Analysis of sport self-confidence of high and low altitude cricket players

Abdul Roof Rather and Brij Bhushan Singh

Abstract
The purpose of this study was to compare the trait and state sport self-confidence of High and Low altitude intervarsity cricket players. 50 cricket players, 25 High Altitude (North Zone Level) Cricket Players and 25 Low Altitude (North Zone Level) Cricket Players were selected through random sampling for this study. The age of the players ranged between 21-25 years and had been practicing in their sport/game for an average of 9 years. The research instruments used 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 18 hours before the first competition and state self confidence inventory was distributed among subjects about 1 hour before the first competition. It was found that both high and low altitude cricket players fall in the high trait and state sport self-confidence level. To test the hypothesis that the High Altitude Players and Low Altitude Players were associated with statistically insignificantly different mean TSSC and SSSC, an independent samples t-test was performed. The independent samples t-test was associated with a statistically significant difference for TSSC t (48) = 2.27, p<.001 and for SSSC t (48) = 2.75, p<.001. On the basis the results it was concluded that Low Altitude Cricket Players possess more Trait Sport Self Confidence and State Sport Self Confidence than High Altitude Players.

Keywords: High altitude, low altitude, sport self confidence, trait, state, cricket

1. Introduction
The vital role that science of psychology plays in the field of physical education and sports demands recognition form the coaches and athletes. Self-confidence has gained great research interest among psychologists, researchers, coaches and athletes. Coaches and athletes keep discussing the role that self-confidence played in their success, but lack of self-confidence has been stated as a cause for failure of an athlete. For example, Trevor Hoffman has stated, “Confidence is everything; if you start second guessing yourself, you’re bound to run into worse outing.” In cricket self-confidence plays an important role. Sachin Tendulkar, who holds the record of highest number of runs both in test and one-day international cricket formats, stated that, “Confidence has helped him to have a prolonged successful career in international cricket. He further added that physical fitness helps in enhancing confidence level.” Self-confidence can be defined as the belief in one’s abilities to achieve success. Athletes and coaches had often mentioned self-confidence as the most important mental skill for success in competitive sports, (Vealey & Chase, 2008) [1]. Sport-confidence model is the other main theoretical conceptual approach to study confidence in sport (Vealey, 2001; Vealey, et al., 1998; Vealey & Chase, 2008) [1, 2, 3]. (Vealey R. S., 2001) [2] sees sport self-confidence as a social cognitive construct that can be more trait-driven or more state-driven, depending on the temporal frame of reference used. These two orientations, state-confidence and trait-confidence, could differ if we consider confidence of a specific time interval, confidence in an upcoming event or a general view point of confidence. In essence, the state self-confidence might be something you feel right now and therefore be unstable, or the trait self-confidence might be part of your personality and thus be very stable. However, both the concepts relate confidence as situation specific and the individual oriented and also try to explain why an athlete feels confident in e.g. hitting six in cricket and might not has to be confident in cricket in general.
Trait self-confidence on the other hand is a part of the personality. In general, athletes with high trait self-confidence are reported as having high self-confidence across different life situations. (Weinberg, R. S. and Gould, D., 2003) [4] stated that confident athletes believe in themselves and less confident players doubt whether they are good enough or have what takes to be successful.

High Altitude: Mountain medicine recognizes High altitude = 1,500–3,500 meters (4,900–11,500 ft) on the basis of amount of oxygen in the atmosphere, (Thomas E. Dietz, 2006). The high altitude atmosphere is known for the hypoxia and the physiological and psychological changes one undergoes to acclimatize. Low Altitude: Literally it means; being at or having a relatively small elevation or upward extension or occurring at a relatively low altitude, the nearest area to sea, (Farlex Word-Net 3.0 Dictionary).

With respect to fewer researches on trait and state sport self-confidence and no research on self-confidence of high and low altitude cricket players, the present study attempted to compare the trait and state self-confidence between high and low altitude interuniversity (north zone level) cricket players.

2. Methodology
2.1 Demographic Questionnaire: Participants were asked to indicate their age, gender, training age and level of their game. 50 cricket players, 25 high altitude north zone level cricket players and 25 Low altitude north zone level cricket players were the subjects of the study. The age of the players ranged between 21-25 years and had been practicing in their sport/game for an average of 9 years.

2.2 Questionnaire: The research instruments used 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 18 hours before the first competition and state self confidence inventory was distributed among subjects about 1 hour before the first competition.

2.3 Trait Sport Confidence Inventory and State Sport Confidence Inventory: The Trait Sport Confidence Inventory (TSCI) and State Sport Confidence Inventory (SSCI) were developed by Robin S. Vealey 1986. TSCI assess how confident athletes generally feel, when they compete in sport. SSCI assess how confident athletes feel in a given state (e.g., right now). Items on the inventory ask the participants to compare themselves to the “most confident athlete you know”. Both 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 reads “How Confident you generally feel when you compete in a sport. Compare your self-confidence to the most self-confident player you know”. An item of the SSCI reads “How Confident you are right now about competing in the upcoming contest. Compare your self-confidence to the most self-confident player 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 and state 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 13 and 39 reflect a low level and scores between 83 and 117 signify a high level of overall competition confidence. Global confidence scores in between those extremes represent a moderate level of confidence.

3. Data Analysis
IBM SPSS Statistics Version20 was used for the statistical analysis of the data. The descriptive statistics was performed to obtain the Mean and Standard Deviation. Levene’s F-test was performed to test the assumption of homogeneity of variances. Furthermore independent t-test was performed to test the hypothesis.

4. Results
The High Altitude Cricket Players group (N= 25) was associated with Trait Sport Self Confidence (TSSC) M= 83.91 (SD= 9.14) and State Sport Self Confidence (SSSC) M= 84.50 (SD= 9.99). By comparison, the Low Altitude Cricket Players group (N= 25) was associated with a numerically higher TSSC M= 89.80 (SD= 8.82) and SSSC M= 92.11 (SD= 9.21). To test the hypothesis that the High Altitude Players and Low Altitude Players were associated with statistically insignificantly different mean TSSC and SSSC, an independent samples t-test was performed. Additionally, the assumption of homogeneity of variances was tested and satisfied via Levene’s F-test. The independent samples t-test was associated with a statistically significant difference for TSSC t (48) = 2.27, p<.001 and for SSSC t (48) = 2.75, p=.01. Table 1. A graphic representation of means is displayed in Figure 1, 2.

Table 1: Shows Mean, SD and Independent Samples t-test of High and Low Altitude Cricket Players

<table>
<thead>
<tr>
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<th>N</th>
<th>Mean</th>
<th>SD</th>
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<th>Sig. (2-tailed)</th>
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<tbody>
<tr>
<td>Trait Sport Self Confidence</td>
<td>HACP</td>
<td>25</td>
<td>83.91</td>
<td>9.14</td>
<td>2.27*</td>
<td>.001</td>
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<tr>
<td></td>
<td>LACP</td>
<td>25</td>
<td>89.80</td>
<td>8.82</td>
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<tr>
<td>State Sport Self Confidence</td>
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<td>25</td>
<td>84.50</td>
<td>9.99</td>
<td>2.75*</td>
<td>.001</td>
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<td></td>
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<td>25</td>
<td>92.11</td>
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p<.05*, HACP: High Altitude Cricket Players, LACP: Low Altitude Cricket Players
5. Discussion
The first aim of the present study was to compare Trait Self Confidence of High and Low Altitude inter-varsity Cricket Players. The t-test results indicated that the mean of Trait Self Confidence of High and Low Altitude inter-varsity Cricket Players is significant. In other words low altitude cricket players had better trait sport self-confidence than high altitude cricket players.

The second aim of the present study was to compare State Self Confidence of High and Low Altitude inter-varsity Cricket Players. The t-test results indicated that the mean of State Self Confidence of High and Low Altitude inter-varsity Cricket Players is significant. In other words low altitude cricket players had better state sport self-confidence than high altitude cricket players.

It is generally believed that one needs a great deal of confidence to survive at high altitude, so does the high altitude training. But in our case the native high altitude cricket players were found less self-confident than low altitude cricket players. That means native low altitude cricket players had been provided with an environment sufficient to improve their self-confidence. Moreover, success in sports and other endeavors of life are believed to contribute in the confidence of an athlete. (Weinberg, and Gould, 2003) stated that confident athletes believe in themselves and less confident players doubt whether they are good enough or have what takes to be successful. The high altitude cricket players were selected from Kashmir valley, the representation in cricket at international levels is almost nothing, and this may had been a restraint and a negative impulse to lower down their confidence. (Jan Reynolds, 2013) in her books, High-Altitude Woman, stated that “people with lower expectation for success avoid challenging tasks. Consequently this may have negative effect on self-confidence and this in turn becomes a barrier to reach to the potential. She further suggested that clear, direct feedback should be given that will help in bringing up the confidence level”.

6. Conclusion
As found low altitude cricket players were more self-confident than their counter parts. It was concluded that environment does affect self-confidence of an individual. That means native low altitude cricket players had been provided with an environment sufficient to improve their self-confidence.

7. References
5. Farlex Word-Net 3.0 Dictionary, online