# Assessment of Mental Training Levels of Individual and Team Athletes in Terms of Some Variables

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**Abstract**

The purpose of this study is to examine whether individual and team athletes' mental training levels differ in terms of variables such as age, gender, sports age and being a national team athlete. This study used quantitative research methods, relational survey and descriptive survey models. A total of 700 individual and team athletes, 358 women (ages 22.48±3.20 years) and 342 men (ages 22.36±18-28 3.27 years), participated in the study voluntarily. "The Sport Mental Training Questionnaire (SMTQ)", adapted into Turkish by Yarayan and Ilhan (2018), and demographic information form were applied as a data collection tool. Descriptive statistics, independent sample t-test and one-way variance analysis ANOVA tests were used in the analysis and interpretation of the obtained data. After the Anova test, Tukey test was performed as a complementary post-hoc analysis to determine the differences. According to the statistical analysis results, the interpersonal skill scores of persons doing team sports were determined to be higher than those doing individual sports. It was revealed that the scores of male athletes' mental performance and mental basic skills were higher than that of women athletes while women's interpersonal skills and self-talking points were higher than men. A statistically significant difference was established in the mental training scores of the athletes according to the variables of age, sports age and being a national team athlete ($p < 0.05$).

**Keywords:** Mental training, Individual sports, Team sports

## 1. Introduction

Mental training is applied both to enhance the performance of athletes and to eliminate several psychological factors that hinder their performance (Vealey, 2007). Mental training programs contribute to the development of both motor and psychological skills of athletes. For this reason, it is indicated that in order to achieve high success in sports, it is necessary to perform mental training as much as physical, technical and tactical training (Urfa & Ascı, 2018). When the effective factors are examined in a victory against an opponent with similar physical abilities, attention is drawn to the effectiveness of psychological factors (Weinberg & Gould, 2015). Performance and success levels of the athletes depend on the control of thought, emotion and mental processes in line with body-mind interaction in addition to genetic structure and regular training. Stress that an athlete, who has spent a very good preparation period, may not control during the competition period may adversely affect his performance (Syer & Connolly, 1998). Athletes are affected by internal (fear of making mistakes, uncertainty, stress, motivation) and external (spectator, coach, referee, family) stimuli. In addition, features such as the ability to be a team, crisis management, and communication skills can also be counted in (Ekmekci, 2017). These factors may cause athletes to face more difficult conditions and experience psychological difficulties (Hasırcı et al., 2018; Kulak & Selvi, 2019). It has been established that performance of athletes who minimize these challenges enhances (Thelwell et al., 2010; Vealey, 2007).

The studies indicate that mental training, one of the applied fields of sports psychology, contributes to the development of performance components (Akman, 2019; Aktop, 2008; Kulak, 2011; Ozdal et al., 2013; Patrick & Hrycaiko, 1998; Savoy, 1993; Turgut & Yasar, 2020). The studies in literature show that there have been many researches on the impact of mental training on sports performance (Caliari, 2008; Connaughton et al., 2008; Kulak & Selvi, 2019; Morais, 2019; You Jin & Hwang, 2020). The study examining the impact of mental training on the performance of canoe athletes has identified an enhancement in psychological skills, self-confidence and concentration as a result of 3-month mental training. In addition, some decrease in anxiety levels is also emphasized (You Jin & Hwang, 2020). In his study on archers, Tuna (2018) researched the effects of neural feedback application, which is used as a mental training method, and EEG-Biological feedback application, which is provided with physical training, on the performance of athletes. The experiment group were trained in sensory motor rhythm (DMR) activity for 10 weeks of 20 sessions. As a result of the research, it was determined that the athletes could focus better, ignore external factors, and provide muscle control during the stretching of the bow.

Enhancement in the performance of athletes draws attention in studies where mental training is applied. Individual and team athletes' developing both their physical and psychological skills is an important factor for their performance. In the study exercised on coaches and athletes, it is indicated that one of the factors that significantly affect performance is psychological skills (Gardner, 2001). This is also evident in the studies carried out when the relevant literature is examined. However, some athletes ignore this situation. It is important to know the factors that cause this situation to be ignored or to occur, so that the process can be carried out more effectively. Knowing these variables and identifying any differentiation

according to these variables is an important point for both coaches and athletes. It is thought that knowing the variables that affect the process may have influence on mental training. In line with this information, an answer has been sought in this research to the question of whether there are differences in the mental training levels of individual and team athletes in terms of some variables. As a result of the literature review on the subject, while there has been studies on mental training, no study showing the mental training levels of individual and team athletes has been discovered. The purpose of this research is to determine the mental training levels of individual and team athletes and to compare and establish whether they differ according to the independent variables obtained from the personal information of the athletes.

## 2. Method

### 2.1 Research Model

In this study, relational survey and descriptive survey models, which are among the quantitative research methods, were used. Due to COVID-19, a demographic information form and the Sport Mental Training Questionnaire, which was adapted into Turkish by Yarayan and Ilhan (2018), were applied to the participants online via Google forms. Athletes were informed in detail about the purpose of the study.

### 2.2 Data Collection Tools

"Demographic Information Form" and "The Sport Mental Training Questionnaire (SMTQ)" were used in this study.

*Demographic Information Form*: This form was created by the investigators. While creating the personal information form, a literature review was conducted on the independent variables that were thought to be related to the SMTQ, and the related variables were determined as; age, gender, sports type, sports age, status of being a national team athlete, and whether or not having received support from a sports psychologist, mentor or counsellor in increasing psychological performance. Respondents completed this form on line.

*Sport Mental Training Questionnaire (SMTQ)*: It is a scale form developed by Behnke et al. and translated into Turkish by Yarayan and İlhan (2018). The SMTQ developed for the athletes consists of 20 items and 5 sub-scales.

These scales are mental basic skills, mental performance skills, interpersonal skills, self-talk, and mental imagery. The 5-point Likert-type form is scored as "strongly disagree (1)" and "strongly agree (5)". The lowest score from inventory is 20 and the highest score is 100. The number of internal consistency coats of inventory is determined to vary between 0.82 and 0.91. As a result, the SMTQ Turkish version can be considered as a valid and reliable measurement tool for athletes. Permission is obtained from the authors to use the scale in the study.

### 2.3 Participants

The research group consists of individual and team athletes in the age range of 18-28

(22.42±3.23 years) in Turkey. Streiner and Kottner (2014) evaluates 200 subjects as "medium", 300 subjects as "good", and 500 subjects as "very good" as sample size. Therefore, since a scale consisting of 20 items was used in this study, it was decided that the sample should be at least 200 people and that 550 people should be targeted for the sample which can be evaluated as "very good". However, more people were reached in the study, and the sample size consisting of 700 people (d = 0.03, p = 0.5, q = 0.5) was proper for the purpose of the research. Stratified sampling method was used in the sample selection of this study.

A total of 700 athletes, including 358 women (age: 22.48±3.20 years) and 342 men (age: 22.36±3.27 years), participated in the study voluntarily. A total of 358 individual athletes participated in the study, namely; athletics (100), wrestling (29), bocce (8), swimming (26), gymnastics (12), fencing (8), judo (20), karate (10), tennis (72), kickboxing (27), taekwondo (43), and archery (26). As for team sports, a total of 319 athletes participated in the study, namely; basketball (89), volleyball (100), football (66), ice hockey (33) and handball (31).

## 2.4 Research Publication Ethics

This study was approved by the Gazi University, Assessment and Evaluation Ethics Sub-Working Group, dated 22.12.2020 and numbered (2020-711).

## 2.5 Data Analysis

The SPSS 25 statistical package program was used to analyse the data obtained in the study. The Cronbach Alpha coefficient was used to determine the internal consistency of the data obtained and it was identified as .882 (Table 1). The data was evaluated by Skewness and Kurtosis test for normality and recognized to have normal distribution due to being within the range of ±1.50 (Tabachnick & Fidell, 2011). For this reason, t-tests were used for dual comparisons of parametric test groups and ANOVA tests were used for multiple comparisons with one-way variance analysis. After the Anova test, Tukey test was used as a complementary post-hoc analysis to determine the differences. The mean, frequency, percentage and standard deviation concerning data were given as descriptive statistics for minimum and maximum values. The level of significance was evaluated as (p < 0.05) in all tests.

Table 1. Cronbach alpha inner consistency test and skewness and kurtosis test results

| SMTQ and Sub Scales | N | Cronbach Alpha | Consistency Status | Skewness | Kurtosis |
|---|---|---|---|---|---|
| SMTQ | 700 | .882 | Highly reliable | -.361 | 1.047 |
| Mental Performance Skills | 700 | .767 | Quite reliable | -.090 | .114 |
| Mental Basic Skills | 700 | .665 | Quite reliable | -.558 | .813 |
| Interpersonal Skills | 700 | .690 | Quite reliable | -.653 | .901 |
| Self-Talk | 700 | .822 | Quite reliable | -.943 | 1.112 |
| Mental Imagery | 700 | .711 | Quite reliable | -.627 | .794 |

## 3. Results

Table 2. Distribution of the athletes participating in the study according to their demographic characteristics

| Gender | N | % |
|---|---|---|
| Female | 358 | 51.1 |
| Male | 342 | 48.9 |
| **Age** | **N** | **%** |
| 18-20 years | 239 | 34.1 |
| 21-24 years | 252 | 36.0 |
| 25-28 years | 209 | 29.9 |
| **National Team Athlete** | **N** | **%** |
| Yes | 223 | 31.9 |
| No | 477 | 68.1 |
| **Sports Psychologist Support** | **N** | **%** |
| Yes | 85 | 12.1 |
| No | 615 | 87.9 |
| **Sports Type** | **N** | **%** |
| Individual | 381 | 54.4 |
| Team | 319 | 45.6 |
| **Sports Age** | **N** | **%** |
| 1-3 years | 177 | 25.3 |
| 4-6 years | 81 | 11.6 |
| 7-9 years | 103 | 14.7 |
| 10 years and over | 339 | 48.4 |

A total of 700 athletes, including 358 women (age: 22.48±3.20 years) and 342 men (age: 22.36±3.27 years), participated in the study voluntarily. Sports ages are 1-3 years (25.3%), 4-6 years (11.6%), 7-9 years (14.7%) and 10 years and over 48.4%. 31.9% of the athletes participating in the research are national athletes and 68.1% it was determined that he was not a national athlete. Sports psychologists, mentors of the athletes participating in the survey or psychological performance counselor, 12.1% received support and 87.9% it was learned that he did not receive support. 54.4% of the participants are individual and 45.6% are teams consists of athletes.

Table 3. T-test analysis results of SMTQ and its sub-scales according to gender variable

|  | Gender | N | X | Ss | P |
|---|---|---|---|---|---|
| SMTQ | Female | 358 | 78.47 | 9.59 | .340 |
|  | Male | 342 | 79.16 | 9.56 | |
| Mental Performance Skills | Female | 358 | 21.75 | 3.56 | .000* |
|  | Male | 342 | 22.83 | 3.66 | |
| Mental Basic Skills | Female | 358 | 15.86 | 2.47 | .021* |
|  | Male | 342 | 16.28 | 2.33 | |
| Interpersonal Skills | Female | 358 | 16.80 | 2.29 | .043* |
|  | Male | 342 | 16.44 | 2.32 | |
| Self-Talk | Female | 358 | 12.10 | 2.17 | .004* |
|  | Male | 342 | 11.60 | 2.35 | |
| Mental Imagery | Female | 358 | 11.97 | 2.15 | .757 |
|  | Male | 342 | 12.02 | 1.96 | |

When the table was examined, it was determined that the mental animation total scores from the SMTQ and its sub-dimensions did not show a statistically significant difference according to the gender variable ($p > 0.05$). It was determined that mental performance skills, mental technical skills, interpersonal skills and self-talk sub-dimensions of SMTQ differ according to gender groups ($P < 0.05$). Men's mental performance and mental basic skills scores were higher than women's, while women's interpersonal skills and self-talk scores were higher than men's.

Table 4. T-test analysis results of SMTQ and its sub-scales according to sport type variable

| | Sports Type | N | X | Ss | P |
|---|---|---|---|---|---|
| SMTQ | Individual | 381 | 78.21 | 10.26 | .071 |
| | Team | 319 | 79.52 | 8.66 | |
| Mental Performance Skills | Individual | 381 | 22.05 | 3.76 | .073 |
| | Team | 319 | 22.55 | 3.49 | |
| Mental Basic Skills | Individual | 381 | 16.13 | 2.54 | .414 |
| | Team | 319 | 15.98 | 2.26 | |
| Interpersonal Skills | Individual | 381 | 16.35 | 2.49 | .001* |
| | Team | 319 | 16.95 | 2.04 | |
| Self-Talk | Individual | 381 | 11.78 | 2.28 | .234 |
| | Team | 319 | 11.96 | 2.27 | |
| Mental Imagery | Individual | 381 | 11.91 | 2.12 | .300 |
| | Team | 319 | 12.10 | 1.98 | |

When examined according to sport type, it was determined that there was no statistically significant difference in SMTQ and its sub-dimensions, mental performance skills, mental basic skills, talking to yourself and mental animation sub-dimensions, according to sports type ($p > 0.05$). It was determined that the interpersonal skills sub-dimension, which is one of the SMTQ sub-dimensions, differs according to the individual doing sports ($P < 0.05$). It was determined that the interpersonal skills score of those who do team sports are higher than those who do individual sports ($P < 0.05$).

Table 5. T-test analysis results of SMTQ and its sub-scales according to the status of being a national team athlete

|  | National Team Athlete | N | X | Ss | P |
|---|---|---|---|---|---|
| SMTQ | Yes | 223 | 80.55 | 8.84 | .001* |
|  | No | 477 | 78.00 | 9.81 |  |
| Mental Performance Skills | Yes | 223 | 22.87 | 3.69 | .003* |
|  | No | 477 | 22.00 | 3.59 |  |
| Mental Basic Skills | Yes | 223 | 16.65 | 2.16 | .000* |
|  | No | 477 | 15.79 | 2.48 |  |
| Interpersonal Skills | Yes | 223 | 16.75 | 2.21 | .309 |
|  | No | 477 | 16.56 | 2.36 |  |
| Self-Talk | Yes | 223 | 12.03 | 2.05 | .170 |
|  | No | 477 | 11.78 | 2.37 |  |
| Mental Imagery | Yes | 223 | 12.25 | 2.03 | .025* |
|  | No | 477 | 11.88 | 2.06 |  |

It was determined that the total scores of interpersonal skills and self-talk, which are sub-dimensions of SMTQ, did not show a statistically significant difference according to the status of being a national athlete. It was determined that SMTQ and its sub-dimensions, mental performance skills, mental basic skills and mental animation scores showed a statistically significant difference according to the status of being a national athlete. It was determined that the SMTQ, mental performance skills, mental basic skills and mental animation scores of the national athletes were higher than those who were not national athletes ($p < 0.05$).

Table 6. T-test analysis results of SMTQ and its sub-scales according to sports psychologist support scale

|  | Sports Psychologist Support | N | X | Ss | P |
|---|---|---|---|---|---|
| SMTQ | Yes | 85 | 82.90 | 9.70 | .000* |
|  | No | 615 | 78.25 | 9.43 |  |
| Mental Performance Skills | Yes | 85 | 24.06 | 3.83 | .000* |
|  | No | 615 | 22.03 | 3.55 |  |
| Mental Basic Skills | Yes | 85 | 17.12 | 2.26 | .000* |
|  | No | 615 | 15.92 | 2.40 |  |
| Interpersonal Skills | Yes | 85 | 17.11 | 2.04 | .040* |
|  | No | 615 | 16.56 | 2.34 |  |
| Self-Talk | Yes | 85 | 12.20 | 2.41 | .141 |
|  | No | 615 | 11.81 | 2.25 |  |
| Mental Imagery | Yes | 85 | 12.42 | 2.00 | .041* |
|  | No | 615 | 11.94 | 2.06 |  |

When the table is examined, it has been determined that there is a statistically significant difference in the sub-dimensions of mental performance skills, mental basic skills, interpersonal skills and mental animation. In the sub-dimension of talking to yourself from the sub-dimensions of SMTQ, sports psychologist et al. There was no statistically significant difference in the dimension of getting support from situations. Sports psychologist etc. It was determined that the participants who received support from various situations had higher scores in the mental performance skills, mental basic skills, interpersonal skills and mental animation sub-dimensions of SMTQ and the participants who did not receive support from a sports psychologist ($p < 0.05$).

Table 7. ANOVA analysis results of SMTQ and its sub-scales according to age variable

| | Age | N | X | Ss | F | P | Tukey |
|---|---|---|---|---|---|---|---|
| SMTQ | 18-20[1] | 239 | 77.78 | 9.28 | 5.695 | .004* | 3 > 1 |
| | 21-24[2] | 252 | 78.26 | 9.48 | | | |
| | 25-28[3] | 209 | 80.65 | 9.81 | | | |
| Mental Performance Skills | 18-20[1] | 239 | 21.55 | 3.38 | 10.049 | .000* | 3 > 1,2 |
| | 21-24[2] | 252 | 22.29 | 3.72 | | | |
| | 25-28[3] | 209 | 23.08 | 3.69 | | | |
| Mental Basic Skills | 18-20[1] | 239 | 15.74 | 2.62 | 7.897 | .000* | 3 > 1,2 |
| | 21-24[2] | 252 | 15.92 | 2.37 | | | |
| | 25-28[3] | 209 | 16.60 | 2.12 | | | |
| Interpersonal Skills | 18-20[1] | 239 | 16.77 | 2.26 | 1.470 | .231 | |
| | 21-24[2] | 252 | 16.43 | 2.43 | | | |
| | 25-28[3] | 209 | 16.68 | 2.22 | | | |
| Self-Talk | 18-20[1] | 239 | 11.86 | 2.28 | .806 | .447 | |
| | 21-24[2] | 252 | 11.73 | 2.16 | | | |
| | 25-28[3] | 209 | 12.00 | 2.40 | | | |
| Mental Imagery | 18-20[1] | 239 | 11.85 | 2.03 | 2.817 | .060 | |
| | 21-24[2] | 252 | 11.90 | 1.94 | | | |
| | 25-28[3] | 209 | 12.28 | 2.21 | | | |

It was determined that the sub-dimensions of SMTQ, mental performance skills and mental technical skills showed statistically significant differences according to age groups ($p < 0.05$).

Table 8. ANOVA analysis results of SMTQ and its sub-scales according to sports age

| | Sports Age | N | X | Ss | F | P | Tukey |
|---|---|---|---|---|---|---|---|
| SMTQ | 1-3 years[1] | 177 | 3.85 | .531 | 6.718 | .000[*] | 4 > 3,2,1 |
| | 4-6 years[2] | 81 | 3.87 | .527 | | | |
| | 7-9 years[3] | 103 | 3.87 | .444 | | | |
| | 10 years [>4] | 339 | 4.02 | .434 | | | |
| Mental Performance Skills | 1-3 years[1] | 177 | 3.53 | .649 | 9.757 | .000[*] | 4 > 3,2,1 |
| | 4-6 years[2] | 81 | 3.61 | .614 | | | |
| | 7-9 years[3] | 103 | 3.63 | .555 | | | |
| | 10 years [>4] | 339 | 3.84 | .588 | | | |
| Mental Basic Skills | 1-3 years[1] | 177 | 3.94 | .708 | 4.680 | .003[*] | 4 > 3,2,1 |
| | 4-6 years[2] | 81 | 3.93 | .646 | | | |
| | 7-9 years[3] | 103 | 3.93 | .632 | | | |
| | 10 years [>4] | 339 | 4.10 | .533 | | | |
| Interpersonal Skills | 1-3 years[1] | 177 | 4.20 | .557 | 2.607 | .051 | |
| | 4-6 years[2] | 81 | 4.09 | .627 | | | |
| | 7-9 years[3] | 103 | 4.06 | .670 | | | |
| | 10 years [>4] | 339 | 4.21 | .522 | | | |
| Self-Talk | 1-3 years[1] | 177 | 3.99 | .630 | 1.384 | .246 | |
| | 4-6 years[2] | 81 | 3.86 | .864 | | | |
| | 7-9 years[3] | 103 | 3.94 | .719 | | | |
| | 10 years [>4] | 339 | 4.00 | .740 | | | |
| Mental Imagery | 1-3 years[1] | 177 | 3.93 | .722 | 2.905 | .034 | 4 > 1 |
| | 4-6 years[2] | 81 | 3.90 | .712 | | | |
| | 7-9 years[3] | 103 | 3.97 | .752 | | | |
| | 10 years [>4] | 339 | 4.07 | .640 | | | |

It was determined that the mental performance skills, mental basic skills and mental animation sub-dimensions of SMTQ and its sub-dimensions showed a statistically significant difference according to the active sports age ($p < 0.05$). As a result, it was determined that the participants with active sports age of 10 years and above had higher SMTQ and

sub-dimensions mental performance skills, mental basic skills and mental animation scores than the other groups.

## 4. Discussion

As a result of the research, statistically significant differences were revealed between mental training levels and sub-scales according to the variables such as gender, age, being a national team athlete, sports type and whether he/she had taken any counselling form a counsellor, sport psychologist or mentor in order to enhance psychological performance ($p < 0.05$).

Scales of the athletes, such as mental performance skills, mental technical skills, interpersonal skills and self-talk, which are subscales of mental training, were defined to vary by gender. Men's mental performance and mental basic skills scores were higher than women's, and women's interpersonal skills and self-talk scores were higher than men's. In the study conducted by Oner and Cankurtaran (2020), it was determined that the mental basic skills and mental performance skills of male athletes were higher than female athletes. In a study conducted by Einarsson et al. (2019), it was revealed that women's self-talk average scores were significantly higher than that of men's. In a study on elite handball players, men were found to have different levels of emotional control, and women have different levels of relaxation in competitions (Katsikas et al., 2009). Wrisberg et al. (2009) indicated in their study on psychological skills that female athletes were more prone to mental training than men.

It has been determined that interpersonal skills, which is one of the SMTQ subscales, of the team athletes differ from those who do individual sports. The research conducted by Gezer et al. (2017) which examined the social skill levels of athletes in teams and individual sports, identified that team athletes have higher social skill levels than individual athletes. In a study examining the imaging skills of elite athletes according to the type of sport; it was revealed that there was a difference between individual and team athletes in terms of imaging skills. According to this; it was determined that athletes engaged in individual sports had better imaging skills than team athletes (Di Corrado et al., 2019). In another study, it was indicated that team athletes were more interested in mental training than individual athletes (Zakrajsek et al., 2015). The fact that team athletes have more interpersonal communication and solidarity than individual athletes is thought to affect the level of interpersonal skills for team athletes. Trainers can be advised to provide such environments to individual athletes in order to improve especially interpersonal communication.

It was determined that national team athletes' SMTQ, mental performance skills, mental basic skills and mental envisaging scores were higher than non-national team athletes. Connaughton et al. (2008) also revealed in their study that experienced athletes with more training age had higher mental training levels than inexperienced athletes with less training age. The fact that national team athletes (elite) participate in more competitions and have experiences can said to be effective on their mental training levels.

Another finding of the study is that athletes who receive support from sports psychologist, psychological performance support etc. have higher scores than those who do not receive any

support. In a study conducted by Bochaver et al. (2021), it is indicated that receiving support from a sports psychologist or psychological performance counsellor positively affects mental skills such as imaging, coping with stress and anxiety, focusing and refocusing. Just like physical skills, psychological skills need to be studied systematically (Weinberg & Gould, 2015). This should be done in the company of experts first, explaining how it affects the performance, and then making the application, which can be effective in increasing the performance of the athletes.

When the age variable was examined, it was determined that the participants of the research at the ages of 25 to 28 had higher SMTQ, mental performance skill, and mental technical skill scores compared to other age groups. When assessing the age of sports, athletes aged 10 years and over were determined to have higher mental performance skills, mental basic skills and mental envisaging scores. Marchant et al. (2009) indicated that mental endurance and mental training levels increased with age. Altunkalem (2020) stated in his study, examining the effect of mental training applied in elite athletes on mental endurance, that mental basic skills increased with age and there was a significant difference between individuals aged 21-25 and 26-30, and individuals aged 26-30 and 36 years and over. In a study conducted on university students, it was determined that sports age, mental performance skills and mental training scores increased with age (Celik & Güngör, 2020). Oner and Cankurtaran (2020) found that, according to the archers' sporting background variable, the mental basic skills and mental performance skills of archers with 5 or more years of sports experience were higher than those of the archers with 1-4 years of sports experience. Crust and Swann (2011) revealed a meaningful and positive relationship between overall mental endurance and optimal performance emotional status as a result of their research on 135 athletes with an average age of 20. As the duration of participation in training and competitions increases, the experience rates of the athletes also increase. In this context, we can say that the development level of the mental skills of experienced athletes is higher, which has an effect on their emotional state.

## 5. Conclusion

It is important to know the factors influencing sports in order to increase performance and maintain its continuity. Although mental training is practised by athletes in different sports disciplines, performance increase is what they all have in common. It is important to establish the mental training levels of the athletes and some variables in terms of both coaches and athletes to approach this issue more sensitively. Taking into consideration the athletes who win medals at international level, we can say that the majority of them systematically practise mental training. Given that factors such as age, gender, and sports age play a role in the mental training process, coaches should also pay attention to this in young athletes.

It can be suggested that young athletes should be introduced to mental training at an early age so that they can reach the professional level in the best way. It is considered that the coaches' being aware of this situation will be important for performance enhance in the long run.

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