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# Coping Skills Of The Female Softball Players At Different Levels Of Performance

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***ABSTRACT***
***The purpose of present study was to compare the coping skills among the inter-college, inter-university and national level female softball players. A total three hundred and eighty five (N=385) softball players (87 inter-college level, 193 inter-university level and 105 national level) were selected as subjects from various colleges, universities and states. The average age of players was 19.98±1.86 years. Coping skills of the softball players was assessed with the help of Athletic Coping Skills Inventory-28 (ACSI-28), constructed by Smith et al. (1995). The results of One-way Analysis of Variance (ANOVA) revealed significant differences on sub-variables of coping skill i.e. coping with adversity (p<0.05), coachability (p<0.05), concentration (p<0.05), confidence and achievement motivation (p<0.05), goal setting and mental preparation (p<0.05), peaking under pressure (p<0.05) and freedom from worry (p<0.05) among the inter-college, inter-university and national level softball players. The post-hoc analysis showed that inter-college level softball players had significantly lower mean values on most of the sub-variables than inter-university and national level softball players. Statistical significantly differences were reported in overall mean score of coping skills (p<0.05) among the players of different performance level. The post-hoc analysis revealed that inter-university and national level players were found to have significantly higher mean value on coping skills (p<0.05) as compared to inter-college level players. It is concluded that the players belonging to higher performance level reported higher scores on coping skills and its sub-variables.***

***Keywords: coping skills, softball players, performance, achievement motivation***

## 1. INTRODUCTION

Sport performance and factors affecting it is a main concern in the field of sport science. Researchers demonstrated that anthropometric, physiological, and skill attributes could be used to predict performance and expertise in sports (Hoare and Warr, 2000). Psychological characteristics are important determinants of performance too. There are several studies investigating the relation of sport performance with various psychological characteristics. The application of psychological characteristics in sports is linked with the development and maintenance of performance in sport (Durand-Bush et al., 2002; Orlick, 2000). People with

appropriate coping skills could manage stress and adversity with self-confidence, however, people with inadequate coping skills tend to perceive anxiety as a threatening factor (Dolbier et al., 2001). Coping is conceptualized as a contextual mediator between the person and the environment. It is a relationship between the perceived demand (stress) and one's ability to cope with the demand. Coping could be used to regulate emotions, to modify the perception of the situations anchored with unpleasant experiences (Folkman and Lazarus, 1985), and also to withdraw from a stressful task or situation (Endler and Paeker, 1990).

The topic of coping skill has received great attention in the area of sports psychology. The literature reflects many scholars' beliefs that coping is a major factor affecting sports performance, is closely tied with mental and physical health (Brennan, 2001). The different types of situation exist in sports and especially psychological problem like stress, anxiety, aggression etc and if sportsperson is not equipped with method to cope with them, they will face many numerous psychological and physical problems (Nubuki and Saori, 2010). Therefore, the players should be able to apply purposely methods to cope with stress (Barnett et al., 2008) Coping skills defined as specific activity, both behavioral and psychological, that people make handle to minimize stress, build master events. Kristiansen et al. (2007) said that different sports have different sources of stress, and consequently participants require special technique. The athlete's ability to cope with these situations can have an important effect on their sports performance (Lazarus, 2000), highlighting the importance of understanding stress and coping responses within sport. Coping responses can be classified into wide themes. The most categories used coping dimensions are problem-focused, emotion-focused and avoidance coping (Compas et al., 2001; Nicholls and Polman, 2007). Problem-focused coping responses help to alter the stressful situation by eliminating the stressor (Lazarus and Folkman, 1984), whereas emotion-focused coping involves strategies to help the individual regulate emotional arousal and distress. Finally, avoidance coping consists of behavioural and cognitive efforts to disengage oneself from a stressful event (Kaiseler et al., 2012). The present study was an attempt to study the coping skills among the inter-college, inter-university and national level female softball players.

## 2. METHODOLOGY

**Participants:** For the present study, total three hundred and eighty five (N=385) female softball players were selected from various colleges, universities and states. Out of 385 subjects, eighty seven softball players were selected from the various colleges of Guru Nanak Dev University, Amritsar, one hundred and ninety three softball players were recruited from different universities and one hundred and five softball players were selected from teams of different states of India. The purposive random sampling technique was applied while selecting the football players for the study. The average age of college level, university level and national level softball players was 19.59±1.15, 20.45±1.76 and 19.46±2.27 years respectively.

*Athletic Coping Skills Inventory-28(ACSI-28)*

The coping skills of the female softball players were measured by applying the Athletic Coping Skills Inventory-28 (ACSI-28), constructed by Smith et al. (1995). ACSI-28 consists of 28 items in seven subscales (coping with adversity, coachability, concentration, confidence and achievement motivation, goal setting and mental preparation, peaking under pressure and freedom from worry). ACSI-28 demonstrated a full scale internal consistency of 0.86 with all subscales ranging from 0.62 to 0.78 (Smith et al. 1995). The inventory measured 7 psychological coping skills dimensions–facets: Coping with Adversity, which is used to measure the athletes' way of coping with difficulties during their performance;

Coachability, which is used to measure the extent to which athletes are able to be open and learn from instruction, and to accept constructive criticism without taking it personally and becoming upset. Concentration, which is used to measure the athletes' ability to focus on the task at hand, to be able to maintain focus, and not to be easily distracted; Confidence and Motivation, which is used to measure self-confidence and positive motivation of athletes who consistently give 100% and work hard to improve their skills; Goal-Setting and Mental Preparation, which is used to measure the athletes' ability to set and work towards specific performance goals and to plan and mentally prepare themselves for performances; Peaking under Pressure, which is used to measure the athletes' ability to perform well under pressure; Freedom from Worry, which is used to measure the athletes' ability to not put extra pressure on themselves by worrying about performing poorly or making mistakes, and not to be concerned with what other people will think about them if they do happen to make a mistake. All these 7 sport specific sub-scales of the inventory reflect a multidimensional construct of psychological skills. Each statement in the inventory describes experiences of other athletes, which prompts the participant to indicate the frequency of similar experiences. The response format for each item consists of a linear 4-point scale ranging from 0 (almost never) to 3 (almost always). Scores range from a low of 0 to a high of 12 on each subscale, with higher scores indicating greater strengths on that subscale. The score for the total scale ranges from a low of 0 to a high of 84, with higher scores signifying greater strength (Smith et al., 1995).

*Statistical Analyses:*

Statistical analysis was performed by using SPSS version 17.0 for windows (SPSS Inc, Chicago, IL, USA). All descriptive data was reported as mean and standard deviation. One-way analysis of variance (ANOVA) was employed to compare the coping skills among inter-college, inter-university and national level female softball players. Following the detection of a significant main effect, Tukey's post-hoc analyses were performed to locate where specific mean differences were laid. Significance levels were set at $p<0.05$.

## 3. RESULTS

Table: 1 Comparison of coping skills and its sub-variables among inter-college, inter-university and national level female softball players

| Variables | Performance Level | N | Mean | SD | F-value | p-value |
|---|---|---|---|---|---|---|
| Coping With Adversity | Inter-College | 87 | 6.47 | 1.71 | 7.033 | 0.001* |
| | Inter-University | 193 | 7.54 | 2.40 | | |
| | National | 105 | 7.43 | 2.43 | | |
| Coachability | Inter-College | 87 | 6.41 | 1.63 | 21.397 | 0.000* |
| | Inter-University | 193 | 8.35 | 2.50 | | |
| | National | 105 | 7.72 | 2.36 | | |
| Concentration | Inter-College | 87 | 6.78 | 1.22 | 5.355 | 0.005* |
| | Inter-University | 193 | 7.05 | 2.29 | | |
| | National | 105 | 7.68 | 1.98 | | |
| Confidence and Achievement Motivation | Inter-College | 87 | 7.41 | 1.55 | 5.796 | 0.003* |
| | Inter-University | 193 | 7.89 | 2.09 | | |
| | National | 105 | 8.40 | 2.16 | | |
| Goal Setting and Mental Preparation | Inter-College | 87 | 7.04 | 1.55 | 7.428 | 0.001* |
| | Inter-University | 193 | 7.89 | 2.09 | | |
| | National | 105 | 8.40 | 2.16 | | |
| Peaking Under | Inter-College | 87 | 5.58 | 2.25 | 13.256 | 0.000* |

| | | | | | | |
|---|---|---|---|---|---|---|
| Pressure | Inter-University | 193 | 7.09 | 2.49 | | |
| | National | 105 | 7.13 | 2.44 | | |
| Freedom From Worry | Inter-College | 87 | 4.05 | 1.93 | 21.840 | 0.000* |
| | Inter-University | 193 | 5.90 | 2.37 | | |
| | National | 105 | 5.75 | 2.19 | | |
| Coping Skills (Total) | Inter-College | 87 | 43.77 | 5.52 | 29.859 | 0.000* |
| | Inter-University | 193 | 51.74 | 9.57 | | |
| | National | 105 | 52.31 | 9.15 | | |

* Indicates significant at 0.05 level

Table: 2 Post-hoc analyses of coping skills and its sub-variables among inter-college, inter-university and national level female softball players

| Variable | Groups | Mean Difference | P - Value |
|---|---|---|---|
| Coping With Adversity | Inter-college vs Inter-univarsity | 1.072 | 0.001* |
| | Inter-college vs National | 0.966 | 0.010* |
| | Inter-univarsity vs National | 0.105 | 0.922 |
| Coachability | Inter-college vs Inter-univarsity | 1.938 | 0.000* |
| | Inter-college vs National | 1.310 | 0.000* |
| | Inter-univarsity vs National | 0.628 | 0.063 |
| Concentration | Inter-college vs Inter-univarsity | 0.275 | 0.541 |
| | Inter-college vs National | 0.904 | 0.006* |
| | Inter-univarsity vs National | 0.628 | 0.028* |
| Confidence and Achievement Motivation | Inter-college vs Inter-univarsity | 0.477 | 0.157 |
| | Inter-college vs National | 0.986 | 0.002* |
| | Inter-univarsity vs National | 0.508 | 0.093 |
| Goal Setting and Mental Preparation | Inter-college vs Inter-univarsity | 0.855 | 0.005* |
| | Inter-college vs National | 1.134 | 0.001* |
| | Inter-univarsity vs National | 0.279 | 0.522 |
| Peaking Under Pressure | Inter-college vs Inter-univarsity | 1.512 | 0.000* |
| | Inter-college vs National | 1.547 | 0.000* |
| | Inter-univarsity vs National | 0.034 | 0.992 |
| Freedom From Worry | Inter-college vs Inter-univarsity | 1.844 | 0.000* |
| | Inter-college vs National | 1.694 | 0.000* |
| | Inter-univarsity vs National | 0.149 | 0.846 |
| Coping Skills (Total) | Inter-college vs Inter-univarsity | 7.976 | 0.000* |
| | Inter-college vs National | 8.544 | 0.000* |
| | Inter-univarsity vs National | 0.568 | 0.852 |

* Indicates significant at 0.05 level

Table 1 presents the descriptive statistics and one-way analysis of variance (ANOVA) with regard to coping skills and its various sub-variables among the inter-college, inter-university and national level female softball players. The results of one-way analysis of variance (ANOVA) revealed that there were statistically significant differences with regard to coping with adversity sub-variable ($F=7.033$, $p=0.001$) among the inter-college, inter-university and national level female softball players. Tukey's post-hoc analysis (table 2) showed that the inter-university level softball players had statistically significantly higher mean value on sub-variable coping with adversity ($p<0.05$) than inter-college level players. Similarly, National level softball players were showed significantly higher mean value on sub-variable coping

with adversity ($p<0.05$) than inter-college level players. The results of one-way analysis of variance (ANOVA) revealed that there were statistically significant differences with regard to coachability sub-variable ($F=21.397$, $p=0.000$) among the inter-college, inter-university and national level female softball players. Post-hoc analysis showed that the inter-university level softball players had statistically significantly higher mean value on sub-variable coachability ($p<0.05$) than inter-college level players. Similarly, National level softball players were showed significantly higher mean value on sub-variable coachability ($p<0.05$) than inter-college level players. There were statistically significant differences with regard to concentration sub-variable ($F=5.355$, $p=0.005$) among the inter-college, inter-university and national level female softball players. Tukey's post-hoc analysis showed that the national level softball players had statistically significantly higher mean value on sub-variable concentration ($p<0.05$) than the inter-college and inter-university level softball players. There were statistically significant differences with regard to confidence and achievement motivation sub-variable ($F=5.796$, $p=0.003$) among the inter-college, inter-university and national level female softball players. Tukey's post-hoc analysis showed that the national level softball players had statistically significantly higher mean value on sub-variable confidence and achievement motivation ($p<0.05$) than inter-college level players.

The results of one-way analysis of variance (ANOVA) revealed that there were statistically significant differences with regard to goal setting and mental preparation sub-variable ($F=7.428$, $p=0.001$) among the inter-college, inter-university and national level female softball players. Post-hoc analysis revealed that the inter-university and national level softball players had statistically significantly higher mean value on sub-variable goal setting and mental preparation ($p < 0.05$) than inter-college level players. It was also noticed from table 1 that there were statistically significant differences with regard to peaking under pressure sub-variable ($F=13.256$, $p=0.000$) among the inter-college, inter-university and national level female softball players. Post-hoc analysis showed that the inter-university and national level softball players had statistically significantly higher mean value on sub-variable peaking under pressure ($p<0.05$) than their inter-college level counterparts. There were statistically significant differences with regard to freedom from worry sub-variable ($F=21.840$, $p=0.000$) among the inter-college, inter-university and national level female softball players. Tukey's post-hoc analysis showed that the inter-university and national level softball players had statistically significantly higher mean value on sub-variable freedom from worry ($p<0.05$) than inter-college level players. While comparing the total score of coping skills among the three groups of players i.e. inter-college, inter-university and national level, statistically significant differences ($F=29.859$, $p=0.000$) were reported. Post-hoc analysis showed that the inter-university and national level softball players had statistically significantly higher mean value of coping skills ($p<0.05$) than inter-college level players.

## 4. DISCUSSION

The psychological characteristics are considered essential determinants for athletic performance and success (Meyers et al, 1999; Smith et al, 1995). One of the important factors of successful performance in competition is ability to remain calm in stressful situations (Géczi et al., 2008; Smith et al., 1995). In the present study, the coping skills and its subscales were assessed for three groups of female softball players whose performance level was used as group classification. We hypothesized that players placed in the three groups' inter-college, inter-university and national level would be distinguishable from each other by psychological scores of coping skills. Our results indicated a significant difference for coping skills among the three groups of softball players. Inter-university and national level players showed significant higher scores for coping skills than the inter-college players.

This might be due to the fact that the Inter-university and national level players were have more experience and face intense competition which might improve their coping skills. There were some studies carried out earlier by Young and Knight (2014) in risk sport or Vidic et al. (2017) in basketball and reported the differences in mental skills between experienced and less experienced athletes (Geczi et al., 2008). The inter-university and national level softball players were also reported to have statistically significantly higher mean value on sub-variable coping with adversity than inter-college level players. More playing experience might be helping the inter-university and national level players in coping with difficulties during their performance. The inter-university and national level softball players were also showed significantly higher mean value on sub-variable coach ability. It might be concluded that athletes are able to be open and learn from instruction, and to accept constructive criticism without taking it personally with the increasing experience and success in competition. Lack of concentration is one of the most frequent complaints athletes during the competition (Smith et al., 1995). Softball players of higher performance level (national and inter-university level) were observed to have higher concentration levels. Lack of concentration might be a problem for inter-college level players as they have lower score on concentration.

National level players reported higher mean scores for self-confidence and achievement motivation which plays vital role for them as it propels players to consistently give 100% and work hard to improve their skills. Female softball players of national and inter-university level were observed to have higher mean scores for goal setting and mental preparation. Goal setting and mental preparation is used to measure the athletes' ability to set and work towards specific performance goals and to plan and mentally prepare themselves for performances. Goal setting and mental preparation are also in the context of a set of attributes that allow a person to become a better athlete and able to cope difficult training and difficult competitive situations (Omar-Fauzee et al., 2014; Smith et al., 1995). Similarly, national and inter-university level players possess the ability to perform well under pressure as they reported higher mean values on peaking under pressure sub-variable than the inter-college level players. The national and inter-university level players also showed the ability to not put extra pressure on themselves by worrying about performing poorly or making mistakes, as they score significantly higher on freedom from worry sub-variable as compared to inter-college level players. The players reported better coping skills with the increasing performance level and playing experience.

## 5. CONCLUSION

In conclusion, the female softball players were differing significantly on coping skills and its sub-variables. Statistical significantly differences were reported in overall mean score of coping skills among the players of different performance level. The inter-university and national level players were found to have higher mean value on coping skills as compared to inter-college level players. It is observed that the players belonging to higher performance level reported higher scores on coping skills and its sub-variables. On the basis of results of this study and demand of contemporary competitive sports, it is recommended to introduce systematic psychological training to college, university and national level players for better performance in their game or event.

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