycling program, if invited. In terms of time commitment, AIS Cycling and SASI negotiated an arrangement that allowed for 1/2 day per week of my time to be dedicated to the Track Sprint program.

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1 An explanation of the Keirin and other track cycling events can be found at http://en.wikipedia.org/wiki/Keirin.
Reflecting on my Professional Practice

I constantly strive to stretch myself as a professional and provide the best psychological support for the athletes, coaches, and support teams with whom I work. To achieve this, I reflect regularly on my performance as a practitioner, thanks to a supervisor from back in my university days at the University of Southern Queensland. He often challenged me to reflect not only on the content of what I delivered, but most importantly on my personal experience of the delivery (e.g. what felt comfortable, what felt uncomfortable).

Writing this chapter has presented me with a wonderful opportunity to relive two intense and rewarding years with Australian Cycling and reflect on my experiences with the entire program. There were many memorable moments and challenges that stretched my professional capabilities to the limit. In this chapter I review two of the more significant experiences in chronological order, interweaving lessons learned and lessons taught in a narrative format.

In the Beginning

I have vivid memories of my first two meetings in this sport. To say that some athletes were sceptical about the potential benefits of sport psychology would be an understatement. My first introduction to Australian Cycling was a meeting with the high performance manager. In this meeting I was casually informed that previous psychologists over the past 10 years “did not survive” and that turnover was high. I remember him saying “Sprinters are a different breed. They can see straight through you. They are competitive even in their sleep!” I was then given the option to stay or to leave. I chose to stay. Curiosity and challenge got the better of me and I had to see if I could not only “survive” but make a positive impact on the system. I knew from that moment that my work with this squad was not going to be about me and my expertise, but rather about them and their expertise. If I could let go of my agenda and truly immerse myself in their culture, then I may just stand a chance of succeeding.

When I was first introduced to the squad by the high performance manager, one of the senior athletes (who was three times the size of me, had a massive black beard and piercing black eyes) asked in a loud and sarcastic manner “So... what do you think you are going to try and make us do?” I had previously faced scepticism and sarcasm from athletes before, but rarely have I felt that an athlete could eat me alive! I kept my cool and simply responded with “Nothing... I am not going to try to make you do anything. I’m just here to watch if that’s cool?” The athlete didn’t have much of a response to that. He was expecting me to run, defend, argue, or promote the benefits of my profession, but instead I just smiled and displayed a laissez-faire exterior (while on the inside I was doing my best to breathe and calm my own heart rate!). I can laugh about it now, but back then I must admit that I was a little nervous.
I am fortunate to have had an amazing professional peer group in Michael Lloyd, Gene Moyle, and Rosanna Stanimirovic with whom to consult and debrief. Often in our profession we have expectations of doing, changing, or fixing. My experience with Australian Cycling cemented my philosophy that “Athletes want to know that you care, before they care what you know.” Hence rapport building and sincerity go a long way in building trust in the professional and the profession.

A Foot in the Door

By the end of February and with hours of observation, conversational interaction, and lengthy discussions with the coaches and sport science team, I finally found an opening. In discussions with the then strength and conditioning coach, I learned that sprint cyclists train hard and need to “rest hard” (that is, recover well) to be at their peak physical condition. In this sport, athletes and coaches valued recovery greatly and athletes were encouraged to rest after heavy training sessions.

The opening for me was that no mental recovery strategies were being taught, and hence many athletes were struggling to wind down physically and mentally. So, in discussions with the head coach, I ran a weekly relaxation session for four weeks following their strength training. This session incorporated progressive muscle relaxation, meditation, and visualization. We started with three athletes on the first occasion and grew over time to have six of the eight athletes in the squad. These sessions opened the door for discussion with athletes on other mental strategies.
Opportunity Calls

In early March 2004, Martin “Marv” Barras, then national head coach for sprint cycling, approached me to work with him and Anna Meares on her mental preparation for her Olympic debut. The focus of the work was on her individual time trial (500 m) event. Time trials are a race against the clock with no room for error. The difference between gold and silver can be as little as a thousandth of a second. The bike is locked into a special starting gate and the rider must time the first pedal stroke to exactly match the gate release. From a standing start they must quickly gain maximum speed and maintain it for the distance. The fastest time wins.

The year 2004 was Anna’s first at the AIS under the coaching of Marv Barras. It was one of the most successful years of her career. She won a silver medal at a World Cup event in Mexico, missing gold by a mere few thousandths of a second. She followed her first World Cup medal with an outstanding performance at the 2004 World Championships in front of a home crowd in Melbourne, with a gold medal in the 500 m time trial and a silver medal in the sprint event. With these results, she qualified for the 2004 Athens Olympic Games and was headed to her first Olympics.

Anna completed a lot of detailed preparation for the 2004 Olympics for both the sprint and the 500 m time trial. Being crowned world champion meant that she would start last at the Olympics after each of her rivals had already raced. It was the first time ever that she had to do this. Previously she had always been seeded early in the start list because she wasn’t among the favourites to win, but since winning the world title in May 2004 she was seeded as the favourite in Athens. Many in the world cycling community did not share the same belief in Anna, because she was young and new to the international scene. Many believed that the “true” favourites were saving themselves for the Olympic Games.

The last rider to race in any event requires intense focus, self-belief, and commitment to the plan. Following the World Championships, Marv requested my assistance to help Anna with her pre-race mindset. He knew that being in her first Olympics and the last rider in the time trial, Anna would need some specific focusing strategies. In discussions with Anna about her pre-race preparation it became apparent that she did not have a pre-race plan from the pit to the start gate. She had a physical routine in terms of a warm-up, and some technical self-talk in the starting block, but no overall mental plan. Marv and I met several times to talk through what he anticipated her pre-race experience to look and feel like. This plan covered everything from the size of the velodrome and noise of the crowd, to the heat and the other competitors, from the warm-up routine to the support staff. We carefully crafted a visualisation script that would enable Anna to regularly “live” the experience before she faced the reality. Then, with her input on the smaller details, we amended the script to more accurately represent her pre-race routine. Our goal was to reduce the unknowns and create the feeling that she had already done this race before. We then put the visualisation strategy into practice in the velodrome.
Anna’s Account of the Preparation

This is Anna’s personal account of what happened on the day we put the visualisation strategy into practice in the velodrome:

Georgia and I had spent quite a few sessions visualising my pre-race environment and routine. Once we had refined the script, Georgia would get me to close my eyes while I listened to a description of race day at the Olympics and pictured it in my mind: the crowd and all the variety of colours scattered around the audience representing the many different countries; the hype; the excitement building of the impending race; the nerves in my stomach; the riders competing before me and finally, me walking to the line facing my rivals and a time to beat. My coach, Marv, nominated the time he believed it would take to win at the Athens Olympics. This was 34.1 seconds - equal to an Olympic record. And so, the last part of the script involved Marv saying to me at the starting line, “Miss Anna (as he often called me), last rider at the Olympics, 34.1 to beat.”

We regularly practised this script and three weeks later with approximately six weeks to the Olympics Georgia said that we were going to turn the script into reality by practising at the velodrome. I felt ready. I was good at visualising the script and at the end when I opened my eyes I felt ready to race. Little did I know that taking it to the track would be a whole new experience. In the velodrome I set up as if it was race day. I did my typical physical warm up routines and then lay down and we went through the script. When I opened my eyes ready to do a standing start my mind was far from focused. My mouth was dry and I had trouble swallowing, my hands were so sweaty I had trouble gripping the handlebars. And this was just training! My legs were shaking and I could not focus on what I was doing. I usually breathe to the countdown of the clock but this time I couldn’t focus enough to get it right. I did my standing start and it was the worst effort I had ever done in training - almost a second slower than I normally do. I was blown away, not because of my time but in that moment I realised the power of the mind. I was in an empty stadium, but having imagined what I thought it would be like on race day I couldn’t handle it. It threw me like nothing I had experienced before.

I knew from that moment that mental preparation was going to be the key to my success. We practised every time I got on the bike with the same imagery preparation. I would sit in a chair near the start line imagining I was waiting for the rider before me to finish. I would go through my visualisation, Marv would say in a calm and confident manner “Miss Anna, last rider at the Olympics, 34.1 to beat”. It was not in vain. On race day, the similarities to what I had imagined were uncanny (Meares, 2009, p. 29).
Race Day Arrives

This is how Anna described her experiences on the day of the time trial event at the 2004 Athens Olympic Games:

The women’s 500 m time trial was the first event of track cycling competition - to say I was nervous on race day was an understatement. For my entire life I had always watched and supported our Australian athletes competing at the Olympic Games. It was a very surreal situation for me to be in now, because all of a sudden I wasn’t watching the television cheering on all the Aussies, I was on the other side being cheered myself. The big stage certainly added nerves to the belly that I had never experienced before. Being a well prepared person, I like to know where everything is and have things organised so that I don’t forget anything. On this occasion, though, I warmed up away from the track centre so as not to be overwhelmed by the atmosphere. I walked up ready to race, and while Marv was pinning on my numbers, I suddenly realised I had forgotten my bootie covers. Marv ran to get them for me. When he came up I told him I had forgotten my gloves too, so he ran down to get them for me. When he came back a second time I panicked and said I had forgotten my glasses. He went to turn around and he stopped then looked at me and said, “Miss Anna, you don’t need glasses, you have a visor helmet.” A little rattled, I just replied, “Oh, right.”

I walked from the Aussie pits towards the start line. I sat in the chair facing the track with only one rider to go before I was on. When China’s Jiang, the current world record holder with a time of 34.100 seconds started, I didn’t watch. Instead I sat and went through my visualisation. I did notice that after one lap she went by me in a blur. The pitch of the crowd rose and I assumed she had the fastest time thus far but I did not look at the clock. She passed in front of me for the second and final time and stopped the clock. The crowd went crazy! Still I did not look at the clock. I stuck to our plan. I looked at Marv and he looked at me with a very confident look on his face (similar to what we had practised) and he said to me, “Miss Anna, last rider at the Olympics, 34.1 to beat.” I was not aware of anything other than the time and what I needed to do. I didn’t know that beating this time would mean a new Olympic record.

As weird as it may sound, a sudden sense of calm came over me and I felt at ease. This was exactly what I had prepared for over the last two months. This is exactly what was said to me every time I got on the track. I walked up to my bike, which was being locked into the start gate. The nerves were definitely there but under control. I shook them out as I waited for the all-clear to get on my bike. When it came I got on and locked my shoes into the pedals and tightened the straps around them. I did them so tight my feet were slightly numb. “Thirty seconds,” came the call from Marv. I hung my head and controlled my breathing just as we had practised. I had my hands set in a comfy position and wasn’t going
to move them. Then the 10-second buzzer went off on the countdown timer. Once that buzzer went it was business. My head lifted and I breathed to the countdown. I squeezed my hands so tight on the handle bars, I tensed my legs and every muscle in my body down to my toes. Five, four, three, two, one and the gate released. I don’t recall much of my race, only certain points. I remember the very first pedal stroke out of the starting block. I remember it not for how good it felt but for how incredibly slow and hard it felt. I thought that I had experienced a bad start but I just kept going. The next thing I remember was the halfway point. One lap around the velodrome. I remember this because the pitch of the crowd changed dramatically. It told me I was close to the lead if not in front at that stage. I don’t remember anything else until I crossed the finish line.

In the space of about five seconds I crossed the line and looked up to the big scoreboard in the middle of the bend in front of me. I couldn’t see much. I did however see that there was a red box with number 1 in the bottom right hand corner next to my name. It hit me - I had won.

The emotion - excitement and surprise and happiness - that filled me in that split second of realisation was like nothing else I have ever experienced. I looked for the time I had ridden and through the tears I could only make out .9 seconds. I couldn’t understand it; the time to beat was 34.1. It was then as I drew closer that I saw the green box in the same corner with ‘WR’ in it. World Record - I had broken 34 seconds and ridden a time of 33.952 seconds.

The look on my face was a picture - my mouth dropped to the ground and my eyes lit up bright and wide. I drew a deep breath and let go a scream of delight. I cried so hard and held my hand to my mouth all the while thinking to myself, “Holy shit, you’re the Olympic Champion!” In my moment of realisation I took six victory laps instead of the customary one or two. I was just lapping up the moment and didn’t want to get off. I couldn’t believe it (Meares, 2009, pp. 32-34).

In Athens at the age of 20, Anna became the youngest Australian female track sprint cyclist and the first Australian female track cyclist to win an Olympic gold medal. In doing so she set a World and Olympic record riding a time of 33.952 seconds, thus becoming the first woman in history to break the 34 second barrier for the 500 m distance. She followed up by winning the bronze medal in the individual sprint a few days later. It was a great honour for me to have the opportunity to work with Anna and Marv.
Crisis in Germany 2005

In 2005 the Australian cycling community and the sporting world as a whole were shocked by the news that six members of our Australian women’s road cycling team were involved in a tragic car accident during a training ride. Unfortunately one of our girls, Amy Gillett, was killed. On the 19th of July, 2005 I was contacted by Australian Cycling and asked to travel to Italy to support our team athletes and staff who were preparing for the Junior World Championships.

With four days’ notice, an expired passport (that was quickly renewed), no experience of working with this particular group and certainly no knowledge of how this incident would affect this group of individuals, I flew to Europe. With no tools, resources, or paperwork, I set forth knowing that this trip was going to be a stretch. What I didn’t know was the extent to which I was going to be stretched. This trip was about practising the art of psychology and practising what I had preached with Anna in the earlier years of preparing myself for what lay ahead. In a whirlwind effort to prepare for this trip, I found myself sitting on the airplane thinking “I have no idea what to expect, no idea who I am meeting and no idea of the relationships between all involved.” I would need to be extremely aware, ask good questions, maintain a sense of calm, and possibly lead people through the grief process. This 3-week period was the most intense I have ever experienced and one that stretched me both professionally and personally.

I flew direct to Italy, where I was met by the AIS bike technician (the person who looks after the road bikes and transports them to all the events across Europe). Little did I realise that this gentlemen spent hours working with the road cyclists, particularly the women’s team. He was a friend, a confidant to the girls. It was a long drive to the Australian base camp but an invaluable one for both of us. The technician shared the history of his work with the girls, their idiosyncrasies, the different approaches he used with each, and had his first opportunity to express his emotions about the incident. I don’t think I spoke much on that drive. There was no need. He simply needed to talk it through. We drove to the AIS Italy residence in Reggio Emilia to meet with Shayne Bannon, the AIS national head coach.

Upon arrival I met the national head coach, the World Juniors head coach and the team manager. In Australia it’s a rare sight to see grown men hug and show mutual support, but this was a unique group of people who really cared about their athletes. The bike technician then opened the back of the truck and everyone broke down emotionally. What I hadn’t realised was that prior to picking me up from the airport, he had just collected all the broken bike pieces from the accident.
Over the next hour I left the men to unload the truck, grieve, talk, be silent, shout. What was I to do? This was a very raw experience. I had so many questions racing through my mind. Should I show support and help? But they may want to be on their own without having a stranger around. Should I leave them alone? But then they may think I don’t care. Should I sit and watch? But they may not want to be watched. I chose a combination of the latter two. I left them and headed into the kitchen where I put on the kettle in anticipation of a kitchen table debrief and then returned to the garage and simply sat in the corner and observed and absorbed the emotion.

It’s difficult to not get emotional in these situations and as I reflect I think it was okay that I also shed a few tears on that day. As time progressed the talking increased and some of the conversations were directed to me, as if telling me the stories.

Once the truck was unloaded we all congregated over a cup of tea in the kitchen and I introduced myself and briefly explained my role in supporting them. I outlined the grief process to the group using napkins and my lipstick, because we had no pens and paper at the time. The aim of this brief education session was to gently normalise the feelings and thoughts they might be experiencing. I chose to stay focused on their current experience rather than try to shift them into thinking about the road ahead, the impending World Junior Championships. That could be discussed once we arrived in Austria, giving them another 10 hrs to have their own space.

While all of this was going on in Italy, Rosanna Stanimirovic and Ruth Anderson (senior psychologists from the AIS) were providing direct support to the injured athletes, their families, and the family of Amy Gillett, in Germany. We kept in regular contact to maintain peer supervision and support.
Arriving at the Training Camp

The next day we arrived in Austria for a 7-day training camp that led into the Junior World Championships. I met with the head coach and team manager (fantastic men who showed such strength and vulnerability over the next 10 days). I suggested a 3-step approach: introduce myself, provide an opportunity for the athletes to grieve, and only then focus on performance. I introduced myself and explained that my role was to support them and reassure them that there would be plenty of time to prepare and get in the zone for Junior Worlds.

Three days into the camp the Amy Gillett memorial service was held in Australia, which our athletes were obviously unable to attend. What could we put in place instead? How could we give them the same sort of experience? In discussion with the head coach and team manager we decided that hosting our own memorial service would be great for the athletes and staff, and may create a small sense of closure and an opportunity to refocus on the task ahead. The question was... who would organise it? The answer... me!

There are many debates about the role of a psychologist, and this experience demonstrated the diverse nature of the situations in which sport psychologists can find themselves when “on the road” with athletes and teams. There is no black and white when it comes to human behaviour and human needs. This experience in particular taught me that flexibility, clients’ best interests, and creative thinking are at the core of sport psychology servicing. Obviously we work within ethical guidelines and boundaries, but it is near impossible to predict how humans will behave in high pressure situations, with limited personal support structures and within the dynamics of a group setting. Plus, at times there are no sound-proofed rooms, no separate dining areas, and no time for long-term intervention. Does this mean we don’t or can’t have an impact? Absolutely not! What it means is that we need to ensure our communication and pre-framing are clear so that clients (athletes and coaches) know the parameters and that we keep talking as things evolve.
The Counselling Side of Sport Psychology

Over the next two days I prepared a memorial service. I gathered stories of Amy’s history from the junior athletes and I invited athletes to share a story, poem, or reading. We had flowers, a main candle, and music, and I purchased tea light candles for each athlete to hold alight throughout the ceremony. I closed the memorial service with a wish using some words of inspiration based on Amy’s approach to training. After the wish, I invited everyone to blow out their tea light candle to signify letting go. It was a heavy morning but a time of bonding.

The staff and I had agreed that following this service the team would get on their bikes and just go for an easy ride around the country side - an experience that they could do together but didn’t necessarily need to talk. I contemplated joining them, but decided that it would be a good opportunity for the team to begin to rebuild on their own and reconnect with their coaches. I decided to eat on my own that evening to reflect on the day, enjoy some down time, and gain some email-based peer supervision.

That night, unbeknown to me, some of the more senior members met to discuss how they could show respect for Amy and her family while racing at the World Championships. The next day, the athletes announced that they would wear pink armbands to show their respect for Amy and the Women’s Road Team. What a great initiative!

The boys displaying their pink armbands
The Performance Side of Sport Psychology

On Day 4, the athletes indicated that they didn’t feel ready or focused for the impending Junior World Championships due to their interrupted training. Together with the staff we brainstormed a plan for the remainder of the camp, introducing some brief sport psychology interventions to support the competition mindset. We decided on three workshops built around the themes of “managing my nerves,” “controllables,” and “visualising the space,” plus optional individual sessions. The remainder of the camp was fantastic! Athletes soaked up the training regime and engaged in the workshops, particularly on the topic of managing their nerves. Athletes indicated that they were feeling a little nervous about competing in their first international competition and wanted to know how to manage these nerves. The coaches also sat in on these workshops to show their support and learn a strategy or two. The first workshop addressed the theory of the stress response and how people can perceive nerves as either a destructive or constructive part of race preparation. We also talked about adrenalin and its key role in performance preparation, and the physiological factors associated with an increase in adrenalin.

The second workshop focused on the controllables, helping them to understand those aspects of racing over which they had no control and other factors over which they could exert control. I used a card game that I have developed to make the learning interactive and interesting. The card game includes 40 factors that athletes may focus on or worry about prior to competing. Each athlete was asked to pick up two cards and place them along the continuum from I Have No Control at one end (e.g., weather, crowd), I Can Influence in the middle (e.g. parents, race times) and I Have Control at the other end (e.g. self-talk, hydration). The workshop became a debate and fruitful discussion about those factors over which we have direct control, those factors over which we have some influence, and those factors that are not worth worrying about or focusing on because they are clearly beyond our control. When playing this game with athletes I often find that although there are some factors that are clearly controllable or not controllable, it is the discussion of where the other factors lie on the continuum that creates the most valuable discussion and learning.

The final workshop was a visual imagery exercise (similar to the work I did with Anna Meares) that guided the athletes through their arrival at the velodrome, entering the velodrome, looking around the inside of the stadium, imagining the crowd, hearing the noises, setting up their bikes, and assembling for the team meeting. Prior to this workshop I asked the head coach to take me to the velodrome and walk me through the arrival and all the key checkpoints so that I could create this imagery script in as much detail as possible. Throughout the 12-day period of the training camp and subsequent competition these young athletes learned about peer support, vulnerability, team cohesion, performing under pressure, switching focus, and race preparation, all of which culminated in some great success on the track.
Celebration and Acknowledgement

All things considered this Junior World Championships was very successful on many levels and I have great admiration for the care, consideration, and collaboration of the coaching and support staff team, including Gary Sutton, Rick Fulcher, and Gus Dawson.

As health care providers we don’t often celebrate or acknowledge the great work we do, but I think it is important to hear your clients’ experiences of your service. A snippet from the team manager’s report stated that

“Georgia was an unbelievable asset to this team (including the staff) in helping everyone cope with and process the grief we were all feeling after the tragedy involving the Australian women’s road team. Georgia found a way to then help us switch from grief to performance within days by assisting the athletes in their competition preparation and I suggest this role would be an integral part of future junior teams.”
From Peak Performance to Personal Growth

I am often asked whether sport psychology is about mental skills or personal development. My answer remains... both. At the very core we are all human beings with thoughts, feelings, and behaviours that shape our lives and our performances, so we cannot develop mental strategies without tapping into who we are and how we operate.

Here is a great example of how Anna Meares had to learn more about herself and her strengths and weaknesses to change her approach to racing. The period between the 2004 Athens Olympics and the 2006 Melbourne Commonwealth Games was a challenging time for Anna. The International Olympic Committee decided that due to the introduction of another Olympic sport, cycling would have to drop one event. It was decided to discontinue the Women’s 500 m Time Trial. Never again would Anna have the opportunity to compete for an Olympic Medal in this event.

Anna recounted her feelings at the time of the announcement:

> I felt as though my career had been cut in half. The Olympics was the pinnacle for me. I didn’t have the option of road events where I could go and make millions, and I didn’t have the Keirin series in Japan (as it is only for men). I had gone from two shots to one and I was furious. I knew this would have a significant impact on my ability to gain sponsors. And it did. I was back at the sporting canteens on the weekends selling burgers and chips in order to top up my income. For a while there I denied that the decision was final and I stayed focused on the Time Trial and just dabbled in the Sprint. But there came a time when I realised that I would have to make the switch and focus on the Sprint. (Meares, 2009, p. 47).

Credit: chrsMc/flickr/CC BY-NC-N’-2.0
The Switch

In mid-2006 I received a call from Anna. She needed some strategies to be able to race successfully in the sprint event and was unsure why she hadn’t already had great success in this event. Unlike the sprints in athletics, these events do not usually start with riders sprinting from the starting line and they are not confined to lanes. The early part of each race is typically highly tactical with riders pedalling slowly, as they carefully jockey for position, often trying to force their opponents up high on the track in an attempt to get their rivals to make the first move. Some even bring their bikes to a complete stop, balanced upright with both feet still on the pedals and both hands on the handle bars, in an attempt to make the other rider take the lead. To the lay person, this race looks more like a cat and mouse game, and there are some truths to this.

When racing at high speed, the riders who manage to stay just behind their opponents can draft, expending less effort. By riding behind the “lead out” riders, the second riders reduce their aerodynamic drag. If all goes to plan, just before the finish, the trailing riders pull out of the slipstream, and aided by fresher legs, may be able to overtake the opponent before the line. To prevent this, leading riders may choose to accelerate quickly before the last lap, hoping to catch the opponents off guard and establish a large enough gap to negate the aerodynamic effect or to keep the speed high enough to prevent their opponents from overtaking. This event is all about tactics, awareness, courage, and commitment.

Up to 2006 Anna hadn’t experienced great success in the sprint. In discussions with her head coach, Anna had the speed and power but wasn’t good at reading the tactics in the race. This information raised a flag for me, because I knew Anna was articulate and focused, and understood the tactics in training. Was she really unable to read the “game”, or was she just not engaging the right strategies? I knew that Anna had a good understanding of pre-race routines based on the work that we did in 2004. So, before diving into the depths of why she could train well but not race well, I was curious to know if her pre-race routine was having an impact on her race success. It is tempting when working with athletes to explore for deep-rooted reasons why they aren’t performing. In my experience it is often what the athlete is doing and thinking in the two hours before they race that has the most significant impact on their focus, energy management, and self-talk. Hence I wanted to understand what her mental pre-race routine entailed for the sprint event. As I had suspected, Anna was using pre-race language and strategies that were similar to her time trial approach. That is, she was narrowing her focus, controlling her breathing, focusing on time, and using specific action-oriented cue words (e.g., fast legs, strong). I had a sense that this mental preparation was not conducive to sprint racing, but I needed more information and organised a meeting with her head coach and strength & conditioning coach to really learn about this “cat and mouse” race.
The Insight

Over the next few days and with the support of a few jumbo lamington cakes (I have learned that cyclists don’t eat regular size food!) Anna and I brainstormed the differences between the time trial and the sprint. We went back to the basics and brainstormed why she was so good at the time trial and how her pre-race routine supported her. Anna identified that she liked to be in control of her body and mind, that she was good at creating a narrow focus, that she loved having a race plan with no external interference, and that she loved racing the clock. Because Anna responds well to visual learning, we jotted these points down on one page and then brainstormed the sprint on another page. She explained the purpose of the sprint, the style of racing, the importance of decision making, the need to be flexible and aware, and a list of her physical strengths regarding this event. She identified that the sprint event required a broader attentional focus, less control, lots of ambiguity, the need to read and respond to tactics, and to have lots and lots of Plan Bs in her race plan.

Then I asked her what pre-race routine she uses for the sprint. It was in this moment that Anna clicked. She realised that not only was there a technical and tactical difference between the events, there was also a mindset difference and that her mental approach was too constrained for the cat and mouse game called the sprint. So we worked through a revised plan. Each time she trained the individual sprint she would remind herself that she was a sprinter. In conjunction with her coach, we redesigned some of her training to create more opportunities to practice responding to changing tactics.

I’m unsure of exactly how Anna would recall this period of time, but from where I sat it seemed that Anna began to gain a sense of excitement about becoming a successful sprinter. There was a sense of hope, an air of confidence, and when you add Anna’s determination all concerned just knew that there was going to be success. The question was simply... when. Later in 2006, Anna went on to win a silver medal in the sprint at the Commonwealth Games in Melbourne followed by a silver medal in the 2008 Olympic Games where she was closely beaten by arch rival Victoria Pendleton of Great Britain. In 2010 Anna won gold at the Commonwealth Games, she won three gold medals at the 2011 World Championships, and then most recently, in a nail-biting final, Anna defeated Victoria Pendleton at the 2012 London Olympics to claim her second Olympic gold.
Closing Remarks

On reflecting upon my 12 years’ experience as a sport psychologist, I have come to appreciate that for me, sport psychology is a blend of organisational psychology, systems management, detailed needs analysis (for athletes and coaches), hypothesis testing, mental skills training, mindfulness coaching, coaching psychology, and wellbeing counselling, all within a solution-focused framework. I continue to be stretched personally and professionally and enjoy the personal development journey that this career provides to me. I have a supervisor from my Master of Psychology program, completed in 2000, to thank for this approach. Steven Christensen opened my eyes to the benefits of practising what I preach and through our group supervision sessions he constantly encouraged us to step outside our comfort zones. Although at times the experience was quite uncomfortable, it is exactly what I ask my clients to do every day to be the best they can be.

REFERENCES


VIDEO

Anna Meares 500 m Time Trial Athens, www.youtube.com/watch?v=WiPbO5TxTCY
ABOUT THE AUTHOR

Georgia Ridler MPsych MAPS is a Registered Psychologist who has worked with athletes, teams, coaches and high performance managers to create strategies that lead to enhanced performance. Over the past 12 years, Georgia has consulted to a range of sports at both the Olympic and professional level, playing a significant role in the success of Olympic gold medallists and several Olympic teams, including Track Cycling, over the last three Olympic cycles. She is currently the consulting Team Psychologist for Swimming Australia. Her vibrant style and insight is drawn from a hybrid of experiences in high-performance sport, psychology, science, leadership, and organisational development.
Triathlon in Australia

Michael Lloyd

In

Secrets of Asian Sport Psychology

Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
History of Triathlon

The origins of the sport of triathlon as we know it today can be traced back to France in the 1920s. The French newspaper L’Auto reported in 1920 on a competition called “Les Trois Sports” (the three sports) with a 3 km run, 12 km bike leg, and a swim across the Channel Marne, completed in succession without any break (Tinley, 2012). There is also a 1934 report of Les Trois Sports in the city of La Rochelle, describing a race with a channel crossing (200 m), a bike competition (10 km) around the harbour of La Rochelle and the Parc Laleu, and a run (1200 m) in the stadium André-Barbeau. Similar documented accounts of tri-sport events featuring running, swimming and cycling (not necessarily in that order) continued throughout the 1940s, 1950s, and 1960s (Tinley, 2012).

The first modern swim-bike-run event to be called a triathlon was held in at Mission Bay, California where a group of friends had begun training together. Amongst them were runners, swimmers and cyclists and before long training sessions turned into informal races. The first formal triathlon race was conceived and directed by Jack Johnstone and Don Shanahan, members of the San Diego Track Club, which sponsored the race. Held on September 23rd 1974, the first Mission Bay Triathlon attracted 46 participants and consisted of a 500 m swim, an 8 km cycle ride, and a 10 km run (Ehritz, 2003).

The first modern long-distance triathlon event was the Hawaiian Ironman Triathlon, which includes a swim of 2.4 miles (3.9 km), a bike ride of 112 miles (180 km), and a marathon run of 26.2 miles (42.2 km). It was conceived during the awards ceremony for the 1977 Oahu Perimeter Relay (a running race for 5-person teams). Among the participants were numerous representatives of the Mid-Pacific Road Runners and the Waikiki Swim Club, whose members had long been debating which athletes were fitter, runners or swimmers. On this occasion, U.S. Navy Commander John Collins pointed out that a recent article in Sports Illustrated magazine had declared that legendary Belgian cyclist Eddy Merckx had the highest recorded maximum oxygen uptake of any athlete ever measured, and that perhaps cyclists were fitter than anyone.

A number of the other military athletes in attendance were also familiar with the Mission Bay races, and understood the concept when Collins suggested that the debate should be settled through a race combining the three existing long-distance competitions already on the island: the 2.4 miles (3.9 km) Waikiki Roughwater Swim, the 115 miles (185 km) Around-Oahu Bike Race, and the 26.2 miles (42.2 km) Honolulu Marathon. Collins calculated that, by shaving 3 miles (4.8 km) off the course and riding counterclockwise around the island, the bike leg could start at the finish of the Waikiki Rough Water and end at the Aloha Tower, the traditional start of the Honolulu Marathon (Schneider, 2008). Prior to racing, each athlete received three sheets of paper listing a few rules and a course description. Handwritten on the last page by Commander Collins was this statement: “Swim 2.4 miles! Bike 112 miles! Run 26.2 miles! Brag for the rest of your life!” It is also reported that prior to the race he was heard to say, “Whoever finishes first; we’ll call him the Ironman” (Ruibal, 2003).

Of the 15 men to start off in the early morning on February 18, 1978, 12 completed the race and the world’s first Ironman, Gordon Haller, finished in a time of 11:46:58.
By 1982, the Hawaii Ironman gained extensive media coverage and participation levels had increased to 580 competitors. In 2011, over 3,000 athletes completed the gruelling challenge, with the fastest man, Australian Craig Alexander finishing in a course record time of 8:03:56, and the fastest woman, Brit Chrissie Wellington, finishing in 8:55:08, just one minute shy of her own course record set in 2009.

The Origins of Triathlon in Australia

The first State Triathlon Associations in Australia came into being in late 1984 and early 1985. In May 1986 at Broadbeach, Queensland the Triathlon Federation of Australia was formed, which in 1991 changed its name to Triathlon Australia (TA). TA became a founding member of the International Triathlon Union (ITU) upon its formation in April 1989 in Avignon, France. At the 97th session of the International Olympic Committee, ITU was given the status of official world governing body for the sport. Since then 140 countries have become affiliated.

The first ITU World Championships were also held in Avignon in August 1989. The distances chosen were to become the standard in short course triathlon racing - 1.5 km swim, 40 km cycle, and 10 km run. These distances were chosen on the basis that the swim was the equivalent of the longest Olympic pool event, the bike was the standard international time trial distance, and the run the longest Olympic track event. The term “Olympic distance” quickly became shorthand for the standard course (www.triathlon.org.au/About/History.htm).
Australian Success

As a relative newcomer on the world stage, the sport of triathlon wasted no time in establishing a strong foothold in a dynamic Australian domestic sporting landscape. Nor did elite Australian athletes waste any time in asserting their dominance on the international stage, an enduring dominance that now spans almost 25 years of international competition. Since the foundation of the ITU in 1989 and the commencement of the ITU World Championships that same year, Australian athletes have achieved unparalleled international success. This success occurred almost from the outset, with Greg Welch picking up the Elite Male World Championship title in Florida 1990, and Miles Stewart following up with a home town victory in 1991 on the Gold Coast. In the female category, Michellie Jones won successive World Championships in Muskoka, Canada in 1992 and Manchester, England in 1993. From that year on, Australia’s dominance of the sport at the elite level has been such that they have now held 19 senior World Championship titles, clearly ahead of Great Britain in second position.

When combined with success at U-23 Elite and Junior Elite levels, another nine titles, Australia is undoubtedly the most successful triathlon nation in ITU World Championship racing to date. Australia’s ITU World Championship success has been augmented by success at Olympic and Commonwealth Games. Australia has achieved podium finishes at all four Olympic Games since the sport’s introduction at the 2000 Sydney Olympics, including Australian women Emma Snowsill and Emma Moffatt winning gold and bronze medals respectively at the 2008 Beijing Olympics. Similar success has also been achieved at the two Commonwealth Games in which triathlon has appeared - Manchester, England (2002) and Melbourne, Australia (2006). These results, along with Australia’s domination of the World Ironman Championships - Chris McCormack (1st 2007 & 2010), Craig Alexander (1st 2008, 2009 & 2011), and Miranda Carfrae (1st 2010; 2nd 2009 & 2011) - clearly substantiate Australia’s standing as the world’s leading nation in the sport of triathlon.

Foundations for Success

It is popularly held within Australian triathlon circles that the enduring success achieved over the past two and a half decades can be largely attributed to the origins of the sport in Australia and its evolution as it branched out from the United States. Triathlon, some argue, is the ultimate modern day sport and one that is ideally suited to Australians and the Australian environment. Australia was one of the first countries to embrace a sport that seemed ideally suited to its climate, lifestyle, and sense of sporting adventure. In addition to a relatively strong tradition in each of the three disciplines individually, the iconic Australian surf lifesaving movement also provided a readymade population of elite athletes indoctrinated in multi-sports events incorporating run and swim legs whose competitive nature and appetite for individual challenge saw many attracted to this new and exciting sport.
Due to triathlon’s formative stage of development in Australia at the time, another factor that surreptitiously but significantly contributed to the development of what was to become a dominant performance environment, was the lack of high performance training centres. In the early days of Australian triathlon there were two dominant squads, under the guidance of Head Coaches Col Stewart (Gold Coast, Queensland) and Brett Sutton (Jindabyne, New South Wales). Between them, these two squads contained the majority of Australia’s elite triathlon population and, in turn, the resultant depth and quality of talent within these squads created a competitive training environment that was ideal for the development of the physical and mental skills required to survive and thrive within the sport. Listening to the words of key individuals, who were immersed in these environments in varying roles, readily elucidates how this exceptional training environment provided the foundation for Australia’s burgeoning performance success.

Bill Davoren was heavily involved in triathlon in Australia from the mid 1990’s, and went on to work directly with the majority of elite athletes of the day as the Head Coach of the Australian Triathlon Program (2002-2008). Davoren describes the impact of the early triathlon environment on athletes and performance in the following way, “We cut our teeth in the early 90’s, a period when there was phenomenal talent, depth, a great racing scene and the reality was that that talent bred more talent, and in turn created a world class training and racing scene.” Athletes were training against world class contemporaries every session, and needed to find a way to back up and push themselves to perform day after day. Davoren added, “The result was a population of physically and mentally resilient and resourceful athletes with a willingness to train and race with incredible intensity and toughness as they strived both for individual development and performance success, and to stay at the top of the Australian triathlon food chain.”

A product of this prolific environment was Chris McCormack, arguably Australia’s most successful athlete over all race distances, having won multiple Olympic distance and Ironman World Championships, and having been voted International Triathlete of the year on five separate occasions. In discussing the factors contributing to Australia’s success, McCormack has no doubt about the significance of the impact that the domestic training and competition environment had on both himself and his peers through the early to mid-1990s.

Reflecting on these influences McCormack highlights the quality of coaching, the depth of talent, and the competitive intensity of the training and racing. However, he also makes special reference to the impact of Australia’s pioneering champions of the sport, “To have the likes of Greg Welch, Miles Stewart, Brad Bevan, and Michellie Jones all experience international success and then come back and train in the domestic environment was invaluable......to have the opportunity to talk to, touch, train with, and race against these individuals demystified their success and allowed the next generation of aspiring champions to realise that if they can do it, then maybe I can too!” Clearly, this opportunity to pit oneself against the best on a daily basis not only served as a powerful motivator, but also as a mechanism for fostering personal self-belief and general sporting confidence.
The Psychology of Triathlon

Renowned for his appreciation and understanding of the mental side of elite performance, McCormack provides a number of wonderful insights into the world of triathlon and why Australia has produced so many champions, and has been so dominant throughout the years. The importance that he places on the mental side of performance is immediately apparent when he states (in relative terms) that, “the physical side of triathlon is the easy side, it’s the mental side that is so important, and being able to master what is in your head” (McCormack, 2011, p. 67). The rationale behind a comment such as this becomes apparent when he explains a couple of key factors that underlie his philosophy regarding winning. The first, is that “Races are won in key moments”, and the second, is that “Success in triathlon is, above all else, about enduring suffering” (McCormack, 2011, p. 65). He goes on to explain that racing is less about the race plan, or even your opponents for that matter, and emphasises that every race is more a war between the positive and negative in your head. Insights such as these have significant relevance to triathletes of all levels and speak directly to the skills required to be successful. They also highlight the importance of individual self-awareness and environment required to develop these skills at both a conscious and sub-conscious level.

In his book, I’m Here to Win (2011), McCormack points out that ultimately triathlon is about pain, knowing when it will come, enduring it, and persisting through it, “Every triathlete (pro or amateur) no matter how fit, reaches a point in every race where he/she has to decide whether they will endure more suffering......It’s all about your mindset, and being able to endure the suck!” (McCormack, 2011, p. 78; p. 212). In more practical terms, this involves having good cognitive awareness, maintaining effective self-talk and associated strategies in the key moments in the lead up to and during the physical and mental adversity experienced during racing. It also requires commitment and determination in not giving in to your ‘rationalisations’ - the insidious thoughts and easy excuses often designed and offered up by the mind, to end the suffering (McCormack, 2011). These realisations embody the value of the interface between the quality of the training environment, and the quality of the people within it.

Obviously, athletes need a training environment that will challenge and develop them both physically and mentally, but the true potential of such an environment can only be realised by an individual with the insight to maximise the opportunities of being exposed to such an environment on a daily basis. Hence, McCormack’s comments regarding exposure to Australia’s pioneering champions of the sport are especially pertinent. He explains that in order to be successful you must have good mentors, mentors that you respect and that are going to encourage you to reflect and to ask yourself the right questions - like, “what is limiting me?” In his view, the biggest limiting factor is fear, but very few triathletes are willing to work at this level of awareness, being willing to acknowledge their fears and develop the skills to manage them - both their own, and the fears of their opponents. However, for those with the courage to do so, and to make the most of all that such a robust environment has to offer, the reward is one of the true keys to success - confidence, and the willingness to back yourself, and dominate the key performance moments.
Not surprisingly a number of these views were also shared by 1996 World Champion and inaugural Head Coach of the Australian Institute of Sport (AIS) Triathlon Program, Jackie Fairweather (née Gallagher). When asked to reflect on her own career and also why she thought that Australia’s elite women had dominated the world over the past 20-25 years, Gallagher’s candid reply was, “We were all hard-arsed bitches!” Elaborating on her response, she went on to explain that, by its very nature, “Triathlon is a hard person’s sport and you need to be physically and mentally tough just to do the work.” Furthermore, she discussed that sporting success is often about self-belief and confidence, and that female athletes often aren’t naturally confident, so the difference between the good and the great was largely related to their confidence. The ‘bitchiness’ could probably be more accurately described as a singled-minded, ruthless, tenacity driving you to train and race to win!

In a similar scenario to the men, Gallagher paid tribute to the pioneering influence of Michellie Jones, who paved the way for her successors by going overseas and displaying this tenacious, single-minded determination in winning back-to-back World Championships. The legacy of her ground-breaking feats was a generation of female athletes with a ‘can do’ attitude, a deep sense of self-belief, and an impeccable work ethic destined to ensure their competitiveness amongst any company. These sentiments were again shared by former National Head Coach, Bill Davoren, who stated that, “Their mindsets were phenomenal; they were hard, tough, and always looking to take themselves to a new level of performance.” He reflected that this resilient and determined attitude meant that the women garnered incredible benefits from the competitive training environments with the men, and sharing in the battle to stay ahead of national peers also ensured that they were super competitive on the international stage.
Taking on the World

Not surprisingly, the international racing scene became the next frontier of challenge in the evolution of a steady procession of Australian athletes with a hunger and willingness to chase competitive opportunities. Traditionally, these athletes would train and race a tough domestic summer in Australia and then, around April each year, many would head to Europe and partake in the French club racing scene. This lifestyle of living lean and pursuing opportunities to race for money in various corners of the world, not only appealed to the adventurous and competitive Aussie spirit, but also further contributed to the mentally tough and resilient triathlon prototype rolling off the Australian production line.

However, as the sport and the success of Australian athletes on the international stage grew, so too did the domestic racing scene. In addition to the traditional national racing series, the early 1990s saw the introduction of Grand Prix racing involving an elite field of the top 30 Australian and invited international athletes. The Australian Grand Prix racing series soon gained a reputation as the world’s premier domestic racing scene and began to attract increasing numbers of the world’s leading male and female triathletes keen to pit their talent against the best from Down Under. Australia soon became a major international hub for the sport of triathlon, forcing all involved to grow and evolve with its ever increasing profile and success.

With the sport’s continued development, the general public were now able to regularly consume high quality racing and Australian success on free-to-air television with multiple flow-on effects, including increases in the sport’s appeal and popularity, a surge in participation numbers, and additional coaches and training centres to cope with the demand. At the grass roots level, triathlon was developing a critical mass and depth of participation characteristic of all successful sports, and the quality of the training and competition environment ensured that those athletes who progressed through the pathway to the top of the Australian triathlon tree were world class; a fact emphasised by the continual production line of male and female world champions that emerged throughout this period.

The ultimate motivator also arrived for all those involved in the sport on the 24th September, 1993, in the form of Juan Antonio Samaranch’s announcement that Sydney had won the right to host the 2000 Olympic Games. Not only did this announcement bring with it added funding, but the prospect of being able to race the biggest race of your life in your own backyard, served to strengthen the will and resolve of all elite and aspiring triathletes within this incredibly successful high performance system throughout the 1990’s and into the new millennium, the legacy of which is still evident in today’s athletes and high performance programs.
Servicing Secrets

My involvement with the National Triathlon Program commenced in 2009 through my role as a service provider with the AIS. The AIS Triathlon Program works in partnership with Triathlon Australia and is focused on providing world class support to Australia’s best elite triathletes. My introduction to the program in March 2009 coincided with the majority of athletes preparing to head to the northern hemisphere in April for racing in the United States and across Europe, with the major focus for the year being a home ITU World Championship Grand Final on the Gold Coast in September.

During the northern hemisphere summer my involvement with the national program was limited to some basic telephone and Skype contact with athletes and coaches to help troubleshoot various personal and performance-related issues. In Australia my time was spent consulting with various developmental athletes and those rehabilitating from injury, which provided a good opportunity to gain a better general understanding of the sport, along with the pertinent performance, personal, and social issues relating to triathlon.

It also provided timely opportunity to review some profiling conducted by my AIS predecessor. The rationale for the profiling was based on Sternberg’s (1999) theory of successful intelligence, which differentiates intelligence as a set of multidimensional human competencies including analytical skills, creative skills, and practical skills, that are context specific. The theory defines successful intelligence as the ability to achieve success in life according to one’s personal standards, and within one’s sociocultural context. The associated assessments included measures of analytical skills (Raven Standard Progressive Matrices; Raven, Court, & Raven, 2004), emotional intelligence (Bar-On Emotional Quotient Inventory; Bar-On, 1997), and mental toughness (Mental Toughness Inventory; Middleton et al., 2004). This profiling information not only gave me an enhanced insight into a number of athletes that I would be dealing with within the squad, but also a useful point of reference in our initial consultations.

My first few months with the sport were a very steep learning curve, and although I was able to watch a number of the major northern hemisphere races online, I really craved an opportunity to consolidate some of this learning in a more practical sense. I was very fortunate that my first significant involvement with the squad was at an event the magnitude of the ITU World Championship Grand Final. Given that I didn’t have a working relationship with a number of the elite athletes competing, my entry was a rather soft one with my primary objectives being to observe, learn, and help out where I could without saying or doing anything that might upset anyone. I’m happy to say that I was relatively successful in achieving these objectives, and was reassured by the operating systems in place to assist in the management and support of our athletes at such an event. However, it must also be said that although increasing my familiarity with the logistics of race day and the athletes involved within the national squad was beneficial, the most significant development from a servicing perspective, was a far greater understanding and appreciation of the physical and emotional demands endured by the athletes in competition. Grounded in this new found perspective, I largely saw my role as working within a multidisciplinary framework to assist athletes and coaches to prepare for and manage these demands in an effective and functional manner in order to enhance performance and well-being.
Looking Backward, Looking Forward

As a relative newcomer to a sport, particularly a sport with such a strong history of success, I understood the importance of spending concerted time learning from those established in the system, and seeking to heed the lessons from the past. I believe that this approach is imperative for a number of reasons. Firstly, in my experience, it assists in the development of rapport and the efficient integration into a new program. Secondly, it assists in understanding and conceptualising the success that individuals and the sport in general has experienced in the past. Finally, it increases one’s ability to leverage off the previous success and effective systems within the sport and utilise a more strengths-based approach (Linley, Willars, & Biswas-Diener, 2010) in order to effectively complement and enhance these existing systems and all those working within them.

However, it must also be said that while the fundamental physical and mental skills required for success in the sport remain ostensibly the same today as they were 25 years ago, the reflective approach undertaken also revealed that a number of the key factors that had contributed to Australia’s success in the past are no longer as influential in the current environment. For example, the national program is now predominantly decentralised, with athletes training in their various home environments with their respective coaches. Although such a system may create greater convenience and the opportunity for more individualised programs, at the same time it also dilutes the many powerful inherent influences brought to bear by regular exposure to a competitive training environment containing a critical mass of high calibre athletes.

The silver lining to this cloud, however, is that triathlon’s success over the years has it positioned as a priority sport (potential multiple Olympic medal) within the AIS framework, and therefore the coaching and resourcing is first class, and the support staff are happy to embrace the challenge of working creatively within this altered context in order to continue the sport’s evolution and success.
In providing servicing to a decentralised program, a substantial amount to time is spent working directly with coaches. Maximising coach effectiveness is a key priority for me and covers a number of fundamental areas, such as coach well-being and self-management, effective engagement and management of healthy relationships with athletes, effective communication with relevant stakeholders, fostering competitive and supportive training environments, encouraging engagement in some form of mentoring relationship(s), and critical analysis of program and coaching practices. Given the amount of contact that coaches have with athletes and the inherent credibility and influence that they bring to the relationship, I believe that it is essential to spend time investing in the coach-service provider relationship to ensure consistency of message and the reinforcement of key concepts within the training and competition environment.

A specific activity conducted with coaches to achieve some of the objectives outlined above is Behaviour Analysis Modeling. Through this process coaches are encouraged to identify cognitive, emotional, and behavioural indicators (i.e., thoughts, feelings, and actions) associated with when they believe they are coaching at their best, and alternate markers associated with perceived sub-optimal coaching performance. We then work together to identify early warning signs (i.e., thoughts, feelings, and behaviours that occur more/less frequently that contribute to sub-optimal performance) and devise strategies for early detection and effective self-management.

Another activity is to have coaches identify and articulate their personal coaching values and philosophies. We then discuss potential mechanisms for monitoring their congruence to these values and philosophies in their daily coaching practice, including identifying a relationship with a respected peer from whom they can proactively seek feedback on their effectiveness. Finally, with the expressed permission of athletes, I will sometimes conduct sessions with both the coach and athlete to discuss performance-related formulations and management protocols, and have both parties discuss how potential interventions can be reinforced in the daily training environment.
The Nitty Gritty

My servicing of athletes within the national program has predominantly been individual work (as opposed to group workshops) and has followed a relatively straightforward performance framework. Observing the lessons of the past, the work primarily focuses on assisting individuals to identify and manage their key performance moments and more effectively endure the physical and cognitive challenges associated with their performance. This process invariably starts with assisting athletes to maximise the benefits of exposure to a high quality training environment. Prior to focusing on the physical aspect of training, athletes are encouraged to review their cognitive and emotional approach to the training environment, and anything that is restricting them, from a psychological perspective. A fundamental aspect of this process is that athletes are willing to acknowledge their relationship with themselves in the training environment, and embrace the role of being their own greatest competitor and ally as they strive in each session to be a better athlete (physically and mentally) than they were in the previous session.

The training environment can then be observed as a mechanism for increasing awareness regarding this personal performance relationship and how the individual copes and reacts to various physical and environmental demands. The effectiveness of this process has been greatly enhanced by the coaches involved within the national program and their willingness to expose their athletes to a variety of personal and environmental training demands through activities such as training camps, boot camps, mixed squad training sessions, etc. Irrespective of the context, and consistent with the principles of deliberate practice (Ericsson, Krampe, & Tesch-Römer, 1993), athletes are encouraged to embrace the challenges and opportunities presented by these environments, to identify clear performance objectives for each session, and employ various processes in order to maximise the quality and consistency of their application and execution.

A simple example is for an athlete to deconstruct the basic elements of a session and identify pertinent physical and mental performance cues that can be incorporated into a tailored performance routine. Athletes can then use this routine as an aide for facilitating two important processes. Firstly, it can be used proactively to enhance the efficient allocation of attentional and physical resources in the execution of a particular skill or series of skills. Secondly, it can serve as an important point of reference to identify and gain critical insights into how and when an athlete’s performance may breakdown (i.e., key performance moments) under varying forms of distress. The job of the practitioner is then to work with the individual athlete (and coach/support staff where applicable) to develop the mental skills to manage these demands and develop the resilient, effective mindsets that have been the signature strengths of Australia’s champions of the past.
A specific example of this involved an athlete returning to racing after two seasons plagued by a number of injuries and experiencing a number of significant performance-related issues. The predominant issue was that the initial (and most severe) injury had occurred on the bike and the athlete was experiencing distressing levels of anxiety associated with riding in a pack.

This issue was addressed on a number of levels. Firstly, the athlete was assisted to identify unhelpful thought processes that were increasing anxiety levels and creating changes in his skill execution and effectiveness on the bike (e.g., increased muscle tension, impaired focus, poor positioning, etc.). Various techniques including psycho-education, mindfulness training, and cognitive restructuring were then used to help normalise and address these troubling cognitions, before then identifying a more effective mindset and associated performance cues. With the assistance of the Head Coach this work was then coupled with regular graded exposure in training in order to desensitise the athlete to the triggering event and also give them the opportunity to use these newly-acquired mental skills in a demanding, race-simulated environment.

The specifics of each individual intervention, of course, vary from athlete to athlete, although there is no hiding from the fact that triathlon is a tough sport and a significant percentage of performance issues are directly related to inconsistent application and execution of skills due to an inability to effectively manage the prolonged physical and psychological demands. It is a natural human tendency, and part of our evolutionary make-up to avoid pain and discomfort wherever possible, but unfortunately such an approach does not fit the elite sports model, and if not managed effectively the associated cognitive distractions have been found to lead to various degrees of performance decrement (see Moran, 1996).

In a number of cases the situation is further exacerbated by the comorbid existence of anxiety related directly to performance outcomes and/or the physical and cognitive demands.

The predominant interventions utilised in addressing these issues is a combination of basic Cognitive-Behavioural Therapy and Mindfulness-Acceptance-Commitment (MAC: Gardner & Moore, 2007) techniques.

For example, if an athlete is struggling with intrusive thoughts and increased anxiety prior to a performance, they are encouraged to attend to and acknowledge the thoughts in an open, non-judgemental manner (Kabat-Zinn, 1994) allowing them to disengage from the thought and providing the opportunity to redirect their attention to something more effective and functional (i.e., consistent with their performance objectives).
An effective technique to engage in this process is having the athlete use any physical manifestations of the anxiety (e.g., butterflies in the stomach, lump in the throat, increased heart rate, etc.) as an attentional anchor or focal point to which to shift their attention. With the athlete now engaging a more present focus and greater experiential awareness, they are then encouraged to utilise a brief centering exercise (e.g., regulating their breathing and/or monitoring any subsequent changes in their physical state). When the athlete is ready, they are then encouraged to re-engage with their pre-determined pre-performance routine, and the associated physical and cognitive processes, repeating the intervention as required.

A similar process is encouraged if an athlete identifies recurrent lapses in concentration and a subsequent inability to adhere to their race plan and performance routines, due to their level of physical distress and associated negative cognitions. The athlete is encouraged to identify a specific aspect of the physical distress (e.g., burning sensation in the legs) and focus their attention on the physiological sensation as an attentional focal point, allowing the release of the fixation on negative interpretation/appraisal that is creating a distraction from relevant performance cues.

Once again, from this more present-centred focus, the athlete can then engage a more functional mindset of either reframing the interpretation of the distress as simply a physical sensation or important physical performance feedback, and/or re-engage their race plan and predetermined associative and dissociative strategies (Masters & Ogles, 1998) to strategically manage their attention and effort more effectively.
Final Note

A clear benefit of the intervention frameworks outlined above and my broader servicing philosophy is their utility within both training and competition contexts. Ever mindful of the lessons of the past and their contribution to Australia’s success in triathlon, I utilise these philosophies and frameworks to guide my concerted endeavours to contribute to the achievement of a number of fundamental objectives.

These objectives include maximising coach effectiveness, creating optimal training environments, and assisting athletes to have a better understanding of themselves in both the training and racing contexts, and to develop the skills to create greater resilience, self-determination, and consistency in performance as they evolve from session to session and race to race.

It is a pleasure to be involved in a program steeped in a history of such success, and I hope that in some small way my involvement can both respect the achievements of the past, and contribute to Australia’s continuing success into the future.
REFERENCES


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Windsurfing in Hong Kong
Li Hin-Yue (Henry) and Si Gangyan

In

Secrets of Asian Sport Psychology
Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

The Hong Kong government has supported the sport of windsurfing, via services provided by the Hong Kong Sports Institute (HKSI), ever since it was introduced to the island in the early 1970s. The HKSI is the only elite training centre in Hong Kong, and is dedicated to identifying, nurturing, and developing promising juniors and elite athletes from 16 focused sports, including windsurfing.

Hong Kong windsurfers have achieved success in major games and various international competitions since the early 1990s. Windsurfer Lee Lai-Shan is Hong Kong’s first and, to date, only Olympic champion. The moment she captured the Olympic crown in Atlanta in 1996 is vividly entrenched in the memories of most Hong Kong people. Since her iconic achievement, windsurfing in Hong Kong has flourished as a competitive sport.
Sport Psychology Services

The Sport Psychology and Monitoring Centre (SPM) operates under the Elite Training Science & Technology Division of the HKSI. Following referral by a coach, the sport psychology consultants will work with athletes from their emergence as talented juniors through to the senior international level. SPM personnel also provide support to the elite coaches, to coaches working in the community, and also conduct applied research as part of their role.

Rene Appel has served as the Head Coach of Hong Kong windsurfing for more than two decades. Appel is well known for getting the best out of his athletes, as well as for his effective utilisation of sport science services, including sport psychology. Due to ongoing demand for sport psychology services by Appel and the windsurfing athletes, the sport has always been one of the highest priority clients for SPM consultants.

Psychological services include regular individual consultation and on-site support at both local and overseas regattas. Individual consultations might include issues such as decision-making and self-regulation, motivation for training, toleration of extreme physical conditions, as well as life planning and retirement. Windsurfing-specific mental skills training programs are also provided.

Credit: Courtesy of Windsurfing Association of Hong Kong / Facebook
Case Study #1: Lee Lai-Shan

As its one and only Olympic champion, Lee Lai-Shan is the undisputed queen of sport in Hong Kong. Born into a humble family of 12 children and losing her father when she was just seven years old, her story is one of a person who grew accustomed to overcoming adversity. Introduced to windsurfing by her uncle at the age of 2, she conquered the disadvantages of lack of finance and an absence of successful role models in Hong Kong sport before going on to conquer the world of international windsurfing, winning three World Championships (1993, 1997, 2001) and two Asian Games gold medals (1998, 2002) in addition to the 1996 Olympic title. Her sense of disadvantage was so acute in the early days of her career that she considered quitting the sport, but a small incident fed her determination to succeed. “I thought of giving up, but once a tiny shrimp bounced up on my board and kept struggling to get back to the sea. If a little shrimp had such willpower, I decided that I had too” (Young, 2005).

San San, as she is affectionately known, has written more than once about her psychological experiences during an athletic career that spanned four Olympic Games (Lee & Lee, 2008). She greatly valued the sport science support she received from HKSI and emphasised her positive working relationship with the sport psychology consultants. Lee Lai-Shan experienced severe anxiety herself and also witnessed it among her teammates at the Barcelona Olympic Games of 1992. She came to dread speaking to the media in Barcelona. “Many people thought I stood a good chance of winning, but I knew I wasn’t ready” she recalled (Tong, 2011). From that point on she worked closely with HKSI sport psychology consultants to develop her competition skills.

Specifically, this involved a program of mental skills training, psychological monitoring, and competition planning. Having secured the silver medal at the 1996 World Championships, San San was regarded by the coaching and sport science team as being well prepared before the Atlanta Olympic Games, “For the Atlanta Olympics, my preparation work was nearly perfect. Days before departure, my dentist noticed the growth of my wisdom teeth. I instantly decided to ask him to remove them. I didn’t want any lingering worries later on. Two days before the competition, I met Trisha (sport psychologist) for a final ‘check-up’. During the session, I vividly visualized the whole competition environment. We both agreed that my mental condition was ‘fit and perfect’” (Lee & Lee, 2008; p.128).
On the first day of competition at the Atlanta Olympics, San San was seriously hurt when stung by a jellyfish. She recalled how the psychological skills she had learned came to the fore at that moment to help manage the pain, to cope with the adversity of the situation, and ultimately to win the Olympic gold medal, “I couldn’t feel anything in my left leg for a while ... the toxin caused me so much pain. More importantly, it made me very angry. I couldn’t believe such a thing could happen to me at that moment. I nearly couldn’t control myself at all. I hit the board to release my pain and anger. I wanted to calm myself ... I sought help from the medical boat ... I couldn’t hesitate any longer. At that moment, those mental skills that Trisha (sport psychologist) had taught me came into play. I asked myself to contain the anger and focus my attention somewhere else. I tried not to feel the numbness or pain in my left leg. After a minute’s practice, it worked well. I could then stay calm and focus on the race. I got third place in the first race” (Lee & Lee, 2008, p.129).

San San acknowledges that the management of emotions begins with an understanding of oneself and an appreciation of the challenges that lie ahead.

She developed the habit of using a particular psychological strategy to cope with issues that had the potential to upset her equilibrium and to generate negative emotions, “Try to visualise a treasure box in the mind. Put the problem in it, close the lid, and focus on the more urgent task. When, after finishing the task, you look at the problem in the box again, you’ll likely find that it isn’t a big deal after all” (Tong, 2011).
Psychological Challenges in Windsurfing

Researchers and applied practitioners have written extensively on the subject of psychological skills for windsurfing and sailing. Based on his longstanding experiences of working with the Royal Yachting Association in the UK, Maynard (2006) identified various psychological interventions suitable for competitive sailors and windsurfers. He described professional attitude development, performance profiling and goal-setting, concentration skills, anxiety management and mental rehearsal, as well as performance planning for windsurfing.

Sport psychology consultants from SPM cover all of these mental skills during their work with the windsurfers. The following sections address some of the common psychological issues experienced among Hong Kong windsurfers and the specific interventions provided by SPM. Both sport-specific and culturally-specific issues are discussed.

Exhaustion Management

Since pumping became permissible in the sport in 1994, windsurfing has been regarded as a combination of sailing and rowing. Pumping involves pushing a heavy rig back and forth in order to accelerate faster in light winds. This technique is often required to be maintained for extended periods of time, testing the stamina of windsurfers to the limit. One of the toughest aspects of intensive training sessions and competition is coping with muscle pain and tiredness. Hence, tolerability of physical pain and exhaustion is one of the most important psychological requirements for windsurfers.

Through their extensive on-site work with the windsurfing team, the sport psychology consultants have identified several factors that can prevent athletes from sustaining high-intensity pumping for extended periods.

- Lack of determination to tolerate substantial muscle pain and tiredness.
- Poor awareness of pain and tiredness tolerability.
- Poor understanding of the physiological mechanisms underlying pain and tiredness.
- Lack of commitment to improve.
- Lack of effective mental skills to cope with sensations of pain and tiredness.
Sport psychology consultants from SPM have established a four-pronged training program to improve the capacity of the windsurfers to tolerate exhaustion.

1. **Systematic assessment of the technical and psychological characteristics of individual windsurfers is conducted to inform the process of tailoring pain awareness and tiredness tolerability strategies to personal characteristics.**

2. **Psycho-education of pain and tiredness mechanisms, as well as human potential, is provided to the windsurfers. They are taught that mental skills training can enhance tolerability of exhaustion. Human potential can be explored and unlocked, so that the tendency for self-protection can be altered and personal limits can be challenged (Si & So, 2011).**

3. **Windsurfers need excellent concentration to perform well. Extreme fatigue combined with distractions triggered by irrelevant internal or external cues represents a common threat to concentration. Windsurfers are often alone on their boards in open seas, and many irrelevant sights and sounds can distract them. Well-practiced re-focusing routines help them to attend to the important performance cues and to cope more effectively with the physiological signals of fatigue. With input from the sport psychology consultants, the windsurfers are encouraged to identify and implement effective coping strategies. This might involve attenuating sensations of pain and tiredness by monitoring pumping rhythm, using controlled breathing, muscle relaxation, imagery, positive self-talk, or music.**

4. **Another key strategy is to make good use of the on-site support by trialling various psychological strategies. The windsurfers and their coaches evaluate pumping quality after each round of competition. These data are recorded systematically for follow-up analysis, during which time the athlete, coach, and sport psychology consultant identify when and how pumping was affected and collectively develop technical and psychological strategies to address pumping-related issues.**
Decision-making

Effective decision-making is a crucial aspect of the sport of windsurfing. Decision-making by a windsurfer in competition involves the collection and analysis of race information, followed by a decision about which course of action is consistent with the competition goal. In different stages of a race — start, rounding marks, final spurt — windsurfers are constantly making decisions (e.g., whether to keep pumping, whether to change direction) in accordance with environmental variations (i.e., wind, waves), the position of opponents, and their own bodily condition. The effectiveness of these decisions can directly influence the race result. The quality of decision-making, as a cognitive skill, is relatively independent of other windsurfing-specific skills (e.g., maximizing speed in a strong wind, pumping technique). A windsurfing athlete who is strong in all technical aspects, but relatively weak in the quality of decision-making would find it difficult to succeed at the elite level.

Several common errors occur during the process of decision-making. Firstly, a windsurfer may rush into making a decision before gathering enough information. This type of error is often associated with inefficient or incorrect attentional shifts (e.g., a premature switch from an external, information-gathering attentional style to an internal, analytical style). Secondly, windsurfers often fail to learn from previous decision-making errors. Some windsurfers do not comprehensively analyze problems they have experienced in the past, so when similar situations arise again (e.g., should I tack under this circumstance?) they may repeat the same error. Thirdly, a windsurfer may become confused in stressful situations (e.g., confronting rivals at the start of a race), which may increase arousal above an optimal level and attenuate information processing efficiency.
SPM consultants have developed specific training techniques for improving decision-making effectiveness:

1. General concentration assessment, education and training, and anxiety-management training (Modrono & Guillon, 2011) can help windsurfers to understand the relationship between arousal level and concentration, and to acquire the proper skills for self-adjustment for competition. Windsurfers should understand the difference between performance on the one hand, and whether they win or lose on the other hand. Whereas performance is more controllable, winning and losing are less so. The aim of the training is to help the athletes identify and focus on the controllable factors associated with performance. Common controllable factors include rig settings, discipline, fitness level, and reaction to daily hassles. Such training can help windsurfers to stay alert and clear-minded, so they can perform at their best via improved anticipation and decision-making.

2. On-site race evaluation, conducted in cooperation with the windsurfers and their coaches, is a valuable way to identify issues that need to be addressed to enhance future performance. The Goal Attainment Scale (GAS; Kiresuk & Sherman 1968; Martin, Thompson, & McKnight, 1998) is used to facilitate windsurfers’ evaluation of their competition performance. The GAS was designed to assist performance review based on five levels of goal attainment, ranging from the best possible outcome (+2, fully in control and good confidence) to the worst possible outcome (-2, total loss of control), and the middle levels of +1 (staying relaxed and calm most of the time), 0 (acceptable behaviors, showing no visible loss of control), and -1 (reacting negatively to the difficult situation; see Table 1). With reference to the goal of correct decision-making the windsurfers respond to the question, “How many difficult or crisis situations did you encounter in the competition today?” They then rate their decision-making and the extent to which they felt in control. Each decision-making situation is discussed, so that windsurfers come to understand the process better and the factors that affect performance in various situations.

3. Comparison of strategic decisions made by the windsurfers with those made by other elite windsurfers can also help to develop more effective approaches to anticipation and decision-making. These latter two strategies are used in conjunction with reviewing the race information downloaded from the event organiser’s GPS system.
Table 1. Self-Evaluation of Goal Attainment

| How many difficult or crisis situations did you encounter in the competition today? |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
| 0                              | 2               | 4               | 6               | 8               |
| 10                             | 12              | 14              | 16              | 18              |
| 20                             |                 |                 |                 |                 |

Your handling of those difficult or crisis situations:

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<th>Scale</th>
<th>Degree of control</th>
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<td>(+2) Best possible outcome</td>
<td>Fully in control and good confidence</td>
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<tr>
<td>(+1) Better than acceptable</td>
<td>Staying relaxed and calm most of the time</td>
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<tr>
<td>(0) Acceptable</td>
<td>Acceptable behaviors, showing no visible loss of control</td>
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<tr>
<td>(-1) Less than acceptable</td>
<td>Reacting negatively to the situation</td>
</tr>
<tr>
<td>(-2) Worst possible outcome</td>
<td>Total loss of control</td>
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Weight management

Weight management in windsurfing is orientated towards achieving a perceived ideal body mass for racing (Allen & De Jong, 2006). Unlike sports such as rowing, there is no specific weight class event for windsurfing. Shephard (1990) advised against a strategy of trying to identify a single optimal weight for athletes, proposing instead that an individual’s physiological profile is more important, including body fat percentage, maximal oxygen uptake, and muscle strength. There is, however, continuing speculation about ideal size or body weight range within the windsurfing community. Some windsurfers think that being heavier will help them to stabilize under strong wind conditions, whereas others hold the view that losing weight makes pumping easier when the wind is lighter. Coaches and windsurfers may have differing views of the optimal weight of individual windsurfers, so sport psychology consultants sometimes need to facilitate communication and mutual understanding between the two parties.

Lee and Lee (2008) described a time when Lee Lai-Shan was “obsessed” with losing weight, because she thought it would be good for her performance at the 1996 Atlanta Olympic Games. She strictly monitored and controlled her diet and lost 1.5 kg, but was then found to have iron deficiency. With the assistance of colleagues, including a sport biochemist and sport nutritionist, her sport psychology consultant helped San San to reduce her concern about weight and to get back on track towards her successful Olympic campaign. Goal-setting, including exploration of possible obstacles and available resources, followed by action planning, are commonly-used strategies during individual consultation for weight management. Also regular psycho-education has been conducted with Hong Kong athletes in general, including those from windsurfing. Disordered eating behaviour is not a common issue among Hong Kong athletes, but it is always on a sport psychology consultant’s radar.
Overseas Coaches

Apart from general psychological issues, including psychological tolerability and decision-making, some culture-specific issues are experienced among Hong Kong windsurfers. Many coaches who work with the team, the elite athletes in particular, are from overseas and do not speak Chinese. Some may not even reside in Hong Kong and only meet the windsurfers during overseas trips. Such circumstances bring inherent communication challenges for both the windsurfers and their coaches. Unless the athletes are proficient in English, high in self-awareness, and willing to express themselves, they find it difficult to discuss their performance and training goals with coaches.

Due to international competition schedules and limited availability of high-quality training partners in Hong Kong, many windsurfers spend a large proportion of their time training and competing overseas. Elite Hong Kong windsurfers may remain overseas for more than 100 days a year. Some travel on their own and train with windsurfers from other countries for most of the year, sometimes without coaches. They are required to set clear, specific, but flexible training goals and maintain a detailed training record. Such circumstances place considerable demands on the windsurfers’ self-discipline and self-management skills and hence regular, long-distance contact with coaches and sport science staff is advantageous for the windsurfers.

The sport psychology consultants take the initiative to stay in touch with the windsurfers when they are overseas and even become something of a bridge between the coaches in Hong Kong and the windsurfers abroad. Also, due to the relative independence of the consultants, windsurfers are sometimes more willing to discuss their goal-setting or overseas training plan with SPM personnel. Thanks to advancements in communication technology, the windsurfers can easily stay in touch with sport psychology consultants through email and online media, including Skype™ and WhatsApp™.

Sport psychology consultants sometimes travel with the team to provide on-site support. During these trips, the typical support provided for the windsurfers would be to help develop a detailed race plan, an anxiety-management plan, post-race review, collection and recording of race information for evaluation at a later date, and occasionally crisis management. It is not uncommon for the athletes and sport psychology consultants to meet daily during a competition lasting for a week or two to reflect on performance and related thoughts and feelings. It is quite common for the team to hold an overseas training camp between competitions, so sport psychology consultants may have opportunities to provide on-site support during training as well as competition. Since the pressure is minimal during training, it can be a good opportunity to work on issues such as exhaustion tolerance.
Parental Involvement and Study Issues

Windsurfers generally start their involvement in the sport by joining a local club or an interest class organised by the Windsurfing Association of Hong Kong. They may then compete in local races and be selected into district teams and, ultimately, the Hong Kong team. In contrast to the top-down selection system that operates in places such as mainland China, the bottom-up sport system in Hong Kong windsurfing allows parents to become involved in their children’s sports development from an early stage. Although parental support is vital in terms of financial, lifestyle, and academic considerations, over-involvement by parents can exert extra pressure on young windsurfers and their coaches. Sport psychology consultants conduct meetings between parents, coaches, and windsurfers to facilitate mutual understanding of the roles of each and the boundaries that need to be observed.

In 2012 there were about 40 windsurfers supported by scholarships from the Hong Kong government. Only five were full time, whereas the remainder were studying full time in tertiary or secondary education. As in other Asian countries, the educational culture in Hong Kong is focused on ranking individuals and institutions, and it is highly exam-oriented. Public examinations during secondary education are stressful for Hong Kong students, especially student-athletes. It is widely believed that students’ futures, in particular securing a university place, are rigorously filtered by their ranking in these examinations. The educational assessment process has been reduced to just a single public examination (i.e., Diploma of Secondary Education, DSE) since 2012, and academic competition among students remains fierce. In collaboration with the Athlete Affairs Department at the HKSI, sport psychology consultants educate young windsurfers about time management and goal-setting once they start to train full-time. Some junior windsurfers may reluctantly put windsurfing on hold for a year, when they reach the year of public examinations. Such an arrangement inevitably causes disruption to their development as neophyte windsurfing professionals. Sport psychology consultants or colleagues from the Athlete Affairs Department conduct meetings with coaches, parents, and the windsurfers in order to ensure that the possible conflict between professional sport and the educational transition from secondary to tertiary education is handled as effectively as possible.
Team Culture and Tradition

Since the late 1990s, Hong Kong windsurfers have won many medals in the Youth World Championship prior to moving up to the senior national squad. Over time, a medal-winning performance in the Youth World Championship has become perceived as a standard to which all young Hong Kong windsurfers should aspire before the end of their junior careers, particularly for those who seek to transfer to the senior level of competition. Although the former youth world champions act as positive role models for junior windsurfers, the downside of this tradition of international success is that it encourages some junior windsurfers to set unrealistic goals for the Youth World Championship and burden themselves with unnecessary pressure. The self-confidence of those transitioning from the junior to the senior ranks may be deflated if they do not perform to their own expectations or the expectations imposed on them by others.

The message from the sport psychology consultants to young windsurfers is that, although the historical legacy of international success provides a validation of the Hong Kong training system, it does not represent a required benchmark nor a “graduation examination” for their junior years in windsurfing. The windsurfers are encouraged to aim high and not to fear opponents, but also not to focus too much on comparisons between themselves and Hong Kong windsurfers from previous years.

Support for Coaches

Coaches and sport psychology consultants collaborate to promote a positive team culture in Hong Kong windsurfing and to improve training effectiveness. The sport psychology consultants have conducted surveys and interviews with the athletes about training motivation. The information gathered from athletes included how they got started in windsurfing, things they don’t like about the sport or about training, as well as their preferred coaching and training elements. The windsurfers, especially the younger ones, have reported how much they enjoyed playing with their coach on the beach. This feedback confirmed to the coaches that fun is one of the key elements for encouraging young windsurfers to commit and devote themselves to the sport.

It is not uncommon for elite windsurfers to move into coaching after their retirement from international competition. SPM works closely with the HKSI windsurfing department (elite level coaches) and the Windsurfing Association of Hong Kong (grassroot and community level coaches) in the area of coach development. Sport psychology workshops and training courses are delivered to community coaches as part of coach registration courses or continuing professional development. Topics covered include goal-setting, motivation, relaxation, imagery, self-talk, adolescent psychological development, and parental engagement.
Case Study #2: Psychological Skills Workshop for Junior Windsurfers

In 2011, SPM provided a series of psychological workshops for junior athletes. Eleven junior windsurfers joined the 12-week program, which addressed arousal control, concentration, goal-setting, self-talk, and imagery. Related theory and application were discussed in alternate weeks. Video demonstrations, homework exercises, and story sharing were used to enhance learning.

- **Arousal control.** The inverted-U relationship between arousal and performance was introduced ([http://en.wikipedia.org/wiki/Yerkes-Dodson_law](http://en.wikipedia.org/wiki/Yerkes-Dodson_law)). Windsurfers were guided to explore their optimal arousal level.

- **Concentration.** Attention style (Nideffer, 1976) and common sources of distraction were discussed. A concentration grid test (Bull, Albinson, & Shambrook, 1999) was conducted to demonstrate concentration issues. The concepts of attentional cues, pre-performance routines, and here-and-now focus were introduced.

- **Goal-setting.** A SWOT analysis ([http://en.wikipedia.org/wiki/SWOT_analysis](http://en.wikipedia.org/wiki/SWOT_analysis)) was conducted, and task and ego orientation were assessed to increase the windsurfers’ self-awareness. SMART goal-setting was emphasised, incorporating both process and performance goals ([http://en.wikipedia.org/wiki/SNART_criteria](http://en.wikipedia.org/wiki/SNART_criteria)).

- **Imagery.** Imagery using various senses (visual, audio, olfactory, kinesthetic, emotional) was introduced. Internal and external imagery were explained and discussed.

- **Self-talk.** Exercises were introduced to assist the athletes to identify their own self-talk and make it as positive as possible.
Twenty items from the Mental Skills Questionnaire (MSQ; Bull et al., 1999) were translated into Chinese and administered before and after the program. Post-program scores were significantly higher than the pre-program scores across all sub-scales (i.e., arousal control, self-talk, goal-setting, concentration, imagery) with large effect sizes evident. Follow-up interviews were conducted with the coaches and junior windsurfers in attendance. Feedback from the windsurfers showed the positive impact of the program:

“I used to set goals that were unrealistic, too difficult. Now I’ve learnt to set more reasonable goals which can drive me to put in all my effort. I will also design an action plan and put it into my training” (Athlete A).

“I learned that I have good teammates who are willing to support me. More importantly, when I lose, I will try to analyze and find out what I’ve done wrong. I might still be unhappy about losing, but not for too long. I wouldn’t let the negative experience affect my next race” (Athlete B).

“I’ve changed a bit after the workshop. I won’t drill into the negative feeling when I lose. Instead, I would encourage myself to focus on the next race” (Athlete C).

These benefits were reinforced by the coaches. One commented that:

“(Name of athlete) no longer complains that the program doesn’t work for him or that other people can’t help him. He has started to realize that he doesn’t focus on his personal goals enough ... He used to follow what others, especially his coach, asked him to do and let the responsibility fall on them. He now understands that he can do better and take charge of his own goals” (Coach A).

Another coach reported that the workshop had helped one of his female windsurfers to be more open, self-aware, and willing to express and reflect on her emotions. Although the long-term effect of the program is yet to be revealed, the junior windsurfers seemed to improve in mental skill proficiency as a result of the workshop.
Summary

In the Hong Kong windsurfing community, the coaches and professional support staff encourage the athletes to think broadly and aim high. Building on Lee Lai-Shan’s legacy, most Hong Kong windsurfers, in particular those who train full-time, dare to commit themselves to the attainment of an Olympic or World Championship medal. Such commitment cannot be maintained without excellent coaching and a holistic sport science team. Sport psychology as part of the sport science team has established effective cooperation with the coaches and windsurfers from grassroots level to junior and senior national squads. The sport psychology consultants endeavour to work on windsurfing-specific issues, such as exhaustion management and decision-making, and to continuously facilitate the young athletes’ capacity to handle challenges in sport and in life.

REFERENCES


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Wrestling in Iran: Where Old Meets New in Sport Psychology

Khosro Hamzeh and Peter C. Terry

In

Secrets of Asian Sport Psychology

Edited by: Peter C. Terry, Zhang Li-Wei, Kim YoungHo, Tony Morris, and Stephanie Hanrahan
Introduction

Wrestling is one of the most ancient sports still contested. Its origins date back at least 5000 years to the Sumerian civilization, and it is apparent that wrestling was commonly practiced by the ancient Egyptians, as evidenced by the many paintings of wrestlers at the Beni Hassan burial tombs. Wrestling became something of an art form in ancient Greece, where it was included in the original Olympic Games from 708 B.C. and provided the culmination of the Pentathlon, following the discus, javelin, long jump, and foot race.

Wrestling has appeared on the program of every modern Olympic Games since they were established in 1896, with the sole exception of the Olympics of 1900. Olympic wrestling events for women were introduced in 2004.

The Olympic future of wrestling has come under serious threat recently.

In February 2013, the International Olympic Committee (IOC) voted to remove its core sport status, threatening wrestling’s continuation in the Olympic Games from 2020 onwards.

Following dramatic changes to its global leadership and a revamped competition format for the sport, the IOC announced in September 2013 that wrestling would remain on the Olympic program. From 2014, international wrestling competitions are held in six weight classes, which vary slightly between the two distinct styles of Greco-Roman and Freestyle wrestling. Wrestling and boxing are the only sports that still require participants to have amateur status to participate in the Olympic Games.
Wrestling in Iran

Wrestling is traditionally regarded as the national sport of Iran, even though it has been overtaken by football as the country’s most popular sport. Wrestling is viewed by many as more than just as a sport, rather as an integral part of Iranian culture. Champion wrestlers are revered as national heroes who are seen as protectors of the poor and role models for society. There are many variations of wrestling in different parts of Iran that are unique to those regions. Indeed, every province in Iran has its own particular style of wrestling. Traditional Iranian forms of wrestling bear close similarities to Olympic Freestyle wrestling.

Iran has a proud record of success in international wrestling. Since the country first participated at the Olympics Games in London in 1948, eight of the 15 Olympic gold medals won by Iran’s athletes have come from the sport of wrestling, five in Freestyle events and three in Greco-Roman. Overall, 38 of the 60 Olympic medals won by Iran have been won by its wrestlers. Furthermore, Iran has won a total of 151 World Championship medals, including 56 gold medals, ranking the country among the most successful of all time.

Emamali Habibi became Iran’s first Olympic wrestling champion in Melbourne, Australia in 1956 and his achievement was matched one day later by Gholamreza Takhti.

A legendary Iranian hero, Takhti was renowned for his generosity, bravery and commitment to the poor, and is considered to be a supreme role model for young people. Takhti had the nickname of Jahan Pahlavan (Persian: جهان پهلوان; literally meaning The World Champion) as much for his chivalrous behaviour and sportsmanship as for his sporting achievements.

In a celebrated match against Russian adversary Alexander Medved, who fought with an injured right knee, Takhti declined to take advantage, attacking only his opponent’s left leg. This made his attacks predictable, which caused him to lose the match but demonstrated that he valued honourable behaviour over victory. Immensely strong physically and mentally, he was a very technical wrestler with several moves unique to him.

Unfortunately he passed away in 1968, taking the secrets of his mental preparation strategies with him. However, many Iranian wrestlers continue to use traditional methods of mental preparation, some of which are detailed in this chapter.
Throughout this chapter, whenever the first person form of expression is used, the first author is referring to the applied sport psychology work he has conducted with the Iranian wrestling team over an extended period of time. The second author, who has visited Iran three times to deliver lectures and workshops on sport psychology to national athletes, coaches and support staff, took the lead during the writing and redrafting phases of the chapter. In those instances where details of consulting work completed with specific, named wrestlers are mentioned, the written permission of the athletes in question was obtained.

Working as a Mental Skills Coach

I started work as a mental skills coach at the National Olympic and Paralympic Academy of Iran in 2007 and have been supporting various national teams ever since. Given the largely traditional views held by Iranian wrestling coaches and athletes, and their relative lack of knowledge about the field of sport psychology, gaining entry into their world presented a difficult challenge. Although I have a background in counselling psychology, I judged that by presenting myself as a mental skills coach rather than as a psychologist would be more readily acceptable to the wrestlers and coaches, and would avoid any perceived stigma associated with use of the term psychologist. My first assignment with the Iranian national wrestling team was to help to prepare the Freestyle wrestlers for the 2007 World Championships in Baku, Azerbaijan, where the Iranian team secured five medals. Subsequently, I supported the Iranian wrestling team at the 2008 Beijing Olympic Games and the 2009 World Cup in Tehran. In addition, I have worked with many wrestlers individually since 2007 in my private clinic.

My own background in sport was as an amateur basketball player but I have always maintained a keen interest in wrestling and followed the major competitions closely. Having a background as an athlete and being knowledgeable about wrestling smoothed my transition into the team and helped me to become accepted by the athletes and coaches. After introducing myself as a mental skills coach to team members, as a first step I always try to explain why mental preparation is important.
Traditional approaches to wrestling in Iran do include some elements of mental preparation but generally athletes and coaches do not share the same worldview nor talk in the same terms as sport psychologists about the mental side of their sport. I have found that a good way to introduce the concept of mental skills training is to talk about the *performance pie* as a way to explain that performance in wrestling, as in any other sport or performance environment, involves the three interdependent elements of technical preparation, physical preparation, and mental preparation (see Figure 1).

I start by requesting estimates from the athletes about the proportion of wrestling performance that can be attributed to each element of the pie. Their estimates vary of course but approximately equal allocations to the three elements are not uncommon. My next question always relates to how much of their preparation time is devoted to each element of performance. A light bulb moment often occurs at this point when the athletes typically realise that their allocation of time to the three performance elements nowhere near matches their estimates of relative importance. Almost always, mental preparation receives far less time in reality than it warrants according to its perceived importance, and this acts as a hook to gain their interest in my work.

For example, if a wrestler tells me that he completes 20 hours of training per week and he believes that mental preparation represents 25% of wrestling performance, I would ask him if he completes 5 hours per week of mental preparation, as would seem logical. I resist presenting a direct challenge to the wrestlers about the correct portion of mental preparation and always respect their views on the matter, but I do encourage them to work towards a balance between the importance each one attaches to mental preparation and the amount of time they devote to it.

To further motivate the athletes to engage with mental training, I also present them with endorsements from famous Iranian wrestlers, such as Rasoul Khadem (1996 Olympic champion) and international role models, including American John Smith (2-time Olympic champion and 6-time World champion), both of whom were advocates for mental training and included it as an integral part of their wrestling preparation.

*Figure 1. The Performance Pie* (adapted from Karageorghis & Terry, 2011, p. 9)
Psychological Assessment of Wrestlers

I conduct initial assessments of the athletes using three approaches.

Firstly, I assess each wrestler using a standardised test, usually the Ottawa Mental Skills Assessment Tool (OMSAT-3; Durand-Bush, Salmela, & Green-Demers, 2001), for which there are Iranian athlete-specific tables of normative data. The OMSAT-3 includes scores for 12 mental skills and hence provides both an indication of each wrestler’s self-assessed strengths and weaknesses across a range of mental skills, and baseline data against which to assess their development.

Secondly, I use a follow-up, semi-structured interview to probe deeper into the OMSAT-3 results of each individual. Often by exploring the perceived strengths and especially the weaknesses of their existing mental skills, I am able to tailor a more individualised program of mental training. Occasionally, I find that athletes have not understood the OMSAT-3 items properly and therefore their responses would have been misleading without the follow-up interview.

Thirdly, I find that observation of each wrestler during training and competition to be very revealing. I typically spend considerable time observing the wrestlers’ performances and the team communication behaviours. Sometimes my observations suggest a completely different pattern of mental skills from the test results. For instance, a Freestyle wrestler preparing for the 2008 Olympic Games had self-reported excellent concentration skills. This self-appraisal contrasted sharply with his observed performance characteristics and reports from team coaches, which both pointed towards poor concentration being his greatest psychological challenge. Whether this was a case of misunderstanding the questions or faking good was never quite established, but the situation did confirm the benefit of multiple sources of assessment. Prior to assessments, and particularly where self-reports are concerned, it is important to confirm to all athletes that the results will be used only for the purpose of assisting their preparation and never for the purpose of selection.

Credit: Courtesy of the Islamic Republic of Iran Wrestling Federation
Mental Skills for Wrestlers

Imagery

Imagery is the first skill that I teach to athletes because most of them already have some existing imagery ability and, in my experience, tend to appreciate its potential benefits more readily than some other mental skills. Imagery can boost many aspects of wrestling performance, such as modifying technique, enhancing self-confidence, or assisting the refocusing process during a bout.

I start by explaining how imagery works and then introduce simple imagery practices to develop their imagery skills. For example, I may give the wrestlers an orange to scrutinise, touch, smell and taste, and to try to memorise its features. Their next task, with eyes closed, is to visualise the orange and to recreate its features with all their senses.

As a more advanced exercise, I ask them to look at a photograph of a relative or friend, focusing on facial features, hair colour, clothing, and so on. Then, again with eyes closed, they try to visualise all the features of that person in the picture, imagine the person moving around while talking with the athlete. Normally I ask them to complete this practice three or four times a day. When they have mastered this activity it is time to move the imagery exercises into the realm of wrestling competitions.

A common strategy is to ask the wrestlers to imagine competing in the most successful competition of their careers thus far, because most athletes can easily recall this scenario in great detail. I encourage them to recreate that competition in their mind’s eye, looking at photographs or videos of the occasion if available, to make their imagery more vivid and realistic.
There are many uses for imagery with wrestlers. For example, if a wrestler is working to improve a technique during training, I would encourage him to augment physical training by using imagery to mentally rehearse the correct technique several times a day. Typically, this helps the wrestler to master the modified technique more rapidly. Imagery is also beneficial to enhance a wrestler’s self-confidence by recreating a multisensory experience of a previous successful performance, recalling the sights, sounds, smells, thoughts, and feelings associated with that success. These images can then be transferred to create images of success related to a forthcoming competition. Similarly, a wrestler might use imagery to recall previous successes against an opponent against whom they may be pitted in an upcoming competition to reinforce feelings of ascendancy over that person or, in the case of an opponent over whom they have never tasted victory, imagery may be used to re-edit their previous encounters to create images of success and to mentally rehearse the strategies by which they plan to overcome that particular opponent.

Alireza Heidari is a very successful Iranian wrestler, with five World Championship medals and an Olympic medal. His close rival, Eldar Kortanidze from Georgia, had defeated Heidari in the quarter final of the 2000 Olympic Games and in the final of the World Championship in 2002 and 2003. Heidari regularly used imagery to try to enhance his prospects against Kortanidze. He would close his eyes and imagine himself competing against his arch rival, performing the techniques he believed would give him the best chance of defeating the Georgian. However, once his eyes were open he had trouble recreating these images and he could not picture the referee raising his hand in victory at the end of the contest, which he interpreted as an indication that he did not really believe that he could produce the outcome in reality. Effectively, he was haunted by the memories of his three defeats at the hands of Kortanidze. To prepare for the Olympic Games of 2004, Heidari imagined a successful encounter against Kortanidze more than 100 times, including the referee raising his hand in victory, and slowly but surely his belief grew that he would win. In Athens, Heidari defeated Kortanidze in the first round, recovering from a position of being 2-0 behind to defeat him 3-2 in overtime. By his own testimony, imagery played a key role in helping Heidari to develop the confidence required to overcome Kortanidze.
Concentration and Refocusing

The capacity to concentrate well, and especially to refocus quickly and effectively, is a very important mental skill for wrestlers. In my experience, this is a common weakness among athletes and hence I always pay particular attention to this issue in my applied work with wrestlers.

I start by explaining that, in any competition, there are particular events that have the potential to interrupt concentration and thereby interfere with performance. Concentration lapses may be caused by internal factors such as irrelevant thoughts or unhelpful emotions, or external factors such as refereeing decisions, crowd reactions, or an opponent’s behaviour.

There are several ways to address concentration lapses among wrestlers, many of which involve exploring the exact circumstances that caused attention to wander and then suggesting techniques that can assist in regaining focus. For example, I may ask a wrestler to recall situations where concentration was lost and then discuss the reasons why. The genesis of lost concentration often lies in negative or irrelevant thoughts. Once a wrestler has succumbed to thoughts that they cannot beat an opponent or thoughts have drifted away from task-relevant cues, by definition, concentration has been lost.

Hence, one beneficial strategy is to replace a negative thought (“I cannot win”) or task-irrelevant thought (“Am I letting down my country?”) with a positive, task-relevant thought (“Attack low and fast”). Given that the pressure of international competition may sometimes cause an athlete to be overwhelmed with negative thoughts, I encourage every wrestler with whom I work to allocate time to plan refocusing strategies for a variety of scenarios, including those that occur frequently and those that occur rarely but may prove pivotal.
The first part of this process, whereby the wrestler plans replacement thoughts for inappropriate thoughts, is shown in Table 1. After replacement thoughts have been identified, they are written in a notebook, memorised, and mentally rehearsed several times a day, increasingly so as the competition gets closer. The intent is to pre-program appropriate thoughts for scenarios with a demonstrated potential to disrupt concentration, so that effective refocusing becomes a habitual and reliable process. Using imagery to mentally rehearse effective refocusing strategies plays a key role in building habit strength, increasing the probability that the correct response will become the dominant response at critical times in competition.

Table 1. Refocusing via Thought Replacement

<table>
<thead>
<tr>
<th>Distraction scenario</th>
<th>Original thought</th>
<th>Replacement thought</th>
</tr>
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<tbody>
<tr>
<td>Example: I am behind with 30 seconds remaining</td>
<td>There's no chance of winning</td>
<td>Nothing is finished yet. I only need a few seconds to make the winning move</td>
</tr>
<tr>
<td>Scenario:</td>
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<td>Scenario:</td>
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Another effective concentration and refocusing strategy that I teach to the wrestlers is the controlled breathing technique, known as centering (see Karageorghis & Terry, 2011, pp. 161-162), which they would practice up to 30 times a day. Centering usually forms part of a wrestler’s pre-event routine, close to the start of the bout.

Often, I would combine centering with mental rehearsal of key characteristics of their desired performance (specific throws, aggressive approach, planned body language, critical moments) and then try to crystallise these characteristics into simple key words that form the basis of the wrestler’s self-talk and act as triggers for pre-planned responses.
Refocusing techniques proved crucial for Iranian Freestyle wrestler, Mehdi Taghavi, in his preparation for the 2009 World Cup. He identified two specific circumstances that caused his concentration to lapse and made it very difficult for him to refocus attention.

The first scenario occurred when he slipped a point or two behind either of his two main rivals in world wrestling. He found that this situation caused him to focus his attention on the robustness of his opponent’s defence rather than searching for weaknesses that he may be able to exploit. In turn this led to negative self-talk (“He’s too good”, “It’s impossible for me to score”) and sometimes he became fixed on this line of thinking until the contest was lost. Based on our discussions, Taghavi came to the conclusion that negative thinking, which led to negative doing in the form of defensive tactics, was the primary reason for his defeat. As a result, he committed to developing a more positive approach to refocusing in this scenario using pre-planned positive thoughts, self-talk, and tactics.

The second scenario was when his coach shouted at him during critical moments in his match in an attempt to motivate him. For Taghavi, the shouts of his coach tended to have a distracting rather than motivating effect. In this instance, the approach taken was to reframe perceptions of the situation, interpreting his coach’s shouts as genuinely motivational and more likely to disrupt his opponent’s concentration than his own. Having reinforced this revised interpretation with positive imagery and self-talk, his coach’s exhortations eventually became extremely effective as a motivator when Taghavi found himself behind in a contest. He went on to win the 2009 World Cup gold medal and the World Championships of 2009 and 2011.
Self-Confidence

Self-confidence is one of the most important psychological characteristics of all. As in all combat sports, it is crucial for wrestlers to have absolute faith in their abilities and in their physical and psychological readiness.

When self-confidence is high a wrestler is often able to overcome an opponent who may be stronger and more skilled. Indeed, a confident wrestler may feel that he is invincible no matter who the opponent. There are many factors that may have a positive impact on the self-confidence of wrestlers, some of which I have addressed below.

Physical Preparation

In my time with the Iranian national wrestling team I identified a close link, perhaps almost a linear relationship, between the quality, intensity, and thoroughness of the pre-event physical preparation and the level of self-confidence felt by the athletes. Whenever a wrestler had completed a high-quality program of physical preparation, having fulfilled all their training goals and attended to all the small details of the program, invariably the satisfaction they took from that experience translated into increased self-confidence for the forthcoming competition. By contrast, if a wrestler had experienced a niggling injury or some other minor mishap that resulted in a sub-optimal physical preparation, it tended to eat away at their confidence for the challenge ahead, as though they were going into battle with a piece of armour missing.

As an example, when working with the Freestyle team in preparation for the 2008 Olympic Games, a wrestler who had previously won two World Championship medals and was seen as a realistic chance for the Olympic title, lost precious preparation time at the pre-Olympic training camp due to some pressing personal issues. As a result, he perceived that his preparation had been inadequate and, on several occasions, expressed the view to me and others that he did not feel ready for the Games. Despite my best efforts and those of his coaches, his self-confidence remained low heading into the Olympic competition, where he performed poorly and was eliminated in the second round.
Positive Self-Talk

Every wrestler engages in self-talk before and during a competition. Positive self-affirmations tend to boost self-confidence whereas negative self-talk tends to detract from self-confidence. I spend time with the wrestlers planning a few positive self-affirmations to reinforce their confidence just prior to or during the critical moments of a contest. Some of the favourite expressions used by the Iranian wrestlers include “I am in the best condition I have ever been”, “I am so ready to compete”, “No one performs these techniques as well as me”, or simply “I am the best.”

Honour Gallery

This is a technique that I have introduced to the wrestlers to support their self-confidence. Each athlete creates a logbook referred to as their honour gallery.

To do this, I ask each of them to list the details of their greatest achievements in wrestling on one page of the logbook. For example, they may note down details of winning an Iranian national title or a World Championship medal, giving information such as when and where, plus any other details they regard as important.

On the opposite page, they make a note of the most important rivals that they have defeated and in what circumstances. For example, Olympic bronze medallist Alizera Heidari provided details of defeating his Georgian adversary Eldar Kurtanidze at the 2004 Athens Olympic Games.

Typically, a national team wrestler would provide details of 3 – 6 of his greatest achievements and best wins. The wrestlers use this logbook as part of their pre-event preparation. A few days before an important competition they read through it 2 – 3 times a day, recalling all the positive aspects of those moments, mentally rehearsing the techniques that brought them success, the referee raising their hand in victory, and so on. This helps to establish a foundation of positivity upon which to reinforce confidence about the forthcoming competition.
Practice Winning

It is common in Iran for coaches to decrease the intensity of training around two weeks prior to an important competition, to provide an opportunity to foster self-confidence among the wrestlers and add the finishing touches to their preparation. During this pre-event period, the coaches always arrange for the national wrestlers to compete in practice bouts against somewhat lower level opponents. The rationale for this strategy is that it provides an opportunity for the wrestlers to practice their competition plans in a relatively low pressure situation and to experience winning on a regular basis. The coaches believe that repeatedly defeating opponents, even those of lower ability, just a few days before a competition is likely to boost self-confidence based on the principle that winning becomes a habit. In addition, the opportunity to successfully execute their competition plans is seen as being of great benefit for their preparation.

Competition Plans

Developing a competition plan is an important part of the process of helping wrestlers to perform to their full potential. Elite wrestlers develop very fluent actions and techniques that are performed almost automatically. However, to increase the probability of success, it is often necessary to help wrestlers to look beyond their instinctive moves to pre-plan a winning strategy in consultation with their coach. I use two types of competition plans with wrestlers.

GENERAL COMPETITION PLANS

This type of competition plan is used against an unknown opponent. I find it helpful to segment each 2-minute round into four periods. An example plan might include the following segments.

During the first 30 seconds, the wrestler should be prudent while trying to estimate the ability of an opponent.

In the next 30-second period, he might try to execute pre-planned techniques an agreed number of times, perhaps three attempts in quick succession in order to gain the first point.

In the third 30-second period, there are three possible scenarios depending on the prevailing score. If the wrestler is ahead he should not feel any pressure to attack but instead be alert for a counter attack and try to maintain the status quo until the end of the round. If the score is tied or the wrestler is behind on the scoreboard, he should press his rival by attempting to execute planned techniques a particular number of times to get ahead or draw the round.

In the last 30 seconds of a round, the wrestler must be prepared for the same three scenarios, but should exercise a higher degree of prudence if ahead and greater intensity if challenging for the win.
SPECIFIC COMPETITION PLANS

There are usually several prominent wrestlers in each weight category who are well known to the other competitors. Wrestlers often spend long periods watching videos of their two or three closest rivals, and usually know their technical characteristics extremely well. Wrestlers may intuitively develop a competition plan to overcome specific opponents but frequently their plans lack adequate detail, emphasizing a few critical moments rather than planning the complete bout. I encourage wrestlers to develop a complete competition plan for every opponent they regard as an important rival.

As with general plans, each round is segmented into four periods but specific plans include greater consideration of how to defend against the trademark techniques of specific rivals and which techniques should be used to take advantage of a rival’s perceived weaknesses. When developing a competition plan for facing a particularly strong opponent, wrestlers are discouraged from attempting high risk techniques and reminded that a narrow win is all that is required. Competition plans for the three scenarios of being ahead, tied or behind are developed in detail.

Agreed competition plans are written down by the wrestlers in a notebook and read through several times until committed to memory. Competition plans are regularly rehearsed physically and mentally with increasing frequency as competition approaches. When working with a wrestler to develop a competition plan, the mental skills coach must be careful not to encroach upon the coach’s territory. The techniques and strategies inherent in the plan are usually based on advice from the Head Coach and, of course, he will have the final say on any competition plan. Given the desirability of wrestlers rehearsing their competition plans multiple times during practice sessions and also during simulated competitions, close collaboration between coach, athlete and mental trainer is essential while the plans are being developed. In practice, once a wrestler has developed an effective general competition plan, that plan can be made specific to particular opponents with only a few modifications.
Individual Consultations with Wrestlers

Although teaching mental skills to wrestlers is advantageous for their psychological preparation, helping them to feel mentally ready to compete remains an individualised and subtle process. Wrestling’s importance in Iranian culture and its popularity among the Iranian public is both a blessing and a curse. On the positive side, the sport is well resourced, the team is well supported, and many of the wrestlers are national heroes. On the negative side though, Iranian wrestling’s record of success leads to public expectations reinforced in the media that many medals will be won at every major championship. The burden of expectation can weigh heavily on the shoulders of young men, leading to irrational beliefs about the significance of winning and losing, threatening their self-confidence, and adding tremendously to the self-imposed pressure to perform well.

My approach to addressing such threats to performance is based in the traditions of cognitive behavioural therapy (CBT; see Meichenbaum, 2009) and rational emotive behavioural therapy (REBT; Ellis, 2004). Hence, when consulting with the wrestlers individually in preparation for major international championships, and in particular the Olympic Games, I will often explore their fears about the impending competition and then apply therapeutic methods to challenge those fears. Examples of such methods are shown below.

Downward Arrow Technique

The downward arrow technique involves identifying and pushing assumptions to the limit of their credibility in order to reduce or dispel anxiety. Using this method, I will ask a wrestler to identify a fear they may hold about a competition, write it down, put a downward arrow underneath it and indicate what will happen as a result. This process continues until the wrestler cannot think of any further consequence. This last answer is referred to as the latent hypothesis of the fear and it is seen as the source of the fear. Having found the source of the fear, it is challenged in order to weaken belief in the likely process of events.

For example, Figure 2 shows the train of thought of a wrestler prior to the Olympic Games. His fear of losing at the Games can be traced to the central thought that he will have lost his greatest, perhaps only, opportunity of a medal. On many occasions, not only is the fear a low probability event but something that, with the benefit of a broader perspective, does not represent a catastrophe. In this instance, the wrestler was young and would likely have subsequent opportunities to challenge for an Olympic medal.
Questioning

Questioning athletes to gauge their thoughts, feelings, hopes, and fears is an integral part of a counselling psychology approach. For me, questioning athletes is the central method by which I come to understand the athletes' personalities, attitudes, values and motives for participation, but perhaps more importantly to gain insight into their anxieties and sometimes irrational thoughts about forthcoming competitions. By finding ways to decrease competition anxiety, it is sometimes possible to simultaneously improve performance. As a mental skills coach, I regard it as one of my obligations to help athletes cope with the burden of expectation, from themselves or others, and to think rationally about impending competitions.

As an example, I recall a consultation with one of Iran’s most popular wrestlers, Saeed Ebrahimi, who was concerned about expectations of him prior to a World Cup event in 2009. Ebrahimi had previously won the silver medal at the 2007 World Championships and a gold medal in the 2005 Asian Championships. My task was to change his thoughts and feelings about what was expected of him in the upcoming competition. An extract of my consultation with Saeed Ebrahimi (SE) is reproduced below.

SE: If I lose I won’t be able to return to my home city.
Me: Why do you think that?
SE: No one in my city will like or respect me if I lose.
Me: I’m not sure I agree; you are their hero.
SE: You don’t know the people of my city; they only love you when you win.
Me: Let me ask you a question, who is Alireza Dabir? (He is the 2000 Olympic champion in the Freestyle 58 kg event, and extremely popular in Iran).
SE: Are you kidding me? Everyone knows him.
Me: Tell me what comes to your mind first when you think about him?
SE: He is an Olympic champion.
Me: So the first thing that comes to your mind is his success and not his losses.
SE: What do you mean? He made five world championship finals in a row. He is remembered for that and everyone remembers his success.
Me: But both of us know that he did not succeed in his last two major competitions, the 2003 World Championships and the 2004 Olympic Games. He was eliminated in the first round both times, don’t you remember? When I asked you about him, you recalled his successes and his losses did not come to your mind. The same is true for you. When people think about you, they first remember that you are the World Championship silver medallist and your other victories; the same way that you thought about Alireza Dabir.

Conversations such as this can help to decrease unnecessary worries created by unrealistic expectations or irrational beliefs. In order to guide an athlete through a conversation like this, it is useful to have some knowledge of the history of the sport and the famous champions in your own country and from around the world.
Traditional Methods of Mental Preparation

It should come as no surprise that Iranian wrestlers have developed traditional methods to prepare mentally for competitions. Developed over many years through experience, such methods have become part of wrestling culture and remain in widespread use today. Some of the traditional mental preparation strategies are described below.

Rival Picture

A common strategy that Iranian wrestlers use to maintain the necessary motivation to train relentlessly at the required intensity is to place a picture of an important rival in a prominent place in their room and every day to stand and stare at the image. This provides a constant reminder that, to defeat this rival, they must train harder and longer than he does. Olympic silver medallist in the 60 kg Freestyle event in Athens 2004, Masoud Mostafa-Jokar, used this method to good effect. To boost his motivation during the pre-Olympic training camp, Mostafa-Jokar used a picture of Russian adversary, Bagavdin Umakhanov. At that time, Mostafa-Jokar thought that Umakhanov would be his fiercest rival for the Olympic title. To help him prepare for training sessions, and especially if he sensed that his training effort was waning, he looked intently at the picture and re-committed to working harder. As events unfolded at the Athens Olympics, Mostafa-Jokar never competed against Umakhanov but his image nevertheless served its purpose of generating optimal preparation, which in turn brought increased self-confidence that culminated in a career-best performance in Athens.
Religious Beliefs

Religion is very important in Iranian society and almost all national team wrestlers use religious strategies as part of their mental preparation routines and, in particular, to enhance their self-confidence. Religious activities appear to be among the most popular and most effective mental preparation and pre-competition strategies in the Iranian wrestling community.

The religious activities take many forms. For example, using religious words or phrases as a form of self-talk (sometimes referred to as God-talk) prior to performance and/or during critical moments within a bout is reported by the wrestlers to be an effective strategy for helping them to handle the pressure of competition. Many wrestlers say that the feeling of being supported by God makes them feel stronger and increases their hardiness. Some wrestlers use particular prayers that they believe help them to become stronger, and many feel that such prayers should be read by a holy person or one of their relatives with strong religious beliefs.

Another religious strategy used by some wrestlers is to secrete a holy relic on their person going into a match. For example, Fardin Masoumi, multiple World championship medallist in the 120 kg Freestyle event, habitually carried a tiny Quran (Islamic holy book) in his competition clothing during every bout. He reported that he felt much stronger when the Quran was in his clothing during competition.

Someone Special

Talking with someone special is traditionally seen as a way of helping wrestlers to become calmer before important competitions. Many Iranian wrestlers include a brief talk with a loved one as part of their preparation routine, typically either the night before the competition or just prior to warm up.

As a famous example, one of the country’s earliest Olympic champions, Gholamreza Takhti, who is generally regarded as Iran’s most popular and influential athlete of the 20th century, always talked with his mother the night before a competition reportedly because she would decrease his worries and leave him feeling calmer.
To Think of Winning or to Avoid Losing?

I have been asked many times about the attitudes of wrestlers going into a match. In such a physical, combative sport, are they focused on winning or on trying not to lose? It seems that there is no simple answer to this question. There are champions who use each approach. Most of the wrestlers that I have worked with have told me that they always compete to be a winner irrespective of who they are wrestling against.

Successful wrestlers, such as 6-time World and Olympic medallist Alireza Heidari, 2-time World champion Mehdi Taghavi, and Olympic silver medallist Masoud Mostafa-Jokar, report that they only ever think of winning, but another very successful Iranian wrestler, World champion and Olympic medallist Morad Mohammadi, confirmed that although he thought only of winning when faced with an unknown or lower-ranked opponent, when up against a renowned rival his thoughts turned to the avoidance of losing. Perhaps both approaches can be useful if matched to a wrestler’s strategic intent. In my experience, wrestlers who prefer to attack opponents repeatedly tend to focus only on winning, while those who adopt a more defensive, counter-attacking strategy tend to focus on the avoidance of losing.
Success in London

The 2012 Olympic Games in London were a huge success for Iranian wrestling. The team not only won three gold medals in the Greco-Roman events, the first in its history, but also secured one silver and two bronze medals in the Freestyle events. The haul of six medals placed Iran third in the wrestling medal table, just behind Russia and Japan. To gain greater insight into the psychological aspects of this Olympic success, I interviewed each of the three gold medallists plus the head coach of the Iranian Greco-Roman wrestling team. Their interview responses are reproduced here with permission.

All three Olympic champions spoke about the importance of self-confidence and how they had nurtured their self-belief over many years. Intense physical preparation was seen as a common thread in providing the foundation for their self-confidence.

Hamid Sourian, a 5-time world champion prior to his Olympic success in the 55 kg event, said

“I spent my whole life preparing for this gold medal. I did the toughest exercises and worked harder than any of my opponents.”

The importance of hard work in the development of self-confidence was also emphasised by the 60 kg gold medallist, Omid Norouzi, who said

“In London, I always thought I am the best and none of my rivals is even eligible to win gold. I had done so many punishing exercises and so much arduous preparation that no one else was capable of doing as well as me, and that is why I truly believed that I was the best prepared person to win the gold medal.”

The third member of the champion trio, 96 kg gold medal winner, Ghasem Rezaei, concurred that effort in training was at the core of his self-confidence,

“The most important thing that contributed to my success was the self-belief gained by completing intense physical preparation via endless high-pressure exercises.”
The unanimous endorsement by the Olympic champions of a link between intense training and self-confidence was a clear reflection of the ethos of Mr. Mohammad Bana, the Head Coach of the Iranian national wrestling team. Coach Bana is widely credited as the architect of Iran’s steady rise over the past several years to reach almost the pinnacle of Greco-Roman wrestling globally. He views the journey as a step-by-step development of self-confidence among the team built on incremental improvements in individual performances. In his words, “the most important thing that helped us to achieve this Olympic success is self-belief that we have built over recent years, to the point where we believe we are the best and can defeat anybody.” He likened the progress of the Iranian wrestling team to an elevator that started its upward journey in 2005 and reached the top floor at the 2012 Olympic Games.

Another common theme among the Iranian wrestling champions was the use of imagery for a variety of separate purposes. Hamid Sourian spoke about using imagery in three distinct ways. Firstly, he commented on how he generated beautiful images in his mind to make himself feel calmer, for decreasing the perceived pressure to perform, and to establish a generally positive mindset (cf. relaxing place technique, Karageorghis & Terry, 2011, pp. 111-112).

Secondly, Sourian used imagery to enhance his belief in a successful outcome at the 2012 Olympic Games. He recalled that “More than 1,000 times, I saw myself standing on the top platform of the podium in London, when I was visualizing myself performing there.”

Thirdly, he used imagery to mentally rehearse his bouts, to predict various situations that might occur against specific opponents and how he would deal with them, to rehearse coping with a range of “what if” scenarios (cf. Karageorghis & Terry, 2011, pp. 182-183), and perhaps most importantly, to rehearse competing successfully in the gold medal match. He credits this type of imagery use with making the Olympic competition feel much more familiar and controllable, and with generating a sense that he already knew how to deal successfully with whatever challenges the competition and particular opponents might present to him.
Ghasem Rezaei also commented on the benefits of imagery for mentally rehearsing his Olympic bouts, although he emphasised how he kept his focus on performance processes rather than the outcome. In his words,

“Refusing to think about winning or losing was very beneficial for me. In London, before every match I just focused on what I had to do in defence and attack, and never thought about the result. The night before the competition I just pictured all the difficult moments that it is possible to face during a match and imagined myself dealing successfully with them and overcoming the challenge.”

The night before competition is a special time for Olympic athletes. Many find themselves lying awake unable to sleep, endlessly rehearsing the next day’s action. This can leave them feeling emotionally drained the next morning with a sense of being ill-prepared for the battle ahead.

Omid Nourozi avoided such a scenario by using a different strategy. He deliberately kept his focus away from competition issues in the pre-event period, safe in the knowledge that he was well-prepared for whatever the competition threw at him by virtue of his thorough preparation for the Games.

“The night before competition in London, I deliberately did not think about what the competition would hold for me the next day. I just tried to eat well and sleep cool. Even on the morning of competition day I continued this strategy by focusing on eating well and completing a very good warm-up.”

Hamid Sourian noted that he attempted to use a similar strategy on the eve of competition, by refusing to allow competition-related thoughts to dominate. Instead, whenever he cast his mind forward to the next day, he focused solely on his first round opponent and mentally rehearsed what he had to do in that match.

Iran has built upon its success at London 2012 to win several major titles in the past two years, including eight medals at the 2013 World Championships and victory over bitter rivals Russia to win the 2014 Freestyle World Cup.
Summary

In this chapter, we have discussed the use of sport psychology approaches among wrestlers in the Islamic Republic of Iran. In doing so, we hoped to demystify both the country and the sport, and to explain how old meets new in terms of mental preparation for wrestling. We started by explaining the integral place of wrestling in Iranian culture, outlined the country’s proud record of success in the sport, and provided pointers for gaining access as a mental skills coach into a traditional sport such as wrestling. We then gave examples of how specific mental skills, notably imagery, concentration, refocusing, self-confidence, and competition plans, were developed among elite Iranian wrestlers using contemporary sport psychology techniques with reference to traditional methods of mental preparation, and also offered insights into the counselling techniques used with individuals. Finally, we reported on the views of Iran’s Olympic champion wrestlers and coach from London 2012, who unanimously endorsed the importance of building self-belief and self-confidence on a solid foundation of intense physical preparation. They also provided strong support for the benefits of imagery and attentional control strategies in the build-up to their successful Olympic campaigns. We hope that this glimpse into the world of Iranian wrestling offers insights of value to readers, whether they are athletes, coaches, students, teachers, practitioners, or those with just a passing interest in the subject.

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