State and trait self confidence among elite and non-elite volleyball players in Iran

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ABSTRACT

The present study compared the state and trait self confidence among elite and non-elite volleyball players in Iran. 40 athletes (20 elite volleyball players and 20 non-elite volleyball players from Iran) were the subjects of the study. The age of the athletes ranged between 18-31 years. All had been practicing their sport for 4-17 years. The research instruments employed were Trait Sport Confidence Inventory (TSCI, Vealey, 1986) and State Sport Confidence Inventory (SSCI, Vealey (1986). Trait sport Confidence Inventory was distributed among subjects approximately 24 hours before the first competition and state self confidence inventory was distributed among subjects about 30 minutes before the first competition. Finally, using one way ANOVA data was analyzed. Results showed mean difference of state self confidence between elite and non-elite volleyball players in Iran was significant (P <0.05). There was significant difference between the level of trait self confidence between elite and non-elite volleyball players in Iran (P <0.05).

Key words: State and trait self confidence, Elite and non-elite volleyball Players.

Introduction

Today, it is important for the physical education coaches as well as athletes to recognize the vital Part that science of psychology plays in the field of physical education and sports [17]. Self-confidence is one of the most frequently cited psychological factors considered to influence athletic performance and has been called the most critical cognitive factor in sport [6]. “Self-confidence is the belief that one has the internal resources, particularly abilities, to achieve success” [22]. Self-confidence can also be divided into two separate orientations, state-confidence and trait-confidence. The state confidence and self-efficacy is related to a special situation or very limited time episodes [23].Both concepts relate to confidence as a relation between the special situation and the individual. The both concepts also try to explain why an individual that feel confident in for example penalty shooting in football might not has to be confident in football in general. Trait confidence on the other hand is a part of the personality. People with high trait confidence have generally high self-confidence across different life situations [23].Trait self confidence represents the perceptions that individuals usually possess about their ability to be successful in sport; state self confidence represents the perceptions individuals have at a particular moment about their ability to be successful in sport. However, based on Nicholls' belief that success means different things to different individuals, Vealey recognized a need to include in her model a construct, competitive orientation, as a way to operationalize success. Competitive orientation is a dispositional construct that indicates one's tendency to strive toward achieving a certain type of goal in sport that will demonstrate competence and success. Vealey selected (a) performing well and (b) winning as the goals upon which competitive orientations are based. Performing well is similar in conceptualization to Nicholls' task ability orientation, and winning is similar to his ego-involved ability concept. Even though athletes may pursue both of these goals, through successive sport experiences they may become performance oriented or outcome oriented [21]. An individual's positive or negative mental state has long been thought to play a crucial role in his or her ability to perform sport specific tasks. This ability then either augments or detracts from his or her overall success or failures as an athlete. Players who are evenly matched in physical skills often rely upon their psychological skills to gain an advantage over their opponents. More specifically, self-confidence has all been linked as contributing factors to athletic performance (Hassmen & Blomstrand, 1995; Morgan, O'Connor, Ellickson, & Bradley, 1988; Ussher & Hardy, 1986). A large number of studies have shown that higher
levels of self-confidence are associated with superior performance. In one recent review, the average correlation reported between self-confidence and performance across 24 studies was 0.54, which indicates a moderately strong relationship [18]. Even under strict laboratory conditions, it has been demonstrated many times over that when confidence is manipulated either up or down, there is a significant effect on sports performance [12]. Psychological skills have been found to differentiate successful and unsuccessful athletes. In general, elite performers have higher self-confidence, heightened concentration, can regulate arousal effectively, use systematically goal setting and imagery, and have high levels of motivation and commitment [8]. It has also been found that elite athletes use more goal setting, imagery and activation compared to non-elite athletes [20]. Although self-confidence is thought to affect athletic performance, its relationship with performance has not been clear in much of the sport science research. Self-confidence has been shown to be significantly correlated with skillful sport performance, but whether there is a causal relationship, and what the direction of that relationship is, cannot be determined from the correlational designs of the Studies [5,7,11]. With respect to fewer researches about state and trait confidence among elite and non-elite athletes the present study attempts to compare the levels of state and trait self-confidence between elite and non-elite volleyball player in Iran.

Material And Methods

The sample consisted of 40 male athletes in two groups (elite and non-elite group). The first group consisted of 20 elite volleyball players who were members of Iran national volleyball team in 2012 year as elite athletes. The second group consisted of 20 non-elite volleyball players that played in local leagues as non-elite athletes. All participants in the study were regularly competing at the super leagues and regional level. The age of the subjects ranged between 19 - 27 years. The basic ethical principles for conducting research studies were observed. The subjects were assured confidentiality regarding the data collected and their personal identity.

Procedures:

At first, researcher visited coaches from the various teams that had been selected and explained the nature of the study and in the second stage explained the study to the athletes and distributed materials containing a letter describing the study and Informed-consent forms. At the third stage demographic Questionnaire and Trait Sport Confidence Inventory [21] were distributed among subjects approximately 24 hours before the first competition. At the fourth stage State Sport Confidence Inventory (SSCI) for both elite and non-elite players were administered to subjects within 30 minutes prior to the start of the competition and the nature of study was described at the top of the questionnaire to the subjects. Each questionnaire took approximately 5 minutes to complete.

Measures:

1. Demographic Questionnaire:

Participants were asked to indicate their age, gender, training experience and skill level.

2. Trait Sport Confidence Inventory [21]

The Trait Sport Confidence Inventory [21] was developed to assess how confident athletes generally feel, when they compete in sport. Items on the inventory ask the participants to compare themselves to the “most confident athlete you know” [21]. The inventory consists of 13 items, with no subscale components, utilizing a 9-point Likert scale anchored by 1 (low) and 9 (high). An item of the TSCI read “Compare your confidence in your ability to perform under pressure to the most confident athlete you know”. The item scores distinguish between low (scores from 1 to 3), moderate (scores from 4 to 6), and high (scores from 7 to 9) confidence. Trait sport confidence scores are obtained through a mean score or a summed score by adding up scores for the 13 items. Global confidence summed scores between 13and 39 reflect a low level and scores between 91 and 117 signify a high level of overall competition confidence. Global confidence scores in between those extremes represent a moderate level of confidence. Cronbach’s alpha coefficient was measured as .93 for the TSCI, with test-retest reliability in two studies of .83 and .86, respectively [21].

3. State Sport Confidence Inventory [21]

Vealey’s State Sport Confidence inventory developed by Robin S. Vealey [21]. Vealey's State Sport Confidence Inventory is a 13 question instrument which measures state sport confidence. To aid in the conceptualization of sport-confidence, Vealey perused the literature on self-efficacy, perceived competence, and performance expectancy. Sport-confidence was defined "as the belief or degree of certainty individuals possess about their ability to be successful in sport" [21].

Data Analysis:

In order to calculate measures of central tendency and variability measures descriptive statistics was utilized. At first Levene's test checked homogeneity of variance between sets of scores.
After making sure of variances homogeneity, one-way analysis of variance conducted for between group’s comparisons, then the hypotheses examined at P<0.05.

**Results:**

<table>
<thead>
<tr>
<th>Variables</th>
<th>GROUPS</th>
<th>Levene Statistic</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>State self confidence</td>
<td>Elite and non- elite players</td>
<td>0.767</td>
<td>38</td>
<td>0.387</td>
</tr>
<tr>
<td>Trait self confidence</td>
<td>Elite and non- elite players</td>
<td>3.473</td>
<td>38</td>
<td>0.070</td>
</tr>
</tbody>
</table>

Table 1 revealed that the amount of Levene Statistic of state self confidence and trait self confidence are 0.767 and 3.473 respectively. The obtained “P” value is 0.387 and 0.070 respectively (P>0.05).

Therefore elite and non-elite volleyball players in term of studied variable are homogenous.

**Table 2:** The mean values of State self confidence between elite and non-elite volleyball players

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M±SD</th>
<th>95% Confidence Interval for Mean</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elite Athletes</td>
<td>20</td>
<td>97.50 ± 12.75</td>
<td>91.52 to 103.47</td>
<td>7.69</td>
<td>0.009</td>
</tr>
<tr>
<td>Non-elite Athletes</td>
<td>20</td>
<td>86.40 ± 12.55</td>
<td>80.52 to 92.27</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level

**Table 3:** The mean values of Trait Self Confidence between elite and non-elite badminton players

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M±SD</th>
<th>95% Confidence Interval for Mean</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elite Athletes</td>
<td>20</td>
<td>96.75 ± 9.88</td>
<td>92.12 to 101.37</td>
<td>4.52</td>
<td>0.040</td>
</tr>
<tr>
<td>Non-elite Athletes</td>
<td>20</td>
<td>85.80 ± 20.79</td>
<td>76.06 to 95.53</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level

**Fig. 1:** Mean difference of state self confidence between elite and non-elite volleyball players

Table 2 shows the scores of state self confidence in elite and non-elite athletes. The one-way ANOVA results indicated that means of state self confidence in elite and non-elite athletes are 97.50 and 86.40 respectively. The standard deviations of state self confidence in elite and non-elite athletes are 12.75 and 12.55 respectively. The obtained “F” is 7.69 and “P” value is 0.009(P<0.05).

Table 3 shows the scores of trait self confidence in elite and non-elite athletes. The one-way ANOVA results indicated that means of trait self confidence in elite and non-elite athletes are 96.75 and 85.80 respectively. The standard deviations of trait self confidence in elite and non-elite athletes are 9.88 and 20.79 respectively. The obtained “F” is 4.52 and “P” value is 0.040(P<0.05).
Discussion:

The first aim of the present study was to compare state self confidence between elite and non-elite volleyball players in Iran. The one-way ANOVA results indicated that the scores mean of state self confidence in elite athletes were significantly higher than non-elite athletes. In other words there is a significant difference in state self confidence between elite and non-elite athletes in Iran (P<0.05).

Elite athletes develop and maintain their self confidence through training and preparation, including visualization. They do not allow any things in a match situation to significantly affect their self confidence, as they know that a mistake in a game is just a human error and nothing more. Some athletes will have a planned strategy for what action to take if mistakes start to occur, and they know that by using this strategy, their mistakes will be temporary and will therefore not affect their self confidence and ultimately, performance. These mistakes will not override the intense self-belief and confidence created by a strong work ethic and focused preparation. It seems that Athletes who possess well-developed and practiced coping skills are often more effective in managing the stress and demands of training and competition. Further, exposing athletes to mental training programs from an early age is likely to have a very positive effect on their levels of self-confidence, which may carry into their adult sporting careers [18].

In Jones and Hardy’s report of interviews of elite athletes, they found that in general, elite athletes tended to have very high levels of confidence and felt that the athletes felt that these high levels were needed for the performances that they were looking for. Hemery’s study of 63 elite athletes showed that 90% of the sample had “a very high level of self-confidence.”[10]. A large number of studies have shown that higher levels of self-confidence are associated with superior performance. These results are supported with the results of Durand, Bush and Salmela [2], Cr Ciun et al., [1] and Kruger [13] and Mohammad Saber Sotoodeh & et al [16].

The second aim of the present study was to compare trait self confidence between elite and non-elite volleyball players in Iran.

The one-way ANOVA results indicated that the scores mean of trait self confidence in elite athletes were significantly higher than non-elite athletes. In other words there is a significant difference in trait self confidence between elite and non-elite athletes in Iran (P<0.05).

On the base of sports specific model of sports confidence [21] in a particular sporting (say, a penalty shoot-out in a European Cup Final), a Player’s trait self confidence and competitive orientation will influence the current state self confidence. This state is what determines the player’s behavioral response -whether they put the ball in the net or straight into the goalkeeper’s arms. This in turn leads to a subjective outcome - how the player feels about their performance. The subjective outcome will be affected by personality traits like trait self confidence and Competitive Orientation (some people look on the bright side, see failure as a learning opportunity, redouble their determination, etc) but the subjective outcome also affects those traits (denting confidence, weakening determination) so they might be slightly different next time. Thus trait self confidence and competitive orientation determine the level of state self confidence for sport performance. If the performance is associated with positive result it will increase trait confidence and will change the type of goal for next performance. Substantial body of reports confirmed the higher level of state confidence in elite athletes. Therefore according to this theory elite athletes may get more positive result, good attitude, successful outcomes and then trait confidence compare with non elite athletes. Additionally, Elizabeth Helen Athanas shown that successful elite athletes have more self-confidence, better concentration skills, are less preoccupied with the threat of failure, have a more positive thought process, and are less outcome driven [9,7,11,14,15]. The result of this hypothesis
supported by Stavrou and Zervas [19] reported moderate correlations of trait sport confidence with several dimensions of state flow, such as sense of control, concentration on the task at hand, challenge-skills balance, loss of self consciousness, and clear goals.

References