**CHAPTER 1**

**INTRODUCTION**

**Hockey**, is a team sport in which a team of players attempts to score goals by hitting, pushing or flicking a ball into an opposing team's goal using sticks. It is most commonly known simply as "hockey"; however, the name field hockey is used in countries in which the word hockey is generally reserved for another form of hockey, such as ice hockey or street hockey.

Hockey has several regular international tournaments for both men and women. These include the Olympic Games, the Commonwealth Games, the quadrennial Hockey World Cups, the annual Champions Trophies and World Cups for juniors.

The International Hockey Federation (FIH) is the global governing body. It organizes events such as the Hockey World Cup and Women's Hockey World Cup. The Hockey Rules Board under FIH produces rules for the sport.

Many countries have extensive club competitions for junior and senior players. Despite the large number of participants—hockey is thought to be the field team sport with the third largest number of participants worldwide (the first being association football and second being Cricket)—club hockey is not a large spectator sport and few players play as full-time professionals. Hockey is a sport played internationally by both males and females.

In countries where winter prevents play outdoors, hockey is played indoors during the off-season. This variant, indoor field hockey, differs in a number of respects. For example, it is 6-a-side rather than 11, the field is reduced to approximately 40 m x 20 m; the shooting circles are 9m; players may not raise the ball outside the circle nor hit it. The sidelines are replaced with barriers to rebound the ball
Hockey can be identified with the early game of hurling. Games played with curved sticks and a ball have been found throughout history and the world. There are 4000-year-old drawings from Egypt. Hurling dates to before 1272 BC and there is a depiction from 500 BC in Ancient Greece when the game was called "Κερητίζειν" ("kerētizēin") because it was played with a horn ("κέρας" in Greek) and a ball-like object. In Inner Mongolia, China, the Daur people have been playing Beikou (a game similar to modern field hockey) for about 1,000 years. There were hockey-like games throughout Europe during the Middle Ages and the word 'hockey' was recorded in 1363 when Edward III of England issued the proclamation: "[M]oreover we ordain that you prohibit under penalty of imprisonment all and sundry from such stone, wood and iron throwing; handball, football, or hockey; coursing and cock-fighting, or other such idle games."

The modern game grew from English public schools in the early 19th century. The first club was in 1849 at Blackheath in south-east London, but the modern rules grew out of a version played by Middlesex cricket clubs for winter sport. Teddington Hockey Club formed the modern game by introducing the striking circle and changing the ball to a sphere from a rubber cube. The Hockey Association was founded in 1886. The first international took place in 1895 (Ireland 3, Wales 0) and the International Rules Board was founded in 1900. Hockey was played at the Summer Olympics in 1908 and 1920. It was dropped in 1924, leading to the foundation of the Fédération International de Hockey sur Gazon (FIH) as an international governing body by seven continental European nations, and hockey was reinstated in 1928. Men's hockey united under the FIH in 1970.

The two oldest trophies are the Irish Senior Cup, which 1st XI teams compete for, and the Irish Junior Cup.
The game had been taken to India by British servicemen and the first clubs formed in Calcutta in 1885. The Beighton Cup and the Aga Khan tournament commenced within ten years. Entering the Olympics in 1928, India won all five games without conceding a goal and won from 1932 until 1956 and then in 1964 and 1980. Pakistan won in 1960, 1968 and 1984.

In the early 1970s artificial turf began to be used. Synthetic pitches changed most aspects of hockey, gaining speed. New tactics and techniques such as the Indian dribble developed, followed by new rules to take account. The switch to synthetic surfaces ended Indian and Pakistani domination because artificial turf was too expensive—in comparison to the wealthier European countries—and since the 1970s Australia, The Netherlands and Germany have dominated at the Olympics.

Women's hockey was first played at British universities and schools, and the first club, Molesey Ladies, was founded in 1887. The first national association was the Irish Ladies Hockey Union in 1894 and though rebuffed by the Hockey Association, women's hockey grew rapidly around the world. This led to the International Federation of Women's Hockey Associations (IFWHA) in 1927, though this did not include many continental European countries where women played as sections of men's associations and were affiliated to the FIH. The IFWHA held conferences every three years, and tournaments associated with these were the primary IFWHA competitions. These tournaments were non-competitive until 1975.

By the early 1970s there were 22 associations with women's sections in the FIH and 36 associations in the IFWHA. Discussions started about a common rule book. The FIH introduced competitive tournaments in 1974, forcing the acceptance of the principle of competitive hockey by the IFWHA in 1973. It took until 1982 for the
two bodies to merge, but this allowed the introduction of women's hockey to the Olympic games from 1980 where, as in the men's game, The Netherlands, Germany, and Australia have been consistently strong. Argentina has emerged as a team to be reckoned with since 2000, winning the world championship in 2002 and medals at the last three Olympics.

Outside North America, participation is now fairly evenly balanced between men and women. For example, in England, the England Hockey reports that as of the 2008–09 season there were 2488 registered men's teams, 1969 women's teams, 1042 boys' teams, 966 girls' teams and 274 mixed teams. In 2006 the Irish Hockey Association reported that the gender split among its players was approximately 65% female and 35% male. In its 2008 census, Hockey Australia reported 40,534 male club players and 41,542 female. However, in the United States of America, there are few hockey clubs, most play taking place between high school or college sides, almost entirely of females. The strength of college hockey reflects the impact of Title IX which mandated that colleges should fund men's and women's sports programmes comparably.

On 15 February 2003 in the UK, Salford University Men's second team set a world record for number of goals conceded in a game, the final score being a defeat of 37–0. An impressive performance from Brooklands 4th team despite the fact that they probably should have scored more due to their opposition, Salford University seconds only having six players.

Most hockey field dimensions were originally fixed using whole numbers of imperial measures. Nevertheless, metric measurements are now the official dimensions as laid down by the International Hockey Federation (FIH) in the "Rules of Hockey". It is these dimensions that are given in this article, with the
imperial units in parentheses. The pitch is a 91.40 m × 55 m (100 yd × 60 yd) rectangular field. At each end is a goal 2.14 m (7 feet) high and 3.66 m (12 ft) wide measured from the inner sides of the posts and crossbar, and an approximately semi-circular area 14.63 m (16 yd) from the goal known as the shooting circle (or D or arc), bounded by a solid line, with a dotted line 5 m (5 yd 6 in—this marking was not established until after metric conversion) from that, as well as lines across the field 22.90 m (25 yd) from each end-line (generally referred to as the 23 m lines) and in the center of the field. A spot 0.15m in diameter, called the penalty spot or stroke mark, is placed with its centre 6.40 m (7 yd) from the centre of each goal.

Traditional grass pitches are far less common in modern hockey with most hockey being played on synthetic surfaces. Since the 1970s, sand-based pitches were favoured as they dramatically speed up the pace of the game. However, in recent years there has been a massive increase in the number of "water-based" artificial turfs. Water-based synthetic turfs enable the ball to be transferred more quickly than on the original sand-based surfaces and it is this characteristic that has made them the surface of choice for international and national league competitions. Water-based surfaces are also less abrasive than the sand-based variety and hence reduce the level of injury to players when they come into contact with the surface. The FIH are now proposing that new surfaces being laid should be of a hybrid variety which require less watering. This is due to the negative ecological effects of the high water requirements of water-based synthetic fields. In the U.S. field hockey is played mostly in the Northeast region of the country.

The game is played between two teams of up to sixteen players, eleven of whom are permitted to be on the pitch at any one time. The remaining five players, the substitutes, may be substituted in any combination, from one to five, an unlimited
number of times in the course of a game. Substitutions are permitted at any point in the game, apart from between the award and end of a penalty corner; the only exception to this rule is for injury or suspension of the defending goalkeeper, this is not allowed when you're playing with a field keep.

Players are permitted to play the ball with the flat of the 'face side' and with the edges of the head and handle of the hockey stick with the exception that, for reasons of safety, the ball may not be struck 'hard' with a forehand edge stroke, because of the difficulty of controlling the height and direction of the ball from that stroke.

The flat side is always on the "natural" side for a right-handed person swinging the stick at the ball from right to left. Left-handed sticks are rare, but available; however they are pointless as the rules forbid their use in a game. To make a strike at the ball with a left to right swing the player must present the flat of the 'face' of the stick to the ball by 'reversing' the stick head, i.e. by turning the handle through approximately 180°(while a reverse edge hit would turn the stick head through approximately 90° from the position of an upright forehand stoke with the 'face' of the stick head.

Edge hitting of the ball underwent a two year 'experimental period', twice the usual length of an 'experimental trial' and is still a matter of some controversy within the sport. Ric Charlesworth, the current Australian coach, has been a strong critic of the unrestricted use of the reverse edge hit. The 'hard' forehand edge hit was banned after similar concerns were expressed about the ability of players to direct the ball accurately, but the reverse edge hit does appear to be more predictable and controllable than its counterpart.
Other rules include; no foot to ball contact, obstructing other players, high back swing, and no third party. If a player is dribbling the ball and either loses control and kicks the ball or another player interferes that player is not permitted to gain control and continue dribbling. The rules do not allow the person who kicked the ball to gain advantage from the kick, so the ball will automatically be passed on to the opposing team. Players may not obstruct another's chance of hitting the ball in anyway. No shoving/using your body/stick to prevent advancement in the other team. Penalty for this is the opposing team receives the ball and if the problem continues, the player can be carded. While a player is taking a free hit or starting a corner the back swing of their hit cannot be too high for this is considered dangerous. Finally there may not be three players touching the ball at one time. Two players from opposing teams can battle for the ball, however if another player interferes it is considered third party and the ball automatically goes to the team who only had one player involved in the third party.

There are no fixed positions (even a goalkeeper is not required under the 2007–2008 rules), but most teams arrange themselves (in a similar way to Association football teams) into fullbacks (defence), midfielders (halfback) and forwards (front line). Many teams include a single sweeper. The rules do not specify a minimum number of players for a match to take place, but most competitions have some local ruling on this, with seven players being a common minimum

One player from each team may be designated the goalkeeper. Goalkeepers must wear at least a helmet and a different coloured shirt in order to have "goalkeeping privileges". They may also opt to wear additional padding such as "kickers" over the shoes, leg-guards, padded shorts, body and arm protectors—if they opt for this protection, they are termed "fully protected goalkeepers". Although such goalkeepers may block or deflect the ball from the goal with any part of their
bodies, and propel the ball with their feet, legs, the associated padding or their stick, they must always carry a stick. Goalkeepers are permitted to play the ball outside their defensive circle (scoring area or "D"), but may only use their hockey-stick in this circumstance, not their kickers; leg-guards; gloves/hand protectors or any part of the body. Fully protected goalkeepers are prohibited from passing their side's defensive 23 m line during play, unless they are taking a penalty stroke. A goalkeeper who is wearing only a helmet and different coloured shirt may remove the helmet and play anywhere on the field and retains goalkeeping privileges even if they do not have chance to replace the helmet when play returns to their defensive circle. They must however wear a helmet to defend penalty corners and penalty strokes.

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For the purposes of the rules, all players on the team in possession of the ball are attackers, and those on the team without the ball are defenders.

The match is officiated by two field umpires. Traditionally each umpire generally controls half of the field, divided roughly diagonally. These umpires are often assisted by a technical bench including a timekeeper and record keeper.

Prior to the start of the game, a coin is tossed and the winning captain can choose a starting end or start with the ball. The game time is divided into two equal halves of 35 minutes each, with five minutes for half-time. At the start of each half, as well as after goals are scored, play is started with a pass from the centre of the field. All players must start in their defensive half (apart from the player making the pass), but the ball may be played in any direction along the floor. Each team starts with
the ball in one half, and the team that conceded the goal has possession for the restart.

Field players may only play the ball with the face of the stick. Tackling is permitted as long as the tackler does not make contact with the attacker or his stick before playing the ball (contact after the tackle may also be penalised if the tackle was made from a position where contact was inevitable). Further, the player with the ball may not deliberately use his body to push a defender out of the way.

Field players may not play the ball with their feet, but if the ball accidentally hits the feet, and the player gains no benefit from the contact, then the contact is not penalised. Although there has been a change in the wording of this rule from 1 January 2007, the current FIH umpires' briefing instructs umpires not to change the way they interpret this rule.

Obstruction typically occurs in three circumstances – when a defender comes between the player with possession and the ball in order to prevent them tackling; when a defender's stick comes between the attacker's stick and the ball or makes contact with the attacker's stick or body; and also when blocking the opposition's attempt to tackle a teammate with the ball (called third party obstruction).

When the ball passes completely over the sidelines (on the sideline is still in), it is returned to play with a sideline hit, taken by a member of the team whose players were not the last to touch the ball before crossing the sideline. The ball must be placed on the sideline, with the hit taken from as near the place the ball went out of play as possible. If it crosses the back line after last touched by an attacker, a 15 m (16 yd) hit. A 15 m hit is also awarded for offenses committed by the attacking side within 15 m of the end of the pitch they are attacking.
Free hits are awarded when offences are committed outside the scoring circles (the term 'free hit' is standard usage but the ball need not be hit). The ball may be hit or pushed in any direction by the team offended against. The ball must not be intentionally raised with any hit including a free hit. (In previous rules versions hits in the area outside the circle in open play have been permitted but lifting directly from a free hit prohibited). Opponents must move 5 m (5.5 yd) from the ball when a free hit is awarded. A free hit must be taken from within playing distance of the place of the offence for which it was awarded and the ball must be stationary when the free-hit is taken.

As mentioned above, a 15 m hit is awarded if an attacking player commits a foul forward of that line, or if the ball passes over the back line off an attacker. These free hits are taken in line with where the foul was committed (taking a line parallel with the sideline between where the offence was committed, or the ball went out of play). When an attacking free hit is awarded within 5 m of the circle all attackers other than the one taking the hit must also be 5 m away.

In February 2009 the FIH introduced, as a "Mandatory Experiment" for international competition, an updated version of free hit rule. The changes allows a player taking a free hit to pass the ball to themselves. Importantly, this is not a "play on" situation, but to the untrained eye it may appear to be. The player must play the ball any distance in two separate motions, before continuing as if it were a play-on situation. They may raise an aerial or overhead immediately as the second action, or any other stroke permitted by the rules of hockey.

Also, all players (from both teams) must be at least 5 m from any free hit awarded to the attack within the 23 m area. Additionally, no free hits to the attack are permitted within 5m of the circle, so if a free hit is awarded inside this area it must
be dragged back outside this zone. The ball may not travel directly into the circle from a free hit to the attack within the 23 m area without first being touched by another player or being dribbled at least 5 m by a player making a "self-pass". These experimental rules apply to all free hit situations, including sideline and corner hits. National Associations may also choose to introduce these rules for their domestic competitions.

A corner is awarded if the ball goes over the back line after last being touched by a defender, provided they do not play it over the back line deliberately, in which case a penalty corner is awarded. Corners are played by the attacking team and involve a free hit on the sideline 5 m from the corner of the field closest to where the ball went out of play. These restarts are also known as long corners (as opposed to short corner which is an alternative name for the penalty corner).

Short corners begin with five defenders (including the keeper) positioned behind the back line and at least 5 m from the 'insert' position of the ball. All other players in the defending team must be beyond the centre line, that is not in their 'own' half of the pitch, until the ball is in play. Attacking players begin the play standing outside the scoring circle, except for one attacker who starts the corner by playing the ball from a mark 10 m either side of the goal (the circle has a 14.63 m radius). This player puts the ball into play by pushing or hitting the ball to the other attackers outside the circle; the ball must pass outside the circle and then put back into the circle before the attackers may make a shot at the goal from which a goal can be scored. FIH rules do not forbid a shot at goal before the ball leaves the circle after being 'inserted', nor is a shot at the goal from outside the circle prohibited, but a goal cannot be scored at all if the ball has not gone out of the circle and cannot be scored from a shot from outside the circle if it is not again played by an attacking player before it enters the goal.
For safety reasons, the first shot of a penalty corner must not exceed 460 mm high (the height of the "backboard" of the goal) at the point it crosses the goal line if it is hit. However, if the ball is deemed to be below backboard height, the ball can be subsequently deflected above this height by another player (defender or attacker), providing that this deflection does not lead to danger. Note that the "Slap" stroke (a sweeping motion towards the ball, where the stick is kept on or close to the ground when striking the ball) is classed as a hit, and so the first shot at goal must be below backboard height for this type of shot also.

If the first shot at goal in a short corner situation is a push, flick or scoop, in particular the drag flick (which has become popular at international and national league standards), the shot is permitted to rise above the height of the backboard, as long as the shot is not deemed dangerous to any opponent. This form of shooting was developed because it is not height restricted in the same way as the first hit shot at the goal and players with good technique are able to drag-flick with as much power as many others can hit a ball.

A penalty stroke (often referred to as a PS, a flick, or just as a stroke) is awarded when defenders commit a deliberate foul in the circle (also known as the 'D') which deprives an attacker of possession or the opportunity to play the ball, when any breach prevents a probable goal, or if defenders repeatedly "break" or start to run from the back line before a penalty corner has started. The penalty stroke is taken by a single attacker in the circle (all other being beyond the 23m line), against the goalkeeper, and is taken from a spot 6.4 m out, central and directly in front of the goal. The goalkeeper must stand with feet on the goal line, and cannot move them until the ball is played, whilst the striker must start behind the ball and within playing distance of it (in other words he must be able to touch the ball with his stick). On the umpire's whistle, the striker may push or flick the ball at the goal and
goalkeeper attempts to make a 'save'. The attacker is not permitted to play the ball more than once, to fake or dummy the shot, or to move towards or interfere with the goalkeeper once the shot is taken. Hitting or dragging the ball is also forbidden. If the shot is saved, play is restarted with a 15 m hit to the defenders. When a goal is scored, play is restarted in the normal way. If the goalkeeper commits a foul which prevents a goal being scored, for example, preventing a goal with the back or rounded part of his stick, a penalty goal may be awarded; for other fouls by defenders, the result is normally that the stroke is retaken. If the taker commits a foul, it is treated as if the stroke has been saved, and play recommences with a 15 m hit. If another attacker commits a foul, then if a goal is scored it is voided, and the stroke retaken.

According to the current Rules of Hockey 2007 issued by the FIH there are only two criteria for a dangerously played ball. The first is legitimate evasive action by an opponent (what constitutes legitimate evasive action is an umpiring judgment). The second is specific to the rule concerning a shot at goal at a penalty corner but is generally, if somewhat inconsistently, applied throughout the game and in all parts of the pitch: it is that a ball lifted above knee height and at an opponent who is within 5m of the ball is certainly dangerous.

The velocity of the ball is not mentioned in the rules concerning a dangerously played ball. A ball that hits a player above the knee may on some occasions not be penalized, this is in the umpire's discretion. A jab tackle for example, might accidentally lift the ball above knee height into an opponent from close range but at such low velocity as not to be, in the opinion of the umpire, dangerous play. In the same way a high velocity hit at very close range into an opponent, but below knee height, could be considered to be dangerous or reckless play in the view of the umpire, especially when safer alternatives are open to the striker of the ball.
A ball that has been lifted high so that it will fall among close opponents may be deemed to be potentially dangerous and play may be stopped for that reason. A lifted ball that is falling to a player in clear space may be made potentially dangerous by the actions of an opponent closing to within 5m of the receiver before the ball has been controlled to ground – a rule which is often only loosely applied; the distance allowed is often only what might be described as playing distance, 2–3 m, and opponents tend to be permitted to close on the ball as soon as the receiver plays it: these unofficial variations are often based on the umpire's perception of the skill of the players i.e. on the level of the game, in order to maintain game flow, which umpires are in general in both Rules and Briefing instructed to do, by not penalising when it is unnecessary to do so, this is also a matter in the umpire's discretion.

The term "falling ball" is important in what may be termed encroaching offences. It is generally only considered an offence to encroach on an opponent receiving a lifted ball that has been lifted to above head height (although the height is not specified in rule) and is falling. So, for example, a lifted shot at the goal which is still rising as it crosses the goal line (or would have been rising as it crossed the goal line) can be legitimately followed up by any of the attacking team looking for a rebound.

In general even potentially dangerous play is not penalised if an opponent is not disadvantage by it or, obviously, not injured by it so that he cannot continue. A personal penalty, that is a caution or a suspension, rather than a team penalty, such as a free ball or a penalty corner, may be (many would say should be or even must be, but again this is in the umpire's discretion) issued to the guilty party after an advantage allowed by the umpire has been played out in any situation where an
offence has occurred, including dangerous play (but once advantage has been allowed the umpire cannot then call play back and award a team penalty).

It is not an offence to lift the ball over an opponent's stick (or body on the ground), provided that it is done with consideration for the safety of the opponent and not dangerously. For example, a skillful attacker may lift the ball over a defenders stick or prone body and run past them, however if the attacker lifts the ball into or at the defender's body, this would almost certainly be regarded as dangerous.

It is not against the rules to bounce the ball on the stick and even to run with it while doing so, as long as that does not lead to a potentially dangerous conflict with an opponent who is attempting to make a tackle. For example, two players trying to play at the ball in the air at the same time, would probably be considered a dangerous situation and it is likely that the player who first put the ball up or who was so 'carrying' it would be penalised.

Dangerous play rules also apply to the usage of the stick when approaching the ball, making a stroke at it (replacing what was at one time referred to as the "sticks" rule, which once forbade the raising of any part of the stick above the shoulder during any play. This last restriction has been removed but the stick should still not be used in a way that endangers an opponent) or attempting to tackle, (fouls relating to tripping, impeding and obstruction). The use of the stick to strike an opponent will usually be much more severely dealt with by the umpires than offences such as barging, impeding and obstruction with the body, although these are also dealt with firmly, especially when these fouls are intentional: hockey is a non-contact sport.

Players may not play or attempt to play at the ball above their shoulders unless trying to save a shot that could go into the goal, in which case they are permitted to
stop the ball or deflect it safely away. A swing, as in a hit, at a high shot at the goal (or even wide of the goal) will probably be considered dangerous play if at opponents within 5 m and such a stroke would be contrary to rule in these circumstances anyway.

In addition to their colours, field hockey penalty cards are often shaped differently to enable them to be recognized easily. Green cards are normally triangular, yellow cards rectangular and red cards circular.

Unlike football, a player may receive more than one green or yellow card. However they cannot receive the same card for the same offence (for example two yellows for dangerous play), and the second must always be a more serious card. In the case of a second yellow card for a different breach of the rules (for example a yellow for deliberate foot, and a second later in the game for dangerous play) the temporary suspension would be expected to be of considerably longer duration than the first. However, local playing conditions may mandate that cards are awarded only progressively, and not allow any second awards.

Umpires may also advance a free-hit by up to 10 m for dissent or other misconduct after a penalty has been awarded; or, if the free-hit would have been in the attacking 23 m area, upgrade the penalty to a penalty corner.

The teams' object is to play the ball into their attacking circle and, from there, hit, push or flick the ball into the goal, scoring a goal. The team with more goals after two 35-minute halves wins the game. The playing time may be shortened, particularly when younger players are involved, or for some tournament play.

Conditions for breaking ties are not laid down in the rules of hockey. In many competitions (such as regular club competition, or in pool games in tournaments
such as the Olympics), a tied result stands and the overall competition standings adjusted accordingly. Where tie-breaking is required, many associations will follow the procedure laid down in FIH tournament regulations which mandate 7.5 minutes each way of "golden goal" or "sudden death" extra time (i.e. the game ends as soon as one team scores). If scores are still level, then the game will be decided with penalty strokes, in much the same way that association football penalty shoot outs are conducted.

Other competitions may use alternative means of breaking a tie, for example, an extended period of golden goal extra time with a progressive reduction in the number of players each team can have on the field. The number of players is usually reduced to seven a side, and they play for ten minutes. At the end of this ten minutes, if there is still a tie, then they play another round of the ten-minute seven versus seven. After that, if the tie remains, the teams compete in penalty strokes. In the event that after two rounds of penalty strokes the tie still remains, the game goes to sudden-death penalty strokes to determine a winner. However, most games will end after one round of the seven versus seven, unless it is a game in which there needs to be a winner.

The FIH implemented a two-year rules cycle with the 2007–08 edition of the rules, with the intention that the rules be reviewed on a two-yearly basis. The 2009 rulebook was officially released in early March 2009 (effective 1 May 2009), however the FIH published the major changes in February. The current rule book is effective from 1 January 2011.

The FIH has adopted a policy of including major changes to the rules as "Mandatory Experiments", showing that they must be played at international level,
but are treated as experimental and will be reviewed before the next rulebook is published and either changed, approved as permanent rules, or deleted.

Recent examples of such experiments include a fixed 2-minute suspension for a green card and a (limited) ability to request video umpiring decisions.

There are sometimes minor variations in rules from competition to competition; for instance, the duration of matches is often varied for junior competitions or for carnivals. Different national associations also have slightly differing rules on player equipment.

The new Euro Hockey League has made major alterations to the rules to aid television viewers, such as splitting the game into four quarters, and to try to improve player behaviour, such as a two-minute suspension for green cards—the latter was also used in the 2010 World Cup. In the United States, the NCAA has its own rules for inter-collegiate competitions; high school associations similarly play to different rules, usually using the rules published by the National Federation of State High School Associations (NFHS). This article assumes FIH rules unless otherwise stated. USA Field Hockey produces an annual summary of the differences.

In the United States, the games at the junior high level consist of two 25-minute halves, while the high school level consists of two 30 minute halves. Many private American schools play 25-minute halves, and some have adopted FIH rules rather than NFHS rules. Players are required to wear mouth guards and shin guards in order to play the game. Also, there is a newer rule requiring certain types of sticks be used. In recent years, the NFHS rules have moved closer to FIH, but in 2011 a new rule requiring protective eyewear was introduced for the 2011 Fall season. The
'cage style' goggles favored by US high school lacrosse and permitted in high school field hockey is not permitted under FIH rules.

Each player carries a "stick", normally between 36–37 inches long, but they make them shorter and longer, and are traditionally made of wood but now often made with fibreglass, kevlar and carbon fibre composites, with a rounded handle, flattened on the left side and with a hook at the bottom. Metal is forbidden from use in hockey sticks.

There was traditionally a slight curve (called the bow, or rake) from the top to bottom of the face side of the stick and another on the 'heel' edge to the top of the handle (usually made according to the angle at which the handle part was inserted into the splice of the head part of the stick), which assisted in the positioning of the stick head in relation to the ball and made striking the ball easier and more accurate.

The hook at the bottom of the stick was only recently the tight curve (Indian style) that we have nowadays. The older 'English' sticks had a longer bend, making it very hard to use the stick on the reverse. For this reason players now use the tight curved sticks.

The handle makes up the about the top third of the stick. It is wrapped in a grip similar to that used on tennis racket. The grip may be made of a variety of materials, including chamois leather, which many players think improves grip in the wet.

It was recently discovered that increasing the depth of the face bow made it easier to get high speeds from the drag flick and made the stroke easier to execute. At first, after this feature was introduced, the Hockey Rules Board placed a limit of
50 mm on the maximum depth of bow over the length of the stick but experience quickly demonstrated this to be excessive. New rules now limit this curve to under 25 mm so as to limit the power with which the ball can be flicked.

The ball is spherical, hard and made of plastic (sometimes over a cork core) and is often covered with indentations to reduce hydroplaning that can cause an inconsistent ball speed on wet surfaces.

Many players wear mouth guards to protect teeth and gums from impacts from the ball or stick. Some local rules require their use. Many players also wear shin guards, and again these may be required equipment in some areas. Many players wear astro gloves: a padded glove which is designed to protect hands from abrasion from contact with the ground (especially that of sand-based astro pitches), and some even protect against impact from a ball or a stick. A few competitions require goggles to protect the eyes. Defenders may sometimes use short corner masks; these are designed to reduce the impact of a drag flick from short corners, though they do not provide guaranteed protection.

The 2007 rulebook has seen major changes regarding goalkeepers. A fully-equipped goalkeeper must wear a helmet, leg guards and kickers. Usually they wear extensive additional protective equipment including chest guards, padded shorts, heavily padded hand protectors, groin protectors, neck guards, arm guards, and like all players, must carry a stick. However, such a player may not cross the 23 m line, the sole exception to this being if the goalkeeper is to take a penalty stroke at the other end of the field, when the clock is stopped. The goalkeeper can also remove their helmet for this action. However, if the goalkeeper elects to wear only a helmet (and a different coloured shirt), they may cross the 23 m line if they have removed their helmet (and placed it safely off the field of play). If play returns
to the circle without them having opportunity to replace the helmet, this player still has "goalkeeping privileges", that is, they are not limited to using their stick to play the ball whilst it is in the circle. The helmet must be worn whilst defending penalty corners and penalty strokes.

It is now also possible for teams to have a full eleven outfield players — and no goalkeeper at all. No player may wear a helmet or other goalkeeping equipment, nor will any player be able to play the ball other than with their stick. This may be used to offer a tactical advantage, or to allow for play to commence if no goalkeeper or kit is available.

The basic tactic in hockey, as in association football and many other team games, is to outnumber the opponent in a particular area of the field at a moment in time. When in possession of the ball this temporary numerical superiority can be used to pass the ball around opponents so that they cannot effect a tackle because they cannot get within playing reach of the ball and to further use this numerical advantage to gain time and create clear space for making scoring shots on the opponent's goal. When not in possession of the ball numerical superiority is used to isolate and channel an opponent in possession and 'mark out' any passing options so that an interception or a tackle may be made to gain possession. Highly skilful players can sometimes get the better of more than one opponent and retain the ball and successfully pass or shoot but this tends to use more energy than quick early passing.

Every player has a role depending on their relationship to the ball if the team communicates throughout the play of the game. There will be players on the ball (offensively-ball carriers; defensively-pressure, support players, and movement players.
The main methods by which the ball is moved around the field by players are a) passing b) pushing the ball and running with it controlled to the front or right of the body and 3) "dribbling"; where the player controls the ball with the stick and moves in various directions with it to elude opponents. To make a pass the ball may be propelled with a pushing stroke, where the player uses their wrists to push the stick head through the ball while the stick head is in contact with it; the "flick" or "scoop", similar to the push but with a additional arm and leg and rotational actions to lift the ball off the ground; and the "hit", where a swing at ball is taken and contact with it is often made very forcefully, causing the ball to be propelled at velocities in excess of 70 mph. In order to produce a powerful hit, usually for travel over long distances or shooting at the goal, the stick is raised higher and swung with maximum power at the ball, a stroke sometimes known as a "drive".

Tackles are made by placing the stick into the path of the ball or playing the stick head or shaft directly at the ball. To increase the effectiveness of the tackle, players will often place the entire stick close to the ground horizontally, thus representing a wider barrier. To avoid the tackle, the ball carrier will either pass the ball to a teammate using any of the push, flick, or hit strokes, or attempt to maneuver or "drag" the ball around the tackle, trying to deceive the tackler.

In recent years, the penalty corner has gained importance as a goal scoring opportunity. Particularly with the technical development of the drag flick. Tactics at penalty corners to set up time for a shot with a drag flick or a hit shot at the goal involve various complex plays, including multiple passes before a deflections towards the goal is made but the most common method of shooting is the direct flick or hit at the goal.
At the highest level, hockey is a fast-moving, highly skilled sport, with players using fast moves with the stick, quick accurate passing, and hard hits, in attempts to keep possession and move the ball towards the goal. Tackling with physical contact and otherwise physically obstructing players is not permitted, some of the tactics used resemble football (soccer), but with greater ball speed.

With the 2009 changes to the rules regarding free hits in the attacking 23m area, the common tactic of hitting the ball hard into the circle was forbidden. Although at higher levels this was considered tactically risky and low-percentage at creating scoring opportunities, it was used with some effect to 'win' penalty corners by forcing the ball onto a defender's foot or to deflect high (and dangerously) off a defender's stick. The FIH felt it was a dangerous practice that could easily lead to raised deflections and injuries in the circle, which is often crowded at a free-hit situation, and outlawed it.

Formations provide structure to a hockey team on the pitch. They help players understand and share the defensive and attacking responsibilities. Although higher level teams may select from a wide range of formations, teams containing inexperienced players or teams which see frequent changes to their players are likely to select from a more limited range of formations such as 4–3–3, 5–3–2 and 4–4–2. (The numbers refer to the number of players arrayed across the pitch, starting in front of the goalkeeper with the defenders, then midfield and then attack.) The 2–3–5 formation, used predominantly in Australia from relatively lowly interschool to professional interstate competitions, provides common language for many players and helps explain why "centre half" is often a name used for a player in the centre of a defense with four or five players.
Because hockey teams have one goalkeeper plus ten outfield players as does association football (soccer), there are many common formations between the two sports. See formation (football).

One important difference in modern hockey is the absence of an offside rule. This allows attackers (often a lone attacker) to play well up the pitch, stretching the opponents' defense and using the large spaces to be found there. To counter this, defenses usually keep a matching number of defenders near those attackers. This can frequently lead to formations such as 1–4–4–1 which is an adaptation of 4–4–2.

When play begins, it is common for the midfield and defensive positions to take a diagonal approach. When the ball is played on the right side of the field, the defensive players on the right side move up field. Consequently, players on the left side would stay back until the ball shifts to their side of the field. This formation allows for quicker recovery in the event of a missed play.

The biggest two field hockey tournaments are undoubtedly the Olympic Games tournament, and the Hockey World Cup, which is also held every 4 years. Apart from this, there is the Champions Trophy held each year for the six top-ranked teams. Field hockey has also been played at the Commonwealth Games since 1998. Amongst the men, India has won 8 Olympic golds and Pakistan lead in the world cup having lifted it 4 times. Amongst the women, Australia has 3 Olympic golds while Netherlands has clinched the World Cup 6 times. The Sultan Azlan Shah Hockey Tournament, held annually in Malaysia, is becoming a prominent Hockey Tournament where teams from around the world participate to win the cup.

India and Pakistan dominated men's hockey until the early 1980s, winning four of the first five world cups, but have become less prominent with The Netherlands, Germany, New Zealand, Australia and Spain gaining importance since the late
1980s. Other notable men's nations include Argentina, England (who combine with other British "Home Nations" to form the Great Britain side at Olympic events) and Korea.

The Netherlands was the predominant women's team before hockey was added to Olympic events. In the early 1990s, Australia emerged as the strongest women's country although retirement of a number of players weakened the team. Other important women's teams are India, China, Korea, Argentina and Germany.

The history of the game of hockey has its roots well laid in the world’s early civilizations. One of the oldest known sports, the game is believed to be in existence about 1200 years before the Ancient Games of Olympia. Right from Arabs, Greeks, Romans, Persians to Ethiopians, everyone played a variation of the game. While some played it just for recreation, the others were of the opinion that hockey would make them better warriors. Even though many ancient civilizations played hockey in different variations, the modern game of hockey, the field hockey, developed in the British Isles. A popular English school game, hockey was introduced in India by British Army regiments and the game soon found to be favor among the native Indians. Spreading internationally, the popularity of the game was especially effervescent in India and Pakistan. It was during this time that the London Hockey Association was formed and the rules for playing hockey were standardized. In 1924, the International Hockey Federation (FIH) was formed and three years later, the international Federation of Women’s Hockey followed.
Talking about hockey in India, the first hockey club came up in Calcutta in 1885-86 and soon Bombay and Punjab followed suit. Making its Olympic debut at the 1928 Amsterdam Games, Indian hockey team cruised home to its first Olympic gold, without conceding a single goal. The hallmark of this ruthless domination was the wizardry of Indian hockey legend - Dhyan Chand, who mesmerized the Amsterdam crowd with his dazzling skills. From 1928 to 1956, the Indian hockey juggernaut won six straight Olympic gold medals, while winning 24 consecutive matches.

This was the golden era of Indian hockey, when India loomed large in world hockey and produced some of the finest players the game has ever seen. During this dominance, one name that clearly comes to mind is Balbir Singh. For almost three decades, Indian team had about five players with the same name. The first Balbir Singh played with the great Indian teams of 1948, 1952 and 1956. He reached the pinnacle of success at Helsinki in 1952 when he scored five goals in a 6-1 gold medal victory over the Netherlands.

The Indian stranglehold over the Olympic hockey gold came to an end, when Pakistan defeated India in the final of the 1960 Rome Olympics. However, the record created by India is likely to stand strong through ages, as no other country has ever managed to come close to it, leave about beating it. Talking about some of the legendary and outstanding players of Indian hockey, Dhyan Chand, K.D. Singh, Dhanraj Pillay and Dilip Tirkey are some names that come to mind instantly. Thanks to their exceptional gaming technique and enduring enthusiasm, the position of India in the field of hockey achieved new heights.
The game of cricket has had a long and complicated history in the West Indies. Originally imported to the West Indies as an agent of control and reaffirmation, the game steadily evolved into a cultural institution radically opposed to the original intentions of those who conspired for its import. The exact role cricket has played in terms of resistance to the postcolonial hegemonic order in the West Indies is widely debated. Much of this debate has to do with the variety of ways in which cricket culture has been allowed to progress according to specific histories of individual locales. Because of the diverse national histories in the region, styles of cricket vary a great deal from one island to the next, as does the cultural work each style performs. One must therefore question the usefulness in talking in-depth about West Indian cricket in ways that suggest the game developed throughout the region in a singular fashion. Having set forth this advisory, here I will attempt to point up some of the larger issues belonging to cricket culture in the West Indies which may or may not be specific to any single locale. Discussion of these larger issues is merely meant to stimulate conversation on the topic of cricket and its relatedness to postcolonial discourse. The game of cricket was exported from England to all of its colonies, including those in Asia and Africa, during the nineteenth century as a way to reinforce a hegemonic cultural order in the face of the emancipation of England's slave population. A brief history of the state of affairs in the West Indies upon cricket's arrival will help explain why a re-commitment to England's Victorian ideals became necessary.

English slaves in the West Indies were emancipated in the year 1838. Emancipation brought to an end an institution that had helped England bring one quarter of the world's land mass under British rule. In the West Indies during this time, the two largest groups were the newly-freed Africans, who made up the labouring class,
and the white plantation owners who formed the islands' aristocracies. The African population prior to slavery not only performed the role of wealth-makers for the white, land-owning plantocracy, but also provided a metaphorical blackness onto which the plantocracy could project their whiteness. The resulting juxtaposition went a long way in alleviating the anxiety of the white land-owners who were constantly reminded of their location at the farthest reaches of the English empire, of civilization. For the planter class, wealth was not enough. There was the constant need to be reminded that they were a distinct race separate from the Africans in their midsts. Through the use of stereotypes and other forms of hegemonic control, the plantocracy learned to survive life at the edge of civilization. White was much whiter when juxtaposed against the black population.

Once the slaves were emancipated, cricket became the new cultural institution by which England sought to socialize the populations and reinforce hierarchies in its colonies. Cricket was imported to all of England's colonies, not only the West Indies. In The Tao of Cricket, Ashis Nandy explains the cultural evolution of cricket in India:

The age was more an affirmation of the superiority of controlled self-indulgence and controlled flair or style, combined with reaffirmation of a moral universe. The nineteenth century was also the period when the various post-Utilitarian theories of progress began to be applied to the new colonies of Britain. The emerging culture of cricket came in handy to those using these theories to hierarchize the cultures, faiths and societies which were, one by one, coming under colonial domination.

Cricket operated according to a Victorian model in which cultivated style and carefully defined notions of grace under pressure worked to keep most people out of the sport. Terms such as sportsmanship, dash, courage and temperament were important to cricket's Victorian ethos. Cricket was through and through a
"gentleman's" game, and all others were excluded by their inability to demonstrate an understanding of cricket's image of the ideal Englishman.

England used its military forces to export the game to the West Indies. Newspaper accounts written during the early nineteenth-century reveal how matches were staged between English military personnel. Needless to say, West Indian planters, fearful of changing social structures in the islands, welcomed cricket in the West Indies and by 1840 many were staging cricket matches on their plantations. Cricket allowed the plantocracy to pledge its support for British cultural values, concepts of social progress, moral codes, behavioral standards and attitudes towards social rankings. Blacks who were exposed to cricket on plantations where they made up the indentured labor pool also began to--either in whole or in part--espouse these views.

Despite the actions of the plantocracy, by the end of the nineteenth-century, a mercantile class had begun to dominate West Indian economic and cultural institutions. This new middle-class began forming cricket clubs which were aimed at countering the new image of social unity that cricket was beginning to suggest through its widespread popularity. Cricket clubs were formed throughout the West Indies. Each club drew its membership based on specific racial characteristics, and potential members knew to which club they would be invited to join without being told. There were separate clubs for aristocratic whites, merchant-class whites, coloreds (mulattos), and blacks. Racial integration for the most part during this time was not allowed.

Much of the recent scholarship surrounding West Indian cricket, writes Beckles, addresses the question of cricket's "cultural imperatives". The question Beckles
and others attempt to answer is whether or not cricket served the needs of the colonial empire England by re-inscribing its Victorian ethos on the newly-freed black West Indians, and if so, to what extent. Those who view cricket as revolutionary prefer the idea of cricket as "an ideological weapon of subversive, anti-colonial, creole nationalism". Cultural critics C. L. R. James, Ashis Nandy and Brian Stoddart illustrate three different opinions about the role of colonial cricket.

I. C. L. R. James

C. L. R. James, in his seminal work Beyond a Boundary, focuses on aesthetics and takes the position that the style of play of black West Indians is itself a form of "social resistance against British colonialism" (Graves). In Boundary, James writes about the "cutting" ("a batting stroke in which the ball is hit toward the off-side in an arc between cover and third man, with the bat held at an angle closer to horizontal than perpendicular") style of West Indian cricketers.

By that time I had seen many fine cutters, one of them, W. St. Hill, never to this day surpassed. . . . Phidias, Michelangelo, Burke. Greek history has already introduced me to Phidias and the Parthenon; from engravings and reproductions I had already begun a life-long worship of Michelangelo; and Burke, begun as a school chore, had rapidly become for me the most exciting master of prose in English ... I knew already long passages of him by heart. There in the very center of this was William Beldham and his cut (6).

James equates the cultural value of cricket to great works of Western art, and the omnipotence of style of a great cutter he likens to the artistic style of Michelangelo and Burke."The stylistic specificity of 'cutting,'" writes Benjamin Graves,"is of some relevance here; . . . the point is that the shot is very difficult ... ;a gesture of mastery that serves little if any practical purpose. To James, the 'cut' signifies a
belligerent affront to the exigencies of colonial rule ... a stylization of emancipatory ambitions."

II. Ashis Nandy

Nandy, like James, recognizes cricket's revolutionary potential, but he identifies this potential in the "schizophrenic" nature of the game. According to Nandy, it was the "moral posture of the superiority and self-control of the gentleman cricketer" that created the spaces for those outside the hegemony to critique the English for not living up to their own standards of morality (7).

[Cricket] allowed the Indians to assess their colonial rulers by western values reflected in the official philosophy of cricket, and to find the rulers wanting. . . . The assessment thus anticipated the nationalist and particularly Gandhian critiques of the British which judged the everyday Christianity of the British in India with reference to philosophical Christianity (7).

The heroic ideal imputed to cricketers by Victorians in England combined with the pagan desire to win at all costs to create in cricket culture a kind of schizophrenia. The marginalized people in England's colonies recognized the split caused by this psychotic condition inherent in cricket culture and used it as the point of attack for its critique of colonial England.

III. Brian Stoddart

Stoddart, like Nandy, recognizes the significance in cricket's contradictory ideals. While Nandy identifies this contradiction as the site of cultural resistance, Stoddart focuses on an alternative view that points up the power of cricket as a tool deployed by the hegemonic order. Writing about two members of the Spartan club (a club composed of upwardly-mobile coloreds), Graham Trent Cumberbatch and
H. M. Cummins, Stoddard points out a more complex reaction to racial discrimination:

On the one hand, men like Cumberbatch and Cummins became ardent enthusiasts of the cricket ideology, attempting to share the cultural values of the whites with whom they competed both in cricket and in society. On the other hand, they developed a strong desire to win, to beat the representatives of those who displayed prejudice. The essential paradox in this dual position is clear. While trying to emulate the ruling cricket and social values, Spartan members had also to deal with the inequalities contained in those ruling values. On the whole, Spartan men resolved to accept the inequalities, an excellent demonstration of Gramsci's theory of hegemony.

Stoddart views early cricket not as a revolutionary force, but as a white cultural re-inscription of black West Indian culture. While there were isolated instances of black cultural resistance, writes Stoddart, "for the most part, the colonial elites carried on this process [of colonization] unhindered, controlling those agencies . . . central in the creation of hegemonic cultural values".

Cricket in today's global environment has been altered a great deal by new technologies, capitalism and revised geo-political landscapes. Because of the intrinsic value of cricket as a repository of culture, postcolonial scholars and fans have looked to this new form of global cricket in an attempt to understand its full implications. Several sites on the World Wide Web such as CricInfo offer weekly and/or daily information and news items about various national cricket teams. The central role England has maintained in global cricket for well over a hundred years is now being relinquished as her former colonies enter the international and
technological marketplace. In the past, England was the primary provider of international competition for many of these countries. As England's Victorian ideal withers under the heat of international play, so too do the theories of nationhood that are tied to, or somehow dependent upon, cricket's age-old Victorian ideal. James's is one such theory, as Kenneth Surin explains:

The claim that cricket is "a means of national expression" is just untenable, especially in the last two decades or so, when capitalism has moved into a globally integrated phase. Cricket, as a commercial sport, has had to respond to this transformation as a condition of its financial survival. This shift is especially evident in the way in which the modern (one might as well say "post-modern") West Indian professional cricketer now earns a living, namely, by playing several "seasons" in the course of a single year: the domestic West Indian season, and English summer of county cricket, a winter tour abroad, and if this can be squeezed in, maybe a spell playing for a state team during the Australian summer.

Once professional cricketers become professional athletes who tour the world in pursuit of ever-increasing financial rewards, their faces become more recognizable in the various countries where they play and -- most importantly -- their style of play becomes less distinctive. This latter point is the result of international players who routinely play against one another and who have more opportunity than in previous ages to imitate the best aspects of one another's style. Adds Surin, "Cricketing styles become homogenized in consequence of this 'internationalization' of the game, and even the 'subjectives' of cricketers becomes fungible"

Nandy, like Surin, also bemoans what has become of cricket in the modern world. As is usually the case with Nandy, he focuses on the role of cricket as harbinger of
a cultural ideal. Once cricketers resort to bodylining ("fast leg-theory bowling, especially as used by the England fast bowlers during the 1932-3 Test series in Australia"); bowling close to the batsman's body) and other immoral acts in order to win, the real victory is already lost (Rundell 20). The value of cricket for Nandy is the cricketer's constant search for an ideal behavior. When cricketers scoff at seemingly trite notions of good sportsmanship, the space between the ideal and the actual identified by Nandy never materializes and the opportunity for cultural empowerment is closed off."When Australian wicket-keeper Rodney Marsh," writes Nandy, "openly says that Australia should try to beat the stronger West Indian side by reverting, if necessary, to being 'ugly Australians,' he is being true to the anti-culture of consumable sport" (117).

Despite the variance of opinion about the past and future role of cricket, the game remains a favorite pastime in former English colonies and does battle with soccer, another British import, as the most popular sport in the world.

**Cricket** is the most popular sport in India, it is played by many people in open spaces throughout the country though it is not the nation's official national sport (a distinction held by **field hockey**). The **India national cricket team** won the 1983 **Cricket World Cup**, the 2007 **ICC World Twenty20**, and the 2011 **Cricket World Cup**, and shared the 2002 **ICC Champions Trophy** with Sri Lanka. Domestic competitions include the **Ranji Trophy**, the **Duleep Trophy**, the **Deodhar Trophy**, the **Irani Trophy** and the **Challenger Series**. In addition, BCCI conducts the **Indian Premier League**, a **Twenty20** competition.

The entire history of **cricket in India** and the sub-continent as a whole is based on the existence and development of the British Raj via the **East India Company**. In 1721, the first definite reference to cricket being played anywhere in the sub-
continent is a report of English sailors of the East India Company playing a game at Cambay, near Baroda. The Calcutta Cricket and Football Club is known to be in existence by 1792, but was possibly founded more than a decade earlier. In 1799, another club was formed at Seringapatam in south India after the successful British siege and the defeat of Tipu Sultan. In 1864, a Madras v. Calcutta match was arguably the start of first-class cricket in India. The most important fixture in the 19th century was the Bombay Presidency Match which evolved, first, into the Bombay Triangular and then into the Bombay Quadrangular. The match was first played in 1877 and then intermittently for several seasons until finally being given first-class status in 1892-93.

An English team led by George Vernon in 1889-90 was the first foreign team to tour India but none of the matches that it played are considered first-class. First-class cricket definitely began in the 1892-93 season with two Europeans v Parsees matches at Bombay (match drawn) and Poona (Parsees won by 3 wickets). In the same season, Lord Hawke captained an English team that played four first-class matches including a game against "All India" on 26–28 January 1893.

The Ranji Trophy was launched as India's national championship following a meeting of the Board of Control for Cricket in India (BCCI) in July 1934 and the competition began in the 1934-35 season. The trophy was donated by the Maharajah of Patiala but named after KS Ranjitsinhji ("Ranji"), even though he barely played any of his cricket in the country. Ranji had died on 2 April 1933. The first winner was Bombay.

The major and defining event in the history of Indian cricket during this period was the Partition of India following full independence from the British Raj in 1947.
An early casualty of change was the Bombay Quadrangular tournament which had been a focal point of Indian cricket for over 50 years. The new India had no place for teams based on ethnic origin. As a result, the Ranji Trophy came into its own as the national championship. The last-ever Bombay Pentangular, as it had become, was won by the Hindus in 1945-46.

One team totally dominated Indian cricket in the 1960s. As part of 15 consecutive victories in the Ranji Trophy from 1958-59 to 1972-73, Bombay won the title in all ten seasons of the period under review. Among its players were Farokh Engineer, Dilip Sardesai, Bapu Nadkarni, Ramakant Desai, Baloo Gupte, Ashok Mankad and Ajit Wadekar.

In the 1961-62 season, the Duleep Trophy was inaugurated as a zonal competition. It was named after Ranji's nephew, Kumar Shri Duleepsinhji (1905–59). With Bombay in its catchment, it is not surprising that the West Zone won six of the first nine titles.

Bombay continued its dominance of Indian domestic cricket with only Karnataka and Delhi and some other teams which were able to mount any kind of challenge during this period.

India enjoyed two international highlights. In 1971, they won a Test series in England for the first time ever, surprisingly defeating Ray Illingworth's Ashes winners. In 1983, again in England, India were surprise winners of the 1983 Cricket World Cup.

The BCCI tinkered with the Duleep Trophy in the 2002-03 season. The original zonal teams were replaced by five new teams called Elite A, Elite B, Elite C, Plate A and Plate B. These teams were constructed from the new Elite Group and Plate
Group divisions which had been introduced into the Ranji Trophy that season. However, this format lasted for only one season as it was felt that the new teams lacked a sense of identity. From the 2003-04 season, the five original zonal teams competed along with a sixth guest team which was a touring foreign team. The first guest team was England A in 2003-04.

Mumbai (formerly Bombay) has continued its dominance of the domestic scene into the 21st century by winning the Ranji Trophy five times in the first decade.

India won the inaugural ICC World T20 in 2007. India was the first Sub-continental team to win a Test match at the WACA in January 2008 against Australia.

India won the Cricket World Cup in 2011, the first time since 1983 - they beat Sri Lanka in the final held in Mumbai.

International cricket in India generally does not follow a fixed pattern. For example, the English schedule under which the nation tours other countries during winter and plays at home during the summer. Generally, there has recently been a tendency to play more one-day matches than Test matches. Cricket in India is managed by the Board of Control for Cricket in India (BCCI), the richest cricket board in the cricket world. Indian International Cricketing Squad has also provided some of the greatest players to the world. Indian cricket has a rich history. The Indian national team is currently ranked the no. 2 team in test cricket as well as the no.1 team in one day international cricket.

Domestic Competitions

- **BCCI Corporate Trophy** - BCCI have set up a 12 team inter-corporate tournament which will involve all the top Indian cricketers. The tournament
will involve 50-over-a-side matches with the winner picking up Rs 1 crore and the runner up getting Rs 50 lakh.

- **Irani Trophy** - The Trophy tournament was conceived during the 1959-60 season to mark the completion of 25 years of the Ranji Trophy championship and was named after the late Z.R. Irani, who was associated with the Board of Control for Cricket in India (BCCI) from its inception in 1928, till his death in 1970 and a keen patron of the game. The first match, played between the Ranji Trophy champions and the Rest of India was played in 1959-60. For the first few years, it was played at the fag end of the season. Realising the importance of the fixture, the BCCI moved it to the beginning of the season. Since 1965-66, it has traditionally heralded the start of the new domestic season. The Irani Trophy game ranks very high in popularity and importance. It is one of the few domestic matches that is followed with keen interest by cricket lovers in the country. Leading players take part in the game which has often been a sort of selection trial to pick the Indian team for foreign tours.

- **NKP Salve Challenger Trophy** - Started as the Challenger series by the Board of Control for Cricket in India in 1994-95 and later named as NKP Salve Challenger Trophy in 1998-99, the tournament features 3 teams: India senior, India A and India B playing each other. They were later renamed India Blue, India Red and India Green respectively. This competition also marked as the platform of return for some big names like Sachin Tendulkar and Sourav Ganguly in 2005-06 season after they battled injury and form respectively. The tournament features the top 36 players from across India and is also the most popular domestic structure after IPL.
• **Ranji Trophy** - Founded as 'The Cricket Championship of India' at a meeting of the *Board of Control for Cricket in India* in July 1934. The first Ranji Trophy fixtures took place in the 1934-35 season. *Syed Mohammed Hadi* of *Hyderabad* was the first batsman to score a century in the tournament. The Trophy was donated by H.H. Sir Bhupendra Singh Mahinder Baha-dur, Maharajah of Patiala in memory of His late Highness Sir Ranjitsinhji Vibhaji of Nawanagar. In the main, the Ranji Trophy is composed of teams representing the states that make up India. As the political states have multiplied, so have cricket teams, but not every state has a team. Some states have more than one cricket team, e.g. Maharashtra and Gujarat. There are also 'odd' teams like Railways, and Services representing the armed forces. The various teams used to be grouped into zones - North, West, East, Central and South - and the initial matches were played on a league basis within the zones. The top two (until 1991-92) and then top three teams (subsequent years) from each zone then played in a national knock-out competition. Starting with the 2002-03 season, the zonal system has been abandoned and a two-division structure has been adopted with two teams being promoted from the plate league and two relegated from the elite league. If the knockout matches are not finished they are decided on the first-innings lead.

• **Duleep Trophy** - The Duleep Trophy competition, a first-class competition, was started by the *Board of Control for Cricket in India* in 1961-62 with the aim of providing a greater competitive edge in domestic cricket - because, apart from the knock-out stages of the Ranji Trophy, that competition proved predictable, with Bombay winning for fifteen consecutive years. The Duleep was also meant to help the selectors in assessing form. The original format was that five teams, drawn from the five zones, play each other on a knock-
out basis. From the 1993-94 season, the competition has been converted to a league format.

- **Vijay Hazare Trophy** - named after the prolific Indian batsman, the Vijay Hazare Trophy was started in 2002-03 as an attempt to bring the limited-overs game among a greater audience. The competition involves state teams from the Ranji trophy plates battling out in a 50-over competition, much on the lines of Ford Ranger Cup of Australia and Friends Provident Trophy of England. Since its conception, Tamil Nadu and Mumbai have won the trophy twice each. It is also dubbed as the Premier Cup by BCCI. It now joins Deodhar Trophy as the second one-day competition of Indian domestic circuit.

- **Deodhar Trophy** - Started in 1973-74 by Board of Control for Cricket in India, it is the current one-day cricket competition in Indian domestic cricket. 5 zonal teams - North zone, South zone, East zone, West zone and Central zone feature in the competition. North zone have won this competition 11th time. It is also called All-Star Series due to some big names representing their Zonal sides in the one-day fixtures.

- **Inter-State T20 Championship** - After India became another member of the ICC Twenty20 and played its first international T20 against South Africa, BCCI launched its own state structure in 2006-07 season, with 27 Ranji teams divided in 5 Zones. The final was played between Punjab and Tamil Nadu, which the latter won by 2 wickets and 2 balls remaining, thereby becoming the only ever winner of this series. In this series, Rohit Sharma also became the only ever Indian to register a T20 century for Mumbai
against Gujarat. The competition was later replaced by a franchise-based IPL.

- **Indian Premier League** - In response to the rival ICL, the BCCI started the Twenty20 Indian Premier League (known as the IPL). This League has been launched by BCCI have received support from all the other Cricket Boards, and International Players could be drafted into City-based Franchises. The game has been likened to Baseball with crowd participation encouraged more strongly than in other forms of the game. It has been greatly acknowledged by people and has made huge profits.

- **Syed Mushtaq Ali Trophy** - To be played for the first time in the 2008-09 season, this will be the first of its kind zonal T20 championship and the third overall in the Indian cricket season, which would see Ranji teams divided along zonal lines into two groups with the tournament culminating in the All India T20 final between the winners of the two groups for the Syed Mushtaq Ali Trophy. Launched after the success of the IPL and the need of the BCCI to search for more talent in the growing regions of cricket.

Even in the most primitive tribes there are some formulations about the nature tribes there are some formulations about the nature of the self and the nature of the mind. In fact, folk tales, mythology, and proverbs, in all languages of the world, reveal the interest of main himself and his knowledge about his desires and frustrations and his achievements and failures. Primitive animism is itself an evidence of the interest in his relations to other persons and objects. The essence of animism is that every

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material body whether it is the sun or the star, the river or the mountain, the plant or the animal, contains a second being within it, which is of a substance different from the material body. Thus animism postulates some the tribal man to understand the behavior of all the beings on earth and in the sky. Further the men of medicine of the ancient as well as the modern tribal groups are masters in the techniques of suggestion and hypnosis. The mantravadin of the village is a post-master in the technique of hypnosis though modern science has learnt about hypnosis only within the last hundred years. It is a familiar fact that when the daughter-in-law of the house behaves in a hysterical fashion and becomes violent, the mantravadin of the neighborhood is invited and with his chants and rituals he not only drive out the demon or the ghost, who is supposed to have been in possession of the woman, but also arranges skillfully some concrete evidence of the departure to the demon or ghost buy a loud sound of a stone dropping in the tape or a well in the neighborhood.

Psychology may be broadly defined as the science of mind. The word is derived from the Greek and means the science of the soul. In ancient and medieval times psychology was regarded as a branch of philosophy dealing with the principle of life, sensation, intelligence and conation, especially in human beings. It was essentially speculative and static, in contrast to the modern practical and dynamic study of psychology. The chief psychological theses of the scholastics included the unity and unifying power of the soul, it’s essential connection with the body, its spirituality and immortality, and freedom of the will, and the dependence of the intellect upon sense data. Modern psychology, is, however, regarded as a branch of experimental biology. The kind of definition now generally behavior and thought. Its predominantly experimental character has led to a decline of interest in such purely speculative questions as that of the relation of mind to body. It is known that mental process are related to changes in the nervous system, but the experimental psychologist is inclined
to be little interested in whether this relation is one of parallelism or mutual interaction. The tendency of physiological psychology has regarded both psychical and physiological events as different aspects of the same series of events. On the other hand, there all still exponents of the integrationist’s view that psychical events act on the nervous system and are acted on by events in the nervous system. Generally the experimental psychologist is impatient of such problems, which affect little if at all his actual observation, and he is inclined to suspect that the existence of such questions is merely due to the inadequacy of language to express relationships of an order so remote from the problems of practical life with which language was designed to deal.

The ritualism in all societies is also an evidence of the interest of man in psychology. Great significance is attached to the various stages in the growth of an individual and rituals are developed to demarcate the various steps in the growth of the human being. The modern Indus, like the ancient Hindus, practice many rituals before and after the brain of the child and later as the child grows up.

In a similar way literature abounds with examples of the insight of the poet, the dramatist and the novelist regarding the motives underlying human behavior. The classics in different languages behavior. The classics in different languages portray vividly the motives, the achievement and the frustrations of the human beings.

Thus preoccupation and concern regarding man his motives for action are to be found from the most primitive to the most modern forms of life and literature. However, a scientific study of these aspects is of a very recent origin. Still we must not overlook the fact that the ancient Indians as well as the ancient Greeks contributed quite a good deal which is a considerable value even today, with all the growth of nearly a hundred years of modern scientific psychology. A rapid survey of some of the basic findings
in ancient India and in ancient Greece will be useful to understand how problems of psychology have been of perennial interest.

Psychology may be defined as the study of behavior and experience. Thus the scope of psychology extends to the whole dominion of living beings. In fact many laws of behavior have been formulated on the basis of studies on animals. These laws have been found to be applicable to the behavior of human beings also. We may define general psychology as the study of human behavior and experience. It also takes into account the facts observed and the laws enunciated on the basis of experimental work with animals.

Behavior is open to observation. It can be studied in the same way in which other phenomena in the universe can be studied. But among human beings there is also experience alongside with behavior. The child who has learnt to speak will not only with draw his hand when he is pricked with a pin; he also shouts that it is hurting him. The pinprick not only leads to withdrawal, which is an observable behavior, it also leads to an experience, which is expressed in the statement that is suffering pain. This experience is not open to observation by others; it is private, it is personal. Only the person experiencing can make an assertion about it. The ancient thinkers were generally concerned with the study and analysis of these experiences. These are the mental activities that we are conscious of. We not only experience them we are also aware of them. But every mental neuromuscular system is involved in all mental activity. A few decades ago the psychologist Watson tried to limit the scope of psychology to the near observation of human behavior so that other persons concern it only with phenomena open to observation. In other words, it was his intention that psychology should be completely objective. Since experience is private, subjective, he said, that it should not be included in the scope of psychology. Thus there was a swing from almost exclusive preoccupation with the analysis of experience to an
almost exclusive preoccupation with the analysis of experience to a campaign for the abandonment of experience.

As we have seen, all mental activities involve the neuro-muscular system. The since organs, the brain, the spiral cord, and the muscles are all very active whether the mental activity knows, feeling or doing. This is no way we can neither accept the old notice that psychology deals with the mind or the mental activities; nor can we accept the position of psychologists like Watson who assert that the scope of psychology should be limited only to behavior. Often behavior cannot be understood without knowledge of the experience, which influenced the action. Our desires and our thoughts influence our activities. While psychology in its quest for general principles must observe and measures external behavior, it must also get information from the grown up human beings by asking them to describe verbally their own experience.

In a broad way we may state that psychology deals with two aspects of the problems of behavior. There is on the one hand the interest in the general laws of human behavior and experience; the aim of psychology is to formulate general laws which hold good of all human beings irrespective of their sex, race etc. On the order hand it aims at the study of individual differences. While all human beings are capable of learning, it is a familiar fact that some learn faster and take less time and some take longer time to learn the same activity, poem or song. This is due to differences in memory, intelligence etc. There are also differences regarding personality, leadership, and so on. Some of these differences are tied with age. There are differences between the activities of children, adolescents, adults and old people. It is the aid of development psychology to study these differences between the various stages in the growth of human beings. Differential psychology studies the differences between individuals. When we study them we find that these differences themselves
obey certain general laws. Thus, the aim of psychology is to study the individual
differences as well as the general principles of behavior.

Sports performance has been found to be related to some personality variables.
Extraversion and neuroticism are among the variables which influence sports
performance in addition to many other personality variables. Extraversion has been
found to be highly related or supportive to dominance and sociability in athletes and
sports participants by Sperling (1942), Tillman (1964), Ruffer (1965), Whiting &
Stembridge (1965), Wernet and Gottheil (1966), Bruner (1969), Kane (1970) and
Ikegami (1970). Extraversion, according to Alderman (1974), is a construct evolving
out of Jung’s (1933) early designation of the two major attitudes of personality: the
extraverted attitude, which orients the person to the external, objective world, and the
introverted attitude, which orients one towards the inner, subjective world. Eysenck
(1947) whose development of the two broad personality dimensions of neuroticism-
stability and extraversion-introversion provides the major underlying theoretical
structure of this trait. He describes extraverted individuals as: “Outgoing, impulsive,
uninhibited, involved in group activities, sociable, friendly, craving excitement, and
having many social contacts. They stick their necks out and take chances, act on the
spur of the moment, are optimistic, aggressive, lose their temper easily, laugh a great
deal, and are unable to keep their feelings under control.”

According to Eysenck (1947), extraversion is at best a behavioral description of
personality, but that it does possess biological causal source implication. He believes
that extraversion can be explained at the neural level in that his extraversion-
introversion scale reflects the strength of the excitatory-inhibitory functions of the
central (cortical) nervous system. He (1967) also proposed that the extraversion
associated reticular-cortical loop systems of the brain stem. It means that the
dimension involves the reticular activating system. His proposal was founded in the
belief that cortical excitation in response to external stimulation (such as the effects of competition) is higher in introverts than in extraverts.

It is through the linkage of the reticular formation and hypothalamus with personality dimension that Eysenck believes differing personalities will reflect their positions on a level of arousal continuum. For example, cortical excitation in response to external stimulation (e.g. a tension situation in sports) is postulated as being higher in introverts than in extraverts. This is because he saw introverts as having weaker nervous systems than extraverts. Conversely, he believed that inhibition will be higher in extraverts as they possess stronger inhibitory mechanisms because of their stronger nervous systems. The reason for this is that weaker nervous system is more sensitive and begins to respond at stimulus intensities which are ineffective for strong nervous systems. This results in the weaker system’s responses being closer to the maximum level of responding than those of a stronger system through the stimulus intensity continuum. Eysenck feels that this represents the cortical supremacy of introverts as producing a constraint of their behavior in accordance with conditioned and learned patterns of response that lead to the emergence of those personality traits characterizing introverts. Conversely, the absence of such supremacy leads to an absence of such constraints and to the emergence of extraversion traits.

According to Alderman (1974). “Eysenck’s view can be interpreted as indicating that extraverts are low on excitation and high on inhibition, which introverts being the opposite. Athletes, then, would react quite differently to a rise in arousal level from competitive circumstances depending on whether or not they are mainly extraverts or introverts. For example, an athlete, high on extraversion would have more trouble “getting up” for a game than one high on introversion, but would be better able to handle and channel arousal later in the game because of strong inhibitory mechanism”.

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The dominance trait appears to be one of the important personality traits of sportsmen which have two interesting implications for sports performance. E.g. (1) Eysenck expects extraverts to have low tolerances for sensory deprivation and higher tolerances for physical pain because they have higher thresholds of arousal. It explains why athletes are, in fact, highly physically active and relatively tolerant of physical pain, which is required in many endurance events and in the hard physical training programmers required for skill perfection. (2) It is generally accepted that an optimal level of arousal, stimulation, or activation, exists in each person where his performance is maximal. It is usually represented by an inverted U-curve relationship which shows that a person’s level of arousal increases, performance increases up to an optimal point, after which further increases in level of arousal result in a deterioratio of performance.

As reported by Alderman (1974), “Eysenck has taken this basic premise, related it to his personality variables, and stated that if extraverts have stronger nervous systems, which have higher thresholds to stimulus intensities (i.e. arousal), then they should be able to handle higher levels of arousal before their performance deteriorates. This is undoubtedly true in outstanding athletes. The ability to withstand the extremely high levels of arousal caused by intense competition and the usually higher vociferous spectator reactions, without a consequent drop in performance, is the hallmark of a successful athlete. A partial explanation for this ability to withstand pressure may lie in Eysenck’s neural explanation of extraversion – a trait that continually crops up in athletes.”

Eysenck (1960) developed two broad personality dimensions, the E scale, which is a continuum between extraversion and introversion, and the N-scale, which is a continuum between neuroticism and stability. Though this is essentially a behavior description of personality, he did attempt to link overt personality characteristics with
their causal biological sources. He believes that behavioral characteristics can be explained at the neural level, with the F scale reflecting the strength of both the excitatory and inhibitory functions of the central nervous system i.e. (the cortex) and the N-scale reflecting the excitation of the autonomic nervous system.

In neuroticism, the individual reacts to some distressing stress situation with more than the usual amount of sadness and dejection. There is high level of anxiety and apprehensiveness, together with diminished activity, lowered self-confidence and a general loss of initiative. Eysenck (1967) has proposed that the neuroticism, stability dimension is more associated with the hypothalamus. His explanation revolves centrally around the hypothesized instability of the autonomic nervous system. He maintains that autonomic nervous system reactions are rooted in the person’s constitutional structure, which mediates the reaction of the sympathetic nervous system to incoming stimuli. Though people react differently to sympathetic stimulation and to the way the Para-sympathetic system is controlled. Eysenck, nevertheless, feels that it is the autonomic nervous system that does, in fact, control emotionality. In this context, introverts are seen to be more chronically aroused than extraverts and neurotic or unstable people then to become aroused more easily than stable people.

However, Eysenck (1947) states that neuroticism (emotional instability) refers to “general emotional over-responsiveness and the liability to neurotic breakdown under stress”. He explains the bipolar dimension of neuroticism-stability in terms of the instability of the autonomic nervous system. He maintains that the autonomic reaction is basically dependent on an individual’s constitutional structure, which mediates the strength of the sympathetic or voluntary reaction to incoming stimuli. Although there
seem to be characteristic ways in which various individuals react to this sympathetic stimulation, and the way in which control is indicated by the Para-sympathetic system. Eysenck nevertheless considers the autonomic nervous system to be the most likely basis for individual differences in emotionality. This is essentially an integration and conceptualization of earlier thoughts by Jung (11039), Pavlov (1934) and Hull (1952), who suggested that variations in the strength of the excitatory and inhibitory functions of the nervous system could account for temperamental differences in human personality.

Alderman (1974) is of the opinion that the level of emotionality in athletes to a considerable extent is “rooted at the constitutional, neural levels i.e. the inhibitory or excitability of the autonomic nervous system. This genetically sends constitutional basis is reflected in the everyday behavior of the individual. In the case of neuroticism, this appears as high emotionality or emotional instability”. Emotional instability is characterized by “a low” tolerance of frustration immaturity, instability, high excitability, evasiveness, worriedness, and neurotic fatigability: 1 On the other hand, emotional stability in athletes is characterized by “maturity, stability, quiet realism’ the absence of neurotic fatigue’. It is generally felt that high emotionality is related to, or described best by Eysenk’s “general neuroticism” and that emotional stability is grounded in what Kane (1964) calls personal integration or a mature control of one’s emotions.

One the basis of related evidence, high emotionality in athletes would appear to indicate three things: (i) because neuroticism has virtually a zero relationship to intelligence, achievement by highly emotional athletes in sports is due to something other than intelligence (ii) neuroticism is probably related to successful athletic performance through its manifestation in persistence, 1 and (iii) high anxious subjects
show high speed of learning, and superior performance in relatively simple tasks, or in complex tasks where faulty associations have not been present.

In terms of the interaction between arousal level difficulty of task, and performance as a function of Eysenck’s two personality dimensions, the following observations can be made:

i) People who score high on introversion and neuroticism will tend to perform better on easy or simple tasks than people high on extraversion and stability.

ii) On difficult tasks, the reverse tends to be true i.e. stable extraverts perform better than neurotic introverts.

iii) No predictions have been made on the intermediate personality types.

These predictions are based on the theory that higher arousal level (partially caused by external conditions as in competitive situations) will not cause as much disruption in the performance of people possessing strong nervous system (extraverts) simply because extraverts possess strong inhibitory potentials, i.e. they can shut out the negative or deleterious effects of high drive situations. Introverts, on the other hand, are more sensitive and respond more quickly to situations of low intensity as appears to be the case, in low arousal situations or with easy tasks.

**NEED OF THE STUDY**

The participation in modern sports is influenced by various physical, physiological, sociological and psychological factors. During training, besides good physique and physical fitness of the athlete, main emphasis is laid on the development of various types of motor skills involved in the game as well as on teaching the strategies, techniques and tactics of the game. Until recently, the Physical Education teachers
have been paying inadequate attention to the social and psychological factors which although have been proved to contribute to performance in events in the higher competitive sports. It is only recently that sports administrators and Physical Education teachers have realized the importance of the psychological preparation and training of players to enable them to bear the strain and stresses inherent in sports participation. So, now the sports trainer and Physical Education teachers have started giving more importance to the psychological conditioning or the building the mental make-up of the players before their contests in the national and international competitions.

In modern competitive sports, psychological preparation of a team is as important as teaching them the different skills of a game with scientific methods. In these days, the teams are prepared not only to play, but to win the games. And for winning the games, it is not only the proficiency in the skills which matters but also the spirit and attitude of the players with which they play. The mental attitude of each individual player as well as of the team can help or hinder their performance. Most of the Physical Education teachers agree that the physical characteristics, skills and training of the players are extremely important, but they also feel that good mental or psychological preparation for competition is a necessary component for success.

The aim of higher sports in this age of competition is to win in international meets or to attain peak performance in competition. And it is on this factor that the Physical Education teachers try to concentrate. In order to reach the target and accomplish the social expectation, the players also work hard, ignoring their comforts in their daily lives and practice for many hours a day. Stress, both psychological and social inhibits the peak performance of players. Unless the players are prepared mentally and psychologically for the contest, they are not able to achieve the desired results. The
psychological training has to be provided to the players by the coaches to face stressful situation occurring during the competition.

Sport has become a psycho-social activity, full of tension, anxiety, fear and stresses. In competitive sports, teams and individual players play to win and this spirit of winning the matches and individual events causes many psychological stresses. So the job of the coach is to prepare or train the individual athlete as well as teams in such a way that the players individually as well as, in their capacity, as members of the team are to bear all types of stresses and overcome the effect of over-stresses and strains which may deteriorate the sports performance. The players need to undergo such an arduous, training that they should be able to have physical load during practice schedules and can have psychic stress during the period of competition, because it is during competition that athletes as well as teams inevitably come under psychological stress.

In modern competitive sports, the role of anxiety in sports performance has attracted the attention of sports scientists. As the physical load during training of sportsmen for international competition is increasing day-by-day, the psychic stress during competition has been intensified. It has been realized that during their participation in competitive sports, the players and athletes are also anxiety-prone. Hence in these days, psychological training of the players and athletes has attracted a greater attention than in the past.

It is agreed by most of the sports scientists that besides developing the physical and physiological aspects of the players i.e. power, strength, endurance, agility and speed as well as providing the best type of the training, unit and unless the players and athletes the mentally prepared for contest, they cannot win in any competition or
attain their peak performance which is considered the optimum objective of the modern sports.

Thus, it has become necessary to conduct research to know which psychological factors enhance sports performance. There is a need to conduct research on the national and international sportsmen with respect to some psychological characteristic. It is also essential to know what type of emotional problems like anxiety, fear, aggressiveness or stresses occur when they have to face some strong opponent and how to overcome these problems to achieve the optimum level of achievement/performance. It may be possible if proper research on scientific lines is conducted on the top level sportsmen. In view of this, five psychological variables namely visual reaction time, auditory reaction time, extraversion, neuroticism and competitive anxiety were selected and the relationship of disjunctive reaction time, both visual and auditory with extraversion, neuroticism and competitive anxiety was examined in the present study.

The great majority of empirical research in sport personality has utilized assessment devices which embody the factor theory as their main premise. As expressed by Cattell (1973), the factor theory searches for consistencies in behavior. It is assumed that internal dispositions or traits are relatively stable and so enduring that they override environmental or situational influences. This infers that questions cold be asked in any situation and the responses to generalized to a sport situation. Thank for example he broad category of anxiety. Is knowing that a person low on an omnibus inventory of anxiety enough to conclude that he will never exhibit anxiety; are there no situations in which his heart rate may increase a little. The situation position as exemplified in Mischel’s [1969] social learning theory, appears to go too far to the other extreme, entering into open debate with personalize. This paradigm can be
regarded as the antithesis of the factor theory and maintains that behavioral variation is primarily a function of the situation in which a person is placed.

Sports performance has been found to be related to some personality variables. Extraversion and neuroticism are among the variables which influence sports performance in addition to many other personality variables. Extraversion has been found to be highly related or supportive to dominance and sociability in athletes and sports participants by Sperling (1942), Tillman (1964), Ruffer (1965), Whiting & Stembridge (1965), Wernet and Gottheil (1966), Bruner (1969), Kane (1970) and Ikegami (1970). Extraversion, according to Alderman (1974), is a construct evolving out of Jung’s (1933) early designation of the two major attitudes of personality: the extraverted attitude, which orients the person to the external, objective world, and the introverted attitude, which orients one towards the inner, subjective world. Eysenck (1947) whose development of the two broad personality dimensions of neuroticism-stability and extraversion-introversion provides the major underlying theoretical structure of this trait. He describes extraverted individuals as:

“Outgoing, impulsive, uninhibited, involved in group activities, sociable, friendly, craving excitement, and having many social contacts. They stick their necks out and take chances, act on the spur of the moment, are optimistic, aggressive, lose their temper easily, laugh a great deal, and are unable to keep their feelings under control.”

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dimension involves the reticular activating system. His proposal was founded in the belief that cortical excitation in response to external stimulation (such as the effects of competition) is higher in introverts than in extraverts.

It is through the linkage of the reticular formation and hypothalamus with personality dimension that Eysenck believes differing personalities will reflect their positions on a level of arousal continuum. For example, cortical excitation in response to external stimulation (e.g. a tension situation in sports) is postulated as being higher in introverts than in extraverts. This is because he saw introverts as having weaker nervous systems than extraverts. Conversely, he believed that inhibition will be higher in extraverts as they possess stronger inhibitory mechanisms because of their stronger nervous systems. The reason for this is that weaker nervous system is more sensitive and begins to respond at stimulus intensities which are ineffective for strong nervous systems. This results in the weaker system’s responses being closer to the maximum level of responding than those of a stronger system through the stimulus intensity continuum. Eysenck feels that this represents the cortical supremacy of introverts as producing a constraint of their behavior in accordance with conditioned and learned patterns of response that lead to the emergences of those personality traits characterizing introverts. Conversely, the absence of such supremacy leads to an absence of such constraints and to the emergence of extraversion traits.

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performance through its manifestation in persistence, I and (iii) high anxious subjects show high speed of learning, and superior performance in relatively simple tasks, or in complex tasks where faulty associations have not been present.

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These predictions are based on the theory that higher arousal level (partially caused by external conditions as in competitive situations) will not cause as much disruption in the performance of people possessing strong nervous system (extraverts) simply because extraverts possess strong inhibitory potentials, i.e. they can shut out the negative or deleterious effects of high drive situations. Introverts, on the other hand, are more sensitive and respond more quickly to situations of low intensity as appears to be the case, in low arousal situations or with easy tasks.

Anxiety is physiological response to a real or imagined threat. It is a complex emotional state characterized by a general fear or foreboding usually accompanied by tension. It is related to apprehension and fear and is frequently associated with failure, either real or anticipated. It often has to do with inter-personal relations and social
situations. Feelings of rejection and insecurity are usually a part of anxiety. According to Frost (1971), Anxiety is “an uneasiness and feeling of foreboding often when a person is about to embark on a hazardous venture; it is often accompanied by a strong desire to excel”. Hence, anxiety state arises from faulty adaptations to the stresses and strains of life and is caused by over actions in an attempt to meet these difficulties.

A certain amount of anxiety is needed for peak performance. Our body’s autonomous nervous system prepares for competition with the “fight or flight” response which quickness reaction time, sharpens our senses and increases our strength. But excessive anxiety, however, is debilitating to performance. It physically inhibits performance by causing extreme muscle tension, shortness of breath and nausea. For athletes, excessive anxiety would mean difficulty in acquiring necessary skills for their sports.

It is clear to most people involved in the various strata’s of competitive sport that intense competition creates varying levels of anxiety within performers. What is becoming more obvious is the fact that some performers react adversely to the competitive situation by reaching states of hyper-anxiousness which often results in the inability to achieve optimum levels of performance (Spielberger, 1966, Martens, 1977). Cratty (1973) also stated, “Research indicates that anxiety improves motor performance on simple tasks, but impedes complex motor behavior”.

STATEMENT OF THE PROBLEM
“A Comparative study of personality Characteristics of Elite Level Cricket and Hockey Players at Nanded District of Maharashtra”

SIGNIFICANCE OF THE STUDY
The findings of the present study would help the Physical Educatoin teachers, sports trainers, administrators and the physical educationists in their professional which are discussed below:

a) Once the causes of the psychological problems in the Cricket and Hockey Players are understood by the coach with the help of sports psychologist, various kinds of remedial techniques may be applied and help may be rendered to overcome the excessive emotional problems which affect their performance.

b) It would facilitate the Physical Educatoin teachers in providing appropriate training to know whether traits like extraversion and neuroticism are related with the sports performance. Whether personality traits undergo a change with the participation in sports or with the knowledge of the personality traits of the sportsmen, their achievement can be predicted.

c) It would also help the Physical Educatoin teachers to find out the level of personality of the top level sportsmen and then apply the different relaxation techniques to bring their anxiety/arousal to the optimum level.

d) With an improved understanding of the personality level sports psychologists would be facilitated in identifying the various sources of anxiety state and would evolve the mechanisms how to reduce the competitive anxiety.

e) The results of the study would add further knowledge to the existing literature of sports psychology; especially the role of reaction time, extraversion, neuroticism and psychoticism sports performance.

f) The findings of the study would provide a guideline to the future research investigators in sports psychology and sports sciences to conduct further research in this field.

**Hypothesis:**
The following hypotheses formulated in this study:
1. It had been hypothesized that there would be no significant difference of personality characteristics with respect to neuroticism between Cricket and Hockey players.

2. It had been hypothesized that there would be no significant difference of personality characteristics with respect to psychoticism of Cricket and Hockey players.

3. It had been hypothesized that there would be no significant difference of personality difference with respect to extraversion between Cricket and Hockey players.

4. It had been hypothesized that there would be no significant difference of personality traits with respect to lie-scale.

5. It has been hypothesized that there would be no significant difference of personality traits with respect to extraversion of Cricket girls and Hockey players.

6. It has been hypothesized that there would be no significant difference to personality traits with respect to psychoticism of Cricket girls and Hockey women players

7. It has been hypothesized that there would be no significant difference of personality traits with respect to extraversion of Cricket girls and Hockey women players
8. It had been hypothesized there would be no significant difference of personality traits with respect to lie-scale of Cricket girls and Hockey women players.

9. It had been hypothesized there would be no significant difference of personality traits with respect to lie-scale of Cricket girls and Hockey women players.

10. It had been hypothesized there would be no significant difference of personality traits with respect to lie-scale of Cricket girls and Hockey women players.

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21. It had been hypothesized there would be no significant difference of personality traits with respect to lie-scale of Cricket girls and Hockey women players.
22. It had been hypothesized there would be no significant difference of personality traits with respect to lie-scale of Cricket girls and Hockey women players.

23. It had been hypothesized there would be no significant difference of personality traits with respect to lie-scale of Cricket girls and Hockey women players.

24. It had been hypothesized there would be no significant difference of personality traits with respect to lie-scale of Cricket girls and Hockey women players.

DELIMITATION OF THE STUDY
The present study was delimited to only five psychological variables, as it was not possible to study all the psychological factors which help the sportsmen to become superior athletes or players and to train them for higher sports. The four variables which were selected for the present study are: (1) Psychoticism, (2) extraversion (3) neuroticism (Neur.), and (4) Lie Scale.
Secondly, the study has been delimited to physical education and academic Cricket and Hockey Players only. Their age ranged between 15-30.

OBJECTIVES OF THE STUDY
The aims of the present study were as follows:
1. To find out the sex differences in the extraversion, neuroticism psychoticism and lie scale of Cricket and Hockey Players.
2. To find out differences between the Cricket and Hockey Players with respect to psychoticism, lay scale, extraversion, and neuroticism.

3. To find out personality differences on extraversion, psychoticism, and lie of Cricket and Hockey players

**DEFINITION AND EXPLANATION OF IMPORTANT TECHNICAL TERMS**

**Concept and Definition of Personality**

Personality is defined as ‘distinctive patterns of behaviour (including thoughts and emotions) that characterize each individual’s adaptation to the situations of his or her life.

Personality is shaped by inborn potential as modified by experiences common to the culture and sub-cultural group (such as sex roles) and by the unique experiences that affect the person as an individual.

Theories about personality can be grouped into those, which emphasize traits, motivation, learning and the self. The corresponding approaches to the understanding of personality are: trait, psychoanalytic, social learning and humanistic theories.

Personality theory has something important, impressive and provocative to say about the nature of human beings. They however, do not always agree due to the three important factors: 1. The complexity of the subject matter. 2. The differing historical and personal contexts in which each theory was formulated. 3. It is a young discipline compared to other science subjects.
The concept of personality gives an understanding of the entire human organism, its structure, nature and functioning. These are more than 50 definitions of personality. More precisely, personality was derived from the Latin word Persona, which refers to the masks, used by actors in Greek theatres. Why? It refers to the appearance or the outer mainifetation of a person. The face that is revealed to the public. What you appear to be is what persona refers to. The word was borrowed by our Personality. Later personality was expanded to include all qualities that are uniquely present in the individual. Psychometrically sound tests were also developed to assess personality.

The personality theories have given divers explanations to human behaviour. Therefore the concept can be understood only by going through the major theoretical approaches to the study of personality. The term personality has no standard meaning. The definition amount to more than fifty; generally including all characteristics of an individual, such as his temperament, abilities, values, interest, motivation etc. The concept of character is often used to explain personality.

Psychologists have developed many theories in attempting to explain human personality. Study of personality itself became the major subject matter of personality, since personality as defined by psychologists comprises of all individual characteristics or qualities within itself. The major explanations of personality have been classified into four types, namely the probabilistic, the deductive, the teleological, and the genetic.

The Probabilistic approach is based on probable or predictive approach has resemblance to other physical sciences, is based on logical inference. From the information available on the particular quality, inferences are made.

The teleological or functional explanation emphasizes the events being the effect of certain causes or functions in adaptation. The genetic type and often the other
branches of science. The term ‘genetic’ means ‘genesis’ or ‘beginning’ and has no
ting to do with the mechanisms of heredity. The approach emphasizes the genesis of
behaviour, the underlying factors or the root of such characteristics.

Psychologists have explained the nature of personality as the unique set of behaviour and
enduring qualities that influence the way has adjust to his environment.
However, the psychologists have also given importance to similarities among human
nature. In general, it may be seen that psychologists, in attempting to understand
personality have found that human beings are like all others in certain characteristics
and only like some other in certain others and like no one in still other characteristics.
Though the general qualities may be present in all human beings on the basis of heredity and environment, certain unique interactions take place resulting in
individual differences.

Many psychologists have offered their own explanations, which are classified as type
and trait theories. Some of the earliest personality theories were not really scientific.
These were the sciences of Phrenology, Physiognomy and Graphology.

F.J. Gall put phrenology forward during the 18th century explaining human nature to
be directly related to the physical formation of the skull. Physiognomy, another belief
that personality characteristics could be interpreted through facial characteristics.
Graphology also was popular during those days when people believed that reading the
handwriting of the person could assess personality characteristics.

Almost a century later Sheldon proposed a body type theory in understanding human
personality. Sheldon argued that body types are basically contributing to different
personality patterns. He described it as somato types. The three basic somato types
of personality are the Endomorph, the Mesomorph and the Ectomorphp, known to have
a Viscer tonic, a Somatotonic and a Cerebrotonic personality. The visceralonic
personality is associated with characteristics of being apprehensive, insecure, sleepy, amiable and conforming. The somatotonic is characterized by being adventurous, informal, tolerant and enthusiastic. The Cerebrarotonic personality is one who is secluded, unamiable, non-adventurous, and intolerant.

There are no consensus amount psychologists about the definition of the term, Personality’. Today, dozens of formal definitions exist. Some of the important are as follows.

G. Allport: The dynamic organization within the individual of those psychophysical systems that determine his unique adjustment to his environment.

H. Eysenck: The more or less stable and enduring organization of a person’s character, temperament, intellect and physique that determines his unique adjustment to his environment.

R.B. Cattell: Personality is that which permits a prediction of what a person will do in a given situation.

J.P. Guilford: A person’s unique pattern of traits.

D. Mc Clelland: The most adequate conceptualization of person’s behaviour in all its details.

L. Kolb: Each individual’s characteristically recurring pattern of behaviour.

S. Freud: Personality is an individual’s pattern of behaviour developed to resolve dynamic conflicts and events.

Each of the above definition emphasis on different points. All port’s emphasis is one dynamics, Eysenck’s on predisposition, Cattelll’s on prediction, Guildford’s on
individual differences, Mc Clelland’s on description, and Kolb’s on uniqueness. A complete definition of personality would include many factors: intellectual abilities, motives acquired in the process of growing up, emotional reactivity, attitudes, beliefs, and moral values.

**Study of Personality**

Traits are underlying tendencies to behave in a consistent and distinctive style. Trait theories assume that a personality can be described by its position on a number of continuous dimensions or scales. We can pick the traits we study by (a) their theoretical or practical value, (b) seeing which traits people actually uses to describe other, and (c) factor analysis. Two dimensions found fairly consistently in factor – analytic studies of personality are introversion-extroversion and stability-instability.

Type theories seldom work, largely because different traits do not regularly go together. We can, however, find certain clusters of characteristics, which constitute “type”, even though the types do not include everyone.

Reliability and validity questions about trait measures are exceptionally complex for several reasons: (a) People’s behaviour tends to very according to the demands of specific situations; (b) people differ in the areas which are “central” to their personalities and in which they show consistency, and (c) behaviour tends to very according to the impression the individual seeks to make.

A ‘trait” is a determining tendency or a predisposition to respond. In some respects every one is a trait theory, in that we note consistencies in other people’s behaviour and we label them accordingly as aggressive, lazy, shy or by one the other 18,000 words, which exist in English to describe human behaviour. Theories of Cattell and Eysenck have been usually quoted as examples of trait and type approach. These two
contributions however could be understood only when the research method is understood, namely that of factor analysis.

a) Extraversion

The extraversion is a personality trait. The extravert person’s orientation is towards the external world. He deals people intelligently in social situation. He is conventional. Outgoing, social, friendly and free from worries. In Eysenckian terms, extraversion stands for central excitatory/inhibitory level and sociability. According to Eysenck, “the typical extrovert is sociable, needs to have people to talk, craves excitement and is generally impulsive. He is carefree, easy going, optimist, likes to laugh and to be merry and his feelings are not under tight control” In the present study, E-score on EPI has been taken as a measure of extraversion.

b) Neuroticism

It is a minor mental disorder, characterized by inner struggles and discordant social relationship. It is precipitated by emotional stresses, conflicts and frustrations. Some of the more frequent psychological complaints in neuroticism are anxiety, depressed spirits inability to concentrate or make decisions, memory disturbances, heightened irritability, morbid bouts, obsessions, irrational fears, insomnia, compulsions and inability to enjoy social relations. According to Eysenck, “Neuroticism refers to emotionality, initiated by the inherited differences in liability and excitability of autonomic nervous system” In the present study, N-score on EPI has been taken as a measure of neuroticism.