

Descriptive Study of Anxiety Level on U-23 Sprinters During Transition Period

Krishnan D.^{1*}, Krishnan D.², Raja A.³

DOI: <https://doi.org/10.55968/ijems.v12i01.242>


^{1*} Dan Krishnan, Student MPEd & IAAF Level 1 Coach, LNCPE SAI, Kerala University, Trivandrum, Kerala, India.

² Dalley Krishnan, Sports Officer, , National Institute of Technology, Trichy , Kerala, India.

³ A Solomon Raja, Sports Officer, , National Institute of Technology, Trichy, Kerala, India.

The purpose of the study conducted was to find the anxiety level of male sprinters under the age of 23 years during a transition period and for those 25 male sprinters from G.V Raja sports school, Trivandrum was chosen. The method used for analyzing the anxiety level was a descriptive study using Sports Anxiety Scale-2 (SAS-2) questionnaire. The test measured three variables namely worry, somatic trait anxiety and concentration disruption analyze the anxiety level .The analysis of the score was done using descriptive analysis of the values of the data collected. During the study, it was found that somatic anxiety was found to be the highest among all the three variables.

Keywords: Transition Period, Sprinters and Anxiety

Corresponding Author	How to Cite this Article	To Browse
Dan Krishnan, Student MPEd & IAAF Level 1 Coach, LNCPE SAI, Kerala University, Trivandrum, Kerala, India. Email: mygopdally@gmail.com	Dan Krishnan, Dalley Krishnan, A Solomon Raja, Descriptive Study of Anxiety Level on U-23 Sprinters During Transition Period. IJEMS. 2023;12(01):33-38. Available From https://ijems.net/index.php/ijem/article/view/242	

Manuscript Received 2023-01-03	Review Round 1 2023-01-31	Review Round 2 2023-02-16	Review Round 3 2023-03-01	Accepted 2023-03-23
Conflict of Interest NIL	Funding NO	Ethical Approval YES	Plagiarism X-checker 18	Note
 © 2023by Dan Krishnan, Dalley Krishnan, A Solomon Rajaand Published by The University Academics. This is an Open Access article licensed under a Creative Commons Attribution 4.0 International License https://creativecommons.org/licenses/by/4.0/ unported [CC BY 4.0]. 				

Introduction

Track and field athletics, which sprang from the most fundamental human activities—running, walking, jumping, and throwing—are the oldest forms of organised sport. The most truly global sport now is athletics, with competitions taking place in almost every nation on earth. The majority of countries send men's and women's teams to the four-yearly Olympic Games and the official track and field world championships. The European, Commonwealth, African, Pan-American, and Asian championship meets are just a few of the many continental and international competitions that take place. Sprint events were a component of the earliest Olympian Games, which took place in the 7th century B.C., as well as the first modern Olympic games, which debuted in the late 19th century (Athens 1896). In both races, competitors crouched to begin (4 point stance). A sprint is a quick running competition. There are often three different sprint distances used in track and field competitions: 100m, 200m, and 400m. The modern sprinting events have their origins in imperial races that were eventually converted to metric measurements. The 100 m distance developed from the 100-yard dash, the 200 m distance came from the furlong (or 18 mile), and the 400 m distance replaced the 440-yard dash or quarter-mile race.

Transition Period

The transition period is a crucial phase between the two annual training plans because it typically allows for physical and psychological recuperation through complete rest with hanging or a reduction in physical activity (in terms of intensity, volume, and frequency).

Even if injuries or recovery set in during this time, the athlete should think about taking an active break.

The activities during this time may vary, but they often promote physical and psychological regeneration in accordance with various ways that may have a substantial impact on the athlete's performance when the new preparatory phase begins.

Typically, transitional periods are approached by completely ceasing all physical activity and entering the off-season, but if inaction is protracted, it could encourage a large detraining effect that

Will reduce physiological and performance capacity (Bompa, 2018). Transition Period

Anxiety

Sport psychology defines anxiety is a poor emotional kingdom in which feeling of nervousness, fear, and apprehension is associated with activation or stimulation of the frame. It's far believed as obtained behavioral predisposition which outcomes behavior of an individual. Dealing and controlling of this mental assemble could have wonderful impact on athlete's overall performance.

Athletes who come upon high stage of tension are much more likely to chock which in result hinder the performance, anxiety interferes with the enjoyment of existence and disrupts work, relationships and self-perceptions. These are, however, treatable situations, and learning approximately them is a critical first step.

Measuring Anxiety

In this part, researcher consider the numerous instrument and techniques that have been devised to measure anxiety in sports, including psychological tests, physiological measures, and behavioral measures. Researchers use newer inventories developed specifically for sports. To date,

Two inventories, the Competitive State Anxiety Inventory-2 (CSAI-2) by Marten et al., (1990) and the Sports Anxiety Scale (SAS) by Smith et al. (1990), measure A-state anxiety in sports situations. The CSAI-2 and SAS measure two forms of anxiety, cognitive and somatic. Another measure of anxiety, the Sports Competitive Anxiety Test (SCAT) (Martens, 1977), also ascertains the athlete's somatic anxiety. However, Smith et al. (1990) contend that SCAT "is primarily a measure of somatic anxiety and not an adequate measure of the cognitive dimension of sport-specific anxiety".

When an athlete believes the demands made of him are above his skills, competitive stress turns negative and may trigger symptoms of anxiety. An athlete's assessment of his ability may be based on a past performance, his perceptions of the competition, or his perceptions of the competition's significance. Anxiety is frequently associated with a fear of failure. His perception can also vary significantly from one incident to the

Next based on how he perceives his physical and mental preparation to be in each situation.

Methodology

Selection of Subjects

A total of 25 subjects were selected from Individual sprinters. Subjects from 15-23 years of age were selected. The subjects were selected from GV raja sports school Trivandrum And their level of participation varied from the District level to the state level.

Instrument Tool used during the Test

The test chosen for measuring the variable anxiety was the SPORTS ANXIETY SCALE 2

(Questionnaire).

Administration and Collection of Data.

The sports anxiety scale Questionnaire was distributed to the subjects, they were asked to give responses based on their personal feelings and based on what they were feeling at the moment and the data was collected from them

Scoring

Enclosed as Annexure 01

The sums of scores from all the items were taken as the sports anxiety scale of sprinters.

Statistical Technique.

The collected data for the study was analysis by using SPSS data analysis software and descriptive statistics such as mean, median, mode, standard deviation, range, percentage was used.

The scoring is a 4-point scale of the sports Anxiety scale.

Result

Descriptive statistics of sprinters on worry Score

Table-1 shows the Descriptive statistics such as Mean is (15.7200), Median is (15.000), Mode is (12.00), SD is (3.65741) and Range is (15.00) of sprinters among worry score.

Enclosed as Annexure 02

Descriptive statistics of sprinters on concentration disruption score

Table-2 shows the Descriptive statistics such as Mean is (7.6800), Median is (8.0000), Mode is (8.00), SD is (1.79629) and Range is (6.00) of sprinters among on concentration disruption score.

Enclosed as Annexure 03

Descriptive statistics of sprinters on Somatic trait anxiety score

Table-3 shows the Descriptive statistics such as mean is (18.4000) median is (18.0000), Mode is 22.00 , SD (4.19325) and range is (17.00) of sprinters among on Somatic Trait Anxiety Score.

Enclosed as Annexure 04

Discussion and Findings

In comparison of the scores of the variables the mean score of the Somatic trait anxiety was found to be the highest, with mean (18.400).The somatic trait anxiety score was the also the highest mode among the subjects with 22.00 as most frequent observed score, it also have the highest range among all three variables. The mean score of concentration disruption was the lowest with mean 7.6800 with only 1.79629 as standard deviation, median 8.000 and mode 8.00.The score of the variable worry was with mean 15.7200, median 15.000, mode 12.00, standard deviation 3.65741 and range of 15.00.

During transition period athletes may anxious about their performance for future competition at the same time if the athlete are injured during this phase there will anxious that they can recover or not. Somatic anxiety highlights the physiological changes that occur in athletes, such as increased sweating, trouble breathing, rapid heartbeat, altered brain waves, raised blood pressure, frequent urination, stomach aches, decreased mouth saliva, and tightness in the muscles. Fear perception in the cerebral cortex stimulates the sympathetic nervous system, which results in a fast stress reaction. Athletes who have mastered anxiety management techniques frequently react more strongly to an anxious sign while also returning to their resting heart rate sooner.

Conclusion

The Sports Anxiety Scale (SAS) is a questionnaire that measures athletes' competitive trait anxiety both before and after competition.A multimodal

Assessment of physical and cognitive anxiety in sporting situations. In order to generate a fresh version that is appropriate for both children and adults, substitute items with readability levels of grade 4 or lower were written. The scale demonstrated sensitivity to programmes designed to lessen anxiety among child sport coaches and parents. It accurately predicts pre-competition state anxiety levels.

A total of 25 male sprinters subjects were selected from Gv Raja Sports School Trivandrum, Between the ages of 15-23, who participated in District level and state level of competitions. The variable selected for the study was to check the anxiety profile and for this purpose Sports anxiety scale (SAS) was selected. This questionnaire consisted of 21 questions and for each questions four responses were their (1-Not at all, 2- Somewhat, 3-Moderately so, 4- Very much so) the subject makes a tick mark on any one of the response that fit them best.

There was no time limit for the completion of the questionnaire but the subjects were instructed not to ponder too long over any question and respond to the entire questions in the questionnaire. The collected data for the study was analysis by using SPSS data analysis software and descriptive statistics such as mean, median, mode, standard deviation, range, percentage was use.

In comparison of the scores of the variables, the mean, mode and range score of the Somatic trait anxiety was found to be the highest among all the three variables. The score of the variables with mean, median, mode, standard deviation and range score of the worry was found to be second highest. The score of the variables with mean, median, mode, standard deviation and range score of the concentration disruption was found to be the lowest.

There we can conclude on the basis of research findings that the performance of U-23 male sprinters of GV Raja Sports School is mostly affected by somatic trait anxiety followed by worry and least by concentration disruption.

Annexure

Annexure 01

Scoring

Categories of response	Worry Scores of items 3,5,9,10,13,16,18	Concentric disruption Scores of items 2,6,7,14,20	Somatic trait anxiety Scores of items 1,4,8,11,12,15,17,19,21
Not at all	1	1	1
Somewhat	2	2	2
Moderate so	3	3	3
Very so much	4	4	4

Annexure 02

Table-1 shows the Descriptive statistics such as Mean is (15.7200), Median is (15.0000), Mode is (12.00), SD is (3.65741) and Range is (15.00) of sprinters among worry score.

	WORRY_SCORE
N	25
Mean	15.7200
Median	15.0000
Mode	12.00 ^a
Std. Deviation	3.65741
Range	15.00

Annexure 03

Table-2 shows the Descriptive statistics such as Mean is (7.6800), Median is (8.0000), Mode is (8.00), SD is (1.79629) and Range is (6.00) of sprinters among on concentration disruption score.

	CONCENTRATION_DISRUPTION_SCORE
N	25
Mean	7.6800
Median	8.0000
Mode	8.00
Std. Deviation	1.79629
Range	6.00

Enclosed as Annexure 04

Table-3 shows the Descriptive statistics such as mean is (18.4000) median is (18.0000), Mode is 22.00, SD (4.19325) and range is (17.00) of sprinters among on Somatic Trait Anxiety Score.

	SOMATIC_TRAIT_ANXIETY_SCORE
N	25
Mean	18.4000
Median	18.0000
Mode	22.00
Std. Deviation	4.19325
Range	17.00

Reference

- Abrahamsen, F. E. , Roberts, G. C. , & Pensgaard , A.M. (2008). *Achievement goals and gender effects on multidimensional anxiety in national elite sport. Psychology of Sport and Exercise*, 9(4), 449-464 [Crossref][Google Scholar]
- Bawa, & Debnath, (1991). Sports Competitive Anxiety in Relation the Level of Competitive. . , & Pensgaard , A.M. (2008). *Achievement goals and gender effects on multidimensional anxiety in national elite sport. Psychology of Sport and Exercise*, 9(4), 449-464 [Crossref][Google Scholar]
- Baric, R. (2011). Psychological pressure and athlete's perception of motivational climate in teamsports. *Review Psychology*, 18(1): 45-49. [Crossref][Google Scholar]
- Mandeep Singh Nathial, Analysis of set shot in basketball in relation with time to perform the course and displacement of center of gravity, *American Journal of Sports Science*, Vol. 2 Issue. 5 pp: 122-126 (2014). Retrieved from <https://www.sciencepublishinggroup.com/journal/paperinfo.aspx?journalid=155&doi=10.11648/j.ajss.20140205.13> [Crossref][Google Scholar]
- Mandeep Singh (2010). Evaluation And Improvement Of Sports Techniques Through Biomechanical Updated Analyzing Technology, *University News, Journal of Higher Education Association of Indian Universities, Association of Indian Universities*, Vol:48:Issue. 05;2010 Pp45-57, 2010. [sciencepublishinggroup.com/journal/paperinfo.aspx?journalid=155&doi=10.11648/j.ajss.20140205.13](https://www.sciencepublishinggroup.com/journal/paperinfo.aspx?journalid=155&doi=10.11648/j.ajss.20140205.13) [Crossref][Google Scholar] [Crossref][Google Scholar]
- . . 05;2010 Pp45-57, 2010. [Sciencepublishinggroup.com/journal/paperinfo.aspx?journalid=155&doi=10.11648/j.ajss.20140205.13](https://www.sciencepublishinggroup.com/journal/paperinfo.aspx?journalid=155&doi=10.11648/j.ajss.20140205.13) [Crossref][Google Scholar] [Crossref][Google Scholar]
- Mandeep Singh Nathial, A Study of Adjustment and Emotional Intelligence of University Coaches in India, *American Journal of Applied Psychology*. Volume 3, Issue 6, November 2014 , pp. 122-126. doi: 10. 11648/j.ajap.20140306.11 [Crossref][Google Scholar]
- Brij Bhushan Singh et al. (2010). A study on sports competition Anxiety and Performance of Intercollegiate Top Ranking Male and Female Power lifters. *Journal of Health and Fitness* 2(1): pp. 66-70 [Crossref][Google Scholar]
- Parnabas, V. , Parnabas, J. , &Parnabas, A. M. (2015). *The effect of cognitive anxiety on sports performance among track and field athletes. The international journal of indian psychology*, 2, 41-47 [Crossref][Google Scholar]
- Jayakody K, Gunadasa S, & Hosker. C (2014) Exercise for anxiety disorders: systematic. *British Journal of Sports Medicine* 196,187-196. [Crossref][Google Scholar]
- Nathial, Mandeep Singh. A COMPARATIVE AND ANALYTICAL STUDY OF SELF-ESTEEM AND JOB SATISFACTION IN ATHLETES AND NON ATHLETES. *Journal of Advances in Social Science and Humanities*, 2(10). <https://doi.org/10.15520/jassh210123> [Crossref][Google Scholar]
- Singh, M. , Kour, R. , &Kour, A. ,. *A collaborative diversified investigation of respective responses of sports person coaches and organizations on criminalization of doping. International Journal of Health Sciences*, 6(S3), 11295-11310. [Article][Crossref][Google Scholar]
- Mandeep Singh. , Assessment of Vocational Interests of Pahadi&Bakarwal School Students In Relation To Their Gender. *Int J Recent Sci Res*. 9(3), pp. 24817-24819. DOI: [Article][Crossref][Google Scholar]
- Dr. Mandeep Singh, 2017. "A study of awareness of inhouse doping errors among national level players and sports administrators in J&K state of India", *International Journal of Current Research*, 9, (01), 45226-45227. <http://www.journalcra.com/sites/default/files/issue-pdf/20036.pdf> [Crossref][Google Scholar]
- Dr. Mandeep Singh & J N Baliya, 2013; "A study of family stress among working and non-working parents", *International Journal of Research in Social Sciences*. Vol 2, 2. 194-201. [Article][Crossref][Google Scholar]
- Mandeep Singh, 2019; "Effect of Mobile Screen Psychomotor Digital Image Motivators in Person Technique in Reducing Anxiety Level

Of Intervarsity Players of Cluster University Jammu, Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). Volume-9 Issue-1, October 2019, PP: 3750-3752, DOI: 10. 35940/ijeat. A9811. 109119. [Article][Crossref][Google Scholar]

Mandeep Singh. (2018). THE AWARENESS OF MOVEMENT AND FITNESS SCIENCES AMONG SCHOOL, UNDER GRADUATE AND POST GRADUATE LEVEL STUDENTS: EMPOWERING EDUCATION THROUGH PHYSICAL EDUCATION. *European Journal of Physical Education and Sport Science*, 4(3). [Article][Crossref][Google Scholar]

SINGH SIDHU, A. , & SINGH, M. (2022). KINEMATICAL ANALYSIS OF HURDLE CLEARANCE TECHNIQUE IN 110M HURDLE RACE. *International Journal of Behavioral Social and Movement Sciences*, 4(2), 28–35. Retrieved from [Article][Crossref][Google Scholar]

Singh, A. , & Singh , D. M. (2013). PROMOTION OF RESEARCH CULTURE –ENHANCING QUALITY IN HIGHER EDUCATION. *International Journal of Behavioral Social and Movement Sciences*, 2(2), 202–208. Retrieved from [Article][Crossref][Google Scholar]

SINGH, M. , & SINGH SIDHU, A. (2016). A COMPARATIVE STUDY OF BODY COMPOSITION AND RELATIVE HEALTH STATUS AMONG RESIDENT AND NON-RESIDENT STUDENTS IN DIFFERENT SCHOOLS OF J&K. *International Journal of Behavioral Social and Movement Sciences*, 5(3), 08–13. Retrieved from [Article][Crossref][Google Scholar]

Singh Nathial, D. M. (2012). ANALYZING THE CREDIT BASED SYSTEM IN PHYSICAL EDUCATION. *International Journal of Behavioral Social and Movement Sciences*, 1(3), 172–176. Retrieved from [Article][Crossref][Google Scholar]

SHARMA, N. P. , & SINGH, M. (2014). SENIOR AGE GROUP RELATIVE EXERCISES AND IMPACT ON THEIR LIFESTYLE. *International Journal of Behavioral Social and Movement Sciences*, 3(04), 78–82. Retrieved from [Article][Crossref][Google Scholar]

CHAND PURI, P. , MISHRA, P. , JHAJHARIA, B. , & SINGH, M. (2014). COORDINATIVE ABILITIES OF VOLLEYBALL IN DIFFERENT AGE GROUPS: A COMPARATIVE STUDY. *International Journal of Behavioral Social and Movement Sciences*, 3(3),

56–68. Retrieved from [Article][Crossref][Google Scholar]

Woodman, T. and Hardy, L. (2001). "Stress and Anxiety ". In *Handbook of Sport Psychology*(edited by R.N. Singer, H.A. Hausenblas and C.M. Janelle), pp. 290–318. New York: Wiley [Crossref][Google Scholar]