



ISSN: 2456-0057  
IJPNPE 2019; 4(1): 1079-1082  
© 2019 IJPNPE  
www.journalofsports.com  
Received: 22-11-2018  
Accepted: 23-12-2018

**Dr. Sonia Kapur**  
Assistant professor  
MYAS-GNDU Department of  
Sports Science and Medicines  
Guru Nanak Dev University,  
Amritsar, Punjab, India

**Vidula Debar**  
MA (Sports Psychology)  
MYAS-GNDU Department of  
Sports Science and Medicines  
Guru Nanak Dev University,  
Amritsar, Punjab, India

**Roopinder Kaur**  
MA (Sports Psychology)  
Guru Nanak Dev University,  
Amritsar, Punjab, India

**Correspondence**  
**Dr. Sonia Kapur**  
Assistant professor  
MYAS-GNDU Department of  
Sports Science and Medicines  
Guru Nanak Dev University,  
Amritsar, Punjab, India

## Lifestyle affects the pre-competitive state anxiety: Study on male and female basketball players

**Dr. Sonia Kapur, Vidula Debar and Roopinder Kaur**

### Abstract

The current research aims to study the effect of quality of life on pre-competitive state anxiety of 100 basketball players (50 male and 50 female players) from various colleges of Amritsar, Punjab, India. The tool used to measure quality of life was Lifestyle scale (LSS-BK) by S.K Bawa and pre-competitive state anxiety was measured through competitive state anxiety inventory-2 (CSAI -2) by Martens et.al. Results indicates that male have shown no relationship between lifestyle scale and competitive state anxiety inventory- 2 whereas females have shown significantly negative relationship between somatic state anxiety and health conscious lifestyle and career oriented lifestyle.

**Keywords:** quality of life, pre-competitive state anxiety, basketball players, lifestyle

### Introduction

#### Lay summary

Previous researches conducted on lifestyle and pre-competitive state anxiety were mainly focused on its effects on the performance of players. My aim was to study lifestyle that affects the pre-competitive state anxiety which ultimately hampers the performance of player. This present study revealed that lifestyle does not show any effect on competitive state anxiety of male players whereas female experiences somatic state anxiety if they have poor health or career oriented lifestyle. As my sample size was very small and limited to basketball players only, more research is required to validate the current results. The implication of this research is to improve the lifestyle of players to reduce pre-competitive state anxiety so that they can attain wellbeing.

### Introduction

The term lifestyle was propounded by Alfred Adler in 1929. It defines attitude, values and somewhat exhibits the social position of an individual. The characteristics of inhabitants of region in special time and place is referred as lifestyle (Farhud2015). The way one lives has a great impact on the competencies of an individual to get success and satisfaction in life. A way of living of individuals, families (households), and societies is, which they manifest in coping their physical, psychological, social, and economical environment on a day to day basis. Lifestyle is expressed in both work and leisure behaviour pattern and (on an individual basis) in activities, attitude, interests, opinions, values and allocation of income. It also reflects people's self-image or self-concept: the way they see themselves and believe they are seen by others. Lifestyle of the person shows the quality of life they are living. Quality of life is defined as a multi-dimensional concept consisting of physical, psychological and social phenomenon, integrating individual's perception of their position in life in the context of the culture and value system in which they live, in relation to their goals, exceptions, standards and concerns. The term was used in 1950s, as a derivative of that of style in modernist art. The rural environment has different lifestyle as compare to urban environment. The concept of lifestyle management has developed as the result of the growing focus on lifestyle. Lifestyle affects individual's identity, it is means of forging a sense of self and create culture symbols that resonate with personal identity. An individual's health depends a lot on their lifestyle. The more time spent on hygiene, physical fitness, and diet regulation, the healthier lifestyle they

have. Another factor that affects lifestyle is technology. The positivity and negativity of technology depends on how much we use it and how much we are exposed to it. In other words, our lifestyle controls how we use technology, while technology influences lifestyle. Researchers in last few years are focusing more on lifestyle as an important factor of health. WHO states that 60% of individual factors related to health and quality of life are correlated to quality of life. It states that people encounter illness, anxiety, death, problems like metabolic disease, joint and skeletal problems, cardiovascular diseases, hypertension, overweight, and so on by following unhealthy lifestyle. Hence this relationship should be highly considered.

Anxiety is a negative emotional state characterized by nervousness, worry and apprehension and association with activation and arousal of the body. Thus anxiety has a thought component (worry and apprehension) called cognitive anxiety, and somatic anxiety component which is degree of physical activation perceived. Another important distinction is made between anxiety is state and trait anxiety. State anxiety refers to the ever changing mood component. It is defined more formally as an emotional state characterized by “subjective, consciously perceived feelings of apprehension and tension, accompanied by or association with activation or arousal of the automatic nervous system” (Spielberg, 1966)<sup>[8]</sup>. Unlike state anxiety, trait anxiety is a part of personality – an acquired behavioural tendency or disposition that influences behaviour. In particular, trait anxiety predisposes an individual to perceive as threatening a wide range of circumstances that objectively not actually dangerous physically or psychologically. The person then responds to these circumstances with state anxiety reactions or levels that are disproportionate in intensity and magnitude to the objective danger (Spielberg, 1966)<sup>[8]</sup>. Anxiety is also multi-dimensional in the sense that it is believed that there are both cognitive and somatic component to anxiety. Both state and trait anxiety are believed to have cognitive and somatic components. In the sports psychology literature, the notion that anxiety has both cognitive and somatic components is referred as multidimensional anxiety theory (Martens *et al.* 1990). Competitive state anxiety that arouse prior to a competitive situation is referred to as precompetitive state anxiety.

Research conducted by Dr. Scott A. Paluska, Thomas L. Shwenk in 2001 states that physical activity may play important role in the management of mild-to-moderate mental health disease, especially depression and anxiety. Although people with depression tend to be less physically active than non-depressed individual, increased aerobic exercise or straight training shown to reduce a depressive symptoms significantly. Excessive physical activity may lead to overtraining and generate psychological symptoms that mimic depression. Several differing psychological and physiological mechanisms have been proposed to explain the effect of physical activity on mental health disorders.

Graham Jones, Austin Swain and Lew Hardy in 2007 examined relationship between intensity and dimensions of competitive state anxiety, and also relationship with beam performance in a sample of female gymnasts. 48 gymnasts ranged from 14 to 16 years completed modified version of the competitive state anxiety inventory – 2. Analysis of variance showed no significant group difference on any of the CSAI-2 sub-component intensity scores, or on somatic anxiety and self-confidence direction score. However the good performance group reported their cognitive anxiety intensity

as being more facilitating and less debilitating to perform than the poor performance group.

In this study, Fabienne Coenders, Carly van Mensvoort, Gerbert Kraaykamp, Kkoen Breedveld (2017)<sup>[1]</sup>. Analysed the connection between a person’s sport-participation and reported subjective health. They hypothesize that this relationship may be affected by educational attainment, economic deprivation and work–family load in two manners. First, these resources may function as common determinants of health and sports participation causing a spurious effect. Moreover, they may moderate this relationship as physical activity might be more beneficial for groups that experience a lack of resources. Second goal was to study differences between people, and also to investigate developments within individuals’ life courses. In doing so, a stronger claim on causation is feasible. The NETHERLANDS Longitudinal Life course Study (NELLS) 2009/2013 on the Dutch population of 15–45 years was used to test the hypotheses with cross-sectional and fixed effects models. Results showed that men and women who have a higher sports frequency report better subjective health, but for women differences in subjective health are partially explained by education, economic deprivation and work–family load. Researchers hardly found moderating effects of these particular resources. This underscores that sport participation is beneficial among members of all educational groups, with various work–family loads and for both people in wealth and poverty.

Ioan Sabin Sopa, Marcel Pomohaci (2018)<sup>[7]</sup>. Conducted a study which focused on finding the habits of a group of students from the University “Lucian Blaga” from Sibiu regarding physical activities, types of sports activities practiced in leisure time, student’s concept about the values and importance of practicing sports activities and so on. The main method of research was the lifestyle health questionnaire through which they investigated some aspects regarding sports activities influence on the level of health. They choose a sample of 300 students from all three years of study from different faculties from their university. The results of the investigation showed that students are aware of the positive influence of sports activities on human body.

## Method

### Subjects

A survey study was conducted on 100 basketball players (50 male players and 50 female players) ages between 18-22 years from different colleges of Amritsar.

### Data collection

Research was conducted during pre-competitive situations on basketball players.

## Methodology

### Tools for evaluation

Life style scale (LSS-BK) by S. K. Bawa was used to measure quality of life. Lifestyle scale given by S. K. Bawa is standardized in three versions i.e. English, Hindi, and Punjabi. It can be used to know the lifestyle of person from 16 years onwards. The scale consists of 60 valid item belonging to 6 different dimensions of lifestyle: health conscious lifestyle, academic oriented lifestyle, career oriented lifestyle, family oriented lifestyle, socially oriented lifestyle, and trend seeking lifestyle. The 60 items included 43 positive and 17 negative in all and the distribution of items as per dimension. English version of scale was used on adult population scoring from 0 = strongly agree to 4 = strongly disagree. All the positive 43

item were scored as 4,3,2,1,0 and negative 17 items were scored as 0,1,2,3,4 for the response strongly agree, agree, indifferent, disagree and strongly agree.

Competitive state anxiety inventory- 2 (CSAI-2) by Rainer Martens, Damon Burton et.al was used to measure state anxiety of male and female basketball players. The 27 item inventory assesses two components of state anxiety cognitive and worry and somatic anxiety and a related construct of self-confidence. The scoring is from 1 = not at all, 4 = very much. To score the CSAI- 2 take all for each item at face value with the exaction of item 14 where reverse the score.

**Procedure**

After the random selection of participants, informed consent form was filled by all participants and they were given all the relevant information related to research and assured complete confidentiality. Participants were seated comfortably while solving both Lifestyle scale (LSS) and CSAI-2. 15 minutes break was given between both the scales. All participants performed on the questionnaire without any time restrictions. Same procedure was followed for participants in different colleges of Amritsar. Scoring had been done according to manual.

**Data Analysis**

Various statistical formulae were used to analyse the data. Arithmetic mean which is derived by adding together all the items and dividing this total by the number of items was applied

to know the average value of the whole range of data. Standard deviation which is the degree of dispersion or deviation of the recorded data from the mean was also applied. Student’s t-test was used to test the hypothesis. To measure the strength of linear association between two variables correlation coefficient was used.

**Results**

**Gender difference in lifestyle and pre-competitive state anxiety**

**Table 1.1:** Mean and t- value of males versus female basketball players.

Scale	Gender	N	Mean	SD	t- ratio
LSS	Males	50	150.70	10.31	0.665
Total	Females	50	149.10	13.51	
CSAI-2	Males	50	64.50	5.46	-1.343
Total	Females	50	66.10	6.40	

\*\*correlation is significant at the 0.01 level

\*correlation is significant at the 0.05 level

Table indicates that there is no significant gender difference in life style of male and female basketball players. On the contrary pre competitive anxiety is high in females as compared to males in competitive situation. According to t-value obtained in case gender difference both the male basketball players and female basketball has shown no significant difference.

**Table 1.2:** Correlation of male basketball players on lifestyle scale and CSAI-2

Variables	Health Conscious	Academic conscious	Career oriented	Socially oriented	Trend seeking	Family oriented	Cognitive state anxiety	Somatic state anxiety	Self confidence
Health conscious	1	.107	.165	-0.05	-0.118	0.190	0.126	-0.067	0.211
Academic conscious	0.107	1	.389**	0.208	-0.313*	0.142	-0.126	-0.196	0.050
Career oriented	0.165	.389**	1	0.273	1	-0.002	-0.052	-0.030	-0.0250
Socially oriented	-0.005	0.208	.273*	1	-0.154	-0.238	-0.038	-0.090	-0.047
Trend seeking	-0.118	-0.313*	-0.002	-0.154	1	-0.303*	0.119	0.110	-0.039
Family oriented	0.190	0.142	-0.052	-0.238	0.303*	1	0.064	-0.049	-0.021
Cognitive state anxiety	0.126	-0.126	-0.030	-0.038	0.119	0.064	1	0.142	0.244
Somatic state anxiety	-0.067	.196	-0.050	-0.090	0.110	-0.048	0.142	1	0.132
Self confidence	0.211	0.05	0.106	-0.047	-0.039	-0.021	0.244	0.132	1

\*\*correlation is significant at the 0.01 level

\*correlation is significant at the 0.05 level

Table 1.2 indicates significantly positive correlation between academic oriented lifestyle and carrier oriented life style of male basketball players. Socially oriented lifestyle was positively correlated to career oriented lifestyle. Thirdly trend seeking lifestyle was positively correlated with family oriented lifestyle among male basketball players.

There was no relationship of lifestyle with competitive state anxiety among male basketball players. It indicates that whether the lifestyle is good or bad it does not affects the anxiety level of males in competitive situations.

**Table 1.3:** Correlation of female BDP on LSS + CSAI

Variables	Health Conscious	Academic conscious	Career oriented	Socially oriented	Trend seeking	Family oriented	Cognitive state anxiety	Somatic state anxiety	Self confidence
Health conscious	1	0.477**	0.585**	0.482**	0.2016	0.072	-0.14	-0.33*	-0.10
Academic conscious	0.477**	1	0.244	0.045	-0.228	0.309**	-0.03	-0.72	-0.01
Career oriented	0.585**	0.244	1	0.387**	0.146	0.131	-0.20	-0.36**	-0.09
Socially oriented	0.48**	0.045	0.387**	1	0.280	0.106	-0.18	-0.03	-0.02
Trend seeking	-0.216	0.228	0.146	0.200	1	0.196	0.06	-0.05	0.03
Family oriented	0.072	0.309*	0.131	0.106	0.196	1	-0.13	0.02	0.13
Cognitive state anxiety	-0.148	-0.035	-0.208	-0.186	0.064	-0.132	1	0.06	0.14
Somatic state anxiety	-0.334*	-0.074	-0.362**	-0.032	-0.055	0.029	0.06	1	-0.02
Self confidence	-0.105	-0.017	-0.090	-0.204	0.030	0.133	0.14	-0.02	1

\*\*correlation is significant at the 0.01 level

\*correlation is significant at the 0.05 level

According to table 1.3 there was negative correlation between health conscious lifestyle and somatic state anxiety, and again career oriented lifestyle was negatively correlated to somatic state anxiety among female basketball players. It indicates that female who have poor health conscious lifestyle tends to show more somatic state anxiety and reflected physiological and affective elements of the anxiety that develops directly from automatic arousal such as rapid heartbeat, showers of breath, clammy hands, butterflies in stomach and tense muscle. And female who are less career oriented are not curious to gain more knowledge in career which tends to show more somatic state anxiety symptoms in competitive situations.

Academic oriented lifestyle was post levels related to family oriented lifestyle. Positive relationship was found between academic oriented lifestyle and family oriented lifestyle.

### Discussion

Results indicate that though, there is very mild difference in the lifestyle of male and female basketball players but competitive anxiety was found to be more in female basketball players as compare to male basketball players in competitive situations.

On lifestyle scale females tends to score more on family oriented lifestyle than male which depicts female are closer in touch with family. Whereas male showed more superior results on health conscious lifestyle as compare to female basketball players, which depicts that they tend to opt a lifestyle in which they always remain conscious for keeping themselves fit and fine. Positive relationship was found in academic oriented lifestyle and family oriented lifestyle. It means that female basketball player who were closely in touch with their family tends to be high in academic field.

Female scored high on cognitive state anxiety as well as somatic state anxiety. So it is clear that in sports females manifests negative expectations about performance and negative self-evaluation, both of which participate worry, disturbing visual images or both. Males scored high on self-confidence variable as compare to female basketball payers which indicates that they possess more ability to be successful in sports.

There was no relationship of lifestyle with competitive state anxiety in males which means that lifestyle maybe good or bad it do affects the players anxiety level in competitive situation. Rather it shows positive interrelation of lifestyle scale variables i.e. relationship of academic oriented lifestyle with that of carrier oriented and social oriented lifestyle and also shows relationship of trend seeking lifestyle with family oriented lifestyle. It is proved that female who have poor health conscious lifestyle tend to show more somatic state anxiety and reflected physiological and affective elements of anxiety that directly develops from automatic arousal such as rapid heartbeat, showers of breath, clammy hands, butterflies in stomach and tense muscles.

From the above discussion, it is recommended that to reduce competitive state anxiety, lifestyle should be healthy and moderate so that lifestyle should not be the component to hinder the performance during competitive situations.

### Conclusion

The hypothesis that lifestyle has positive and negative effect on competitive state anxiety among male and female basketball players is supported by current study. In the present study male have shown no relationship between lifestyle scale and competitive state anxiety inventory- 2

whereas females have shown significantly negative relationship between somatic state anxiety and health conscious lifestyle and career oriented lifestyle.

### Limitation of study

All the samples included in study were from 18-22  
Sample size is too small to include the entire region.

### Suggestions and further relevance

It will guide parents, teachers and coaches to know what should be the lifestyle for better performance.

It will promote other researches to explore this field.

It will foster the quality of life to use them in reducing state anxiety which further leads to competitive state anxiety.

### References

1. Coenders F, Mensvoort CV, Kraaykamp G, Breedveld K. Does sport-participation improve health? A panel analysis on the role of educational attainment, economic deprivation and work-family load. *European Journal for sports and society*. 2017; 14(1):45-59. doi:<https://doi.org/10.1080/16138171.2017.1284388>
2. Farhud DD. Impact of lifestyle on health. *Iran J Public Health*. 2015; 44(11):1442-1444.
3. Jones G, Swain A, Hardy L. Intensity and direction dimensions of competitive state anxiety and relationships with performance. *Journal of sports sciences*. 2007; 11:525-532.
4. Martens Re. competitive anxiety in sports champaign. IL: Human Kinetics, 1990a
5. Martens, Re. Development and validation of the competitive state anxiety inventory-2 R. Martens, R.S. Vealey, & D. Burton (Eds) competitive anxiety in sports. Champaign IL: Human Kinetics, 1990b, 117-178.
6. Paluska DA, Shwenk TL. Literature review in sports medicine, 2001, 29-3.
7. SOPA IS, POMOHACI M. developing a healthy lifestyle of students through prectice of sports activities. *Social behavioural sciences*, 2018, 207.
8. Spielberger C. the effects of anxiety on complex learning and academic achievement. *C.D Spielberger (Ed), Anxiety and behaviour*, 1966a; 361-398.
9. Spielberger C. anxiety as an emotional state. *C.D. Spielberger (Ed.)*, anxiety: current trends in theory and research. 1972a; 1:23-49.
10. Spielberger C, Gorsuch R, Lushene R. Manual for the state trait anxiety inventory, 1970.
11. WHO. Services for prevention and management of genetic disorders and birth defect in developing countries (Farhud as a committe member), 2001 (WHO/HGN/WAOPBD/99.1).