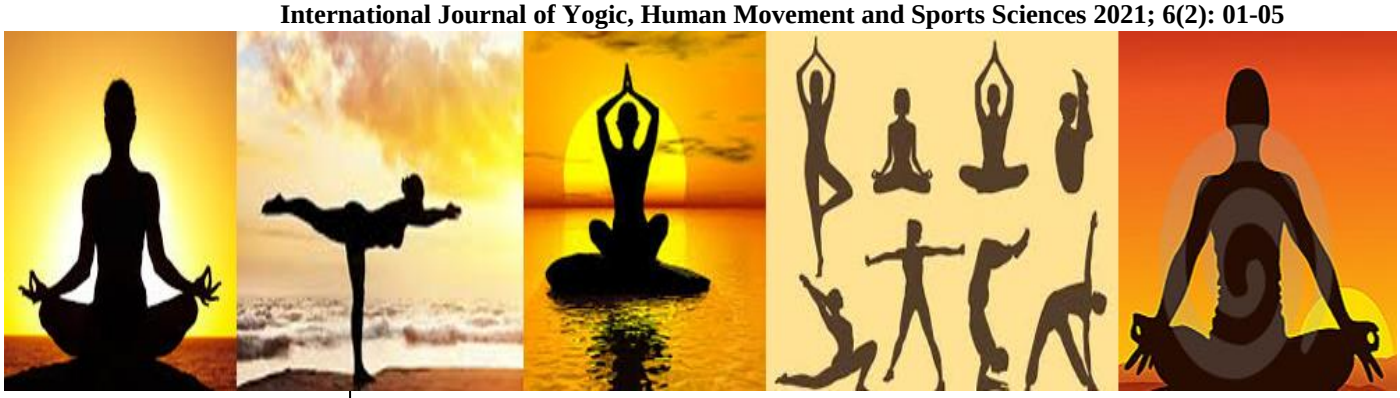
International Journal of Yogic, Human Movement and Sports Sciences 2021; 6(2): 01-05



ISSN: 2456-4419
Impact Factor: (RJIF): 5.18
Yoga 2021; 6(2): 01-05

www.theyogicjournal.com
Received: 01-05-2021
Accepted: 03-06-2021

Raveendra Khot
Research Scholar, Visvesvaraya Technological University, Belagavi, Karnataka, India

Dr. AG Bujurke
Research Guide, Director of Physical Education Visvesvaraya Technological University, Belagavi, Karnataka, India

Corresponding Author:
Raveendra Khot
Research Scholar, Visvesvaraya Technological University, Belagavi, Karnataka, India

A study on stress, anxiety and depression of inter-collegiate tennis men and women players in Belagavi division

Raveendra Khot and Dr. AG Bujurke

DOI: https://doi.org/10.22271/yogic.2021.v6.i2a.1157

Abstract
A study on stress, anxiety and depression of inter-collegiate tennis men and women players in Belagavi.
Research Design: This study was conducting an explorative study which identifies stress, anxiety and depression among tennis players.
Research participants: The sample consisted of 85 tennis players, out of them 40 respondents are men and 45 respondents are women. Purposive sampling was used in this study instead of non-probability sampling.
Method of Data Collection: Both primary and secondary method of data collection was used for this research. Primary data were collected in questioner method. Toassess anxiety; depression and stress among tennis players ADSS Scale by Bhatnagar P., Singh M. and Pandey M. (2011) were used. SPSS-22.0 for Windows software package was used for data processing.
Data Analysis and Interpretation: The finding of the study shows that majority of the tennis players are from 19 - 20 years of age. Majority of female tennis players participated the present study. Most of the tennis players were from OBC group. The Hindu religion participated by vast majority of respondents. Most of the respondents are from nuclear family. Majority of the respondents are from urban area. The mean score of anxiety among male respondents is 4.10 and female respondents mean score is 4.20.In the same way the depression mean score of male respondents is 3.78 and female respondents mean score is 3.73. Moving to stress among male respondents mean score is 4.13 and female respondents mean score is 4.24.

Keywords: tennis players, stress, anxiety, depression, men and women

Introduction
Sports injury is a common concern among athletes in today's world (Uitenbroek, 1996) [23]. Many studies have been conducted to determine the predictors and risk factors for sports injury occurrence. Researchers are currently primarily interested in determining the role of specific psychosocial variables in predicting vulnerability or resiliency to injury. There is a rising recognition that psychological features, particularly stress and anxiety, show a significant role in determining the occurrence, severity, and extent of damage (Lavallee & Flint, 1996) [16].

Because of the stressful nature of sport and the competitive environment, athletes are predisposed to injury. It has been discovered that stress in one's life is a significant predictor of damage existence in sports persons (Woodman & Hardy, 2001; and Mellalieu, Fletcher, & Neil, 2009) [24, 18]. Anxiety and stress are both associated with an athlete's routine in competition and have been recognized as key predictors of injury and are responsible for sport participation interruption (Grossbard, Smoll, Smith, & Cumming, 2009; and McEwen, Eiland, Hunter, & Miller, 2012) [13, 17].

Tennis has frequent health assistances for people of all ages. It is also an awfully effective form of exercise. Consistent contributors advantage from a variety of physical and mental health benefits, such as improved cardiovascular, metabolic, and bone health, as well as improved quickness and management and stress and anxiety management.

Tennis puts an person's aerobic and anaerobic training to the test though also needful incredible muscular power and endurance (Groppel & Dinubile, 2009) [12]. Tennis players, according to Finn (1990) [8], recorded greater in vigor, cheerfulness, and confidence when compared to other athletes and non-athletes, whereas recording lesser in depression, anger, misunderstanding, anxiety, and strain. Tennis beats golf and the bulk of other sports in terms of emerging optimistic behavior development (Gavin, 2004) [9].

Specialized tennis performers are too vulnerable to damage. An injury can be one of the furthermost irritating times in a sports person's occupation. A severe harm and the ensuing rehabilitation distance may additionally alter the athlete's temper and expand stress ranges. For example, Brewer and Petrie (1995) [1] in contrast injured and unhurt university soccer gamers and observed that the injured gamers had greater stages of melancholy and stress than the unhurt players.

Stress is characterized by mental, emotional, or physical tension or stiffness. It has been claimed that stressful life events are the root cause of physical and mental diseases (Coleman & Iso-Ahola, 1993) [4]. Stress manifests itself in a variety of ways for professional tennis players. Stress is defined in this study as mental, emotional, or bodily pressure or stiffness (Iso-Ahola & Park, 1996) [14]. So, for tennis players, this may include stress from performance demands, the possibility of injury, and family members' anticipations. It has been demonstrated that stress increases people's motivation and aspiration to accomplish precise goals. For example, professional tennis players are frequently motivated to improve their performance by the desire to win a match, which causes stress. This upsurge in stress may ultimately have an influence on their physical and mental health, causing in poor presentation (Rees &Hardy, 2003) [20].

Firstly Brewer and Petrie (1995) [1] had compared the depression symptoms between athletes who experienced and not experienced the injuries. Tennis prodigy Nick Kyrgios has admitted to struggling with depression (Krishnan, 2021) [15]. He went on to say:

“When I was struggling - and it wasn’t just about tennis – there were moments when I was seriously depressed. I remember waking up in Shanghai one year and it was 4pm and I was still in bed, curtains closed. I didn’t want to see the light of day,” Kyrgios told Telegraph.

Sports and Anxiety

Most people experience difficult times throughout their lives, and as a result, they may encounter negative emotions and difficulties that have an impact on their mental health (Gerber, Best, Meerstetter, 2018) [10]. In spite of the element that sports have been connected to positive mental health consequences, research has shown that one out of every five athletes has experienced mental health problems (Gouttebarge *et al*., 2019) [11]. Presence an athlete and participating in sports can profit a person in a variety of ways, including improved mental health, leadership skills, connection building, weight management, improved sleep and mood, and a decrease in anxiety and depression (Pluhar *et al*., 2019) [19]. Though sports are said to be beneficial to mental health, they can also be detrimental to athletes' mental health and contribute to symptoms of anxiety and depression (Chang *et al*., 2019) [2].

Anxiety has an effect on a sports player's physiological, cognitive, and behavioral performance. If he is anxious before an important athletic competition, his performance will suffer. When an athlete's body is anxious and his blood pressure is high, he fights to move gracefully and in a synchronized manner. Athlete movements will be irregular and misdirected, which will have a negative impact on his presentation.

Anxiety is a collection of spiteful emotions that are shared in sporty and presentation situations. Anxiety is a trait or a state that has both cognitive and somatic components (Zhang, Woodman, & Roberts, 2018) [25]. Numerals of rapports have been used roughly in the literature on anxiety and sport performance, stifling progress. The standings stress, anxiety, and arousal are regularly used interchangeably in sport psychology (Fazey and Hardy, 1998) [6].

The occurrence of anxiety disorders in adults has been described to range from 6% to 20%.According to Patel *et al* (2010), the life of an athlete is no further demanding than the life of the normal person. Some levels of anxiety are measured standard in sportspersons; though, if sports persons involvement thrilling anxiety, their performance may suffer (Patel *et al*., 2010). Anxiety disorders are activated by emotional responses. When an individual is suffering “fear”, “apprehension”, “worry” or “threat” (Rice *et al*., 2019) [21].

Aim of the Study

A study on stress, anxiety and depression of inter-collegiate tennis men and women players in Belagavi Division.

Objectives of the Study

1. To measure stress among inter-collegiate tennis men and women players.
2. To measure anxiety among inter-collegiate tennis men and women players.
3. To measure depression among inter-collegiate tennis men and women players.

Methodology

Research Design

This focus of this study was conducting an explorative study which identifies stress, anxiety and depression among tennis players. To analyze and identify the subject of this study, a research design is used. A research design is required to get the research going in the right direction.

Research participants

The sample consisted of 85 tennis players, of them 40 respondents are men and 45 respondents are women. Purposive sampling was used in this study instead of non-probability sampling.

Method of Data Collection

Both primary and secondary method of data collection was used for this research. Primary data were collected Questioner method.

Instruments

ADSS is a scale developed by Bhatnagar P., Singh M., and Pandey M. (2011) to assess anxiety, depression, and stress. It consists of 48 items divided into three subscales, which are as follows:

1. The anxiety subscale- contains of 19 items that cover several indications of anxiety.
2. The depression subscale contains of 15 items that signify the various signs of depression.
3. The stress subscale contains 14 items that embody the indicators that people practice when they are stressed.

Each item receives a 1 (one), if it is endorsed "Yes," and a 0 (zero), if it is endorsed "No." In the case of the anxiety subscale, the score range is 0 to 19. The subscale for depression ranges from 0 to 15, while the stress subscale ranges from 0 to 14. A higher score indicates more anxiety, depression, and stress and vice-versa.

Statistical Analysis

In this study percentage method and frequency of respondents is used to classify the data on the basis of various dimensions.SPSS-22.0 for Windows software package was used for data processing.

Data analaysis and interpretation

The following table no: 1 explains about the background of the tennis players. The frequency test was performed to show the percentage. Furthermore, the independent t-test was applied between gender of the tennis player and the anxiety, depression and stress among tennis players.

Table 1: Background of the Respondents

		Frequency	Percent
Age of the Respondents	19 – 20 years	57	67.5
	21 – 22 years	28	32.5
	Total	85	100.0
Gender of the Respondents	Male	40	47.1
	Female	45	52.9
	Total	85	100.0
Caste of the Respondent	General	24	28.2
	OBC	28	32.9
	SC	17	20.0
	ST	16	18.8
	Total	85	100.0
Religion of the Respondent	Hindu	50	58.8
	Muslim	19	22.4
	Christian	14	16.5
	Others	2	2.4
	Total	85	100.0
Family type of Respondents	Joint	23	27.1
	Nuclear	62	72.9
	Total	85	100.0
Domicile of Respondents	Urban	51	60.0
	Rural	34	40.0
	Total	85	100.0

The above table no: 1 describes the background of the tennis players. Out of 85 respondents 67.5 percent of the tennis player's age is 19 – 20 years and 32.5 percent of the respondent's age is 21 – 22 years. It is clear from the above table that majority of the tennis players are from 19 – 20 years of age.

52.9 percent of the female respondents participated in the present study and 47.1 percent male respondents participated. It is clear from the above table that majority of the female tennis players participated the present study.

32.9 percent of the respondents belongs to Other Backward Classes (OBC) category; 28.2 percent of the respondents are from general category; 20.0 percent of the respondents are from Scheduled Caste (SC); and 18.8 percent of the respondents belongs to Scheduled Tribe (ST). It is clear from the above table that majority of the tennis players belongs to OBC category.

58.8 percent of the respondents are Hindu religion; 22.4 percent of the respondents are from Muslim religion; 16.5 percent of the respondents belong to Christian religion; and only 2.4 percent of the respondents are from other religion. The above table clearly shows that the majority of respondents are Hindus.

72.9 percent of those sampled belongs to nuclear family members and 27.1 percent of the defendants are from joint family. It is clear from the above table that most of the respondents are from nuclear family.

60.0 percent of participants are from urban areas, while 40.0 percent are from rural areas. It is clear from the above table that majority of the respondents are form urban area.

Table 2: T-test of Stress, Depression and Anxietyand Gender of Respondents

	Genger	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Classification Anxiety	Male	40	4.10	.304	-1.276	83	.206
	Female	45	4.20	.405			
Classification Depression	Male	40	3.78	.423	.440	83	.661
	Female	45	3.73	.447			
Classification Stress	Male	40	4.13	.335	-1.406	83	.163
	Female	45	4.24	.435			

The above table no: 2 revels the mean difference of stress, depression and anxiety level among male and female respondents of the study. The independent t-test has applied to see the significant difference between the genders of the respondents and level of stress, depression and anxiety. The mean score of anxiety among male respondents is 4.10 and female respondents mean score is 4.20.In the same way the depression mean score of male respondents is 3.78 and female respondents mean score is 3.73. Moving to stress among male respondents mean score is 4.13 and female respondents mean

score is 4.24. Among these three dimensions female anxiety mean score is high comparatively to male respondents, mean score of depression among male is high comparatively to female and mean score of stress among female is high comparatively to male respondents.

The independents t-test has applied to see the significant difference in stress, depression and anxiety among male and female tennis players. The result of the independent t-test found that the Sig. (2-Tailed) value of anxiety is .206, depression is .661 and stress is .163. As a result, there is no statistically significant difference in the scores of male and female respondents. This value is greater than .05. Hence there is no statistically significant difference between the male and female respondents of tennis players. The null hypothesis "there would be no significant difference in stress, depression and anxiety between male and female in inter-collegiate players of tennis" was accepted.

Discussion of the findings

The main goal of this research was to investigate stress, anxiety and depression levels of inter-collegiate tennis players in Belagavi division. According to the study's findings, male respondents' mean anxiety level is 4.10, while female respondents' mean anxiety level is 4.20. According to the study's findings, female tennis players have a higher anxiety mean score than male respondents. Dias, Cruz, & Fonseca, (2010) [5] found that female athletes had higher levels of cognitive and somatic anxiety than male athletes in Portuguese athletes. According to Filaire *et al*., (2009) [7], females had significantly higher somatic anxiety (+23 percent: p.05) than males, whereas males had significantly higher self-confidence (+34 percent: p.05).

The depressions mean score for male respondents is 3.78, while the mean score for female respondents is 3.73. It is clear from the finding of the tennis playersmean score of depression among male is high comparatively to female tennis players. According to Appaneal *et al*., (2009) research, female athletes experienced more post-injury depression than male athletes and took longer to recover.

The stress means score among male respondents is 4.13 and female respondents mean score is 4.24. The mean score of stress among female is high comparatively to male respondents. According to Waddington *et al*., (2005), the following sources of stress among tennis players are damages, grade, participants, family/friends and social pressure, which can lead to avoidable and risky behaviors such as liquor and sub stance difficulties.

Conclusion

Throughout their careers, the tennis players overcame a variety of obstacles. Among the challenges were competing with better players, pressure from coaches and themselves, physical and mental barriers, limited supports, and a change in environment. Because of its strong relationship with performance, anxiety is a psychological variable that sport psychologists have extensively researched, with various trends and methodologies (Cecchini *et al*., 2001) [3]. Therefore, anxiety can be well-defined as a multidimensional concept in which the somatic and cognitive characteristics necessity eminent; they are different from one another and have altered possessions on behavior (Santos-Rosa, García, Jiménez, Moya & Cervelló, 2007) [2]. When compared to the general population, there are risk factors specific to the athletic population (i.e., injury, involuntary career termination, performance expectations and possibly overtraining) that may increase the risk of depression.

As a result, it is dangerous that these health care specialists identify the symbols and indicators of anxiety, depression and stress in tennis players and make suitable transfers while essential. Players could exhibit nonconforming marks and signs, for example irritability and anger, and may involve in well or unhealthy handlings trategies, for example substance abuse or extra training. Furthermore, the coach and players must have a positive relationship. As a result, players will be able to overcome issues such as anxiety, depression and stress.

References

1. Brewer BW, Petrie TA. A comparison between injured and uninjured football players on selected psychosocial variables. Academic Athletic Journal 1995;10:11-18.
2. Chang C, Putukian M, Aerni G, Diamond A, Hong G, Ingram Y, *et al*. Mental health issues and psychological factors in athletes: detection, management, effect on performance and prevention: American Medical Society for Sports Medicine Position Statement-Executive Summary. British Journal of Sports Medicine 2020;54(4):216-220. https://doi:10.1136/bjsports-2019-101583
3. Cecchini JA, González C, Carmona A, Arruza J, Escartí A, Balagué G. The Influence of the Teacher of Physical Education on Intrinsic Motivation, Self-Confidence, Anxiety, and Pre- and Post- Competition Mood Status. European Journal of Sport Science 2001;1:4-22.
4. Coleman D, Iso-Ahola SE. Leisure and health: The role of social support and self-determination. Journal of Leisure Research 1993;25(2):350-361.
5. Dias C, Cruz J, Fonseca A. Coping Strategies, Multidimensional Competitive Anxiety and Cognitive Threat Appraisal: Differences across sex age and type of sport. Serbian Journal of Sports Sciences 2010;4(1):23-31.
6. Fazey J, Hardy L. The Inverted U Hypothesis: A Catastrophe for Sport PsycholoKJ1 Leeds, England: White Line Press 1988.
7. Filaire E, Déborah AS, Ferrand C, Verger M. Psychophysiological stress in tennis players during the first single match of a tournament. Psychoneuroendocrinology 2009;34(1):150-157.
8. Finn JA. Characteristics for predicting success among highly skilled youth tennis players. USTA Research GrantInformation. Dr. J.A. Finn, Southern Connecticut State University, New Haven, Conn 1990, 06515. Available from: http://uspta.com/html/HealthBooklet.pdf
9. Gavin J. Pairing Exercise with Activity New Tools for Inspiring Active Lifestyles. The Physician and sportsmedicine 2004;32(12):17-24.
10. Gerber M, Best S, Meerstetter F, *et al*. Effects of stress and mental toughness onburnout and depressive symptoms: A prospective study with young elite athletes Journal of Science and Medicine in Sport 2018;21(12):1200-1205. https://doi:10.1016/j.jsams.2018.05.018.
11. Gouttebarge V, Castaldelli-Maia JM, Gorczynski P, Hainline B, Hitchcock ME, Kerkhoffs GM, *et al*. Occurrence of mental healthsymptoms and disorders in current and former elite athletes: a systematic review and Depression and anxiety symptoms in athletes across different types of individual sports meta-analysis. British journal of sports medicine 2019;53(11):700-706.

https://doi.org/10.1136/bjsports-2019-100671
12. Groppel J, Dinubile N. Tennis: For the Health of It. The Physician and sports medicine 2009;37(2):40-50.
13. Grossbard J, Smoll FL, Smith RE, Cumming S. Competitive anxiety in young athletes: Differentiating somatic anxiety, worry, and concentration disruption. Anxiety, Stress & Coping 2009;22(2):153-166.
14. Iso-Ahola SE, Park CJ. Leisure-related social support and self-determination as buffers of stress-illness relationship. Journal of Leisure Research 1996;28(3):169-187.
15. Krishnan V. The Dark Side: Tennis players who battled anxiety and depression. America: First Sports 2021.
16. Lavallee L, Flint F. The Relationship of Stress, Competitive Anxiety, Mood State, and Social Support to Athletic Injury. Journal of Athletic Training 1996;31(4):296-299.
17. McEwen BS, Eiland L, Hunter RG, Miller MM. Stress and anxiety: Structural plasticity and epigenetic regulation as a consequence of stress. Neuropharmacology 2012;62(1):3-12.
18. Mellalieu S, Fletcher D, Neil R. Competition stress in sport performers: Stressors experienced in the competition environment. Journal of Sports Sciences 2009;27(7):729-744.
19. Pluhar E, McCracken C, Griffith KL, Christino MA, Sugimoto D, Meehan WP. Team Sport Athletes May Be Less Likely to Suffer Anxiety or Depression than Individual Sport Athletes. Journal of sports science & medicine 2019;18(3):490-496.
20. Rees T, Hardy L. Matching social support with stressors: Effects on factors underlying performance in tennis. Psychology of Sport & Exercise 2004;5(3):319-337.
21. Rice SM, Purcell R, De Silva S, Mawren D, McGorry PD, Parker AG. The Mental Health of Elite Athletes: A Narrative Systematic Review. Sports medicine (Auckland, N.Z.) 2016;46(9):1333-1353. https://doi.org/10.1007/s40279-016-0492-2
22. Santos-Rosa FJ, García T, Jiménez R, Moya M, Cervelló EM. Predicción de la satisfacción con el rendimiento deportivo en jugadores de tenis: Efectos de las claves situacionales. Motricidad. European Journal of Human Movement 2007;18:41-60.
23. Uitenbroek DG. Sports, exercise, and other causes of injuries: results of a population survey. Research Quarterly for Exercise and Sprot 1996;67(4):380-385.
24. Woodman T, Hardy L. A Case Study of Organizational Stress in Elite Sport. Journal of Applied Sport Psychology 2001;13(2):207-238.
25. Zhang S, Woodman T, Roberts R. Anxiety and Fear in Sport and Performance. In BG. Knight, Oxford Research Encyclopedia of Psychology. Oxford University Press 2018, 1-29.