Relationship between self-efficacy and body imagination with some individual characters of Iran’s woman National football team

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Abstract
The importance of the exerciser’s mental preparation is evident for instructors, however, any researches or tools that assist this will be significance. The aim of this research is to study the self-efficacy and body imagination with education background, exercise literature and BIM of woman footballers. Consequently 59 woman footballers of National team voluntarily taken apart in the research including 3 classes of 20 Juvenescent, 19 young and 20 adolescent. Required data have been collected by personal data’s questionnaires, Shere’s self-efficacy, March’s body imagination and length and weight measurements. Data was analyzed by SPSS, descriptive statics, Pierson’s correlation, Results show that there is direct relationship between these criteria: self-efficacy with body imagination, education background and BMI, and also body imagination with BMI in adult group; self-efficacy with body imagination and body imagination with education background in young group; self-efficacy with BMI and body imagination with exercise background in juvenescent group. One may concluded that body composition and body imagination are among the causes which have direct effect to self-efficacy and can assist the exerciser success.

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Introduction

Some exerciser have something more than physical skills, they have incredible abilities such as: enhance the moral readiness, adjust the psychic, having heavy focus and competitive aims but true. They have self-succession imagination ability resulted in doing whatever they imagine. Self-Individual's imagination can intensively impact on self-assurance and exercise progress, enjoy of wining or trying for compensate of defeat self-perception in training and sporting psychology (Martens, 1978). Body imagination and self-efficiency can be regarded as the most significance factors affecting the self-assurance (Gill, 2000).

Bandura (1997) have discussed that the self-efficiency is the composer ability effectively arranging by cognition, social, sensation and behavioral skills. According to Bandura, knowledge skills, former achievements of individual are not proper predictive for future work, rather human beliefs of self-ability for doing the work is affective.

In one hand, body imagination is the personal concepts of individual about his or her body. Sometimes body imagination is also referred as self-concept. Body imagination is the internal sense of self. This internal sense has stated from birth and cultural method of training can highly affected that. In subsequent years, positive body imaginations are related to movement experience and body control of environment. The higher level of body imagination is forming by lateral and moving body pattern and directionality (Werner & Rini, 2002).

Studies show that body imagination is considered as a usual and prevalent concern by woman; and can affected on self-assurance and self-efficiency (Tiggemann and Lynch, 2001). Relationship between self-efficiency and body imagination can be differ among genders, social and countries or variety of exercises (Ponyahotra et al., 1997; Gill, 2000). Diverse researches can be seen that study the relation between self-efficiency and body imagination yet they did not achieve the same results. Caruso & Gill (1992) have studied 34 female students and have presented that there is the meaningful relation between body perception, satisfactory of body position, self-assurance and body preparation. However, Netz et al. (1998) have analyzed the impact if 12 week body trainings on some mental factors of man and woman and finally found that in both genera mental safety and self-assurance have intensively improved but body imagination has not changed, also demonstrated that these factors have not meaningful relation. Malak-shahi et al. (2009) have surveyed the relation between self-respect and self-efficiency of volleyball man and found there is not any meaningful relation between these factors. Rodin & Larson, (1992) have revise previous research and concluded that social and cultural factors are effective on illusive body composition. Also atrophy have relation with satisfactory of body composition.

The point interpreted of various study results is that experimental of every study in the view of exercise and educational background are differ, so these two factors may affect self-efficiency and body imagination. The sport of woman football was started from 1971, although this has 40 year activity but less works have been done on this subject. Scientific research can assist the progress of this realm. Body imagination and self-efficiency are among the most important factors controlling the exercise function, motivation and prosperity of sport. Therefore, the study of relations between these two factors with some individual factors can assist instructors and trainer to discover effective exercise and training method, and to improve athlete works in competition champ. However, in this study, researcher wishes to respond this question: is the association between self-efficiency with body imagination and some individual characters of member of Iran woman’s national team?

Materials and methods

In this descriptive-correlative research, statistics population include 2013 Iran women’s national football team in three level of juvenescent, young and
Research specimens as follows: Twenty of juvenescent, nineteen of young and twenty of adult participating voluntarily in the personal communication. The tools used are digital balance, personal character form, and self-efficiency questionnaire of Sherer including 17 questions as completely agree to completely disagree (Sherer, 1982). The consistency of this questionnaire has affirmed by malek-shahi et al. (2009) \( r=0.729 \).

Every question has 5 options respectively as: 5: completely agree; 4: agree; 3: no idea; 2: disagree; 1: completely disagree. Finally the score of the entire question were collected and regarded as self-efficiency score. Estimating of body evaluation have been done by short questionnaire of self-descriptive marsh et al. (2010) including 36 question in 6 value amplitude of completely true to completely falls. It can be mentioned that the valuation of questions are as reverse 7, 8, 9, 27, 31, 23, and 32. Justifiability and consistency of this questionnaire has been confirmed by Bahram et al. (2012) using Korenbakh’s alphabet \( r=0.83 \). The valuation of the question as 6: completely correct; 5: correct; 4: partly correct; 3: partly falls; 2: falls; 1: completely falls. All the questions were distributed by researcher after the exercise and were collected after the fulfillment. Finally the scores were collected and regarded as the score of body imagination.

After above data collection, length of the participants was calculated using in cm and the weight of the kg after starting the exercise by researcher and assistant and total body mass for every participant was calculated by these two data. Central index and distribution of quantitative scale were calculated using descriptive statics. First, the normality of data was analyzed using Kolmogorov-Smirnov Test. Also, the analyze of one way variance and Scheffe test was used for study differences existed between juvenescent, young and adult teams.

### Results

The descriptive data of participant individual character in three level juvenescent \( (n=20) \); young \( (n=19) \) and adult \( (n=20) \) including age, length, weight, education and exercise background, body mass index and the scores of questionnaires and body imagination are presented in the Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Age (year)</th>
<th>Length (cm)</th>
<th>Weight (kg)</th>
<th>Education Level (year)</th>
<th>Exercise background (year)</th>
<th>BMI (kg/m²)</th>
<th>Self-efficiency</th>
<th>Body imagination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>24.9</td>
<td>168</td>
<td>61.5</td>
<td>13.85</td>
<td>8.2</td>
<td>22.34</td>
<td>59.1</td>
<td>155.25</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>3.94</td>
<td>2.81</td>
<td>1.31</td>
<td>1.52</td>
<td>1.24</td>
<td>11.04</td>
<td>21.23</td>
</tr>
<tr>
<td>Young</td>
<td>18.6</td>
<td>166</td>
<td>56.79</td>
<td>12</td>
<td>6</td>
<td>21.15</td>
<td>63.26</td>
<td>164</td>
</tr>
<tr>
<td></td>
<td>0.83</td>
<td>4.34</td>
<td>4.46</td>
<td>.97</td>
<td>1.1</td>
<td>1.6</td>
<td>10.8</td>
<td>14.99</td>
</tr>
<tr>
<td>juvenescent</td>
<td>15.45</td>
<td>164</td>
<td>54.6</td>
<td>7.95</td>
<td>4.1</td>
<td>20.78</td>
<td>69.06</td>
<td>168.6</td>
</tr>
<tr>
<td></td>
<td>0.7</td>
<td>4.96</td>
<td>3.53</td>
<td>0.99</td>
<td>0.9</td>
<td>1.46</td>
<td>6.91</td>
<td>14.41</td>
</tr>
</tbody>
</table>

In interpretative statics, the results of Pierson’s test shows that there is the relationship between body imagination \( p=0.00 \ & r=0.74 \) with education background \( p=0.049 \ & r=0.44 \) and \( p=0.0067 \) \( r=0.59 \) and body imagination with education background \( p=0.49 \ & r=0.44 \) BMI \( p=0.0 \ & r=0.77 \).

Also there is the relationship between self-efficiency and body imagination \( p=0.00 \ & r=0.74 \) and BMI \( p=0.26 \ & r=-0.27 \) and body imagination and education background \( p=0.01 \ & r=0.54 \) and in juvenescent between self-efficiency with BMI \( p=0.41 \ & r=0.19 \) and body imagination with education background \( p=0.44 \ & r=-0.18 \).
The shows the average scores of self-efficiency can differ at least among two age level (F=5.75 & p≤0.05) and the use of Scheffe test demonstrate that there is only meaningful difference between juvenescent and adult level regarding the value of self-efficiency and the level of self-efficiency of juvenescent is meaningfully larger than those of adult. Also analyze of variance test shows that there is no meaningful difference regarding average of body imagination scores (F=3.1 & p=0.053).

Discussion
This study has been done to seek the relationship existed between body imagination and some individual characters of the members Iran’s woman national team. Bandura defined self-efficiency as a kind of self-assurance in specific situation and he believe that self-assurance has close relation with external body shape and body imagination. However, change in external body shape or imaginations of body can affect the self-efficiency and self-assurance. The findings of the study show the strong relation (r=0.74) between self-efficiency and body imagination in young and adult members. Ketcham and Christopher (2009) believe the more good imagination of the body, the more good sense of the life and who opinion upon this idea are more successful in activates and works. Some other researchers also have concluded that positive body imagination and satisfactory of external body shape can bring high self-assurance and high self-efficiency (McCabe et al., 2004; Bodiba et al., 2008). Contrary, malekshahi (2009) have claimed there is no relationship between these two variables. It should be mentioned that the later study used man volleyball team as sample and Barchid scale as estimation of body imagination differed with our used questionnaires for the type of questions, studying scale and the numbers of questions.

The relationship of self-efficiency and physical activity background in three age levels is not meaningful in our study. The result of JahanMaleki et al. (2009) was as same direction with our result but between different age levels. They have found that self-efficiency can directly have meaningful relation with self-conscious and potentially with education background. The students were taken apart as participants and the education level have high importance, consequently can affect their self-efficiency. However, the participants of the present study have been done between Iran’s woman football team and education background may have no relationship with their success, and skill level and acceptance can have high importance in the view of instructor.

This study, also, have found that there is no relationship between self-efficiency and body mass index of juvenescent and young but this relationship is meaningful among adult. Based on our findings and negative correlation coefficient of adult we can claimed that increasing the body mass and tendency to overweight may resulted in decreasing self-efficiency and self-satisfactory of their body. The present study is at same direction with Maccabee and Ricciardelli (2004), vender et al. (2004) and Badiba et al., 2008. All of these studies have resulted that BMI have negative association with self-efficiency and the main cause is the predominant opinion of society. Based on the findings of this study, there is meaningful relationship between body imagination and activity background of juvenescent team while can’t see in the young and adult. The founding of Griffin, M & Kirby (2004) are in the same direction. They found that participate in the competition are not related to body imagination. Contrary, the results of Annesi et al. (2008) and Richards (2002) are different. These researcher claimed that exercising and sport activity can improve the body imagine. It should be mentioned that produced bias may be assigned to less works done seeking the exercise background and its association with body imagination.

There is meaningful association between body imagination and education level of the members of young team but not among those of juvenescent and
adult. The Harter’s hypothesis of the value of perceptible ability shows that perception and imagine of individual on efficiency, acceptance, also mental and physical abilities can affected by instructor and trainer relationship (Harter, 1982). More prolonged education background maybe considered as a reflection of the relationship of individuals with instructor and trainer. However, considering the value of perceptible ability, only in the young team is in the same direction with Hart’s hypothesis.

There is a meaningful relationship between body mass index and body imagination of adult team but not among juvenescent and young. These results confirm the statements of Rodin and Larson (1992) revised the previous studies regarding the body composition and its association with mental factors is in the same direction. They, also, claimed that, although, atrophy can resulted in the satisfactory, however, can causes nourishment problems and the athletes psychologically and socially are confronted with incredible socially and psychologically stresses.

The present study are in different direction with Maccabee and Ricciardelli (2004),bander et al.(2008). All of these researchers have found that BMI have negative relation with body imagination. The variance analysis test, in our study, shows that in the age class cannot affect their body imagination, however, influence the self-efficiency. Scheffe’s test indicate that meaningful difference can be seen only between self-efficiency level of adult and juvenescent (p>0.05) which is larger in the later.

We can conclude of the results that the body composition and exercise activity background is meaningfully related to self-efficiency. There is, also, meaningful relation between body imagination and body composition with self-efficiency. However, considering self-efficiency as a one of the significant factors controlling the success of athletes, attention to the body composition and body imagination as a directionally impacting factor on self-efficiency, can highly affect the athlete’s success.

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