

A Study on Table Tennis Players' Psychological Skills, Sport Injuries, and Tournament Satisfaction at the 49th World Championship

Chang-Yong Chu¹, Jung-Huei Lin², Tsung-Min Hung³

¹National Cheng-Chi University, Taiwan,

²National Ilan University, Taiwan

³National Taiwan Normal University, Taiwan

(¹Tel: +886-2-29387087; E-mail: chu5676@nccu.edu.tw)

(²Tel: +886-932249594; E-mail: linjh@niu.edu.tw)

(³Tel: +886-2-77343202; E-mail: ernesthungkimo@yahoo.com.tw)

Abstract: The purpose of this study was to: 1) to investigate the psychological skills that players used during the 49th World Championship; 2) to survey the sport injuries sustained; and 3) to survey the satisfaction of the players in order to better understand the tournament context for them. 102 participants who came from 23 countries were surveyed during the tournament. 55% of the participants sought help from sport psychologists, while the average consulting time was 1.7 hours. During tournaments, psychological consultations came from the coaches, athletes, physiotherapists, psychologists, team physicians, and nutritionists. Psychological problems encountered in training and competitions included lack of concentration, lack of self-confidence, too much pressure, lack of motivation, and recurrence of previous injury. Motivation for participating in the championship stemmed from the desire to attain higher achievements, rewards and prizes; gain more experience, and accomplish personal goals. In regard to tournament injuries, participants' injuries were at the waist, shoulders, knees, thigh, back, legs, arms, and neck areas. Causes of injury included overtraining, insufficient warm-up, incorrect posture, emotional instability, lack of concentration, and previous injuries. Injuries were owing to forceful ball saving, smashing, and driving. In the satisfaction survey the highest score went to 'transportation arrangement', followed by 'event organizers' and 'tournament equipment'. 'Food supply' received the lowest satisfaction score, followed by 'awards and prizes', and then the tournament's 'procedures/arrangements'.

Keywords: table tennis, psychological skills, sport injury, satisfaction

1. Purpose

The Wheel of Excellence is a model that has been supported by many applied studies and extensive consultation of elite performers (Orlick, 1980, 1990, 2000, 2002; Orlick & Partington, 1988; Burke & Orlick, 2003). Orlick (2000) describes seven "keys to success", in which four elements form the outer circle (positive images, mental readiness, distraction control and ongoing learning), and three elements form the inner core of the wheel (commitment, focused connection, and confidence).

In Orlick's theory, focus is highlighted as the center of the wheel and the center of excellence. Coleman and Orlick (2006) state that a strong focused connection involves loving what you are doing, the ability to remain calm when performing even when faced with extreme consequences for failure, and acting on valuable lessons from personal experiences. These success elements have the potential to guide the positive development of performers in many sports as well as areas of life.

Besides personality and approach, the acquired environment and external factors also play significant roles. These include the counsel of the coach, overload training, mental and physical exhaustion, stress and anxiety, audience/spectators, sport injuries, and the expectations of significant others. Sport injuries in particular may affect the athlete's mental and physical status.

Evidence from prior research supports an association between psychological skills and sport performance. Sports psychology helps athletes develop confidence and focus skills as they master the technical aspects of the game (Cohn, 2008). In fact, using psychological skills allows for mental readiness. Orlick and Partington (1988) consider mental readiness an extremely influential factor in an athlete's performance. Mental readiness is a sense of complete preparation prior to performance. It includes the athletes' mental, physical, and technical-mental readiness. Mental readying is derived from a number of learned mental skills which must be continually practiced and refined for an athlete to perform at full potential on a consistent basis.

The purpose of this study was to: 1) investigate the psychological skills used; 2) survey sports injuries sustained by players; and 3) survey the satisfaction with the 49th World Table Tennis Championship in order to understand the real tournament context encountered by athletes.

2. Methods

Participants

The participants in this study were 102 elite table tennis players (Mean age = 23.4, SD = 4.7; Mean sport years = 15.2, SD = 5.0), from 23 countries, surveyed during the 49th World Table Tennis Championship.

Procedure

- a) The questionnaire was designed by the authors. Items from this questionnaire were discussed and modified by professional sport psychologists. The questionnaire included three parts: utilization of psychological skill, sports injury and satisfaction with tournament context.
- b) The questionnaire were brought to the places of the games and completed.
- c) We explained and with the consent of coaches and

athletes to fill in the questionnaire.

Table 1. Demographic data of the participants

Variable	Mean	SD
Height (cm)	170.4	9.2
Weight (kg)	63.8	10.4
Attending world championship (times)	3.8	6.9
Attending continental championship (times)	3.6	3.8

Statistical analysis

Data were compiled using SPSS 12 version package software to calculate different variables in this questionnaire.

3.Results

1. Table 1 shows the demographic data of the participants in this study.

2. In regard to the athletes' psychological skills, 55% of the participants sought help from sport psychologists, while the average consulting time was 1.7 hours. During tournaments, psychological consultations came from the coach, athletes, physiotherapist, psychologist, team physician, and nutritionist. Psychological problems encountered in training and competitions included lack of concentration, lack of self-confidence, too much pressure, lack of motivation, and recurrence of old injury. Motivations for participating in the championship were to: attain higher achievements, obtain rewards and prizes, gain experience, and accomplish personal goals.

3. With regard to sport injuries, participants had been previously injured at the waists, shoulders, knees, thighs, backs, legs arms, and neck areas. Causes of injury were overtraining, insufficient warm-up, incorrect posture, emotional instability, lack of concentration, and previous injuries. Injuries were owing to forceful ball saving, smashing, and driving.

4. As to the satisfaction of the tournament context, the higher scores were in transportation arrangement, event organization, and tournament equipment. The lower scores went to food supply, awards and prizes, and the tournament's procedure/arrangement.

4.Discussion and conclusion

From the results, we found that athletes need sport

psychologists to consult their psychological skills as per the norm. However, during tournaments athletes require more help from coaches than psychologists for support and instruction. Orlick (2002) mentioned that successful coaches are genuinely committed to their athletes and to doing what is best for them. They care about their athletes as people and performers, challenging them to keep pushing their limits and supporting athletes every step of the way, especially through challenges, injuries and setbacks. Truly great coaches have mastered the art of coaching largely because they mastered their capacity to: Listen, Respect, Challenge, Believe, Care and Support. Successful coaches give athletes reasons to believe in themselves, their team and their capacity. They seize opportunities to enhance confidence, and are careful to avoid speaking or acting in ways which undermine confidence, challenging athletes to push their limits in positive rather than negative ways. Through these methods, the coach can alleviate most of an athlete's psychological problems, including: lack of concentration, lack of self-confidence, too much pressure, and lack of motivation.

Concerning sports injuries, most of the athletes had been injured from overtraining. Coaches should know how to prevent this. Support staff should have athletic trainers to take care of them, preventing injuries from occurring. During competition, the athletic trainer should release the athlete's stress and pain, both mentally and physically. Most importantly, the athletic trainer and coach should build good relationships based on trust and resolve the problem together with the injured athlete.

Orlick (2002) tells a particular anecdote about how at the 2002 Olympics, one of the world's best ling track speed skaters who was factored to win faltered in both his Olympic races, finishing far off the podium. In a subsequent qorld cup race shortly after the Olympics he

Table Tennis Players' Psychological Skills, Sport Injuries, and Tournament Satisfaction

was back on track as a world leader. What was different? He returned to familiar territory, and followed the patterns of thinking, focusing and doing that worked best for him. Orlick supposes that a great athlete is often determined by two factors: how prepared he feels to accept challenges, and the extent to which he is able to remain positive and fully absorbed in the process of engaging himself in the experience or performance. Excelling in the tournament context is almost entirely dependent on perspective and focus. In order to perform one's best as a competitor, one of the first things that must be done after being momentarily stunned by the environment or feeling somewhat intimidated, is to take control.

When athletes do not perform to their potential in competition it is not because the performance demands are different, but because they have not been prepared to deal effectively with the tournament environment, in even areas such as their diet, and many other distractions surrounding their performance. Those who do perform to their capacity are able to plan their own ideal path, commit themselves to staying positive through the many challenges, and focus fully on executing their own best performance.

An elite athlete utilizes his psychological skills to fulfill his mental readiness before competition. No matter what challenges they encounter, it is possible to get through them and achieve the set goal. The role of the coach and staff should be to remain positive, calm, and confident, besting order to support and help their athletes to gain honor and recognition for their efforts.

With regard to the 49th World Table Tennis Championship context, most of the athletes were

satisfied with the transportation system, and disliked the supplied food. However, it is not easy to supply appetizing and nutritious food for athletes who come from different countries.

5. Acknowledgement

The work was approved and supported by the ITTF Sport Science Committee.

6. References

- [1] Burke, S., & Orlick, T. (2003). Mental strategies of elite Mount Everest climbers. **Journal of Excellence**, 8, 42-58.
- [2] Cohn, P. J. (2008). **How can sports psychology help athletes?** Retrieved from <http://www.topendsports.com/psychology/performance-maximizing.htm>
- [3] Coleman J. & Orlick, T. (2006). Success Elements of Elite Performers in High Risk Sport: Big Mountain Free Skiers. **Journal of Excellence**, (11). Retrieved from <http://www.zoneofexcellence.com/>
- [4] Orlick, T. (1980, 1990, 2000). **In pursuit of excellence: How to win in sport and life through mental training**. Champaign, IL, Human Kinetics.
- [5] Orlick, T. (2002). Excelling in the Olympic context. **Journal of Excellence**, (6). Retrieved from <http://www.zoneofexcellence.com/>.
- [6] Orlick, T., & Partington, J. (1988). Mental links to excellence. **The Sport Psychologist**, (2), 105-130.