

A COMPARATIVE STUDY ON COPING SKILLS OF HIGH AND LOW ACHIEVER NATIONAL FEMALE HOCKEY PLAYERS

Ravindra Thakur¹ and Dr. B. John²

Affiliations:

- Research Scholar, Department of Physical Education, Dr. CV Raman University, Kargi Road Kota Bilaspur C.G.
- ² Associate Professor, Department of Physical Education, Dr. CV Raman University, Kargi Road Kota Bilaspur C.G.

ABSTRACT

The present study aimed to compare the coping skills of high and low achiever national female hockey players. The sample for the present study includes 50 high achievers and 50 low achievers female field hockey players. The selection of high achiever female hockey players was done from the first three ranked teams in a national level hockey tournament. The selection of low achiever female hockey players was done from the bottom three ranked teams in a national level hockey tournament. The sample was selected through purposive sampling with an average age of the sample was 23.11 years. To assess the coping skills of female hockey players, inventory prepared by Smith et al. (1995) was considered appropriate. It was found that the coping skills of high achiever (medal winner) national female hockey players were significantly superior as compared to low achiever (non-medal winner) national female hockey players. It was concluded that high achiever national female hockey players have more sustained and better cognitive and behavioural efforts to overcome the requirement of that particular circumstance or event as compared to low achiever national female hockey players.

Keywords: Coping skills, Female, Hockey, National level, High and Low Achiever

1. INTRODUCTION

How do people cope with a stressful situation or what are the determinants of coping skills? This question always interested the psychologist. A person often employs psychological and behavioural strategies to cope and minimize the impact of stressful events and stress arising out of them. The popular strategy to cope with stress is problem-solving and the other being emotion-based techniques (Folkman and Lazarus, 1980). In sports coping is a term used for athletes cognitive and behavioural efforts to overcome the requirement of that particular circumstance or event. The word coping is used extensively in sports psychology because performing constantly at the highest level with the same amount of consistency comes with pressure. Stress and emotion-related bad effects on performance are observed due to environmental factors such as spectators or internal such as inability to enhance own skill ability etc. or before facing a tougher and stronger opponent. It is essential for a sportsperson to effectively manage the demands of the game along with their response to these situations by psychological techniques. Lazarus propounded a model named CMRT in this regard. This is a process-oriented model. It is a relational theory of emotions that is based on cognition and motivation. Crying or shouting during a tense match is not coping but a defense mechanism. The coping strategies that are described under sports psychology deal with arousal, motivation, positive attitude, meaningful use of mental imagery, self-talk, making notes on opponents strengths and weaknesses etc.

The coping strategies help an athlete to gain knowledge regarding stressors or difficult situations so that they channelize their emotional thoughts towards effective management employing better planning.

Sports psychologists have demonstrated that psychological status affects the motor skills of a sportsperson. This is true at the highest level of competition. **Smith, Schutz, Smoll and Ptacek (1995)** described having a better understanding of coping skills.

The first point is performing at best under pressure. Good coping skills are required to consume the pressure of competition and performing to their best when it matters most. The second point in coping skills is the management of worrying thoughts. An athlete with good coping skills manages to clear his mind regarding failure or unforeseen mistakes or views of other people regarding performance. The coping skills come in handy when a situation is tough during a match. Even if the situation is severely adverse during a match or competition, an athlete with good coping skills can remain optimistic and emotionally controlled. The coping skills are also important when not performing to the best of potential or setbacks in a career. Coping skills enable an athlete to come back strongly with more intensity. Coping skills are associated with concentration. An athlete with good coping skills is not distracted by stressors. Even in a game situation, he is focused on his job. Goal setting and mental preparations are also part of coping skills. These two factors prepare athletes to overcome obstacles because he is mentally prepared to face them. Coping skills get better with confidence and achievement motivation. An athlete with good achievement motivation is confident that he will cross all the difficulties come that may achieve his goal. Coping skills enhances the ability of a sportsperson to hear positive criticism.

Despite knowing the importance of coping skills and their association with sports performance none of the researchers has addressed this issue in terms of female hockey although vast literature is available. Pensgaard and Ursin (1998), Waples (2003), O'Neil and Steyn (2007), Bois et al. (2009), Esfahani and Ghezelseflo (2013) evaluated the coping skills of elite athletes from various sports other than field hockey. Similarly, psychological studies on

field hockey players are conducted by Karp (2000), Eloff et al. (2011), Agashe and Chaurasiya (2013), Khan (2014), Vijay Francis Peter (2014), Night (2015), Walker (2016), Vurho et al. (2017), Nachum (2018) and Nas Kazim and Temel Veysel (2019). These studies have explored the wide range of psychological factors that are responsible for the sports performance of hockey players. One thing is noticeable though that research on performance correlates such coping skills of female hockey players are very limited.

The objective of the present study was to compare coping skills and their sub-scales between high and low achiever national female hockey players. It was also hypothesized that the coping skills in high achiever national female hockey players will be significantly better as compared to low achiever national female hockey players.

2. METHODOLOGY

The following methodological steps were taken to conduct the present study.

2.1 Sample

The sample for the present study includes 50 high achievers and 50 low achievers female field hockey players. The selection of high achiever female hockey players was done from the first three ranked teams in a national level hockey tournament. The selection of low achiever female hockey players was done from the bottom three ranked teams in a national level hockey tournament. The sample was selected through purposive sampling with an average age of the sample was 23.11 years.

2.2 Description of Tool

To assess coping skills of national female hockey players inventory prepared by **Smith et al. (1995)** was considered appropriate. The ACSI-28 is a sports-specific inventory to assess the coping style of a sportsperson. This inventory has 28 items in which the respondent give their opinion on five points Likert scale i.e. Strongly disagree, Disagree, Undecided, agree and strongly agree respectively. The numerical weightage for Likert scale is 00, 01, 02, 03 and 04 respectively for the above items. The inventory uses sub-parameters for an overall assessment of the coping behaviour of sportspersons. The item-wise distribution of this scale is Coping with adversity, Peaking under pressure, Goal setting and mental preparation, Concentration, Freedom from worry, Confidence and achievement motivation and Coach-ability. The test-retest reliabilities of sub-scales and overall inventory was 0.87 which indicate that this inventory is highly reliable. The inventory is validated against several other scales such as the Ways of Coping Checklist and Mental Health Test.

2.3 Procedure

100 national-level female hockey players with 50 representing medal-winning teams and 50 representing non-medal-winning teams were selected as samples. Athletic Coping Skills Inventory was administered to each selected female hockey player. Responses were tabulated and put to statistical treatment. Results are given in table 1 and table 2.

3. RESULTS

TABLE 1
COMPARISON OF COPING SKILL BETWEEN HIGH(MEDAL WINNER) AND LOW ACHIEVER(NON-MEDAL WINNER) NATIONAL FEMALE FIELD
HOCKEY PLAYERS

		t-ratio										
Variable	High Achiever Low Achiever											
	N	M	SE_{M}	N	M	SE _M						
Coping Skills	50	82.58	1.16	50	69.64	1.05	8.22*					

*Significant at .01 Level

t.05(98) = 1.98

Comparative statistics as shown in table 1 regarding the coping skills of female field hockey players with different achievement credentials indicate noteworthy results at .01 level of statistical significance.

The mean score of the high achiever group on the coping skills inventory was 82.58 while the mean score of the low achiever group was 69.64. The mean scores of respective groups showed that athletic coping skills of medal winner high achiever female field hockey players were considerable better as compared to non-medal winner national female field hockey players.

When 't' value was computed it was 8.22 denoting that the finding is significant at .01 level as per the table value at 98 degree of freedom.

TABLE 2
COMPARISON OF SUB-SCALES OF COPING SKILL BETWEEN HIGH(MEDAL WINNER) AND LOW
ACHIEVER(NON-MEDAL WINNER) NATIONAL FEMALE FIELD
HOCKEY PLAYERS

		TOCKET I	DITTE	0			
		t-ratio					
Sub-scales	High Achiever			Low Achiever			ι-ιαιιο
	N	M	SE_{M}	N	M	SE_{M}	
Coping with Adversity	50	12.94	.26	50	8.48	.28	11.42*
Peaking under Pressure	50	12.60	.28	50	9.86	.40	5.60*
Goal Setting and Mental Preparation	50	10.78	3.13	50	10.22	.37	0.96
Concentration	50	11.88	.38	50	11.82	.36	0.11
Freedom from worry	50	11.54	.35	50	10.04	.37	2.92*
Confidence and Achievement Motivation	50	10.52	.36	50	8.22	.21	5.43*
Coachibility	50	10.72	.41	50	10.04	.33	1.26

^{*}Significant at .01 Level

t.05(98) = 1.98

Comparative statistics as shown in table 2 regarding ability of national female field hockey players to cope with adverse situations with different achievement credentials indicate noteworthy results at .01 level of statistical significance. The mean score of the high achiever group on the coping with adversity sub-scale was 12.94 while the mean score of the low achiever group was 8.48. The mean scores of respective groups showed that the ability of medal winner high achiever female field hockey players to cope with the adverse situation was considerably better as compared to non-medal winner national female field hockey players. When 't' value was computed it was 11.42 denoting that the finding is significant at .01 level as per the table value at 98 degree of freedom.

Comparative statistics as shown in table 2 regarding the ability to peak perform under pressure was considerably better in medal winner national female field hockey players as compared to non-medal winner female field hockey players. The mean score of high achiever group on "peaking under pressure" sub-scale was 12.60 while the mean score of the low achiever group was 9.86. When 't' value was computed it was 5.60 denoting that the finding is significant at .01 level as per the table value at 98 degree of freedom.

The goal setting and mental preparation for competition in high and low achiever female field hockey players displayed non-significant variation. The mean score of the high achiever group on "goal setting and mental preparation" sub-scale was 10.78 while the mean score of the

low achiever group was 10.22. When 't' value was computed it was 0.96 denoting that the finding is non-significant as per the table value at 98 degree of freedom.

The concentration as a subscale for coping skills in high and low achiever female field hockey players displayed non-significant variation. The mean score of the high achiever group on "concentration" sub-scale was 11.88 while the mean score of the low achiever group was 11.82. When 't' value was computed it was 0.11 denoting that the finding is non-significant as per the table value at 98 degree of freedom.

Comparative statistics as shown in table 2 regarding freedom from worry did differ between high and low achievers in a national female hockey tournament at .01 level. The mean score of the high achiever group on "freedom from worry" sub-scale was 11.54 while the mean score of the low achiever group was 10.04. When 't' value was computed it was 2.92 denoting that the finding is significant at .01 level as per the table value at 98 degree of freedom.

Comparative statistics as shown in table 2 signifies that high achiever national female field hockey players were more motivated and confident about their skills and other performance-related abilities as compared to low achiever national female field hockey players with weightage of 99% statistical probability. The mean score of the high achiever group on "confidence and achievement motivation" sub-scale was 10.52 while the mean score of the low achiever group was 8.22. When 't' value was computed it was 5.43 denoting that the finding is significant at .01 level as per the table value at 98 degree of freedom.

The mean score of the high achiever group on "coachability" sub-scale was 10.72 while the mean score of the low achiever group was 10.04. When 't' value was computed it was 1.26 denoting that the finding is non-significant as per the table value at 98 degree of freedom.

4. DISCUSSION

Coping skills in medal winner national female field hockey players was found to be considerably better as compared to low achiever non-medal winner national female field hockey players. Ability to perform under pressure and at the appropriate moment was found to be significantly high in medal winner high achiever female field hockey players as compared to non-medal winner national female field hockey players. Mean score on goal setting and mental preparation, concentration and coach-ability sub-scales between high and low achiever female hockey players did not reveal any variation in mean scores. High achiever national female hockey players were found to be less worried about their performance outcome as compared to low achiever national female hockey players. High achiever national female field hockey players were more motivated and confident about their skills and other performance-related abilities as compared to low achiever national female field hockey players with weightage of 99% statistical probability. Mean score on goal setting and mental preparation, concentration and coach-ability sub-scales between high and low achiever female hockey players did not reveal any variation in mean scores.

It was also reported by Meyers et al. (1999) that anxiety control and finest concentration were the two most important aspects of sports performance. Similarly, certain sub-factors of coping skills are also reported to be essential for a high level of performance in sports. Waples (2003) placed special emphasis on coping with adversity, pre-game psychological preparation along with self-belief as far as sports performance is concerned. Researchers like Sotoodeh et al. (2012) also supported superior psychological status in elite sportspersons. Hence results are consistent with previous findings.

5. CONCLUSION

It was concluded that high achiever national female hockey players have more sustained and better cognitive and behavioural efforts to overcome the requirement of that particular circumstance or event as compared to low achiever national female hockey players.

REFERENCES

- **Agashe, C.D. and Chaurasiya, V.K. (2013).** A Comparative Study of Personality Characteristics of National Hockey Player Hailing from Public Sector and Defence Organisations. Online International Interdisciplinary Research Journal, 3(1), 155-158.
- Bois, J.; Sarrazin, P.; Southon, J. and Boiche, J.C. (2009). Psychological Characteristics and their Relation to Performance in Professional Golfers. The Sport Psychologist, 23, 252-270.
- Eloff, M., Monyeki, A. and Grobbelaar (2011). Mental skill levels of South African male student field hockey players in different playing positions. African Journal for Physical Activity and Health Sciences, 17(4), 636-646.
- **Esfahani, N. and Ghezelseflo, H. (2013).** The comparison of psychological skills of Elite and non-Elite Karate ka and its relation with athletes' performance. Quarterly Journal of Psychological Studies, 9(1), 109-120.
- Folkman, S., and Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. Journal of Health and Social Behavior, 21, 219-239.
- **Kap, P. E. (2000).** Personality assessment and the prediction of success and achievement in professional hockey. Dissertation Abstracts International: Section B: The Sciences and Engineering, 61, 3315.
- **Khan, M.K. (2014).** A comparative study of self-confidence among different levels hockey players. Review of Research Journal, 3 (4), 60-61.
- Meyers, M.C., Bourgeois, A.E., LeUnes, A. and Nurray, N.G. (1999). Mood and psychological skills of elite and sub-elite equestrian athletes. Journal of Sport Behavior, 22, (3), 1-7.
- **Nachum, Adina (2018).** Self-Regulation and High School Athletes: An action research study. Master's Thesis in Sport and Exercise Psychology. University of Jyväskylä. Faculty of Sport and Health Sciences.
- Nas Kazim; Temel Veysel (2019). Mental Toughness of Students: Levels of Hockey Players Mental Toughness of the Athletes. Asian Journal of Education and Training, 5(1): 224-228.
- **Night, J.R.S. (2015).** Analysis of Emotional Intelligence among Hockey Players in Relation to their Positional Play. Research Journal of Physical Education Sciences, 3(7), 8-11.
- O'Neil, J. and Steyn, B.J.M. (2007). Strategies used by South African non-elite athletes to cope with the environmental stressors associated with endurance events. South African Journal for Research in Sport, Physical Education and Recreation, 29(2), 99-107.
- **Pensgaard, A.M. and Ursin, H. (1998).** Stress, control, and coping in elite athletes. Scandinavian Journal of Medicine and Science in Sports, Vol. 8, Issue 3, 183-189.
- **Peter, Vijay Francis (2014).** The Study of Group Cohesion and Aggression between All India Inter University and National Female Hockey Player's. Research Journal of Physical Education Sciences, 2(7), 4-7.
- Sotoodeh, M.S., Talebi, R., Hemayattalab, R. and Arabameri, E. (2012). Comparison of Selected Mental Skills Between Elite and Non-Elite Male and Female Taekwondo Athletes. World Journal of Sport Sciences 6 (1), 32-38.

- Vurho, J.Z., Hamafyelto, S.S. and Buba, A.S. (2017). Relationship among Flow, Self-Concept, and Sports Performance of Club Hockey Players in North-East Zone, Nigeria. International Journal of Education and Research, 5(7), 301-322.
- Walker, S.P. (2016). Mindfulness and mental toughness among provincial adolescent female hockey players. S. Afr. J. Sports Med,; 28(2), 46-50.
- Waples, S. B. (2003). Psychological characteristics of elite and non-elite level gymnasts Unpublished Doctoral dissertation. Texas A & M University, College Station, Texas.