

# Relationship of Emotional Intelligence and Coping Skills to Playing Ability of Handball Players at National Level

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**Abstract** - The purpose of this study was to analyze the relationship of Emotional intelligence and Coping skills to Playing ability in Handball players at National level. The second purpose of the present study was to determine the Handball Playing Ability on the basis of Emotional Intelligence and Coping skills at National level. The subjects selected for this research work in which 50 International Level Handball players (Men) from different States of India. In the light of the experts opinion, administrative feasibility, availability of subjects, availability of materials and also the availability of expertise for recording the data, the following variable were selected for the purpose of this study i.e. Emotional Intelligence, Coping Skill and Handball Playing ability. Emotional Intelligence was assessed by Emotional Intelligence Scale (EIS) constructed and standardized by Anuket Hyde, Dr. SanjyotPethe and Dr. Upinder Dhar (2002). Score was the sum total of the response. Second, Athletic Coping Skills Inventory developed by Smith, Schutz, Smoll and Ptacek (1995) was used for the purpose of the present study. Score was the sum total of the response The Handball Playing Ability of the subjects was assessed by the help of three competent handball coaches used Handball Rating Scale. The scoring from each of the subjects was done strictly in accordance with the distribution of points as given against each sub heading of the 7 components of handball playing ability.

To determine the characteristics of Emotional Intelligence, Coping Skills and Handball Playing Ability of National level Handball Players Mean and Standard Deviation was used. In order to determine the relationship of Emotional Intelligence and Coping Skills to playing ability of Handball Players at National level, Pearson Product Moment Correlation was used. In order to predict Handball Playing Ability on the basis of Emotional Intelligence and Coping Skills of National level Handball player, Regression Equation was applied. The data was analyzed by using SPSS version 16.

**Keywords** - Emotional intelligence, Coping Skills

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## INTRODUCTION

Sports Psychology is a science in which the Principle of Psychology is applied in a sports or exercise setting. These principles are often applied to enhance performance. The true sports Psychologist is interested in much more their performance enhancement and sports as a vehicle for human enhancement. The Sports Psychologist is interested in helping every Sport participant reach his or her as an athlete to highest performance. Sports Psychology is an exciting subject dedicated to the enhancement of both athletic performance and social psychological aspect of human enrichment, Handball of the 80s was characterized by its popularity, stabilization, consolidation of the rules and the development of the technical-tactical repertoire of the game. The growing popularity of the game

necessitated the formation of Continent Federations which organise continental championships for national teams and clubs. The IHF co-ordinates the work of the Continent Federations as well as organizing the big events for the National Handball teams such as the Olympic Games, World Championships and the World Cup. Performance enhancement is most important factor and Sports Psychology factors helps to attain it.

## STATEMENT OF THE PROBLEM

The purpose of this study was to analyze the Relationship of Emotional Intelligence and Coping Skills to Playing Ability in Handball players at National level.

## METHODOLOGY

### Selection of the Subject

The subjects selected for present study were total 50 male National level Handball players from 37<sup>th</sup> Senior (Men) National Handball Championship from 21<sup>st</sup> to 26<sup>th</sup> February, 2009 at Visakhapatnam, Andhra Pradesh from different States of India. The subjects selected for this study had represented the country and state in different level of championships and tournaments organized by the International Handball Federation and Handball Federation of India.

#### • Emotional Intelligence

**Hyde, Pethe and Dhar (2002)** Emotional Intelligence was assessed by Emotional Intelligence Scale (EIS) constructed and standardized by Anuket Hyde, Dr. SanjyotPethe and Dr. Upinder Dhar

In sports and games match requires that work together side by side for 1 to 3 hours and also in training during whole life. Players spend more time with teammates than with their friends, spouse or children. Feelings and opinions just do not do many because players walk into training and fields.

Emotional Intelligence involves the ability to perceive accurately, appraise and express emotions; the ability to access and generate feelings when they facilitate thoughts; the ability to understand emotions and emotional knowledge and intellectual growth.

Emotional intelligence scale has thirty four statements. Below each statement are given five responses. (Strongly agree, Agree, Uncertain, Disagree and Strongly Disagree). The subjects had to read each statement carefully and respond to it by marking a tick on any of the five responses given. Example: - I am able to stay focused even under pressure. There the individual agrees with the statement and therefore has marked responses agree. There is no right or wrong response.

High scores indicate high level of emotional intelligence and low level indicates low level of emotional intelligence.

#### • Scoring

The respondent is provided with the five response alternatives to give his response and therefore each on statement should be scored 5 for strongly agree, 4 for agree, 3 for uncertain, 2 for disagree and 1 for strongly disagree.

### Coping Skills

**Smith, Schutz, Smoll and Ptacek(1995)** The athletic coping skills inventory is developed to measure individual differences in psychological skills within a sports context" The athletic coping skills was

developed to assess specific psychological coping skills such as concentration and control of worry.

The athlete coping skills inventory contains twenty eight items and seven subscales (Appendix-D).

1. Coping with adversity, "I maintain emotional control no matter how things are going for me".
2. Packing under pressure "the more pressure there is during game, the more I enjoy it.
3. Goal setting/mental preparation, "I set my own performance goals for each practice".
4. Concentration "I handle unexpected situations in my sport very well".
5. Freedom from worry, "When competing I worry about mistakes or falling to come through".
6. Confidence and achievement motivation "I feel confident that I will play well".
7. Coachability "If the coach criticizes or yells at me I correct the mistake without getting upset".

The Reliability was very high at .84 and .87 for the test-retest. The validity of the Athletic coping skills was .58. Further support for the predictive validity of athletic coping skills was provided by results from Smith and Chistenson (1995) and their testing of elite Baseball players. Hierarchical regression analysis provided information that showed that the participant's Psychological skills as measured by Athletic coping skills were predictive of their batting and pitching skills during the season following athletic coping skills invention testing.

#### • Scoring

Athletic coping skills inventory has twenty eight statements. Below each statement are given four responses (Almost never, sometimes, often and almost always). The subject has to read each statement carefully and respond to it by marking a tick on any of the four responses given like almost never, sometimes, often, almost always. Example: - I feel confident that I will play well. Here the individual agrees with the statement and therefore has marked responses almost always.

There is no right or wrong response. High scores indicate high level of coping, skills and low indicates low level of coping skills.

The respondent is provided with the five-response alternative to give his response and therefore a score of 0 to 3 responses 0 = Almost never, 1 = sometimes, 2 = often, 3 = almost always.

## Tools to Measure Playing Ability in Handball

Every athletic skills performance is believed to be psycho-physical. Observable sports skills performance can be seen being expressed through verbal, written or concrete i.e. active and many more type of performance. The measurement of these expressions can be either qualitative or quantitative.

Unfortunately, objective measures of performance of Handball Playing Ability are conspicuously absent. The inherent game situations offer immediate hindrance in construction and development of such objective measures. No objective Playing ability test in handball is available at present which measures the playing ability of handball player at the time of match.

**Scott and French (1950)** Suggested method of assessing skills performance ability of players and to observe them in action. They state that, "In many activities objective measures should be supplemented with subjective rating or charts on which detail performance are recorded". A chart on which a tally is kept of the number of times a player is successful in executing some of these skills can be used. Subjective rating or evaluation of performance with respect to some standard can be very useful, if made while the players are engaged in game play. They further add that, phases of performance that can be rated on in the game situation should be broken into units and rated. This method is prefers to watch players only in the game situation and then assigning a single score. Since it directs the attention toward more aspects of the game and tends to prevent by giving an undue amount of credit out of proportion or real ability to a player who makes one spectacular and perhaps lucky play. This procedure enables the summaries of the rating to weight the more important items. The present experimenter used overall rating of performance to assess overall playing performance ability of handball players.

The research scholar got the assessment of Handball Playing Ability done by a panel of experts comprising three experienced handball coaches. With the help of rating scale (Appendix-E), the research scholar himself made this rating scale after gone through related study for several months in the field of sports and also discussed on the rating scale with the experienced experts in the field of physical education and sports. The scholar enabled himself in assigning a numerical (quantitative) value to the subjective (qualitative) judgment of the experts. The objective, description and the scoring of the handball rating scale is as under:

**Objective** – This Handball Rating Scale was used to measure the techniques and tactics of the subjects through the subjective evaluation of the experts in the field of handball which was developed by the Researcher himself.

**Description:** - Handball Rating Scale measures the Playing Ability during the playing time that means in the match. In the Rating Scale there is a point values and was scored on a 5-4-3-2-1-0 as given under:

5 points	-	Most of the time
4 points	-	Quite often
3 points	-	Sometimes
2 points	-	Rarely
1 point	-	Very seldom
0 point	-	Never

**Scoring-** The scoring from each of the subjects was done strictly in accordance with the distribution of points as given against each sub heading of the 7 components of handball playing ability.

## Statistical Technique

1. To determine the characteristics of Emotional Intelligence, Coping Skills and Handball Playing Ability of International level Handball player mean and standard deviation was used.
2. In order to determine the relationship of Emotional Intelligence and Coping Skills to Playing Ability of Handball Players at International level of Handball players, Pearson Product Moment Correlation was used.
3. In order to predict Handball Playing Ability on the basis of Emotional Intelligence and Coping Skills of International level Handball player, Regression Equation was applied.

## RESULT AND FINDINGS

To study Emotional Intelligence, Coping Skills and Handball Playing Ability of International Handball Players, Mean and Standard Deviations were computed and data pertaining to that have been presented in Table -1

**Table 1: DESCRIPTIVE STATISTICS  
 EMOTIONAL INTELLIGENCE, COPING SKILLS  
 AND HANDBALL PLAYING ABILITY OF  
 NATIONAL HANDBALL PLAYERS**

Variables	Minimum	Maximum	Mean	Std. Deviation
Emotional Intelligence	60.00	89.00	75.9800	7.54710
Coping Skill	50.00	79.00	71.1800	6.38778
HandballPlaying Ability	18.00	22.67	20.5800	0.94954

The Descriptive statistics of Emotional Intelligence, Coping Skills and Handball Playing Ability of National handball players are presented in table-1. The mean and standard deviation of Emotional intelligence is  $75.98 \pm 7.54$ , Coping skills is  $71.18 \pm 6.38$  and Handball Playing Ability is  $20.58 \pm 0.95$

**TABLE 2: RELATIONSHIP OF EMOTIONAL INTELLIGENCE, COPING SKILLS TO PLAYING ABILITY OF HANDBALL PLAYERS**

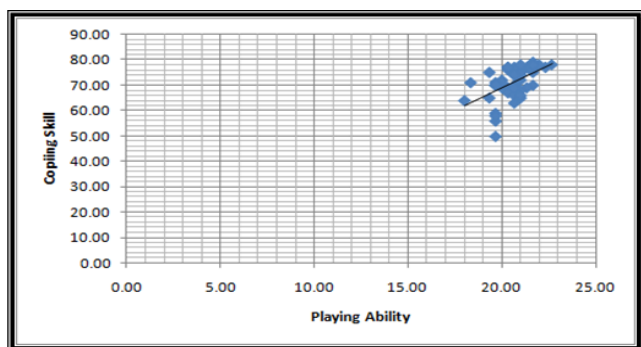
Variables	Handball Playing Performance
	National
Emotional Intelligence	0.480*
Coping Skill	0.531*

(\*) Correlation (r) is significant at the 0.05 level.

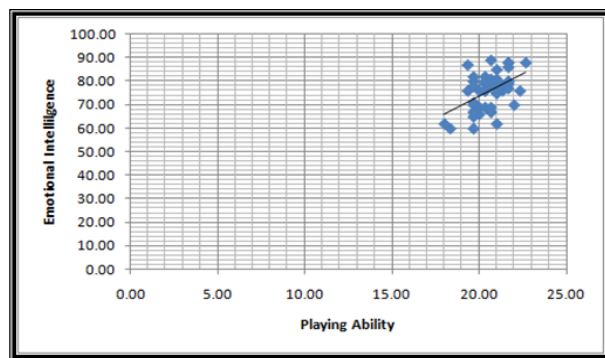
$$r_{.05} (98) = 0.195$$

$$r_{.01} (98) = 0.254$$

The results obtained from the analysis of data in table- 2 reveals that the attribution variable i.e. **Emotional Intelligence** ( $r = 0.480$ ) and **Coping Skills** ( $r = 0.531$ ) was positively related with the national players playing Performance at 0.05 level of significance.



**Figure 1: Graphical Representation of Relationship of Coping Skills and Playing Ability Performance of Handball at National level**



**Figure 2: Graphical Representation of Relationship of Emotional Intelligence and Playing Ability Performance of Handball at National Level**

**TABLE 3: REGRESSION EQUATION OF EMOTIONAL INTELLIGENCE, COPING SKILLS TO PLAYING ABILITY OF NATIONAL LEVEL HANDBALL PLAYERS**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.648 <sup>a</sup>	.420	.395	.73827

a. Predictors: (Constant), Coping skills, Emotional Intelligence

Table - 3 shows that  $R^2$  was 0.420 when all two predictors were included in step 1. This means that 42.0% of the variance in Handball performance is associated with changes in the Emotional intelligence and Coping skills.

**TABLE 4: ANOVA TABLE OF EMOTIONAL INTELLIGENCE, COPING SKILLS TO PLAYING ABILITY OF NATIONAL LEVEL HANDBALL PLAYERS**

Model	Sum Squares	of Df	Mean Square	F	Sig
Regression	18.563	2	9.281	17.028**	0.000
Residual	25.617	47	.545		
Total	44.180	49			

a. Predictors: (Constant), Coping Skills, Emotional Intelligence

b. Dependent Variable: Playing ability

$$F_{.05} (2, 47) = 3.19$$

$$F_{.01} (2, 47) = 5.08$$

In Table 4 ANOVA tests the null hypothesis that there is no linear relationship between the predictor and the Dependent Variable. For the Model 1 when both two predictors (Emotional Intelligence and coping skills) were entered, the significance level associated with observed value of  $F (2, 47 = 17.028)$  which is significant at 0.01 levels. Thus the null hypothesis can be rejected and it may be concluded that there is a significant linear



relationship between the set of independent variable and dependent variable.

**TABLE 5: COEFFICIENT REGRESSION EQUATION OF EMOTIONAL INTELLIGENCE AND COPING SKILLS TO PLAYING ABILITY OF NATIONAL LEVEL HANDBALL PLAYERS**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.209	1.438		8.489	.000
	Emotional intelligence	.048	.014	.381	3.349	.002
	coping skill	.066	.017	.447	3.921	.000

a. Dependent Variable: Playing Ability

Table-5 displays the value of the coefficient in the regression equation and measures the probability that a linear relationship exists between each predictor variables and the Dependent variable. In this table 'B' is the slope of the line. 'SE B' is the standard error of 'B'. 'Beta' is the standardized regression coefficient. 'Sig' is the significance level for the test of the null hypothesis that the value of a coefficient is zero in the population.

In model I, the significance value for Emotional intelligence and coping skills is less than 0.05 (0.02) and (0.000). Therefore, the null hypothesis that there will be no linear relationship between this predictor and Handball Playing Ability can be rejected.

**The resulting regression equation is**

**Handball Playing Performance = 12.209 + 0.048 (Emotional Intelligence) + 0.066 (Coping skill)**

The equation estimates that for the sample survey 42.0% of the variation in Dependent Variables (Handball Playing Ability at National level) is explained by the area of Emotional intelligence and Coping skills.

## CONCLUSIONS

Based on findings of the present study following conclusions were drawn.

1. The attribution variable i.e. Emotional Intelligence ( $r = 0.480$ ) and Coping Skills ( $r = 0.531$ ) was positively related with the national players playing performance.

Thus, it can be concluded that Emotional Intelligence and Coping Skill are positively related to Handball Playing Ability at National level.

2. The resulting regression equation for Handball Playing Ability Performance at National level =  $12.209 + 0.048$  (Emotional Intelligence) +  $0.066$  (Coping skills). The equation estimates that for the sample survey 42.0% of the variation in

Dependent Variable (Handball Playing Ability at National level) is explained by the area of Emotional Intelligence and Coping skills.

Thus, the sample survey 42% of the variation in dependent variables affects the Handball Playing Ability of National players that means these dependent variables (Emotional Intelligence and Coping skills) played an important role in Handball Playing ability.

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