



## **A COMPARATIVE STUDY BETWEEN STATE AND NATIONAL LEVEL MALE HOCKEY PLAYERS ON THEIR MOTIVATION AND ANXIETY PROFILES**

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### **ABSTRACT**

*Indian hockey team have now-a-days been played by the absences of super performers. Various institutions and individuals have been making effort to find and train talent in this department with an idea to promote excellence in hockey. It was ensured that selected talented players from all over the country are provided scientific training, sports medicine support, requisite exposure in national and international tournaments and opportunity to play on wooden/hard surface right through their formative years while they undergoing their training. This study aims to compare state and national level male hockey players at investigating motivation and anxiety profiles. To achieve objective of study, 100 state level and 18 national level male hockey players were selected at random from college / university or some hockey academy students of Maharashtra. For the purpose of this study, subjects were considered as true representatives of the entire male hockey population of Maharashtra, when their motivation and anxiety variables are assessed. In this way, the entire sample would be objective rather than random. The findings of the study shows that in terms of power, there was a significant disparity between national & state hockey players. A significant difference found in success was discovered between national & state hockey players. In terms of sports motivation, there was a significant difference between national & state hockey players. In terms of anxiety, there was a significant difference between national & state hockey players.*

**Keywords:** *Physical Science, Self Motivation, Stress and Anxiety, Hockey players & sports in Maharashtra*



## INTRODUCTION

Field hockey is one of the world's oldest sports. Hockey is world's most thrilling & spectacular sport. It is a symbol of rudeness & skill, and it is somewhat dangerous but extremely exciting from start to finish. The game's essence lies in its artistic prowess & aggressiveness. It is not only skill in winning games that brings victory, but also spirit of players in which they play and perform their best in competitions. It is critical to understand role of an emotional event, such as motivational & concern of & players during training & competitive situations. A coach's job is to help athletes discover their unique talents & factors that contribute to their full potential. This includes not only the development of athletes' physical characteristics, but also their behavioural, motivational, and psychological traits. In general, motivation is a process that indicates why people participate in sports & how they do so. A general understanding of nature of achievement motivation is beneficial, as is a personal understanding of what they do, how well they do it, & how long they stay in game. Anxiety, on the other hand, is a relationship that develops over time b/w a person & situation that he or she encounters. Heart palpitations, respiratory disturbances, sweating, tremors & tremors, vertigo, & other physical and behavioural manifestations are common symptoms of anxiety. The current study's goal is to examine the motivation & anxiety variable profiles of Maharashtra state and national level male hockey players.

## SELF MOTIVATION FOR HOCKEY PLAYERS

Every athlete has periods when they feel utterly discouraged & unable to encourage themselves to keep going. No matter how good or successful they are, game can get better of them & lead them to lose confidence. This is nothing new, but top players understand how to overcome their doubts & remain motivated in order to continue improving as an athlete & maintaining a particular degree of performance. While encouragement from others, such as teammates & coaches, can be helpful, it is self-motivation that is most needed in order to keep going & improve. Continue reading to learn ways to inspire yourself to grow as a player. The keys of motivation are-

## SET GOALS

If you merely go out on ice every day with no endpoint in mind, you will rapidly burn out & lose your ability to focus on the sport. It might rapidly turn into a job rather than a fun, & you will lose interest. Setting personal objectives for yourself, on other hand, can help you stay motivated and progress as a player. These goals might be as basic as accumulating a specified amount of ice time in a single game or as complicated as winning league championship. In fact, having a variety of goals spanning from modest to important is best. Perhaps you should make a commitment to contribute to at least one team goal before every

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game. Setting team objectives is preferred since you will become a better team player & your group will have a higher chance of winning. This might mean that you wish to help or prevent a shot that leads to a spectacular breakaway. Your goals might also be more esoteric, such as wishing to support a struggling player. Even if this isn't a physical hockey objective, it will inspire you to remain in game & help others achieve.

### **SELF- TALK**

Sometimes all you need is a little motivation from your colleagues. Team bonding may considerably increase a player's confidence, & support from others is crucial in such a social sport. However, it should not be your primary source of inspiration. Accept that bulk of your energy will come from within you & that you will have to seek it out in order to harness it. In this scenario, stepping back for a period of time to be alone might be incredibly useful. You must make time before every game to reconnect with yourself, whether it's in vehicle before game or simply on bench as you tune out others. Talk to yourself, either out loud or in your brain, & go through your previously established goals. Give yourself some motivating words, comparable to what you would give a struggling colleague. If it helps, gaze in mirror & shout these words at yourself. You may seem & feel nuts, but what's damage if it makes you a better hockey player? Self-talk may be quite beneficial in organizing your thoughts & clearing your head so you can concentrate on game at hand.

### **FOCUS ON THE POSITIVES**

Give yourself some motivational words, similar to what you would give a struggling teammate. If it helps, look in mirror & yell these words at yourself. You may appear & feel insane, but what's harm if it makes you a better hockey player? Self-talk can be extremely beneficial in organising your thoughts & clearing your mind so you can concentrate on the game at hand. If you made a mistake, evaluate what you might have done differently to avoid it & how you may improve your performance next time. Remember that if you win next game, no one will remember your previous one's gaffe. You could wind up being star of tomorrow's game, but only if you can let go of your errors from past. Positive energy can be provided by your colleagues, but you must discover majority of it inside yourself. Capture this energy & utilize it the next time you play. Consider how delighted you'll be if you score game-winning goal or make a game-saving save at end. Don't consider what may happen if something goes wrong. People will forget your mistakes, but they will never forget your major accomplishments, & they will want to join in your excitement. Field hockey players in present day are determined to face sophisticated obstacles in order to exhibit their performance in this competitive sport environment. Due to scientific advancements, global competition, & rapid geographic shifts, they must respond quickly. The coaching environment may restrict chance



for performance efficiencies with counterpart of field hockey players' cohesion has recently arisen as a new & crucial concern for sport institutions. Several studies have revealed that hockey coaches and team cohesiveness play a crucial role in a player's success (Turman, 2008;. Even Pakistan's four (4) times world champion squad was unable to qualify for 13th World Cup, which was held in Netherlands in 2014. Despite having won three (3) consecutive Olympic Games, Pakistan was failed to qualify for the Rio Olympics for first time in Olympic history.

### **HOW STRESS AND ANXIETY AFFECT HOCKEY PLAYERS**

Athletes might get nervous or anxious due to a variety of circumstances. Physical demands, psychological demands, environmental demands, performance expectations and pressure, substantial additional stresses, interpersonal troubles, & life direction concerns are all variables that can lead to stress & anxiety. The following are four postulated key reasons for competitive stress reaction prior to competition: "Assumption that an athlete's mental state before to a competition might influence future performance."

1. During pre-contemplation time, athlete is thought to have some influence over his or her mental preparation.
2. In practice, researchers have far greater access to this time than they do to competition period itself.
3. If pre-competition anxiousness is a source of performance variation, psychologist can help you build an acceptable pre-competition mood."

According to studies, "intercollegiate athletes have higher levels of psychopathology." Examples include: more alcohol problems & a higher risk of eating disorder symptomatology." Female athletes, according to Storch et al. (2006), "expressed greater levels of depressive symptoms, social anxiety, and non-support than male athletes and male/female non-athletes." All of these factors have an influence on athletes & their performance, which might lead to problems outlined below.

### **OBJECTIVES OF THE STUDY**

- ❖ To determine the relationship between the playing ability of male hockey players with selected motivation and anxiety variables.
- ❖ To determine the variables which predict the playing ability of male hockey players from selected motivation and anxiety profiles.

### **LITERATURE REVIEW**

**Elferink-Gemser, Visscher, Van Duijn & Lemmink (2006)** highlighted development of interval endurance capacity in talented youth field hockey players aged 12 to 19 Over the course of three years, 377 measurements were taken. MLwiN, a multilevel modelling programme, was used to create a longitudinal model for interval endurance capacity. Scores on interval shuttle run test can be predicted using the model for elite & sub-elite male & female field hockey players aged 12 to 19. It was concluded that during adolescence, both male & female elite hockey players

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develop a more promising pattern of interval endurance capacity than sub-elite youth players. This development is influenced by body fat percentage, additional training hours, & motivation. However, there are still significant differences between individual players.

**Thomassen & Halvari (2007)** a hierarchical achievement motivation approach model was investigated in relation to effort control in 55 male high level soccer players. The desire to succeed was expected to be positively associated with a mastery goal, which was expected to be positively associated with playing time near the lactate threshold in the first period of a soccer game, & this was expected to be positively associated with same magnitude of effort in second period. The findings revealed surprising nonlinear correlations between incentive to avoid failure & effort control.

**Elferink-Gemser, Visscher, Lemmink & Mulder (2007)** selected performance variables that may help in prediction of future elite field hockey players and examined anthropometric, physiological, technical, tactical, and psychological aspects of 30 elite & 35 sub-elite youth players after three seasons. Repeated-measures covariance studies found that elite players beat sub-elite players on technical and tactical variables, with standard of performance and measurement occasion as factors & age as a covariate. In terms of interval endurance capacity, motivation, and confidence, female top youth players surpassed their male counterparts. Future great players tend to have outstanding tactical skills by age of 14. They also have strong particular technical talents, which they will improve quicker than sub-elite junior players over following two years, as well as interval endurance capacity.

**Bretigny, Seifert, Leory & Chollet (2008)** In field hockey, the upper-limb kinematics & synchronisation of the short grip & classic drives were compared. Ten outstanding female players participated in trial. The VICON technology was used to record displacement of markers put on the stick & players' joints during five short grip & five classic drives. The characteristics of kinematics and coordination were examined. The ball's velocity was monitored using a radar instrument, which also served as driving target. Kinematic variations between two drive conditions were found, with short grip drive having a shorter duration and a lower overall amplitude, which may be attributed to shorter lever arm & unique context in which it is employed. There were no variations in upper-limb coordination discovered. In both forms of stick holding, interlimb dissociation was detected on left side, but right interlimb coordination was in phase.

**Bhagirathi (2009)** Pearson product moment correlation method was used to assess the effect of anxiety and achievement motivation on goal keeping among female hockey players. The threshold of significance was set at 0.05 in order to investigate relationship b/w anxiety & achievement motivation to goal keeping among Secondary School level girl hockey players. The research included ten female hockey goalkeepers from diverse schools in Madhya Pradesh, India. They ranged in age from 14 to 19 years old. The Sports Achievement Motivation Test (Kamlesh) and State & Trait Anxiety Inventory (Steinberger) were employed in this investigation. Examine significance of calculated correlation to determine relationship. The study discovered a substantial link between state anxiety & trait anxiety & goalkeeping

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performance for state (0.904) & trait anxiety (0.844), but no significant relationship with achievement motivation.

**Dureha (2010)** was to compare psychological status of national & international hockey players on certain psychological parameters. Sixty Indian male hockey players were separated into two groups: national (n=30) and international (n=30). The ages of the participants ranged from 17 to 25. The Alberta Incentive Motivation Inventory, Sports Achievement Motivation Test, State & Trait Anxiety Inventory, and Sports Competition Anxiety Test were used to collect data. According to study's findings, there was no significant difference in incentive motivation, achievement motivation, state anxiety, or trait anxiety between national & international hockey players, but there was a significant difference in sports competition anxiety. The t test was used to test, & level of significance was set at 0.05. In case of achievement motivation, hypothesis that international & national players would not differ was accepted; however, it was rejected in case of state, trait, & sports competition anxiety.

**Mehndi Hasan et al. (2015)** to compare level of Aggression among hockey players of various skill levels. As a sample, 300 male subjects (N = 300) were chosen. The subjects ranged in age from 17 to 25 years. Kumar and Shukla developed and standardised a sports aggression inventory to assess the subjects' aggression (1984). At the .05 level of significance, ANOVA (One Way) was used to interpret the results. It was determined that there is a significant difference in aggression b/w intercollegiate, north-zone intervarsity, and all India intervarsity level hockey players.

**Alexander John Sturges (2018)** Junior hockey is an elite sport development strategy that serves approximately 20,000 teenage male players each year. Statistical studies were carried out to investigate influence of various junior hockey experience measures on measures of athletic identity & psychological development, with comparisons to a representative group of male college students. When compared to a control group of male college students, data show that junior hockey may lead to greater athletic identity as well as delays in some elements of teenage psychological development. There are suggestions for junior hockey stockholders to improve developmental consequences of a junior hockey experience.

**Devanand Bajirao Sawarkar (2020)** was to create psychological profiles of Junior National level hockey players. A total of 240 Junior National Male Hockey Players were chosen as subjects for this study. In study, great care was taken to identify very specific psychological characteristics of the game of hockey in order to select psychological variables that are not only relevant to current study but are also closely related to the study's purpose. As a result, based on the literature, correspondences, and discussions with prominent sports psychologists, as well as & scholar's own understanding, and following psychological variables were chosen to prepare & psychological profile of Junior National level hockey players for the purposes of this study: Anxiety, Achievement Motivation, Personality, & Visual Perception. To learn about the psychological profiles of the players, the data was analysed and the mean and standard deviation were calculated.

**C.R. Nigg, A. Gessner, C. Nigg, et al (2020)** determine which performance factors were related to plus-minus statistic among recreational ice hockey players in Germany. (n = 20 players; 1 female; mean age = 36.25 12.91 years; height = 178.85

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8.64 cm; weight = 81.36 12.89 kg; mean years of ice hockey experience = 5.68 8.93) during course of a season. Over the course of a season, several performance and psychological factors are connected to the plus-minus statistic of recreational ice hockey players. Recreational team coaches and players should prioritise muscular strength and endurance, shooting speed, body composition, & appreciating challenge of competition while decreasing their win orientation.

**Catherine E. Amiot, and Frederik Skerlj (2021)** conducted among parents of young ice hockey players to see if emphasising increasingly popular (i.e., dynamic) social norms that promote sportspersonship, learning, and having fun in sports increases parents' self-determined endorsement of these behaviours & values, improves their psychological well-being, & influences their children's on-ice behaviour. Hockey parents (N=98) were randomly assigned to either experimental or control condition (i.e., dynamic norms that increasingly favour sportspersonship, learning, & fun) (i.e., presenting neutral information). The reasons of parents for pushing their children to learn & enjoy hockey were then assessed. Parents had access to their children's on-ice behaviours (i.e., penalties) via score sheets from games that followed research, which were utilised as markers of sportspersonship. Parents in experimental condition expressed greater self-determination in encouraging their child to learn & love hockey than parents in control condition.

### ANALYSIS AND FINDING OF THE STUDY

To determine significant difference of motivation and anxiety characteristics b/w State level & National level male Hockey Players, the data collected was analyzed using the “t” test.

**TABLE-1 SIGNIFICANT DIFFERENCE OF MOTIVATION AND ANXIETY CHARACTERISTICS BETWEEN STATE LEVEL AND NATIONAL LEVEL OF MALE HOCKEY PLAYERS**

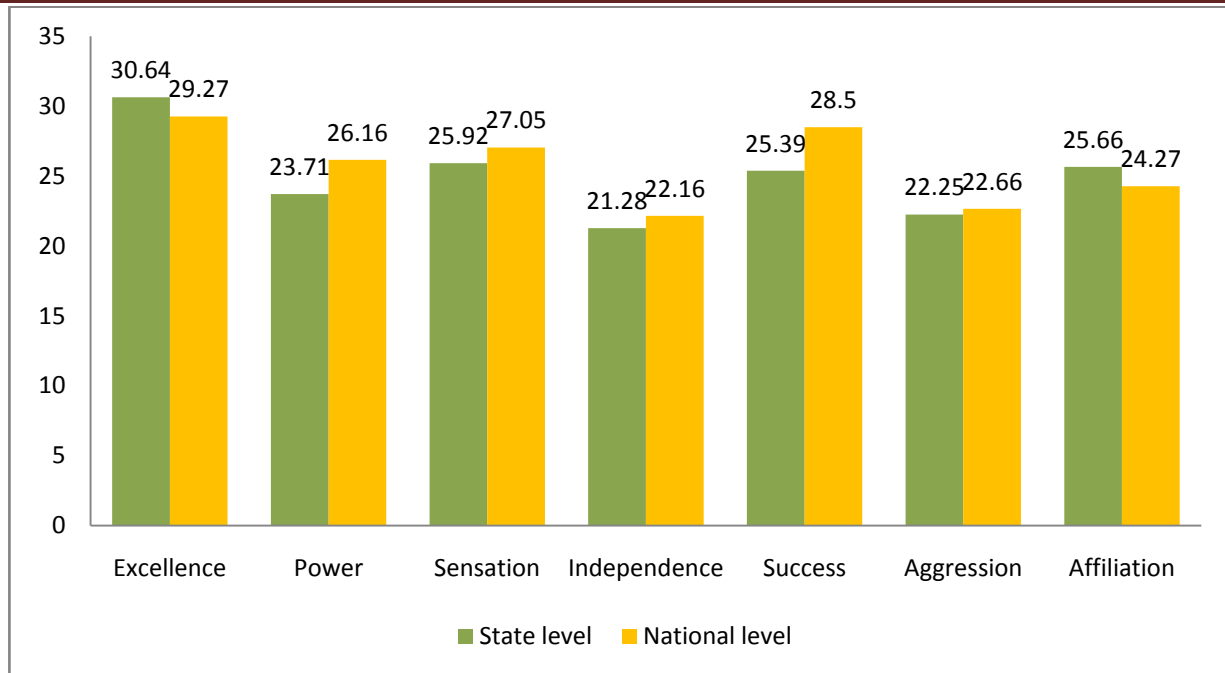
Variables	Level	N	Mean	M.D.	Df	‘t’
<b>Excellence</b>	State level	100	30.64	1.36	116	1.21
	National level	18	29.27			
<b>Power</b>	State level	100	23.71	2.45	116	2.43*
	National level	18	26.16			
<b>Sensation</b>	State level	100	25.92	1.13	116	1.47
	National level	18	27.05			
<b>Independence</b>	State level	100	21.28			

	National level	18	22.16	.88	116	.912
<b>Success</b>	State level	100	25.39	3.11	116	3.4*
	National level	18	28.50			
<b>Aggression</b>	State level	100	22.25	.41	116	.43
	National level	18	22.66			
<b>Affiliation</b>	State level	100	25.66	1.38	116	1.99*
	National level	18	24.27			
<b>Sports Achievement Motivation Test</b>	State level	100	21.83	3.94	116	2.89*
	National level	18	25.77			
<b>State Anxiety</b>	State level	100	31.59	3.41	116	1.85
	National level	18	35.00			

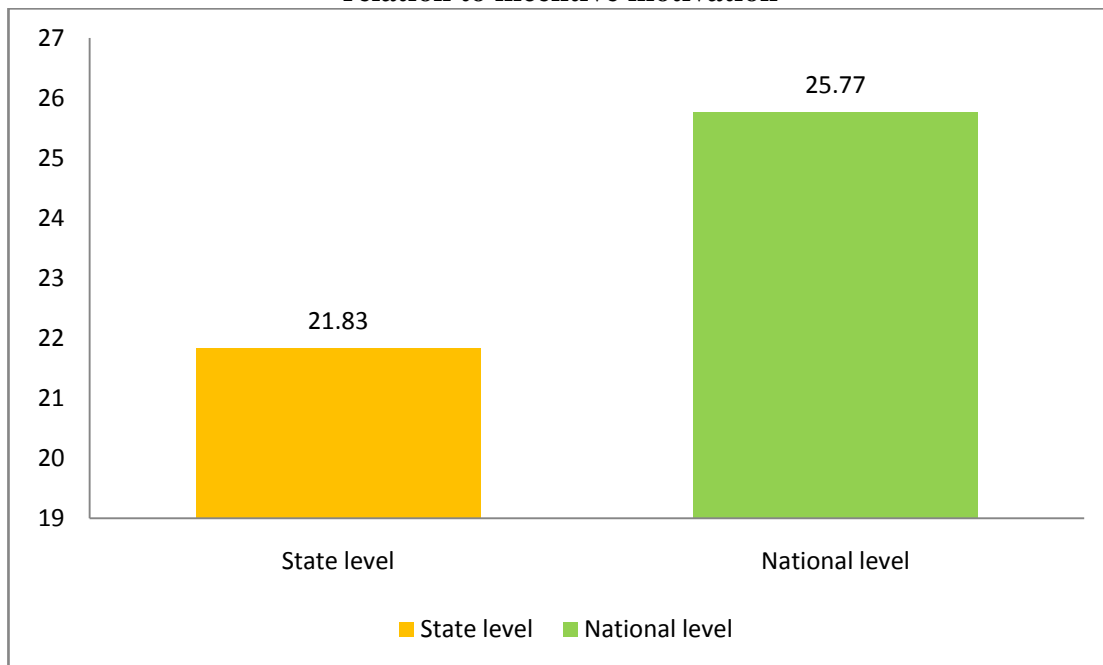
<b>Variables</b>	<b>Level</b>	<b>N</b>	<b>Mean</b>	<b>M.D.</b>	<b>Df</b>	<b>'t'</b>
<b>Trait Anxiety</b>	State level	100	34.17	4.38	116	2.41*
	National level	18	38.55			
<b>Sports Competition Anxiety Test</b>	State level	100	18.66	1.82	116	2.15*
	National level	18	16.83			

Tab. 't' at 116 degree of freedom= 1.98

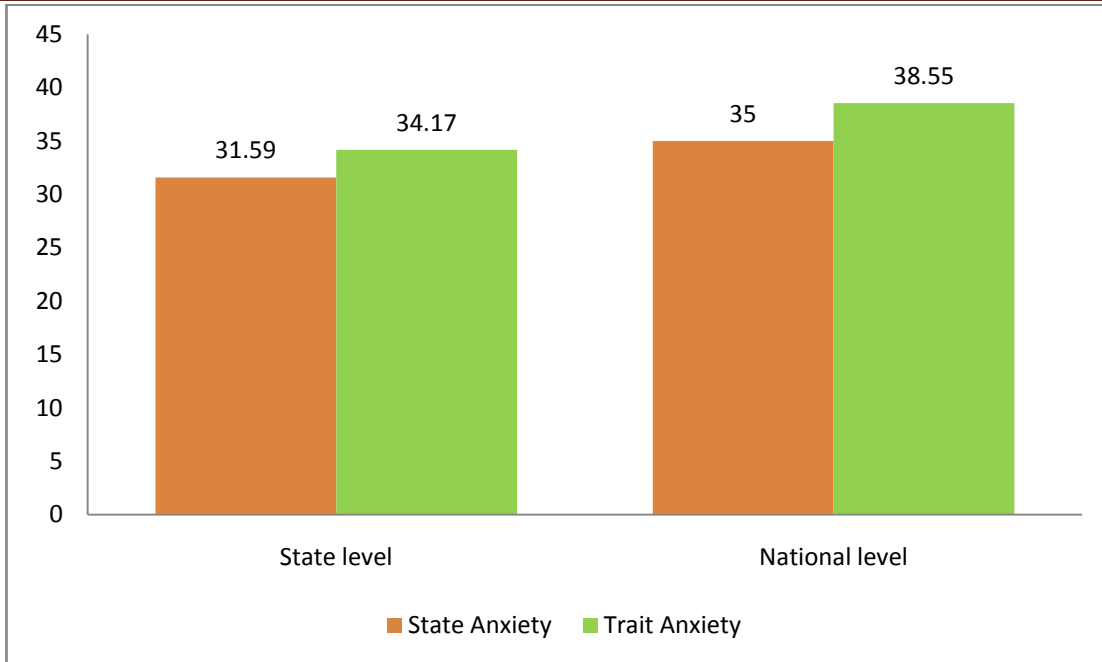




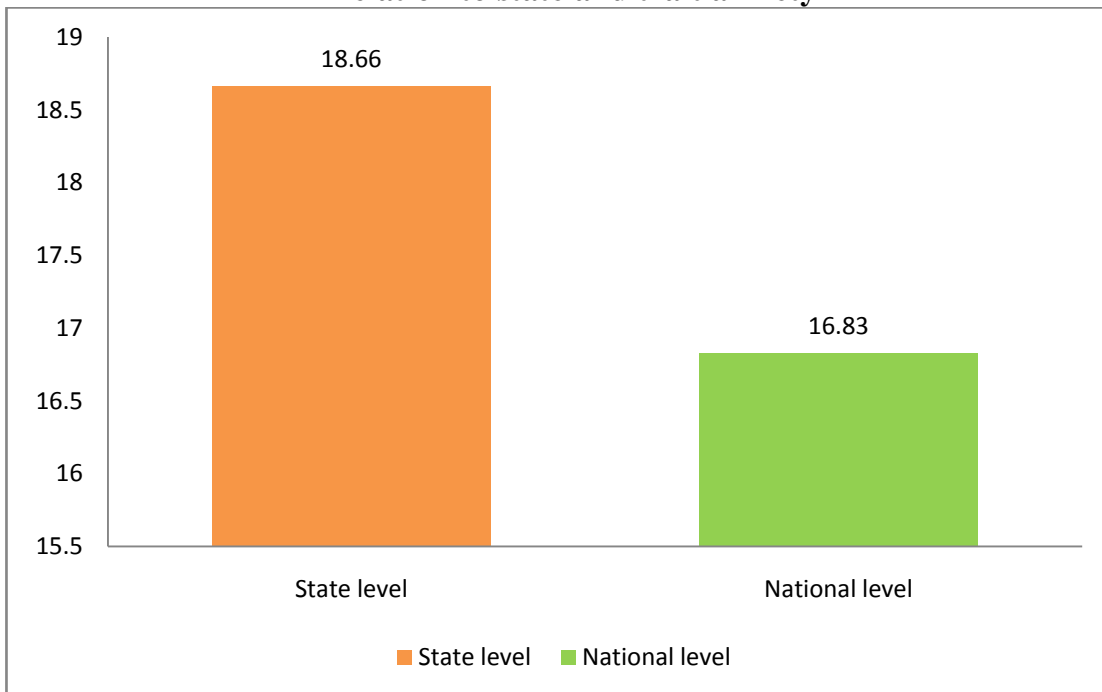
**Figure1 Comparison of means between State level and National level hockey players in relation to incentive motivation**



**Figure 2 Comparison of means between State level and National level hockey players in relation to sports achievement motivation**



**Figure 3 Comparison of means between State level and National level hockey players in relation to state and trait anxiety**



**Figure 4 Comparison of means between State level & National level hockey players in relation to sports competition anxiety**



## CONCLUSIONS

In terms of power, there was a significant disparity b/w national & state hockey players. A significant difference in success was discovered b/w national & state hockey players. There was a huge difference in devotion b/w national & state hockey players. In terms of sports accomplishment motivation, there was a significant difference b/w national & state hockey players. In terms of trait anxiety, there was a significant difference b/w national & state hockey players. In terms of sports competition anxiety, there was a significant difference b/w national & state hockey players. In terms of Excellence, there was no major difference b/w national & state hockey players. There was no substantial difference in feeling b/w national & state hockey players. There was no substantial difference in independence b/w national & state hockey players. In terms of hostility, there was no major difference b/w national & state hockey players. In terms of state –anxiety, there was no substantial difference between national & state hockey players.

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