Psychological Skills and Performance Efficacy in Team Sports: Moderating Role of Coaching Competence

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The current research investigated the relationship between psychological skills and performance efficacy in team sports i.e. hockey players and cricketers. It also explored the moderating role of coaching competence between psychological skills and performance efficacy. It was a correlational research with a cross-sectional research design employing 518 players (N=518, *n=261 hockey players, and n=257 cricketers)* collected via purposive sampling. The assessment measures included Psychological Skills Scale for Team Sports (Solomon, Malik & Kausar, 2019), Coaching Competency Scale (Moen & Federici, 2012), Youth Sports Value Questionnaire-2 (Lee, Whitehead, & Ntoumanis, 2007), and Collective Efficacy for Sports Questionnaire (Short, Sullivan, & Feltz, 2005). After data screening, assessment of parametric distribution and accuracy of the sample; and determining the psychometric properties of the research tools, the results revealed that there was a significant positive relationship between psychological skills, coaching competence, and performance efficacy both in hockey players and cricketers. For cricketers, coaching competence significantly negatively moderated the relationship between psycho-performance and performance efficacy, however, coaching competence moderated perceived psychological support, psycho-competitiveness, and performance efficacy. This research will

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work as empirical proof for Pakistan Cricket Board (PCB) and Pakistan Hockey Federation (PHF) to conduct psychological skills training for cricketers and hockey players for the enhancement of their performance efficacy.
Keywords: Psychological skills, coaching competence, Pakistan Hockey Federation, Pakistan Cricket Board

Sports psychology, supporting psychologically and enabling players to cope with stressful situations in a better way, enhances physical performance dramatically and changes defeat into victory. It has been observed that different psychological components such as self-talk, self-confidence, imagery, and visualization diminish negative thoughts and improve positive thinking (Mesagno, Marchant & Morris, 2008). During practice, the attitude development of players is as important as physical fitness because many studies have revealed that under stressful situations, even the gifted fail to synchronize their psychological approach with physical competence (Goudas & Theodorakis, 2000). Moreover, psychological components are very helpful in coping with pre-competition stress and avoiding choking during the competition (Barker, 2002). Researchers are of the view that physical and technical abilities when accompanied by psychological and behavioral characteristics especially winning attitude and high morale, may enhance international cricketers' performance manifold (Oudejans & Pijpers, 2010). The end of the 1990s was marked as the era fitness revolution, the 2000s named as the sports science and analysis period and now the next era will be marked as dealing with psychological aspects of sports (Roberts, 2011).

Despite a broader literature on coaching and its theoretical models, unfortunately, any specific theory is not available for guiding trainers and practitioners. Erickson et al (2007) defined coaching as the beneficial relationship between a client and a consultant using different behavioral patterns and approaches for assisting in achieving a mutually acknowledged goal for the betterment of his or her professional competence and happiness that results effectively within a formal coaching agreement. Zetou et al. (2016) stated that executive coaching is a pragmatic and leadership development process that formulates a leader's competence

to accomplish short-term and long goals. Rostron (2009) systematically defined coaching as a one-to-one process that helps players to develop rapidly sustainable outcomes resulting from better goal setting and better decision making. The significant role of coaches in competitive sports is undisputable as excellent coaches are responsible for supporting their players physically, psychologically, and technically and enabling them for accomplishing their desired goals (Young et al., 2009). Moreover, Lynch and Mallett (2006) recommended coaching as a cooperative technique involving focusing on solutions of problems, systematic result orientation, and increasing client's quality of life and performance in different areas of life through self-directed learning.

Rationale

Despite best practices, facilities, and physical fitness, generally, sudden fluctuations in the performance of cricketers and hockey players are frequently observed. Despite a good start, collective team collapse or sudden underperformance is due to different causes such as inappropriate behavior, lack of proper role functioning, negative communication among team members, or misunderstanding of game tactics of the opposing team (Nighswonger, 1991). Psychological skills such as a competitive mind and positive attitude are as essential for all sports participants as physical fitness and practice. Players employing psychological practices in their sports demonstrate a higher level of leadership, play with confidence and adjust to adversity more effectively during the competition (Oudejans & Pijpers, 2010). Nowadays, the psychological preparation of cricketers and hockey players along with physical fitness is one of the fundamental requirements and demands of team sports. Unfortunately, the psychological issues and field-related psychological problems of players are being neglected and have never been addressed in Pakistan.

The role of coaches in team sports is vital and oblivious as coaches flourish their players physically, psychologically, technically, and tactically and enable them for accomplishing optimal goals (Deci & Rayan, 2000). Many important issues still need to be explored including factors important for healthy coach-athlete interaction despite extensive research as researchers explore only measurable forms of coaching behavior and

seldom provide insight into the experiences of the athlete connected with being coached (Sheard & Golby, 2006). Intensive research on the psychological skills of players can help to control anxious responses, lower the probability of a player being put in a choking situation, restore self-confidence, motivation and improve positive outlook, and enhancement of performance efficacy. Therefore, the current research was conducted to find out the relationship between psychological skills and performance efficacy in team sports and also explored the moderating role of coaching competence.

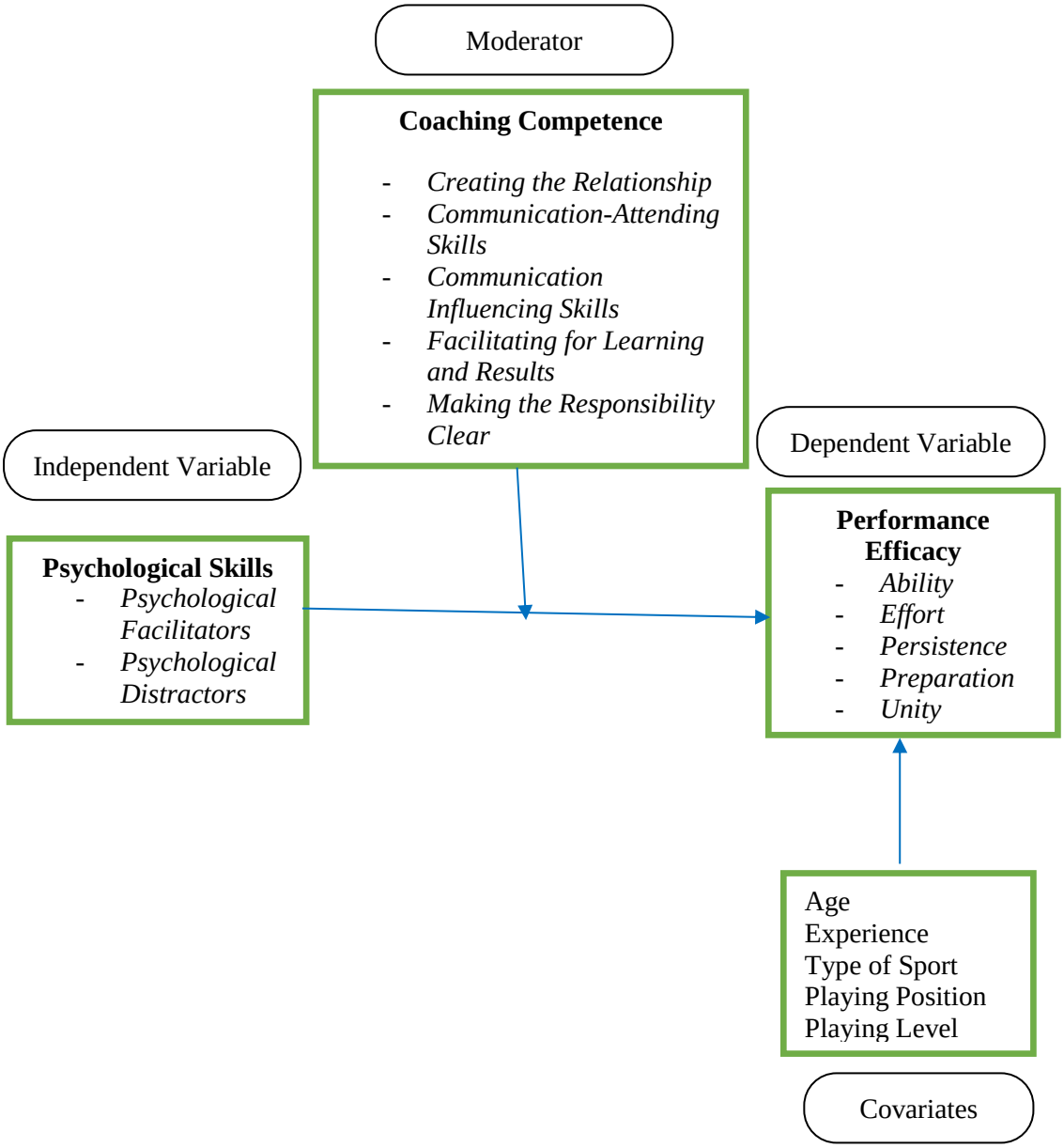
Objectives

- To find out the relationship between psychological skills, coaching competence, and performance efficacy in hockey players and cricketers.
- To determine the moderating role of coaching competence between psychological skills and performance efficacy.

Hypotheses

- There is likely to be a relationship between psychological skills, coaching competence, and performance efficacy in hockey players and cricketers.
- Coaching competence will moderate the relationship between psychological skills and performance efficacy in hockey players and cricketers.

Hypothesized Model of the Study



Method

Research Design

A correlational (cross-sectional) research design was employed.

Sampling Strategy and Sample

Hockey players and cricketers were approached by Pakistan Hockey Federation and Pakistan Cricket Board, before their matches following initial discussion with club representatives and management about the nature and purpose of the study. The sample consisted of 518 (n= 261 hockey players and n=257 cricketers) collected from hockey players and cricketers of different hockey clubs and cricket academies via non-probability purposive sampling technique.

Table 1

Descriptive Statistics of Demographic Characteristics of Sample (N=518)

Variables	*Hockey N=261* *f (%)*	*Cricket N=257* *f (%)*
Age	M (SD) 22.88 (6.82)	M (SD) 22.65 (4.37)
U19 (16-19)	97 (37.16)	66 (25.68)
U23 (20-23)	87 (33.34)	103 (40.07)
Above 23 (24 Onwards)	77 (29.50)	88 (34.25)
Experience in Years	M (SD) 5.59 (4.89)	M (SD) 4.52 (2.91)
Playing Level		
Club	108 (41.4)	134 (52.1)
First Class/ National	92 (35.2)	123 (47.9)
International	61 (23.4)	-
Playing Positions		
Forwards	115 (44.1)	-
Mid-Fielders	39 (14.9)	-
Defenders	85 (32.6)	-
Goal-Keepers	22 (8.4)	-

Openers	-	61 (23.7)
Middle-Orders	-	59 (23.0)
All-Rounders	-	86 (33.5)
Bowlers	-	51 (19.8)
Education		
Primary/ Middle	4 (1.5)	5 (1.9)
Matriculation	110 (42.1)	84 (32.7)
Intermediate	91 (34.9)	84 (32.7)
Bachelors	30 (11.5)	40 (15.6)
Masters	26 (10)	44 (17.1)
Marital Status		
Married	47 (18)	32 (12.5)
Unmarried	214 (82)	225 (87.5)
Residence		
Lahore	36 (13.8)	71 (27.6)
Karachi	-	10 (3.9)
Sargodah	31 (11.9)	41 (16)
SheikhuPura	36 (13.8)	13 (5.1)
Faisalabad	47 (18)	59 (23)
Gojra	80 (30.7)	24 (9.3)
Toba Tek Singh	31 (11.9)	39 (15.2)

Assessment Measures

Following assessment, measures were used for data collection including a demographic information sheet.

Psychological skills scale for team sports (PSSTS). Psychological Skills Scale for Team Sports (Solomon, Malik & Kausar, 2019) that was consisted of 84 items with three sub-scales: Psycho-Performance Skills, Perceived Psychological Support, and Psycho-Competitiveness included 38, 24, and 22 items respectively. The response format was 1= never, 2= often, 3= sometimes, and always. The overall score range on the Psychological Skills Scale for Team Sports (PSSTS) was 84 (minimum) to 326 (maximum), however, the score range on psycho-performance skills is from 38 (minimum) to 152 (maximum),

whereas, the scoring range for perceived psychological support and psycho-competitiveness is 24 (minimum) to 96 (maximum) and 22 (minimum) to 88 (maximum) respectively. Alpha Reliability of the overall scale was .89, however, the range on psycho-performance skills, perceived psychological support, and psycho-competitiveness is .70-.91.

The coach competence scale (CCS). The Coaching Competence Scale (CCS) was developed based on core competencies for coaches as defined by the coaching profession (Moen & Federici, 2012). The CCS consists of five dimensions with three different numbers of items on each sub-scale. The dimensions are: (1) Creating the relationship, (2) Communication-attending skills, (3) Communication-influencing skills, (4) Facilitating for learning and results, and (5) Making the responsibility clear. The scale was found to be reliable in previous literature as its alpha reliability was .78 (Moen & Federici, 2012)

Collective efficacy for sports questionnaire (CESQ). Collective Efficacy for Sport Questionnaire (Short, Sullivan & Feltz, 2005) is a 20 item questionnaire that will measure collective team collapse on a 9-point scale with low scores indicating greater collapse. The 20 items measure five different elements of collective efficacy. The five elements that are measured are ability, effort, persistence, preparation, and unity. The overall scoring range of the questionnaire was from 20 to 90. The alpha reliability of the overall questionnaire was .89 (Short, Sullivan & Feltz, 2005)

Demographic information sheet. Demographic items included the following information: type of sport, playing level, playing position, playing duration, no of siblings, birth order, marital status, education, residence, and monthly income.

Results

Before evaluating the relationship among variables, the psychometric soundness of the instruments for measuring constructs was examined. For this purpose, descriptive statistics and internal consistency levels for all scales were determined. P-P plots and histograms of all the variables didn't reveal a substantial departure from symmetry. Thus, the choice of parametric tests was justified after determining descriptive statistics of the variables as mentioned below:

Table 2

Descriptive Statistics of Psychological Skills, Coaching Competence and Performance Efficacy in Team Sports (N=518)

Variables	*k*	*M (SD)*	*Range*		*a*
			Actual	*Potential*	
Psychological Skills	84	270.17 (29.24)	325	336	.94
Psycho-Performance Skills	38	111.16 (18.13)	148	152	.92
Perceived Psychological Support	24	81.92 (11.00)	96	96	.90
Psycho-Competitiveness	22	77.55 (8.63)	88	88	.87
Coaching Competence	15	121.59 (22.36)	90	90	.90
Creating the Relationship	3	14.61 (3.14)	18	18	.70
Communication Attending Skills	3	14.20 (3.19)	18	18	.71
Communication Influencing Skills	3	13.56 (3.27)	18	18	.61
Facilitating for Learning and Results	3	14.37 (3.26)	18	18	.70

Making the Responsibility Clear	3	14.51 (3.09)	18	18	.68
Performance Efficacy	20	162.68 (28.85)	200	200	.92
Ability	4	33.11 (6.37)	40	40	.74
Effort	4	31.86 (7.10)	40	40	.75
Persistence	4	31.49 (6.88)	40	40	.68
Preparation	4	33.70 (6.27)	40	40	.80
Unity	4	32.41 (6.31)	40	40	.67

Note: k = Number. of items, *M* = Mean, *SD* = Standard Deviation, α = Cronbach's alpha

Table 2 showed mean standard deviation, and psychometric properties of psychological skills, coaching competence, and performance efficacy. Results showed that all scales have a satisfactory alpha reliability coefficient.

Firstly, it was hypothesized that there is likely to be a relationship between psychological skills (psycho-performance skills, perceived psychological support, and psycho-competitiveness), coaching competence (creating the relationships, communication attending skills, communication influencing skills, facilitating for learning and results, and making the responsibility clear) and performance efficacy (ability, effort, persistence, preparation, and unity) in hockey players and cricketers.

Table 3

Correlations among Demographic Variables: Age, Experience, Playing Levels, Playing Positions and Study Variables: Psychological Skills, Coaching Competence and Performance Efficacy in Hockey Players (n=261) and Cricketers (n=257)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Age	-	.87***	.09	.11	.03	.02	.04	.02	.06	.13*	-.04	-.04	.13*	.08	.14*	.06	.16*	.11
2. Exp.	.75***	-	-.07	.11	-.01	-.01	.01	.01	.07	.07	-.08	-.04	.14*	.10	.14*	.07	.14*	.13*
3.PSk	.03	.01	-	.82***	.73***	.65***	.23***	.24***	.25***	.16**	.16**	.12*	.23***	.21**	.18**	.15*	.20**	.23***
4.PPr	-.01	-.01	.80***	-	.27***	.20**	.06	.11	.09	.01	.03	.01	.06	.11	-.02	.02	.07	.09
5. PPS	.08	.06	.74***	.24***	-	.65***	.31***	.28***	.31***	.23***	.24***	.20**	.31***	.21**	.33***	.24***	.26***	.27***
6.PCo	.02	.01	.76***	.31***	.73***	-	.26***	.21**	.27***	.23***	.18**	.16**	.25***	.20**	.25***	.18**	.22***	.23***
7.CCo	.04	.01	.36***	.13*	.44***	.37***	-	.81***	.81***	.80***	.82***	.76***	.45***	.32***	.41***	.42***	.38***	.35***
8.CRe	.02	.03	.36***	.15*	.40***	.36***	.85***	-	.64***	.54***	.58***	.51***	.43***	.36***	.35***	.41***	.38***	.36***
9.CAt	.02	.02	.32***	.13*	.39***	.30***	.87***	.74***	-	.58***	.52***	.50***	.38***	.26***	.36***	.34***	.34***	.30***
10.CInf	.09	.03	.29***	.10	.36***	.29***	.82***	.64***	.67***	-	.57***	.48***	.31***	.23***	.30**	.30***	.25**	.24***
11. LR	.07	.01	.27***	.09	.36***	.27***	.82***	.56***	.64***	.58***	-	.57***	.33***	.20**	.32***	.32***	.28***	.28***
12. ReC	-.02	-.04	.27***	.08	.33***	.32***	.83***	.63***	.60***	.60***	.68***	-	.34***	.28***	.31***	.32***	.27***	.26***

13. Per. Ef.	.13*	.08	.41***	.19**	.46**	.41**	.42**	.36**	.41**	.33**	.32**	.34**	-	.83**	.84**	.86**	.87**	.84**
14. Ability	.10	.06	.43***	.22**	.45**	.41**	.38**	.33**	.38**	.25**	.31**	.30**	.91**	-	.59**	.64**	.66**	.68**
15. Effort	.13*	.09	.38***	.20**	.39**	.40**	.40**	.33**	.40**	.36**	.30**	.31**	.90**	.76**	-	.66**	.70**	.59**
16. Pers.	.10	.07	.34***	.13*	.39**	.37**	.38**	.40**	.35**	.30**	.27**	.31**	.90**	.80**	.77**	-	.69**	.64**
17. Prep.	.15*	.11	.38***	.18**	.45**	.35**	.34**	.31**	.32**	.24**	.27**	.27**	.89**	.78**	.77**	.75**	-	.70**
18. Unity	.08	.04	.31***	.11	.37**	.31**	.40**	.30**	.38**	.32**	.28**	.32**	.89**	.77**	.74**	.74**	.74**	

Note: *p<.05, **p<.01, ***p<.001, upper diagonal values are for hockey players (n=261), lower diagonal values are for cricketers (n=257), Exp.=Experience, PS=Psychological Skills, PPr.=Psycho-Performance Skills, PPS=Perceived Psychological Support , PCo= Psycho-Competitiveness, CCo= Coaching Competence, CRe=Creating the Relationship, CAt=Communication Attending Skills, CInf=Communication Influencing Skills, LR=Facilitating for Learning and Results, ReC= Making the Responsibility Clear, Per.Ef.= Performance Efficacy, Pers.= Persistence, and Prep.=Preparation

Table 3 revealed that psychological skills were significantly positively correlated with psycho-performance skills, perceived psychological support, psycho-competitiveness, coaching competence, creating the relationships, communication influencing skills, communication attending skills, facilitating for learning and results, making the responsibility clear, performance efficacy, ability, effort, persistence, preparation, and unity. Coaching competence was significantly positively correlated with creating the relationship, communication attending skills, communication influencing skills, and facilitating for learning and results and making the responsibility clear, performance efficacy, ability effort, persistence, preparation, and unity. Performance efficacy was significantly positively correlated with ability, effort, persistence, preparation, and unity. Ability was significantly positively correlated with effort, persistence, preparation, and unity. The effort was significantly positively correlated with persistence, preparation, and unity. Persistence was significantly positively correlated with preparation and unity. Preparation was significantly and positively correlated with unity.

For cricketers, psychological skills were significantly positively correlated with psycho-performance skills, perceived psychological support, psycho-competitiveness, coaching competence, creating the relationships, communication influencing skills, communication attending skills, facilitating for learning and results, making the responsibility clear, performance efficacy, ability, effort, persistence preparation, and unity. Coaching competence was significantly positively correlated with creating the relationships, communication attending skills, communication influencing skills, and facilitating for learning and results, making the responsibility clear, performance efficacy, ability, effort, persistence, preparation, and unity. Performance efficacy was highly significantly positively correlated with ability, effort, persistence, preparation, and unity. Ability was significantly and positively correlated with effort, persistence, preparation, and unity. The effort was significantly and positively correlated with persistence, preparation, and unity. Persistence was significantly and positively correlated with preparation and unity. Preparation was significantly and positively correlated with unity.

After checking the direction and strength of variables through Pearson Product Moment of correlation, we move towards the main hypothesis of the study i.e. coaching competence will moderate the relationship between psychological skills and performance efficacy in hockey players and cricketers.

Table 4

Fit Indices for Psychological Skills, Coaching Competence and Performance Efficacy in Hockey Players and Cricketers (N=518)

Model	χ^2	*df*	χ^2/df	*CFI*	*NNFI*	*GFI*	*RMSEA*	*SRMR*
Model Fit	138.978	110	1.263	.99	.98	.96	.02	.02

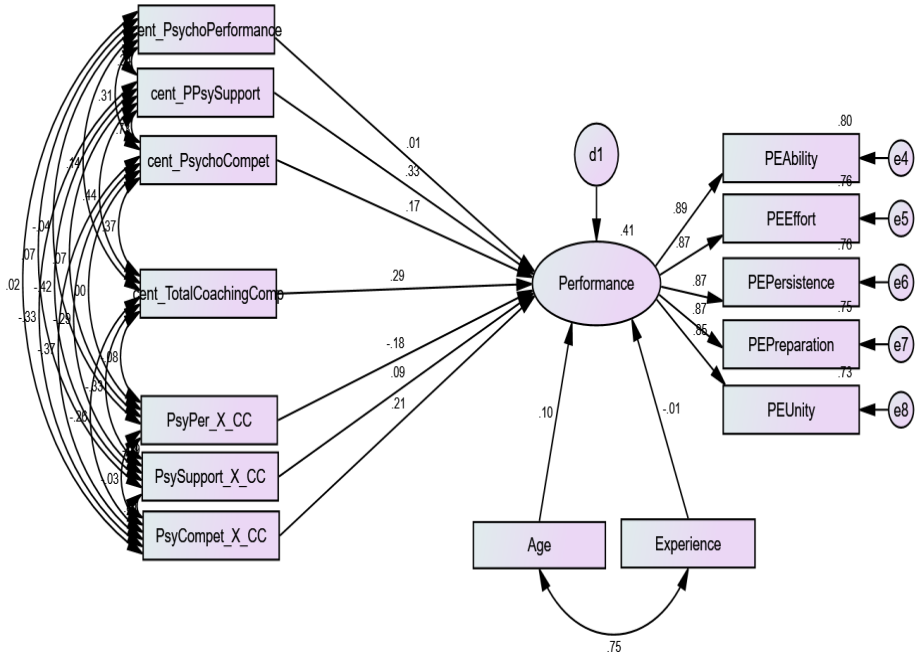
Note: All changes in chi-square values are computed relative to the model, χ^2>.05., GFI= Goodness of fit index, CFI=comparative fit index, NNFI (TLI) =non-normed fit index; RMSEA=root mean square error of approximation, SRMR=Standardized root mean square.

Table 4 showed results of fit indices for psychological skills (psycho-performance, perceived psychological support, and psycho-competitiveness), and performance (ability, effort, persistence, preparation, and unity). Absolute fit for initial model fit was χ^2 (110, 518) = 138.97, p< .001. The fit indices were considered to provide an indication of a good fit of the data with the tested model. The model fit was analyzed in one key step that included indices of absolute and relative fit (GFI, CFI, NNFI, RMSEA, SRMR) as the chi-square test of absolute model fit is sensitive to sample size and number of parameters, investigators often turn to various descriptive fit statistics to assess the overall fit a model to the data. Hu and Bentler (1999) recommend χ^2/dfbetween 1 and 3, RMSEA and SRMR values .08 or lesser and Comparative Fit Index (CFI), Tucker-Lewis Index (TLI) or Non-normed fit Index (NNFI), and Goodness of fit index (GFI) values of .9 or higher are considered as good while.9 ≤ .8 is considered permissible sometimes. Model fit suggested covariance between error terms of subscales because they were similar in content and context as well moreover the covariance between error terms in survey-based research can be legitimately drawn (Kenny 2012; Tomás & Oliver,

1999). The criteria of modification indices for error covariance should be at least 4.0 (Arbuckle, 2012). So only that covariance was drawn which chi-square change was 4.0 or greater. Again the indices of absolute and relative fit (GFI, CFI, NNFI, and RMSEA) were compared. The Root Mean Square Error of approximation (RMSEA) and standardized root mean square residual (SRMR) for the model fit after drawing covariance was .02 and .02 respectively whereas the GFI, CFI, and NNFI values were .96, .99, and .98 respectively while χ^2/df was 1.26. These were accurate enough to fit the model as can be seen from figure 3.

Figure 1

Empirical Results from a Complex Multivariate Model Representing Standardized Regression Coefficients for Hockey Players



Note: A complex multivariate model of six endogenous variables and five exogenous variables. Completely standardized maximum likelihood parameter estimates

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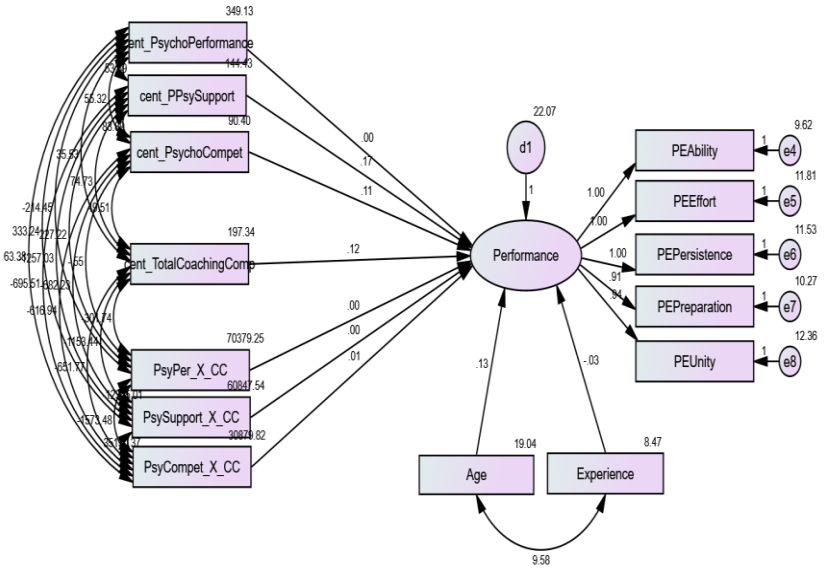
Figure 2

Empirical Results from a Complex Multivariate Model Representing Standardized Regression Coefficients for Cricketers



Note: A complex multivariate model of six endogenous variables and five exogenous variables. Completely standardized maximum likelihood parameter estimates.

Table 5

Unstandardized Estimates of Main and Interaction Effects

Variables	Performance Efficacy			
	Hockey Players		Cricketers	
	β	*SE*	B	*SE*
Main Effect				
Psycho-Performance Skills	-.005	.01	.003	.01
Perceived Psychological Support	.07	.03	.16***	.04
Psycho-Competitiveness	.02	.04	.11	.05

Coaching Competence	.15***	.02	.12***	.02
Interaction Effect				
Psycho-Performance_X_Coaching Competence	.00	.00	-.004***	.00
Perceived Psychological Support_X_Coaching Competence	-.00	.00	.002	.002
Psycho-Competitiveness_X_Coaching Competence	-.00	.00	.007	.003
Total R^2	.28		.40	

*Note: *p*<.05.,*un-bold values are for hockey players and bold values are for cricketers.*

Table 5 summarizes the findings of moderation conducted through AMOS for testing the proposed model. Findings highlighted that coaching competence significantly negatively moderated the relationship between psycho-performance and performance efficacy in cricketers, however, coaching competence acted as a moderator for perceived psychological support, performance efficacy, and psycho-competitiveness and performance efficacy. Moreover, coaching competence significantly negatively moderated the relationship between psycho-performance and performance efficacy in cricketers, however, coaching competence acted as a moderator for perceived psychological support performance efficacy and psycho-competitiveness and performance efficacy. Hockey players tend to have higher perceived psychological support than cricketers.

Figure 3

Interaction of Psycho Performance and Coaching Competence on Performance Efficacy in Cricketers

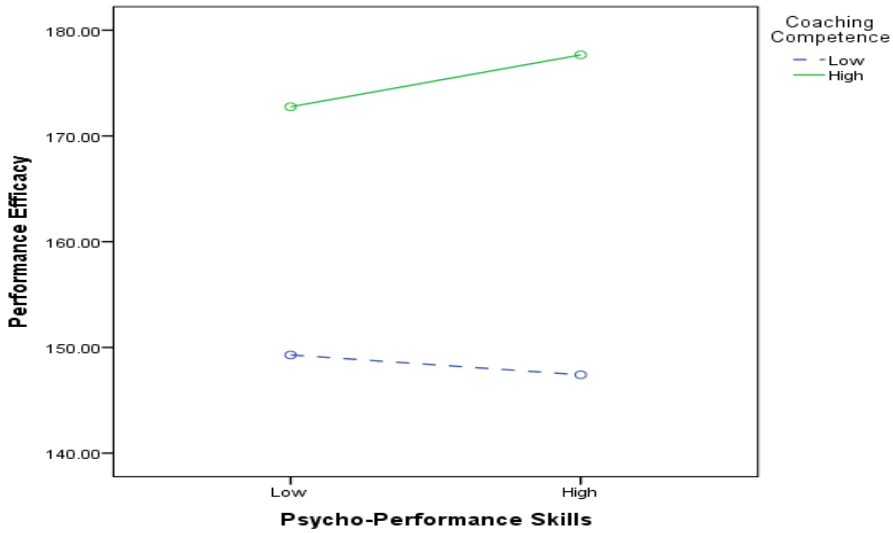


Figure 3 showed that the nature of the relationship between Psycho-Performance skills and performance efficacy become positive at a high level of coaching competence.

Discussion

Nowadays, psychological skills and psychological skills training are considered essential in physical activities especially in sports as players are required to manage their physical abilities with appropriate psychological skills. Performance and consistency are dependent on psychological factors. Psychological skills determine a player's ability to be a champion in brutal circumstances and these skills not only enable him or her to keep moving but are also helpful in competitive conditions (McRobert & Muller, 2009).

Firstly, it was hypothesized that there is likely to be a relationship between psychological skills (psycho-performance skills, perceived psychological support, and psycho-competitiveness), coaching

competence (creating the relationships, communication attending skills, communication influencing skills, facilitating for learning and results, and making the responsibility clear) and performance efficacy (ability, effort, persistence, preparation, and unity) in hockey players and cricketers. The results revealed that for hockey players, psychological skills were significantly positively correlated with psycho-performance skills, perceived psychological support, psycho-competitiveness, coaching competence, creating relationships, communication influencing skills, communication attending skills, facilitating for learning and results, making the responsibility clear, performance efficacy, ability, effort, persistence, preparation, and unity. For cricketers, psychological skills were significantly positively correlated with psycho-performance skills, perceived psychological support, psycho-competitiveness, coaching competence, creating the relationships, communication attending skills, performance efficacy, ability, effort, persistence, and preparation. For hockey players, coaching competence was significantly positively correlated with creating the relationship, communication attending skills, communication influencing skills, and facilitating for learning and results and making the responsibility clear, whereas, significantly positively correlated with performance efficacy, ability effort, persistence, preparation, and unity. For cricketers, coaching competence was significantly positively correlated with creating the relationships, communication attending skills, communication influencing skills, and facilitating for learning and results**,** making the responsibility clear, performance efficacy, ability, effort, persistence, preparation, and unity. For cricketers, performance efficacy was highly significantly positively correlated with ability, effort, persistence, preparation, and unity. These results are consistent with Birrer and Morgan (2009) who explored the importance of psychological skills training in the development of athletic performance with a focus on high-intensity sports. The reviewed literature showed a lack of convincing evidence and theoretical underpinning concerning traditional psychological skills to enhance performance, therefore, a model with three conceptual levels (psychological demands, skills, and techniques) was prepared that facilitated the identification of the psychological demands of a specific sport enabling distinguishing the

required psychological skills. Considerations based on this model, it was revealed that self-skills, personal development and life skills, arousal-regulation skills, volitional skills, motivational skills, and recovery skills are the most important skills to enhance performance. Development of harmonious passion, in-practice integration of volitional strategies, use of associative attentional techniques, pain management techniques, use of the mindfulness-acceptance approach, and the facilitative interpretation of cognitive and somatic sensations are regarded as suitable to meet the psychological demands of high-intensity sports. Another study by Beauchamp, Bray, and Albinson (2002) examined the effects of performance enhancement techniques on motor skill performance. The sample consisted of one hundred and fifty college students. All participants were asked to perform a golf-putting task and it was indicated that participants who implemented several performance enhancement techniques increased their putting accuracy across overall difference score evaluations.

Follow-up analyses indicated that participants who reportedly engaged in ten hours or less of athletic activities per week preferred self-talk strategies whereas participants who endorsed ten hours or more of athletic activity per week preferred imagery strategies. Solomon and Kausar (2015) conducted a study to find out differences between psychological skills and choking in first-class, national, and international cricketers. The sample of 227 (first-class, national, and international cricketers) was collected through purposive sampling. Results revealed that age and playing duration were found to be significantly positively correlated with psychological facilitators. Psychological facilitators were significantly negatively correlated with psychological distractors and choking. Psychological distractors emerged as significant predictors of choking. These results can be generalized on hockey players as both are regarded as team sports and both hockey players and cricketers displayed almost equal results for the relationship between psychological skills, coaching competence, and performance.

Secondly, it was hypothesized that coaching competence will moderate the relationship between psychological skills and performance efficacy in hockey players and cricketers. The results found a negative

moderating role between psycho-performance and coaching competence in cricketers only. These results were non-significant for previous researches. Dave, Farin, and Farin (2017) conducted a descriptive and correlational study that examined the relationship between emotional intelligence and coaching behavior of the sports coaches in estate universities and colleges on the sample of five hundred players, one hundred and fifty coaches. The study describes the perception of the respondents' emotional intelligence in terms of emotional awareness, managing emotions, self-motivation, empathy, and coaching others' emotions. The sports coaches and athletes indicate that the emotional intelligence of sports coaches was high. They were emotionally aware, can manage one's emotions, self-motivated and empathetic. The coaching behavior of the sports coaches displayed during the selection of athletes, during practices, before the game, during the game, and after the game was described as very high positive. The coaching behavior of the sports coaches displayed during the selection of athletes, during practices, before the game, during the game, and after the game was perceived by the athlete-respondents to be highly positive. The findings suggest that sports coaches need to increase the level of their emotional awareness through emotional intelligence seminar workshops. To maintain their very high positive coaching behavior, a continuing high-quality coaching education program should be provided by the entire state universities and colleges.

Limitations

- The sample for the current research was only collected from Punjab and only hockey players and cricketers were included.
- Only male hockey players and cricketers within the age range of fifteen to fifty years participated in this research.
- Self-report measures were used and behavioral observations were not kept under consideration.

Strengths

- Hockey players and cricketers were approached from only registered clubs and academies under the platform of the Pakistan Hockey Federation (PCB) and Pakistan Cricket Board (PHF).

These results can be helpful for initiating awareness in hockey players and cricketers on psychological skills training programs.

Recommendations and Implications

- Future research must be conducted for assessing psychological skills, coaching competence, sportsmanship, and performance efficacy including players other than hockey and cricket.
- Under fifteen and female team sports players should be included in future researches.
- It is also advised that team sports officials may include in future researches for obtaining maximum information regarding the psychological skills of players along with coaching competence, sportsmanship, and performance efficacy.
- There must be psychological skills training program for hockey players cricketers to enhance their performance by eliminating negativity in their minds.
- It is important to measure different psychological constructs in sports and there should be training programs for hockey players and cricketers.
- Educational courses must be initiated for club and academy players for the betterment of the psychological skills of hockey players and cricketers along with physical fitness.

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