Comparison of psychological skills between men and women athletes of Karate and Taekwondo in Alborz province

Parya Azizi¹, Afsaneh Sanatkaran², Ahmad Mosalmanhaghighi³, MajdAldin Mostaan⁴

1. M.Sc in Sport Psychology, Islamic Azad University Karaj Branch, Iran
2. Associate, Department of Physical Education and Sport sciences, Islamic Azad University Karaj Branch, Iran
3. M.Sc in Physical Education and Sport sciences, Islamic Azad University Eslamshahr Branch, Iran
4. M.Sc in Sport Psychology, Islamic Azad University Karaj Branch, Iran

ABSTRACT: The objective of the present study was to compare profile of psychological skills between two sports Karate and Taekwondo adult women and men in Alborz province. Subjects of this research are 120 Karate and Taekwondo women and men in age range of adult that were selected by random availability sampling. Otawa’s psychological preparation (1993) with reliability coefficient (α=.849) was used as research tool. The research method was causal-comparative and data analysis using descriptive and deduction statistics (independent T) in significance level (p≤.05). Results didn’t show significance difference between none scores of psychological skills of athletes. Also no difference was observed between any of psychological skills of Taekwondo and Karate athletes (P≥.05). It seems that study of psychological skills in this research had a great influence on determining strategies to promote athletes’ psychological performance and will improve their performance. Thus it is suggested that in the future research athletes’ psychological skills is examined on other factors and variables.

Keywords: basic psychological skills, psychological-physical skills, cognitive skills, Taekwondo, Karate

INTRODUCTION

Training motor and sport skills to improve athletes' performance always has been a challenge for sport coaches and scholars of motor learning increasingly find more advanced ways to better learning of sports skills and introduce to coaches. But a term that during recent years has attracted the attention of psychologists, coaches and athletes is "psychological skills". The word "skill" in this term, shows the acquirability of psychological skills. That is, sport psychologists and coaches can by allocating some hours of exercise, teach such skills to athletes and so help them to improve their performance (7). On the other hand, in psychology discussion also, psychological health and sport performance improvement has been considered as two main factors. Psychological health is a phenomenon that examines the body impact on mind. Sport performance improvement depends on psychological factors and includes the issues of anxiety, focusing, self-confidence, motivation and …. This area isn't limited just for skilled athletes but include an extensive spectrum from athletes like members of club teams but also include old people that exercise for fun (9). Cox (1998) believes that goal setting is base of the other psychological skills and strongly is affected by self-efficacy. Khanjari et. al. (2013) in their research on adolescent Taekwondo girls of Iran national team concluded that the subjects weakness in the skills of reaction to stress, fear controlling and imagination and after 4 months performing this program, post-test was performed for both groups that showed there is a significant difference between control and experiment groups.
But in the skill of fear control a significant difference wasn’t observed between the two groups. Comparison of psychological skills between athletes and non-athletes students in Tehran universities and between women and men athletes in group sports and individual sports and American athletes shows significant results inside and outside the country. But comparison of psychological skills in individual and group sports athletes particularly inside our country has been less considered.

Mohamadi and Samarghandi (2011) in a research addressed to psychological skills of men between Basketballs, Football, Volleyball, Wrestling, Boxing and Martial arts. They didn’t compare different sports, but intended to describe psychological skills components between the six mentioned sports that concluded that between psychological skills components (basic psychological, physical-psychological and psychological) and subscales each one was different among different sports.

Since the role of psychological skills in Karate and Taekwondo hasn’t been studied extensively and less has been addressed to their combination or comparison in sports, it is necessary that it is considered in sports science studies. So the present research has been prepared considering the mentioned premises concerning this issue. Psychological skills are abilities to approach the research objectives that one prepares through them his/her mind and body to optimal performance. Description and instruction of psychological skills requires general and individual strategies that considering the abilities and personality factor of athletes, are instructed by sports psychologists and by repeat and exercise and according athlete's personal habits are used as mature coping skills during life and behavior and sport exercises and matches. One way of evaluating these skills is drawing statistical diagram or the same profiling that is performed in order to estimate individual general situation on concerned variables. One reason for using this method is that evaluation and interpretation of the profile norms is partially easy and comparing it with individuals at the same or higher level is possible. The objective of this study is determining psychological skills in Karate and Taekwondo and psychological variables (goal setting, self-confidence, commitment, stress control, fear control, relaxation, powering, imagination, mental exercise, refocusing and outlining match) are evaluated, described and compared.

Therefore performing such a research can help us to identify the factors influencing on individuals performance. Thus inclusive evaluation of athletes' capabilities and abilities can while presenting a complete picture from their psychological conditions, present effective and constructive guidelines to coaches for efficient planning. Since most of the performed studies about psychological skills include comparison of elite and non-elite athletes from one gender, or assessing psychological or physical skills of one group and its relation to their performance and also because Karate and Taekwondo are considered of medal-taking sports, and unfortunately our country doesn’t lie in Karate in world ranking, and the proportion of internal studies about psychological characteristics of Karate and Taekwondo athletes are very little, and also because of lack of sport psychologists presence beside elite athletes currently is another essential problem for athlete sports. So performing extensive researches about this seems necessary issue. Therefore, all above factors forced the author to perform a study concerning psychological skills of women and men Karate and Taekwondo athletes.

**METHODOLOGY**

This study is of causal-comparative type. Statistical population include 120 adult karate and Taekwondo athletes in Alborz province that had at least 3 years exercise experience and also informal matches in their sport course. In this research due to limitation of population number, all of them were examined purposefully as a sample, that include 30 women and 30 men in Karate and 30 women and 30 men in Taekwondo in the black waist class upward in Alborz province.

**Data gathering tool**

Otava's preparation measurement questionnaire (OMSAT-3) and personal information questionnaire (demograph) was used as a tool. The psychological skills were studied and compared by this questionnaire. This questionnaire has been developed specially to sport researches in order to assess athletes' psychological skills preparation that was developed in 1992 by Salmea Barbour, Cox, Gowlett, Imaj and Ping in Otawa University and in 1993 was validated by Salmela and Bota. This questionnaire has 48 questions and each item has been written as a statement that measures three classes of physical-psychological, cognitive basic skills. Sanati Monfared examined the validity and reliability of this test on adult athletes of national team members that were in preparation camping in order to go to Asian games 2006 in Doha, Qatar, and it was determined that some items has low validity coefficient, thus by creating required changes, third version of Otava's psychological preparation measurement questionnaire was prepared, such that 4 items was allocated to goal setting factor \( (r = .4775) \), 4 item to self-confidence \( (r = .7555) \), 4 items to commitment \( (r = .7525) \), 4 items to stress \( (r = .7846) \), 4 item to fear control \( (r = .7555) \), 4 item to relaxation \( (r = .7072) \), 4 items to powering \( (r = .7594) \), 4 items to imagination \( (r = .7966) \), 4 items to mental exercise \( (r = .8510) \), 4 items to focusing \( (r = .7555) \), 4 items to refocusing \( (r = .5372) \), 4 items to match layout \( (r = .8048) \). Also the reliability of questionnaire in Maleky's thesis
(2005) by method of Cronbach Alpha \( r = 0.92 \) and by Gotman's method was gained equivalent to \( r = 0.88 \) that was significant in the level of \( p = 0.05 \).

Performing procedure

Initially demographic questionnaire was used to gather general and basic data and subjects were given confidence that all of their information will be remained secret. Then gathering information to determine profile of psychological skills among women and men karate and Taekwondo athletes was performed using Otava's psychological preparation questionnaire. To describe data the central tendency indices (mean, median, mode) and dispersion index (changes range, variance and criterion deviation) and to test hypothesis the parametric test (independent T) was used in order to comparing two groups, Kolmogorov–Smirnov test was used to examine normality of data distribution and the Levin's test by SPSS software was used to assess variances homogeneity. Significance level of the research variables all calculated less than 0.05. Then it can be said that data distribution is normal.

## RESULTS

The individual characteristics of the study subjects (gender, age, sport field, coaching grade, sport experience) are presented as descriptive (abundance and percentage, average and standard deviation). Gender: 50% of the sample population includes men and 50% include women. Age: 23.3% of the sample are less than 24 years old, 51.7% between 25-30, 11.7% between 31-35, 8.3% between 36-40, and 5% older than 40. Respondents' distribution in terms of age show that two-third of athletes have less than 30 years olds. Education level: 44.2% of the sample population had diploma and below it, 21.7% had foundation degree, 33.3% were bachelor and 8% had M.A. degree. About half of the respondents had a degree lower than diploma. Coaching degree: 1.7% of the sample had no coaching degree, 79.2% had class 3 degree, 15% had class 2 degree and 3.3% had class 1 degree. (more than 80% of respondents had class 3 degree). Sport experience: 32.5% of the subjects had less than 5 years experience, 56.7% had 5-10 years, 7.5% had 10-15 years and 3.3% had more than 15 years experience. Sport field: 50% were Karatekas and 50% were from Taekwondo.

Given the table 1, total scores of psychological skills in Taekwondo athletes are: mean score of basic psychological skills 5.62, physical-physiological skills 4.99 and cognitive skills is 4.81 from 7 scores. Results show the moderate to high level of psychology skills profile in women and men Taekwondo athletes in Alborz province.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Maximum</th>
<th>minimum</th>
<th>Sd</th>
<th>mean</th>
<th>component</th>
</tr>
</thead>
<tbody>
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<td>3.70</td>
<td>0.567</td>
<td>4.81</td>
<td>Cognitive skills</td>
</tr>
<tr>
<td>Psychological skills</td>
<td>6.38</td>
<td>3.81</td>
<td>0.613</td>
<td>4.99</td>
<td>Psychological-physical skills</td>
</tr>
<tr>
<td>Basic psychological skills</td>
<td>6.33</td>
<td>4.33</td>
<td>0.434</td>
<td>5.62</td>
<td>Basic psychological skills</td>
</tr>
<tr>
<td>Cognitive skills</td>
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<td>1.27</td>
<td>3.73</td>
<td>Refocusing</td>
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<tr>
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</tr>
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<td>6.75</td>
<td>2.75</td>
<td>0.915</td>
<td>5.26</td>
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</tr>
<tr>
<td></td>
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<td>3.75</td>
<td>0.811</td>
<td>5.33</td>
<td>imagination</td>
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<tr>
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<td>2.75</td>
<td>0.883</td>
<td>5.12</td>
<td>powering</td>
</tr>
<tr>
<td>Psychological-physical skills</td>
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<td>1.75</td>
<td>1.11</td>
<td>4.90</td>
<td>Fear control</td>
</tr>
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<td>Basic psychological skills</td>
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<td>2.75</td>
<td>0.733</td>
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</tr>
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<td>4.5</td>
<td>0.604</td>
<td>6.11</td>
<td>Self confidence</td>
</tr>
<tr>
<td>Component</td>
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<td>minimum</td>
<td>Sd</td>
<td>mean</td>
<td></td>
</tr>
<tr>
<td>Basic psychological skills</td>
<td>6.75</td>
<td>4.25</td>
<td>0.554</td>
<td>5.90</td>
<td>Goal setting</td>
</tr>
<tr>
<td>Psychological-physical skills</td>
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<td>4.5</td>
<td>0.604</td>
<td>6.11</td>
<td>Self confidence</td>
</tr>
<tr>
<td>Cognitive skills</td>
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<td>3.5</td>
<td>0.883</td>
<td>5.27</td>
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<td>0.883</td>
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<td>powering</td>
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<td>6.75</td>
<td>3.75</td>
<td>0.811</td>
<td>5.33</td>
<td>imagination</td>
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<tr>
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<td>6.75</td>
<td>2.75</td>
<td>0.915</td>
<td>5.26</td>
<td>Mental exercise</td>
</tr>
<tr>
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<td>1.50</td>
<td>1.26</td>
<td>4.23</td>
<td>Focusing</td>
</tr>
<tr>
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<td>1.27</td>
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<td>0.434</td>
<td>5.62</td>
<td>Basic psychological skills</td>
</tr>
<tr>
<td></td>
<td>6.38</td>
<td>3.81</td>
<td>0.613</td>
<td>4.99</td>
<td>Psychological-physical skills</td>
</tr>
</tbody>
</table>

Table 1. Descriptive data of psychological skills profile and its components in Taekwondo athletes
Considering the table 2, total score of psychological skills in Karate athletes report basic psychological skills 5.77, physical-psychological skills 5.05 and cognitive skills of Taekwondo athletes 4.92. Results show moderate to high level of psychological skills profile in women and men Karate athletes in Alborz province.

In this research also Cronbach alpha was used to examine reliability of measurement tool (spectra). To get confidence of the measured questions, Cronbach alpha was calculated for all research questionnaires that taking into account that is larger than .70, is acceptable and this subject shows internal correlation between variables to assess the involved concepts and hence it can be argued that the present research tool has necessary reliability and validity.

In order to examine normal distribution of data related to research variables the Kolmogorov–Smirnov test was used that its results are presented in table 4.

As table 3 show the Cronbach alpha rate obtained was calculated for all research questionnaires that taking into account that is larger than .70, is acceptable and this subject shows internal correlation between variables to assess the involved concepts and hence it can be argued that the present research tool has necessary reliability and validity.

In order to examine normal distribution of data related to research variables the Kolmogorov–Smirnov test was used that its results are presented in table 4.

The significance level of all variables is higher than .05, then it can be suggested that data distribution is normal.

Results of independent T test in table 5 in order to compare psychological skills between Karate and Taekwondo athletes showed that connective skills hasn’t significant difference between them (Sig ≥ 0.05). Also comparison of psychological skills between Karate and Taekwondo athletes showed that there isn’t significant difference in basic psychological skills between Karate and Taekwondo athletes (sig ≥ 0.05). Comparing psychological-physical skills between Karate and Taekwondo athletes showed that there isn’t significant difference between them (sig ≥ 0.05).
Table 5. results of independent T test to determine difference of psychological skills between two groups of Karate and Taekwondo

<table>
<thead>
<tr>
<th>Significance (sig.) level</th>
<th>Df</th>
<th>t</th>
<th>Df</th>
<th>t</th>
<th>F</th>
<th>Sd</th>
<th>mean</th>
<th>group</th>
<th>Variable</th>
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<tbody>
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<td>118</td>
<td>0.448</td>
<td>251</td>
<td>0.251</td>
<td>1.33</td>
<td>0.613</td>
<td>4.99</td>
<td>Taekwondo</td>
<td>Psychological-physical skills</td>
</tr>
<tr>
<td>0.196</td>
<td>118</td>
<td>1.30</td>
<td>551</td>
<td>0.551</td>
<td>0.358</td>
<td>0.414</td>
<td>5.14</td>
<td>Taekwondo</td>
<td>Psychological skills</td>
</tr>
<tr>
<td>0.058</td>
<td>118</td>
<td>1.91</td>
<td>625</td>
<td>0.625</td>
<td>0.241</td>
<td>0.434</td>
<td>5.62</td>
<td>Taekwondo</td>
<td>Basic psychological skills</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>0.417</td>
<td>5.77</td>
<td>Karate</td>
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</tr>
<tr>
<td>0.318</td>
<td>118</td>
<td>1.006</td>
<td>235</td>
<td>0.235</td>
<td>1.42</td>
<td>0.567</td>
<td>4.81</td>
<td>Taekwondo</td>
<td>Karate</td>
</tr>
</tbody>
</table>

Results of independent T test in table 6 in order to compare psychological skills between Karate and Taekwondo athletes showed that there isn’t significant difference in psychological skills between them (s0g≥0.05). Comparison of psychological skills among Karate and Taekwondo athletes showed that there isn’t significant difference in psychological skills between them (s0g≥0.05).

Table 6. results of independent T test to determine the difference between two groups of Karate and Taekwondo athletes in psychological skills

<table>
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<tr>
<th>Significance (sig.) level</th>
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<th>t</th>
<th>Df</th>
<th>t</th>
<th>F</th>
<th>Sd</th>
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<tr>
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<td>269</td>
<td>0.269</td>
<td>1.24</td>
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<td>5.26</td>
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<td></td>
<td>0.445</td>
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<td>woman</td>
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</table>

Results of independent T test in table 7 in order to compare basic psychological skills and its components between women and men Taekwondo athletes showed that there isn’t significant difference in basic psychological skills and its components between them (s0g≥0.05).

Table 7. Results of independent T test to determine difference between women and men Taekwondo athletes in basic psychological skills and its components

<table>
<thead>
<tr>
<th>Significance (sig.) level</th>
<th>Df</th>
<th>t</th>
<th>Df</th>
<th>t</th>
<th>F</th>
<th>Standard deviation</th>
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<td>0.745</td>
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<td></td>
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<td>5.84</td>
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<td>0.593</td>
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<td></td>
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<td>6</td>
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</tr>
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<td>0.586</td>
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<td>143</td>
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<td>2.175</td>
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</tr>
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<td>0.316</td>
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<td>866</td>
<td>0.166</td>
<td>1.94</td>
<td>0.866</td>
<td>4.92</td>
<td>man</td>
<td>Basic psychological skills</td>
</tr>
</tbody>
</table>

Results of independent T test in table 8 in order to compare basic psychological skills and its components between women and men Taekwondo athletes showed no significant difference (s0g≥0.05).
Table 8. Results of independent T test to determine difference between women and men Taekwondo athletes in basic psychological skills and its components

<table>
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<tr>
<th>Significance (sig.) level</th>
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</tr>
<tr>
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<td>0.352</td>
<td>5.81</td>
<td>woman</td>
</tr>
</tbody>
</table>

Results of independent T in diagram 1 in order to compare psychological skills and its components between women and men Taekwondo athletes showed that there isn't significant difference in basic psychological skills and its components between them (sig≥0.05). In diagram 2 in order to compare physical-psychological skills and its components between women and men Taekwondo athletes showed that there isn't significant difference between them (sig≥0.05).

![Figure 1](image1.png)

Figure 1. Comparison of profile psychological-physical skill between women and men Taekwondo athletes

![Figure 2](image2.png)

Figure 2. Comparison of profile psychological-physical skill between women and men Karate athletes

The results of independent T test in diagram 3 in order to compare cognitive skills and its components between women and men Taekwondo athletes showed that there isn't significant difference between them (sig≥0.05).
Results of independent T test in diagram 4 in order to compare cognitive skills and its components between women and men Karate athletes showed that there isn’t significant difference between them ($\text{sig} \geq 0.05$).
psychological skills between women and men can require discussion, because diverse studies have shown the
difference between two groups. Therefore it is suggested to coaches particularly in Taekwondo and Karate that
examine their athletes' psychological skills profile and pay special attention to its impact on their performance
and achievement. Thus to reach to sport success in the two sports can seek help from psychology specialists
to retain and promote their psychological preparation.

Results showed that there isn’t significant difference between profiles of psychological skills Karate and
Taekwondo athletes. Findings of this study are aligning with studies of Mirzaee and colleagues (2007) and
Noorbakhsh and Maleki (2007). Also Gould and colleagues (1981) in their research studied the psychological
characteristics of U.S.A. Olympic athletes that had an appropriate performance in matches and gained Olympic
medal and suggested that they have same psychological characteristics, also the concluded that ability to
overcome on anxiety and control for it, self-confidence, ability of focusing and preventing from confusion,
competitiveness, hard working, goal setting, trust in coach ability, hope, optimism and idealism have a
significant importance for athletes. Results of the present study weren’t aligning with studies of Dornd Bush and
colleagues (2001), Sadeghi and Shirazi (2013), Khanjari and colleagues (2013), Mohamadi and Samarghandi
(2011). Given the report on above hypothesis that was the general assumption of this study, it was stated that
reason for discrepancy between results of present study with mentioned researches may be dissimilar
conditions and the time of gathering information from under study population. Considering that athletes'
psychological skills consist of basic psychological skills, psychological-physical skills and cognitive skills,
therefore coaches must consider the role of goal setting, self-confidence and commitment, reaction to stress,
fear control, relaxation, powering, imagination, mental exercise, focusing, refocusing and match outlining. In
fact if the psychological skills aren’t established in athletes, the other psychological skills never reach to ideal
level. According Bloom et. al. (1994) providing personal profiles of national and international athletes, that are
very exceptional people and have unique physical and psychological situation, can clarify their special needs
and illustrate their change trend, and it is suggested that coaches don’t avoid this.

Results showed that there isn’t significant difference between profiles of basic psychological skills of
women and men in under study population (Taekwondo and Karate athletes). Concerning this, Fuchs and
Zaiczkowsky (1983) studied psychological features of 31 women and men in body building. In their research,
significant difference wasn’t observed in psychological features. Also Antonio and Blisous (2003) in their
research on basic psychological skills of Greek Badminton athletes found that psychological skills was different
among age groups, but they didn’t observed any difference between women and men. Another research that is
in disagreement with the present research is study of Sanati Monfared and Mosayebi (2007). The lack of
discrepancy of psychological skills between two groups (women and men) show that gender has no impact on
not using psychological skills by athletes and by contrast, for both sports (Taekwondo and Karate) in the
present research also psychological skills is an integral element of these sports. Along with this it is necessary
that more researches are done experimentally to identify optimal psychological strategies and interventions to
increase level of psychological skills in women and men athletes to obtain more definite results about this.
Considering that basic psychological skills such as goal setting, self confidence and commitment in women and
men Taekwondo and Karate athletes wasn’t different and their basic psychology skills was in a desirable level,
it can be suggested that athletes in addition to having high motivation, must have high psychological
preparation and goal setting is an extremely effective tool to raise an athlete's psychological energy level. Also
self confidence that is a degree of trust in oneself is ability in a special moment to perform an action for athletes
can provide an athlete's stability before match. This factor also makes not fearing form rival's success and
oneself disappointment that results in stability and finally winning. In fact basic psychological skills are as
constructive units for evolution of other mental and psychological skills. Vaez Moosavi (2007) argues that goal
setting, self confidence and commitment are among important success elements and are employed in higher
level than the other psychological skills.

Findings of the present research showed that there isn’t significant difference between profiles of
psychological-physical skills in Taekwondo and Karate women and men. These findings are in aligning with
study of Mirzaee and colleagues (2007) and are in disagreement with studies of Durand Bush and colleagues
(2001), Bachank (2001), Sadeghi and Shirazi (2013), Khanjari and colleagues (2013), Mohamadi and
Samarghandi (2011) and Sanati Monfared and Mosayebi (2007). The not discrepancy of profiles of
psychological-physical skills in different researches may caused by subjects' demographic features and the
sports studied in this research. In fact response to stress, fear control, relaxation and powering was in a
desirable level in both women and men and this shows gigh importance of psychological-physical skills in both
Taekwondo and Karate and it may be suggested that it is required in martial arts and has nothing to do with
gender.

Findings of the present research showed that there isn’t significant difference between profiles of
psychological skills of Taekwondo and Karate women and men. Findings of present research are aligning with
studies of Mirzaee and colleagues (2007) and Noorbakhsh and maleki (2005), Fuchs and Zaiczkowsky (1983)
and are in disagreement with studies of Durand Bush et. al. (2001), Sadeghi and Shirazi (2013), Khanjari et. al.
(2013), Mohamadi and Samarghandi (2011) and Hashemi (1986). Vytenberg and Gould (2007) believe that psychological interventions through psychological skills, must be through regular methods and over time and employing diverse psychological skills and strategies including imagination, relaxation and goal setting to have necessary influence on sport performance. It seems that continuous and regular exercise of psychological skills has a great impact on their psychological skills and finally their performance. Considering that psychological skills play main role in athletes’ success, particularly in national teams in Asian, World and Olympic competitions, it is suggested that coaches and teams officials by help of sport psychologists identify strengths and weaknesses of athletes' cognitive skills and taking them into account make planning and advises required to promote and improve these skills. It is worth noting that Taekwondo and Karate are among sports that athlete must have much concentration during match on very little motion of rival so that can perform attack techniques in appropriate opportunity and take scores and when performing any technique by rival, employ defense techniques and anti-attack to prevent him take score, so high concentration and performing imagination exercises to increase prediction power and raising action and reaction speed at competition, is important in success of Taekwondo and Karate athletes. Most of the researches have shown that goal setting is a factor in increasing attention and finally increase of focusing skill. It seems that using goal setting strategy, relaxation and imagination in this research has a great influence on athletes' concentration. Also exercising psychological skills will improve their performance. Therefore it is suggested that in the future studies relation of athletes’ psychological skills with other factors and variables like sport performance, success, anxiety, self-efficacy are evaluated and in order to increase validity and content of research, it is suggested that using the other gathering methods specially interview, this research goals are studied.

REFERENCES

Aslankhani MA, Shahidi Sh.1988. Study and comparison of a selection of psychological features in women and men athletes and non-students in universities dependent on High Education Ministry based in Tehran, Harekat journal, year 1, no.3.
Bebetos E, Antoniou P. 2003. Psychological skills of Greek badminton athletes perceptual and motor skills, 97, 1289-1296.
Gaal A.2006. Test to assess physical, skill and psychological preparation of elite athletes in different sports, Olympic national committee.
Noorbakhsh M, Maleki M.2005. Comparison of basic psychological, psychological-physical and cognitive skills of elite men athletes in individual and group sports in Khoozestan province and relation of these skills with their efficient, international congress of Azad University, 23, 125-141.
Sanati Monfared Sh, Mosayebi F, Salmela JI.2007. Comparison of psychological skills in Iranian selected and not selected athletes for Asian matches of Doha, the paper presented in European congress of sport psychology, 2007, Samt press.
Sanati Monfared Sh, Mosayebi F, Salmela JI.2007. Study of profile of mental skills and expert level of athletes of Iran national teams, international congress of applied psychology in athlete sports, Tehran.