Psychological Skills of Elite and Non-Elite Volleyball Players

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ABSTRACT

The present paper aimed to study and compare some psychological skills of elite and non-elite volleyball players in the City of Urmia. Statistical population included all volleyball players of Urmia in the premier league and youth competitions, among of whom 60 male athletes with an average age, weight, and height of 24±1.68, 78±2.86, and 188±2.53, respectively, were selected by non-random and purposeful method and divided into two groups of elite and non-elite. In order to collect information, the questionnaire of psychological skills assessment issued by South Australian Sports Institute (SASI) was used. The results showed that elite volleyball players, compared with non-elite ones, recorded higher scores at all levels of mental skills. In overall, the present study showed that psychological skills play a more important role in reaching the peak fitness in volleyball players and they deserve to receive more attention from coaches and athletes.

Key Words: Motivation, Concentration, Self-confidence, Mental energy, Imagery, Goal-orientation.

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INTRODUCTION

Nowadays, as different types of sport skills and trainings have been proliferated and the records and the gap between athletes have shortened, mental preparation and psychological skills have become increasingly important, so that many coaches and athletes emphasize more on psychological skills to achieve sporting success (1). Generally, optimal performance of athletic skills depends on three factors, including physical, skill, and mental fitness. Psychological skills are divided into several types, one of which is creation, regulation, and management of motivation, defined as the intensity of behavior and the amount of effort and activity to achieve a target or determine the direction of behavior (2). Reiss et al. (2001) believe that the most important factor involved in sports is an inner joy of physical exercise, and athletes have a higher motivation for progress compared with non-athlete persons (3). Usually known as attention capacity, concentration is another mental skill which is the power to keep the focus on the selected stimulus in a given time (1). The results of a study by Bois et al. (2009) on golfers showed that, given the specific nature of golf compared with other sports, the use of psychological skills such as controlling emotions, concentration, imagery, and self-talk is an integral part of the training program for golfers (4). Self-confidence is another mental skill which refers to the degree of confidence in oneself ability to do an action at a certain point of time and depends capabilities, personal skills, and the way of doing a task. Studies have shown that successful athletes have a higher self-confidence than unsuccessful ones. The results of a study by Rivera and Dosil (2007) revealed that main players have higher motivational capacities and attention than reserve players (5). Another mental skill is imagery that is defined as the use of all the senses to renovate or build an experience in mind (6). Rousis and Loizou (2007) studied the psychological needs of referees and stated that exercise and psychological interventions can improve both mental health of referees and execution of competition (7). Fletcher and Hanton (2001) reported that application of relaxation techniques reduces anxiety, improves performance, and creates more self-confidence in athletes (8). Goal-orientation is also another mental skill indicating the ability to identify and classify goals and strive to achieve them. This skill helps athletes and coaches to find both the goal and the successful way to achieve it. It also makes it possible to assess the quality and extent of progress (9). Regulating or controlling the mental energy level is another mental skill which refers to a level of activity and mental and physical awakening providing the essence for mental activities and motivation basis (10). The results of a study conducted by Godoy-Izquierdo, Vélez, and Godoy (2007) showed that individuals apply multiple psychological skills during and after the exercise period (11). Mirzaei, Rahmaninia, and Bordar (2008) carried out a study on wrestlers of freestyle and Greco-Roman wrestling national teams of youth and adults and reported that wrestlers of adult team (both freestyle and Greco-Roman) obtained scores near to each other in each of the six psychological skills measured, while in youth team Greco-Roman wrestlers recorded better scores than freestyle wrestlers in all six psychological skills (2). Yousefi (1998) stated that imagery and mental practice are associated with age and observed that there is a significant difference between elite wrestlers and footballers of Tehran and Mazandaran provinces in terms of these two psychological skills (imagery and mental practice) (12).

Research hypotheses aimed to compare the levels of regulating motivation, imagery, mental energy, concentration, self-confidence, and goal-orientation between two groups of volleyball players. So, the objective of the present study was to acquire information about the application of psychological skills by elite

and non-elite volleyball players and discover their weaknesses. Coaches and athletes should take these items into account to reach the peak fitness.

**MATERIALS AND METHODS**

**Subjects.** 60 male athletes with an average age, weight, and height of 24±1.68, 78±2.86, and 188±2.53, respectively, were selected by non-random and purposeful method and divided into two groups of elite (those playing in the premier league) and non-elite (those playing in youth teams).

**Instruments.** Winter psychological skills Assessment Questionnaire, developed by two Australian psychologists named Graham Winter and Cathy Martin (1993) from South Australia Institute of Sport (SAIS), was used in order to compare psychological skills of subjects. Firstly used by researchers in Seoul and Barcelona Olympics, this questionnaire consisted of 60 question measuring 6 psychological skills including motivation, concentration, self-confidence, mental energy level regulation, imagery, and goal selection. Reliability and validity of this questionnaire was proved by authors (Mousavi and Javadipour) with an internal consistency of about 89% [17, 18]. Internal consistency of the questionnaire was calculated 87% by Cronbach’s alpha.

**Procedure.** Since this study was conducted in the city of Urmia, the author, with the help of officials of Urmia Volleyball Board, paid a visit to volleyball clubs and, given the number of samples needed in each club, handed out the questionnaires among the subjects and asked them answer the questions carefully and accurately.

**Statistical Analysis.** Independent t-test was used for statistical analysis of collected data. All statistical analyses were done by SPSS at a significance level of $p < 0.05$.

**RESULTS**

In elites group, the highest (43.30) and the lowest (39.40) mean of mental variables was belonged to motivation and concentration, respectively. In the group of non-elite volleyball players, the highest (40.8) and the lowest (32.3) mean were obtained, respectively, from motivation and imagery. Independent sample t test results (table 1) indicate a significant difference ($p<0.001$) between all psychological skills except mental energy level regulation ($p<0.002$). This difference implies that the level of psychological skills is higher in elite athletes compared with non-elite ones. According to above-mentioned data, it can be stated that the level of motivation, concentration, self-confidence, mental energy level regulation, imagery, and goal-orientation in elite volleyball players is significantly higher than non-elite ones.

**DISCUSSION**

In the present study, elite and non-elite volleyball players were compared in terms of some mental skills. Results indicate that there is a significant difference between elite and non-elite volleyball players in terms of motivation, as the level of psychological skills in elite volleyball players is higher than non-elite ones. This difference is probably due to the presence of experienced coaching staff in professional teams who are familiar with the topics of sport psychology and have gained experiences in their sport lifetime from international coaching courses. So it seems that the use of expert coaching staff along with experienced players is one of the strongest possible reasons for this difference. In terms of motivation, as of the most important mental skills, elite volleyball players recorded higher figures than non-elite players. Rivera and Dosil (2007) (5) reported that elite athletes have a higher level of motivation than non-elite one, which is consistent with findings of the present study. By contrast, the results of study by Jafari, Moradi, and Rafieinia (2007) indicate that there is no significant difference between elite and non-elite athletes of
different sports in terms of motivation level, which is inconsistent with the results of the present paper (13).

Table 1. Comparison of Psychological Skills of Elite and Non-elite Volleyball Players. *: significant at p < 0.05.

<table>
<thead>
<tr>
<th>Psychological Skills</th>
<th>Elite</th>
<th>Non-Elite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation</td>
<td>40 ± 5</td>
<td>30 ± 4</td>
</tr>
<tr>
<td>Concentration</td>
<td>35 ± 6</td>
<td>25 ± 3</td>
</tr>
<tr>
<td>Self-confidence</td>
<td>30 ± 4</td>
<td>20 ± 3</td>
</tr>
<tr>
<td>Mental energy</td>
<td>25 ± 3</td>
<td>15 ± 2</td>
</tr>
<tr>
<td>Imagery</td>
<td>15 ± 2</td>
<td>5 ± 1</td>
</tr>
<tr>
<td>Goal-orientation</td>
<td>10 ± 1</td>
<td>5 ± 1</td>
</tr>
</tbody>
</table>

When athletes have a correct understanding of their duties and position as a premier league player, there would be a stronger relationship and they are more motivated to continue their sport activity. When athletes feel that they have heavier duty during the match, they will show more activity. Findings of the present study also suggest that elite volleyball players are more concentrated than non-elite ones. Nippert and Smith (2008) believe that lack of proper mental preparation in critical events and loss of self-confidence and concentration are the main causes of the poor performance of athletes in different sports (14). Rivera and Dosil (2007) also reported that concentration of elite athletes is at a higher level compared with non-elite athletes (5). The present study showed that elite volleyball players are more self-confident than non-elite ones. Jones, Hanton, and Swain (1994), and Bahram and Shafizadeh (2002) also reported the same result (15, 16). In contrast, Meyers et al. (1999) stated that there is no significant difference between elite and non-elite athletes in terms of self-confidence, which violates the results of the present paper (17). Failure, lack of experience, poor performance in critical competitions, and loss of enough concentration and self-confidence are the main factors causing the weakened performance and unusual statuses in athletes. The present study showed that elite volleyball players can regulate their mental energy level better than non-elite players, which is consistent with findings of Godoy-Izquierdo, Vélez, and Godoy (2007) (11), but inconsistent with the results of some other authors like Meyers et al. (1994) (18). Increased experienced of athletes by participating in various tournaments leads to the control of negative emotions, optimal use of mental energy in various conditions, and increased effectiveness and performance of athletes. In terms of imagery and goal selection, elite volleyball players have better performance than non-elite players. In a study on high school athletes, Fulgham (1999) reported that imagery and goal orientation practices have a positive impact on self-confidence and attitude of participants (19). Rivera and Dosil (2007), and Godoy-Izquierdo, Vélez, and Godoy (2007) reported higher levels of imagery in elite athletes compared with non-elite ones (5, 11), which is consistent with findings of the present study. The use of imagery reduces negative emotions and stresses and leads to a better performance. Elite athletes can use mental imagery to manipulate and modify their goals in mind and change their thoughts to positive performance in critical moments.
CONCLUSION
In summary, the present study shows that elite volleyball players have a better mental health than non-elite players. Volleyball players of elite group are approximately the same level in terms of anthropometric indices, physical fitness, training programs, tactics, and individual performances. So, the superiority of elite players over non-elite ones is associated to their higher levels in mental skills. Having better concentration, higher self-confidence, and more mental efficiency, elite players are less affected by emotions, consequently showing a more successful performance. To achieve success in this field of sport it is recommended that, in addition to preserve the current status by applying sport psychologists, other factors influencing the performance of volleyball players such as physical, skill, and tactical preparation should be monitored.

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مهمت‌های روانی و الیپالیست‌های نخبه و غیرنخبه

حسین محمدزاده، سعیدی سامی

چکیده

هدف از پژوهش حاضر بررسی و مقایسه برخی مهارت‌های روانی و الیپالیست‌های نخبه و غیرنخبه شهرستان ارومیه بود. ۶۰ والیبالیست حاضر در لیگ برتر و رده جووانان شهرستان ارومیه با میانگین سنی ۲۸/۵۸ ± ۴ و وزن ۱۸۵/۴۸ ± ۷۷ و قد ۱۸۱/۲۳ ± ۲۷ بالاتر از بالینی ارزیابی مهارت‌های روانی الیپالیست‌های روانی استندی و ورزش استفاده گردید. اندازه‌گیری‌ها با استفاده از برنامه‌های SASI (استفاده شد. نتایج نشان داد که والیبالیست‌های نخبه نسبت به غیرنخبه در تمامی سطوح مهارت‌های روانی بالاتر نبودند. 

واژگان کلیدی: انگیزش، تمرکز، اعتماد به نفس، تنظیم سطح انرژی روانی، تصویرسازی ذهنی، هدف‌گذاری

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