

## Relationship Between Psychological Skills and Performance Among Cricketers in Pakistan: Mediating Role of Emotional Intelligence

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**ABSTRACT:** This study explores the relationship between psychological skills and performance among domestic/international cricketers in Pakistan, highlighting the mediating role of emotional intelligence (EI). Purposive sampling technique was used in the study, permission to collect data was taken from the Pakistan Cricket Board, and data from 100 elite cricketers i.e. 50 males and 50 females who represented Pakistan's national side and domestic regions through Pakistan Cricket Board were analyzed through standardized tools i.e. Test of Performance Strategies (TOPS), Psychological Skills Inventory for Sports (PSIS) and Schutte Emotional Intelligence Scale (SEIS). Results indicate significant positive relationship between psychological skills and performance, with Emotional Intelligence enhancing the application of mental strategies under pressure. Males and elite-level cricketers exhibited higher psychological skills and emotional intelligence than their female counterparts having only regional experience. Limitations include self-reported data and a small sample size. The findings suggest integrating psychological skills training and emotional intelligence development into coaching programs to improve cricketers' performances and decision-making.

**KEYWORDS:** Psychological Skills, Emotional Intelligence, Cricket Performance, Sports Psychology, Mental Resilience

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## Introduction

Cricket is one of the most popular sports in Pakistan, requiring a unique combination of physical, technical, and psychological skills for success. While physical attributes and technical expertise are essential, research increasingly highlights the role of psychological skills and emotional intelligence (EI) in optimizing performance (Hanin, 2000; Mahoney et al., 1987). Unlike fast-paced sports that rely on split-second reflexes, cricket demands sustained mental endurance, strategic decision-making, and emotional regulation to maintain high-performance levels across multiple hours or days (Gould et al., 1999).

## Psychological Skills

Psychological skills training (PST) has been extensively studied as a means of enhancing cognitive and emotional control in competitive sports. Techniques such as goal setting, self-talk, attentional control, and relaxation strategies have been shown to enhance focus, self-confidence, and performance consistency

(Vealey, [1986](#); Hardy et al., [2010](#)). Research indicates that cricketers who engage in structured PST programs demonstrate superior decision-making abilities, increased emotional resilience, and reduced performance anxiety (Weinberg & Gould, [2015](#)).

## Performance Strategies

Performance strategies are systematic and deliberate techniques or actions employed to enhance efficiency, effectiveness, and success in achieving specific goals. These strategies encompass cognitive, behavioral, and emotional approaches to optimize performance across various domains, including sports, business, education, and personal development (Tenenbaum & Eklund, [2020](#)).

## Emotional Intelligence

Emotional intelligence (EI), defined as the ability to perceive, understand, and regulate emotions, is a crucial factor in sports performance (Mayer & Salovey, [1997](#)). High EI enables cricketers to manage stress, foster positive team dynamics, and maintain composure under pressure (Laborde et al., [2016](#)). Studies suggest that athletes with strong EI exhibit superior focus, better interpersonal relationships, and greater adaptability to changing game situations (Lane et al., [2009](#)).

## Literature Review

The relationship between psychological skills and athletic performance has been extensively studied in sports psychology. Cricketers, like other high-performance athletes, require cognitive, emotional, and behavioral skills to excel under competitive pressure. Emotional intelligence (EI) has emerged as a crucial factor influencing how athletes regulate stress, make decisions, and interact with teammates. This section reviews the literature on psychological skills, emotional intelligence, and their mediating role in cricket performance.

Psychological skills training (PST), including goal setting, self-talk, attentional control, relaxation, and mental toughness, significantly impacts athletic performance. Vealey, ([1986](#)) established PST's importance, with Hardy et al., ([2010](#)) demonstrated its positive effects on consistency and anxiety reduction. Weinberg and Gould, ([2015](#)) highlighted goal-setting's role in motivation and concentration. Hatzigeorgiadis et al., ([2009](#)) found positive self-talk enhances confidence and resilience. Hanton et al. ([2003](#)) and Hill et al., ([2010](#)) showed relaxation techniques to reduce anxiety and improve decision-making in cricket. Clough et al., ([2002](#)) and Gucciardi et al., ([2016](#)) emphasized mental toughness for recovery and consistent performance, with Cowden, ([2016](#)) identifying it as a predictor of performance consistency in elite cricketers.

## Emotional Intelligence and Sports Performance

Emotional intelligence (EI), the ability to manage emotions, influences stress management and team dynamics. Mayer & Salovey ([1997](#)) defined EI, with Laborde et al., ([2016](#)) highlighting its role in stress management and team relationships. Perlini & Halverson, ([2009](#)) found EI enhances self-efficacy and decision-making in ice hockey, applicable to cricket's high-pressure situations. Lane et al., ([2009](#)) correlated EI with reduced anxiety and better stress regulation in cricketers. Zizzi et al., ([2003](#)) emphasized EI's contribution to team cohesion. Humphrey et al., ([2008](#)) and Ahmad & Safdar, ([2020](#)) demonstrated EI's impact on leadership and team performance in cricket, particularly in high-pressure scenarios.

## The Mediating Role of Emotional Intelligence in Psychological Skills and Performance

EI mediates the effectiveness of psychological skills. Meyer & Fletcher (2007) suggested psychological skills may not be fully utilized without EI. Laborde et al., (2016) found athletes with low EI struggled with performance fluctuations despite psychological training. Hill et al., (2010) and Narimani, (2009) showed EI enables effective channeling of psychological skills in cricket. Laborde et al., (2016) also highlighted EI's impact on decision-making under stress.

Gucciardi et al., (2016) and Cowden, (2016) found EI enhances strategic decision-making in bowlers and situational awareness in wicketkeepers. Fletcher & Sarkar, (2012) emphasized EI and resilience for performance stability. Ahmad & Safdar, (2020) demonstrated EI's contribution to quicker psychological recovery and long-term success in cricket.

## Theoretical Framework

### Emotional Intelligence Theory

EI theory categorizes emotional intelligence into four domains: emotional perception, facilitation, understanding, and regulation. Athletes who excel in these areas demonstrate superior emotional control, reduced competitive anxiety, and enhanced leadership in team settings (Laborde et al., 2016).

### Rationale

Psychological factors significantly influence an athlete's performance, especially in sports like cricket. However, understanding the impact of psychological skills and emotional intelligence on Pakistani cricket performance remains a gap.

Cricketers experience high-pressure situations, including extended match durations, unpredictable game dynamics, and intense public scrutiny. Despite possessing technical expertise, many players struggle due to psychological barriers such as anxiety, loss of focus, or emotional instability (Lane et al., 2009). Research suggests that athletes with well-developed psychological skills—such as goal setting, attentional control, and self-regulation—are more likely to perform consistently under competitive stress (Weinberg & Gould, 2015). However, psychological skills alone may not be sufficient if an athlete lacks the emotional intelligence to regulate stress, maintain composure, and adapt strategically in real-game scenarios (Laborde et al., 2016).

Pakistan's cricketing history underscores the importance of psychological training and emotional intelligence in enhancing player performance, thereby promoting targeted mental training programs for domestic and international cricket. The study suggests incorporating psychological and emotional intelligence training into player development programs to enhance mental resilience, decision-making, and performance in high-stakes matches.

### Objectives

1. To investigate the relationship between emotional intelligence and cricket performance.
2. To assess whether emotional intelligence mediates the relationship between psychological skills and cricket performance.
3. To determine demographic (Age, Gender) related differences in psychological skills, emotional intelligence, and performance among cricketers.

## Hypotheses

1. Psychological skills have a positive relationship with cricket performance.
2. Emotional intelligence mediates the relationship between psychological skills and cricket performance.
3. There is a significant difference between male and female cricketers in terms of psychological skills, emotional intelligence, and performance.
4. There is a significant difference in psychological skills, emotional intelligence, and performance between different levels of play (e.g., club, domestic, and professional cricketers).

## Research Design

This study implied a quantitative, cross-sectional correlational research design to examine the relationships between psychological skills, emotional intelligence, and cricket performance. The study also analyzed the mediating role of emotional intelligence and compared differences in psychological skills, emotional intelligence, and performance based on gender, age groups, and levels of play. Purposive sampling technique was used in the study.

## Participants

A total of 100 cricketers i.e. 50 males and 50 females participated in the study, representing Pakistan national side and respective regions i.e. Lahore, Faisalabad, Islamabad, Rawalpindi and Peshawar while possessing various competitive levels.

## Inclusion Criteria

Senior cricketers were considered those who have represented Pakistan's national side through the Pakistan Cricket Board and different regions through their respective regions at different levels for at least 8 years.

## Exclusion Criteria

Cricketers with any injury, subject to any disciplinary action or not representing any institution will be excluded. Senior cricketers who are retired or on the field as a coach will also be excluded.

## Instruments

### Test of Performance Strategies (TOPS)

The Test of Performance Strategies (TOPS; Thomas et al., [1999](#)) assessed psychological skills and coping strategies in cricket. It measured goal setting, self-talk, attentional control, emotional control, relaxation strategies, and activation (energy regulation) using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The scale has shown high reliability ( $\alpha = 0.75-0.92$ ) in sports performance research.

### Psychological Skills Inventory for Sports (PSIS)

The Psychological Skills Inventory for Sports (PSIS; Mahoney et al., [1987](#)) evaluated motivation, confidence, anxiety control, mental preparation, team cohesion, and concentration. Participants responded on a 5-point Likert scale, with higher scores indicating greater psychological preparedness.

## Schutte Emotional Intelligence Scale (SEIS)

The Schutte Emotional Intelligence Scale (SEIS; Schutte et al., 1998) measured emotional perception, regulation, facilitation of thought, and understanding. The 33-item scale, rated on a 5- point Likert scale, demonstrated strong validity ( $\alpha = 0.87-0.90$ ) in sports settings.

## Ethical Consideration

The research project adhered to ethical guidelines, obtaining permission to use Schutte Emotional Intelligence Scale, TOPS, and PSIS from authors and Pakistan Cricket Board. Participants provided written informed consent, were informed about research rights, and data was used solely for research purposes.

## Procedure

This study used the Schutte Emotional Intelligence Scale, Test of Performance Strategies, and Psychological Skills Inventory for Sports, with permission from the authors and data collection approval from the Pakistan Cricket Board, National Cricket Academy, and relevant cricket clubs. Data was analyzed using SPSS-25, Pearson correlation analysis, mediation analysis, independent samples t-test, and one-way ANOVA to analyze differences across age groups and levels of play. Results were interpreted based on statistical significance ( $p < .05$ ) and effect sizes, ensuring a comprehensive evaluation of the study's hypotheses.

## Results

**Table 1**

*Frequencies and Percentages of the Demographic characteristics of the sample*

Characteristics of Participant	Frequencies (f)	Perce stage (%)
<b>Age</b>		
15-20	11	11.0
20-25	24	24.0
25-30	36	36.0
30-35	21	21.0
Above 35	8	8.0
<b>Gender</b>		
Female	50	50
Male	50	50
<b>Education</b>		
Matriculation	30	30.0
Undergraduate	26	26.0
Graduate	44	44.0
<b>Level of Play</b>		
Pakistan National	64	64.0
Pakistan U-19	20	20.0
University	9	9.0
Regional	7	7.0
<b>Type</b>		
International	57	57.0
Domestic	33	33.0

The sample consisted of an equal distribution of male (50%) and female (50%) participants, with most aged between 25-30 years (26%) and 30-35 years (21%). Educationally, 44% had a graduate degree, while 30% had completed metric, and 26% had an undergraduate degree. Regarding the level of play, 64% were Pakistan National players, 20% played at the U-19 level, 9% at the university level, and 7% at the regional level. Most participants competed internationally (57%), while 33% played domestically, and 10% participated in both. In terms of specialty, 40% were bowlers, 30% were batters, and 30% were all-rounders.

**Table 2**

*Psychometric properties of the Psychological Skills Inventory for Sports, Test of Performance Strategies, and Scale of Emotional Intelligence.*

Measure	No. of items	Mean	SD	Range				
				Cronbach $\alpha$	Actual	Potential	Skew	Kurt
PSIS	60	143.5	61.67	0.982	45-225	45-225	-1.141	.365
TOPS	68	247.1	25.13	0.85	187-303	68-340	.124	-.516
SSEIT	33	125.9	14.80	0.885	81-157	33-165	-.114	.262

*Note:* PSIS= Psychological Skills Inventory for Sports, TOPS= Test of Performance Strategies, SSEIT= Schutte Self-Report Emotional Intelligence Test

The psychometric properties of the scales indicate that all measures demonstrate acceptable reliability. The Psychological Skills Inventory for Sports (PSIS) had Cronbach's  $\alpha$  of 0.982, suggesting excellent internal consistency. The Test of Performance Strategies (TOPS) had a mean of 247.1 (SD = 25.13) with a reliability of 0.85, indicating good reliability. The Schutte Self-Report Emotional Intelligence Test (SSEIT) showed a mean of 125.9 (SD = 14.80) and reliability of 0.885, also indicating strong internal consistency. Skewness and kurtosis values suggest that the data are approximately normally distributed, supporting their suitability for further statistical analysis.

**Table 3**

*Correlation between Psychological Skills Inventory for Sports and Test of Performance Strategies.*

Variables	n	M	SD	1	2
PSIS	100	176.51	26.41	-	-
TOPS	100	247.12	25.13	.489**	-

*Note:* \*\* $p < 0.01$ .

Table 3 presents the correlation between the Psychological Skills Inventory for Sports (PSIS) and the Test of Performance Strategies (TOPS). The results show a significant positive correlation ( $r = 0.489$ ,  $p < 0.01$ ) between PSIS and TOPS, indicating that higher psychological skills are associated with better performance strategies in sports. The means and standard deviations for both variables suggest moderate variability within the sample, supporting the reliability of the findings.

**Table 4**

*Descriptive Statistics and Results of Independent Sample T-Test for Mean Differences in Responses of Male and Female athletes on Psychological Skills Inventory for Sports, Test of Performance Strategies, and Schutte Self-Report Emotional Intelligence Test*

Male  
(n=50)

Female  
(n=50)

Variables	M	SD	M	SD	t	p	Cohen's d
PSIS	187.44	25.91	166.0	22.5	4.424	.000	0.884
TOPS	260.30	23.45	234.45	19.70	5.978	.000	1.194
SSEIT	130.89	12.99	121.25	15.01	3.439	.001	0.687

Note: PSIS= Psychological Skills Inventory for Sports, TOPS= Test of Performance Strategies, SSEIT= Schutte Self-Report Emotional Intelligence Test

The t-test results show significant gender differences in psychological skills, performance strategies, and emotional intelligence, with males scoring higher ( $p < 0.01$ ). Effect sizes indicate moderate to large differences, especially for TOPS ( $d = 1.194$ ), highlighting substantial gender-based variations.

**Table 5**

*Descriptive Statistics and Results of One-way ANOVA for Mean Differences in Responses of Athletes from different Levels of play on Psychological Skills Inventory for Sports, Test of Performance Strategies, and Schutte Self-Report Emotional Intelligence Test*

Pak National  
(n=64)

Pak U-19  
(n=20)

Uni/College  
(n=9)

Regional 207  
(n=7)

Variables	M	SD	M	SD	M	SD	M	SD	$\eta^2$	F	p
PSIS	131.5	69.89	161.9	29.87	180.5	48.09	153.8	26.78	0.077	2.672	.002
TOPS	252.1	25.17	239.55	18.57	250.6	24.22	217.8	20.15	0.142	5.30	.052
SSEIT	127.9	14.1	125.55	10.03	132.2	14.41	101.4	11.38	0.222	9.128	.000

Pak National (n=64); Pak U-19 (n=50); Uni/College (n=9); Regional (n=7)

Note: PSIS= Psychological Skills Inventory for Sports, TOPS= Test of Performance Strategies, SSEIT= Schutte Self-Report Emotional Intelligence Test

Table 5 shows significant differences in PSIS ( $p = .002$ ,  $\eta^2 = .077$ ) and SSEIT ( $p = .000$ ,  $\eta^2 = .222$ ) across athlete levels, with national and university athletes scoring higher. TOPS ( $p = .052$ ,  $\eta^2 = .142$ ) is near significance. Higher-level athletes demonstrate better psychological skills, performance strategies, and emotional intelligence.



**Table 6***Mediation Analysis of Emotional Intelligence on Psychological Skills and Performance*

Emotional Intelligence			
Variable	B	SE	β [95%CL]
Step I			
Constant	87.0*** [68.6,105.48]	9.28	
PSIS	.2205	.0520	.3935
[.1173,.3238]			
R= .3935 , R^2= .1549 ,		F=32.19, p< .0001	
Step II			
Constant	100.74*** [64.21,137.2]	18.403	
PSIS	.3031*** [.1414, .4648]	.0815	.3186
TOPS	.7372*** [.4487,1.0257]	.1453	.4343
R=.4895, R^2=.2396, F= 30.88, p< .0000			

Note: PSIS= Psychological Skills Inventory for Sports, TOPS= Test of Performance Strategies

The results indicate that both psychological skills (PSIS) and performance strategies (TOPS) significantly predict emotional intelligence (EI). While PSIS alone explains 15.49% of the variance, adding TOPS increases the explained variance to 23.96%, with TOPS having a stronger effect ( $\beta = .4343$  vs.  $\beta = .3186$  for PSIS). The decrease in PSIS's effect suggests partial mediation, meaning both factors contribute uniquely to EI development.

## Discussion

The study emphasizes the substantial correlation between psychological skills and cricket performance, with emotional intelligence serving as a critical mediator. Cricketers who use goal- setting, self-talk, attentional control, and relaxation techniques perform better under pressure. Research (Vealey, [1986](#); Hardy et al., [2010](#); Weinberg & Gould, [2015](#)) demonstrates that PST improves decision-making, resilience, and anxiety. Hatzigeorgiadis et al., ([2009](#)) discovered that positive self-talk increases confidence and flexibility in focused sports such as cricket.

The study emphasizes how Emotional Intelligence (EI) can help athletes stay calm, make decisions, and manage stress in sports (Mayer & Salovey, [1997](#); Laborde et al., [2016](#)). Cricket players with higher EI exhibit greater focus and less anxiety (Lane et al., [2009](#); Ahmad & Safdar, [2020](#)). Performance under pressure is aided by emotional stability (Perlini & Halverson, [2009](#)).

According to the study, emotional intelligence (EI) improves psychological abilities, enabling athletes to use mental strategies more successfully during competition. Although emotional regulation is necessary for psychological abilities to be successful, it enhance cognitive control (Meyer & Fletcher, 2007; Laborde et al., [2016](#)). Cricket players with higher EI exhibit greater consistency and flexibility (Narimani, [2009](#)). According to Gucciardi et al., ([2016](#)), fast bowlers with high EI make better strategic choices. The study finds that male cricketers score higher in psychological skills and EI, likely due to competitive exposure (Zizzi et al., [2003](#)). However, targeted training can help female athletes develop similar EI levels (Laborde et al., [2016](#)). Higher EI and psychological skills were observed in national and university players (Fletcher & Sarkar, [2012](#)).



To improve performance, the study highlights the integration of psychological skills and emotional intelligence (EI) into cricket coaching (Hill et al., [2010](#); Humphrey et al., [2008](#)). Given the demands of cricket, consistency is crucial, and EI mediates the relationship between psychological skills and performance, supporting training strategies. Future research should examine long-term effects and broader data collection methods.

### Limitations

- ▶ Self-reported data may introduce bias as participants could overestimate or underestimate their skills.
- ▶ The small sample size (100 cricketers) limits the generalizability of findings.
- ▶ The cross-sectional design prevents establishing causal relationships.
- ▶ Uncontrolled factors like fitness, experience, and coaching may have influenced results.

### Implications

- ▶ Psychological skills and EI training should be integrated into cricket coaching.
- ▶ Specialized programs are needed to address gender and regional differences.
- ▶ Governing bodies should include psychological assessments in player selection.

### Conclusion

- ▶ Psychological skills and EI play a crucial role in cricket performance.
- ▶ High-EI cricketers manage stress, make better decisions, and stay consistent.
- ▶ Integrating EI and psychological training enhances resilience and adaptability.
- ▶ Future research should include larger samples and assess long-term effects.

## References

- Ahmad, S., & Safdar, F. (2020). Goal orientation, motivation, and competitive anxiety in players of domestic cricket in Pakistan. *Pakistan Journal of Psychological Research*, 35(1), 87-105. <https://doi.org/10.33824/PJPR.2020.35.1.6>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.
- Clough, P., Earle, K., & Sewell, D. (2002). Mental toughness: The concept and its measurement. *Solutions in sport psychology*, 1(1), 32-46. <https://www.scirp.org/reference/ReferenceID=1902775>
- Cowden, R. G. (2017). Mental toughness and success in sport: A review and prospect. *The Open Sports Sciences Journal*, 10(1). <http://dx.doi.org/10.2174/1875399X01710010001>
- Fletcher, D., & Sarkar, M. (2012). A grounded theory of psychological resilience in Olympic champions. *Psychology of Sport and Exercise*, 13(5), 669-678. <https://doi.org/10.1016/j.psychsport.2012.04.007>
- Gould, D., Guinan, D., Greenleaf, C., Medbery, R., & Peterson, K. (1999). Factors affecting Olympic performance: Perceptions of athletes and coaches from more and less successful teams. *The sport psychologist*, 13(4), 371-394. <https://doi.org/10.1123/tsp.13.4.371>
- Gucciardi, D. F., Hanton, S., Gordon, S., Mallett, C. J., & Temby, P. (2016). The concept of mental toughness: Tests of dimensionality, nomological network, and traitness. *Journal of Personality*, 84(1), 18-30. <https://doi.org/10.1111/jopy.12079>
- Hanin, Y., Khanin, I., & Chanin, J. (2000). Emotions in sport human kinetics. *Go to original source*.
- Hanton, S., Jones, G., & Mullen, R. (2000). Intensity and direction of competitive state anxiety as interpreted by rugby players and rifle shooters. *Perceptual and motor skills*, 90(2), 513-521. <https://doi.org/10.2466/pms.2000.90.2.513>
- Hardy, L., Roberts, R., Thomas, P. R., & Murphy, S. M. (2010). Test of Performance Strategies (TOPS): Instrument refinement using confirmatory factor analysis. *Psychology of Sport and Exercise*, 11(1), 27-35. <https://doi.org/10.1016/j.psychsport.2009.04.007>
- Hatzigeorgiadis, A., Zourbanos, N., Mpoupaki, S., & Theodorakis, Y. (2009). Mechanisms underlying the self-talk-performance relationship: The effects of motivational self-talk on self-confidence and anxiety. *Psychology of Sport and Exercise*, 10(1), 186-192. <https://doi.org/10.1016/j.psychsport.2008.07.009>
- Hill, D. M., Hanton, S., Matthews, N., & Fleming, S. (2010). Choking in sport: A review. *International Review of Sport and Exercise Psychology*, 3(1), 24-39. <https://doi.org/10.1080/17509840903301199>
- Humphrey, N., Lewis, S., & Squires, G. (2008). Emotional intelligence and education: A critical review. *Educational Psychology*, 28(3), 349-370. <https://doi.org/10.1080/01443410701738637>
- Laborde, S., Dosseville, F., & Allen, M. S. (2016). Emotional intelligence in sport and exercise: A systematic review. *Scandinavian Journal of Medicine & Science in Sports*, 26(8), 862-874. <https://doi.org/10.1111/sms.12510>
- Lane, A. M., Thelwell, R. C., Lowther, J., & Devonport, T. J. (2009). Emotional intelligence and psychological skills use among athletes. *Social Behavior and Personality: An International Journal*, 37(2), 195-202. <https://doi.org/10.2224/sbp.2009.37.2.195>
- Mahoney, M. J. (1989). *Sport psychology*. American Psychological Association.

- Mahoney, M. J., Gabriel, T. J., & Perkins, T. S. (1987). Psychological skills and exceptional athletic performance. *The sport psychologist*, 1(3), 181-199. <https://doi.org/10.1123/tsp.1.3.181>
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3-31). Basic Books.
- Meyer, B. B., & Fletcher, T. B. (2007). Emotional intelligence: A theoretical framework for the study of emotions in sport. *International Journal of Sport Psychology*, 38(2), 91-99.
- Narimani, M., & Basharpoor, S. (2009). Comparison of attachment styles and emotional intelligence between athlete women (collective and individual sports) and non-athlete women. *Research Journal of Biological Sciences*, 4(2), 216-221. <https://makhillpublications.co/published-files/mak-rjbs/2009/2-216-221.pdf>
- Perlini, A. H., & Halverson, T. R. (2006). Emotional intelligence in the national hockey league. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 38(2), 109-119. <https://psycnet.apa.org/doi/10.1037/cjbs2006001>
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, 25(2), 167-177. [https://doi.org/10.1016/S0191-8869\(98\)00001-4](https://doi.org/10.1016/S0191-8869(98)00001-4)
- Tenenbaum, G., & Eklund, R. C. (2020). *Handbook of Sport Psychology*. John Wiley & Sons. <https://doi.org/10.1002/9781119568124>
- Thomas, P. R., Murphy, S. M., & Hardy, L. (1999). Test of Performance Strategies: Development and preliminary validation of a comprehensive measure of athletes' psychological skills. *Journal of Sports Sciences*, 17(9), 697-711. <https://doi.org/10.1080/026404199365560>
- Vealey, R. S. (1986). Conceptualization of sport-confidence and competitive orientation: Preliminary investigation and instrument development. *Journal of Sport & Exercise Psychology*, 8(3), 221-246. <https://doi.org/10.1123/jsep.8.3.221>
- Weinberg, R. S., & Gould, D. (2015). *Foundations of sport and exercise psychology* (6th ed.). Human Kinetics.
- Zizzi, S. J., Deaner, H. R., & Hirschhorn, D. K. (2003). The relationship between emotional intelligence and performance among college baseball players. *Journal of Applied Sport Psychology*, 15(3), 262-269. <https://doi.org/10.1080/10413200305390>