Competition in sports is becoming intense. Individuals and nations are striving hard to gain supremacy over others. Modern competitive sports are an extremely complex behavioral phenomenon. In tough competitions, some top athletes who were strong in terms of techniques or physical fitness often fail to achieve their potential just because they lack on psychological aspects. Performance in sports is not only related to physical strength and skill, rather psychological states and traits are involved in delivering peak performance. Psychological strength seems to facilitate the players in converting their physical strength or sport skills into optimal performance. There is growing realization that mind has the power to influence the physical functioning of human body. Performance in top competitive sports goes beyond mere physical efforts and skills which have their own natural limits that can not be pushed beyond certain limits. However, it is difficult even to reach up to these limits without training the mind.

The literal meaning of the word sport is competitive physical activities or the activities which provide fun and enjoyment. The word is derived from ‘dis’ and ‘portere’ – meaning “carrying away from work”. In common parlance, sport activities are relaxing in nature and done for “seeking pleasure”. Sports commonly refer to activities where the physical capabilities of the competitor are the sole or primary determinant of the outcome but the term is also used to include activities such as mind sports.
and motor sports where mental acuity or equipment quality are major factors for success. Sport is commonly defined as an organized, competitive and skillful physical activity requiring commitment.

VanderZwaag (1988) stated, “Sport is a competitive physical activity, utilizing specialized equipments and facilities, with unique dimension of time and space, in which quest for records are of high significance”. Snyder & Spreitzer (1989) identified three criteria for an activity to be labeled as sport “activity involves competition, human physical movement, and is governed by systematic rules and regulations”. Coakley (2001) suggested, “Sports are institutionalized competitive activities that involve rigorous physical exertion or the use of relatively complex physical skills by participants, motivated by personal enjoyment and external rewards”.

To summarize, sport involves those competitive and recreational activities which are governed by a set of rules and provides enjoyment, release of energy, and various health related benefits. Sports have been increasingly organized and regulated from the time of the ancient Olympics up to the present century. Industrialization has brought increased leisure time to the citizens of developed and developing countries, leading to more time for citizens to attend and follow spectator sports, greater participation in athletic activities, and increased accessibility. These trends continued with the advent of mass media and global communication. Professionalism
became prevalent, further adding to increase in sport's popularity, as sports fans began following professional athletes through radio, television, and the internet while enjoying the exercise and competition associated with amateur participation in sports.

In the new millennium, sports have been going further from the physical aspect to the mental or psychological aspect of competing. Numerous coaches and athletes maintain that the ability to reach optimal sport performance is 90 percent mental (Porter, 2003). Over the years, there is growing realization that peak performance in sport can only be achieved through taking help from those psychological techniques which enhance players' psychological strength. These techniques include biofeedback, progressive muscle relaxation, meditation, yoga, cognitive behavioral therapy, hypnosis, self talk, thought stopping, autogenic training, Zen approach, transcendental approach, mental imagery, and the like. Among the number of techniques, mental imagery seems to possess the highest potential to enhance sport performance (Paivio, 1985; Munroe et al., 2000).

**Mental imagery** is recognized as one of the most important technique used for increasing sport performance and altering psychological states. The concept of mental imagery has evolved over a period of time. Initially the term imagery was not there. Different researchers used different terms to refer to the same process. The concept emerged in early
1930s when the term “mental activity” and “imagination” were used by Jacobson (1930) in his training program. Sackett (1934) referred to “symbolic rehearsal” in the form of thinking about the activity in the interval between learning and performing. The same term was used later by Richardson (1967) who defined mental practice as “the symbolic rehearsal of a physical activity in the absence of any gross muscular movement”. Murphy and Jowdy (1992) reviewed a vast amount of literature and identified some of the terms related to imagery in sport, used by different researches i.e. symbolic rehearsal, visualization, modeling, covert practice, cognitive rehearsal, imaginal practice, dreams hallucinations, hypnosis, visuomotor training, introspective rehearsal, implicit practice, ideomotor training and even sofa training. The term “mental practice” is mostly used by authors in U.S.A., whereas “mental training” and “ideomotor training” are mostly preferred by European authors. Perry (1939) defined the terms “imaginary practice and “imaginary rehearsal” as the repetition or rehearsal of the task “in the mind’s eye”. He also used the term “ideational” activity, meaning “activity involving the formation of verbal and symbolic association with a minimum of overt movement. The terms “introspective rehearsal”, “conceptualizing” (Egstrom, 1964) and “mental rehearsal” (Sage, 1977) were referred to as synonymous to “mental practice” and “imagining”. The word “mental” means, persons are “thinking” about a particular task and imagining themselves performing it (Sage, 1977).
According to Richardson (1969), “Mental imagery refers to all those quasi-sensory and quasi-perceptual experiences of which we are self-consciously aware and which exist for us in the absence of those stimulus conditions that are known to produce their genuine sensory or perceptual counterparts”. Anderson (1981) imagery experience referred to, “Awareness of sensory like qualities in the absence of environment stimuli appropriate to the sensation”. Suinn (1993) described, “Imagery is the mental creation or re-creation of sensory experiences that appear to the person imaging them to be similar to the actual event”. Matlin (2005) referred to imagery as, “A procedure for mentally representing things that are not physically present”. Vealey & Greenleaf (2006) explained, “The process of creating or recreating an experience in the mind is known as imagery”.

To conclude, imagery is a mental process where senses are involved to create sensory experiences in the mind in the absence of actual physical activity so as to closely resemble the actual movement. It plays a vital role in producing positive states of mind. Paivio (1985) talked about the motivational and cognitive role of imagery intervention. Following his work different researchers explored imagery categories and identified five different categories of imagery use in sport.

**Motivational-specific imagery (MS)** - This involves seeing yourself winning an event, receiving a trophy or medal and being congratulated by
other athletes. MS imagery may boost motivation and effort during training and facilitate goal-setting, but is unlikely on its own to lead directly to performance benefits

**Motivational general-mastery imagery (MG-M)** - This is based on seeing yourself coping in difficult circumstances and mastering challenging situations. It might include maintaining a positive focus and then coming back to win. MG-M imagery appears to be important in developing expectations of success and self-confidence

**Motivational general-arousal imagery (MG-A)** - This is imagery that reflects feelings of relaxation, stress, anxiety or arousal in relation to sports competitions. There is good evidence to suggest that MG-A imagery can influence heart rate - one index of arousal - and can be employed as a 'psych-up' strategy

**Cognitive specific imagery (CS)** - This involves seeing yourself perform specific skills, such as a tennis serve, golf putt or triple-toe-loop in figure skating. If learning and performance are the desired outcomes, evidence suggests that CS imagery will be the most effective choice

**Cognitive general imagery (CG)** - This involves images of strategy and game plans related to a competitive event. Examples could include employing a serve-and-volley strategy in tennis or a quick-break play in basketball.
Thus, different categories of imagery could be used to meet different purposes. All the five categories of imagery can be experienced in two ways using different perspectives. **Internal perspective** involves imaging from within the body and experiencing the action in a multi-sensory manner. **External perspective** involves imaging the action as if it is outside the body in the same manner as a video presentation. Similarly the content of imagery could also vary depending upon what purpose the imagery is being used for. There are total eight kinds of imagery content.

**Feeling State Imagery** - Feeling state imagery is the imagery that changes mood, such as seeing yourself in your favorite place, or recalling a happy, peaceful time. Some players imagine past successful experiences that can genuinely elicit feelings of love, care, safety and gratitude, these will diminish feelings of fear, anxiety, resentment and anger.

**End State Imagery** - End state imagery refers to imagining any desired outcome or goal, in all its realistic particulars e.g. imagining a perfectly played, confident, relaxed, focused game of tennis.

**Energetic Imagery** - Energetic imagery, taken from Ayurvedic and Chinese medicine, as well as quantum physics, uses the notion of plentiful, coherent, free-flowing, unblocked energy as the underlying dynamic of good health and fitness. Negative state of mind, in this paradigm, would be seen as stuck energy, or energy that is withheld from the general flow. Players
can imagine moving dots, a kind of sound, or an internal feeling of motion that help in maintaining general flow of energy within the system.

**Cellular Imagery** - Cellular imagery focuses on the healthy interaction of the cells, and requires accurate technical knowledge, so it isn't for everyone. It is mostly used in healing process. In sport setting such kind of imagery content could be helpful in the period of recovery from injury.

**Physiological Imagery** - Physiological imagery focuses on larger healing processes in the body, such as sensing the widening, softening, and clearing of the arteries to release more energy to the muscles. It can be used to solve various physiological problems.

**Metaphoric Imagery** - Metaphoric imagery works with symbols instead of concrete reality, such as seeing a flower opening its petals as a metaphor for enhanced creativity blossoming again or seeing rising sun as a symbol of regaining energy for the fresh competition.

**Spiritual Imagery** - Spiritual imagery evokes the wider perspective and peaceful or transcendent feelings provided by mystical states of consciousness and prayer. This might involve sensing assistance from angels, God, or specific religious figures and symbols or imagery that fosters a sense of oneness and connection with all things or any imagery that deeply opens the heart in order to resolve conflicts that might interfere with the performance.
Psychological Imagery - Psychological imagery specifically addresses a person's cognitive, behavioral, and emotional issues by providing corrective emotional content. So, for instance, it might consist of imagining being confident while playing, seeing oneself feeling optimistic, performing under optimal aroused state of mind.

During mental imagery often no single content of imagery is focused upon rather two or more imagery contents are used together for attaining specific purpose in sport. Different imagery categories and different imagery contents are used to meet specific purposes in sport depending upon the demand. These purposes could be:-

Seeing success - Many athletes "see" themselves achieving their goals on a regular basis, both performing skills at a high level and seeing the desired performance outcomes

Motivating for higher performance - Before or during training sessions, calling up images of your goals for that session, or of a past or future competition or competitor can serve a motivational purpose. It can vividly remind you of your objective, which can result in increased intensity in training.

For visualizing perfection in skills - Mental imagery is often used to facilitate the learning and refinement of skills or skill sequences. The best athletes "see" and "feel" themselves performing perfect skills, programs, routines, or plays on a regular basis.
Familiarizing with conditions - Mental imagery can be effectively used to familiarize yourself with all kinds of things, such as a competition site, a race course, a complex play pattern or routine, a pre-competition plan, an event focus plan, a media interview plan, a refocusing plan, or the strategy you plan to follow.

Setting the stage for performance - Mental imagery is often an integral part of the pre-competition plan, which helps set the mental stage for a good performance. This helps draw out their desired pre-competition feelings and focus. It also helps keep negative thoughts from interfering with a positive pre-game focus.

Refocusing - Mental imagery can be useful in helping you to refocus when the need arises. If a warm-up is feeling sluggish, imagery of a previous best performance or previous best event focus can help get things back on track. You can also use imagery as a means of refocusing within the event, by imagining what you should focus on and feeling that focus.

In short, imagery can be used to meet various purposes in sport. In present research imagery package is used to enhance flow state, confidence, concentration, intrinsic motivation, and ultimately the performance of the football and hockey players. Imagery relates to its goals through working on 3 common-sense principles.

Firstly, images created in the mind can be almost as real as actual and external events. In order to perform any physical task mind and body
coordination is required. The mind cues the body to evoke sensory
memories and fantasies which enables the individual to sight, sound, smell,
feel, and taste. Specially, when there is a strong emotional element
involved, for instance, a strong evocative image might be remembering the
sound of clapping by the audience and the internal bristling of energy all
through the body as one realizes that he/she is about to receive a medal at
some prestigious competition. These sensory images are the true language
of the body, the only language it understands, immediately and without
question.

Secondly, the altered state is a state of relaxed focus, a kind of calm
but energized alertness, a highly functional form of focused reverie. In the
altered state, human beings are capable of more rapid and intense healing,
growth, learning, and performance. Body wanders in and out of altered
states all through the day. Under altered state of mind, attention is
concentrated on one thing or on a very narrow band of things and a
decreased awareness of other things going on around us e. g. a player may
be so focused on tennis that he/she didn't realize he/she was playing on a
broken ankle, and the pain isn't perceived until the game is over.

Thirdly, when we have a sense of being in control, it can help us to
feel better and do better. Feeling in control is associated with higher
optimism, self esteem, and ability to tolerate pain, ambiguity, and stress.
Decades of research in ego psychology informs us that we feel better about
ourselves and perform better when we have a sense of mastery over the environment. Conversely, a sense of helplessness lowers self-esteem, our ability to cope and our optimism about the future. Because guided imagery is an entirely internally driven activity and if it is applied properly, it has the strength of producing internal sense of control.

To conclude, mental imagery is a technique that generates an altered state, in which the mind is directed toward multi-sensory images that the body perceives as real, produces feeling of being in control and ultimately ended up delivering high level of performance. How does imagery actually work and what are the different processes involved in it are explained by different theoretical perspectives. These theoretical perspectives are categorized under four different headings that is (1) Physiological theories (2) cognitive theories (3) Information processing theories (4) Effective use of imagery models.

**Physiological theories**

**Psycho-neuromuscular theories** (Carpenter, 1894; Jacobson, 1930; Richardson, 1967; Start & Richardson, 1964) evolved largely out of the ideomotor principle, originally proposed as far back as 1894 by Carpenter. This principle suggested that during imagery localized muscular activity occurs, which is weaker in magnitude but identical in pattern to muscle activation during actual physical performance of the task.
According to this theory imagination of any physical action tends to elicit a pattern of faint and localized muscle movement (identical in pattern to those that occur during actual execution) such muscular activity could provide performers with visual, e.g. knowledge of results and performance, and kinesthetic feedback, e.g. body position, muscular tension and tactile feelings, when skills are performed overtly. This feedback enables adjustment in motor behavior (Corbin, 1972) or facilitates the rate at which
the performer activates mental nodes representing the desired motor behavior during overt performance (MacKay, 1981).

**Functional equivalence theories** (Farah, 1989; Finke, 1980; Finke and Shephard, 1986; Jeannerod, 1994, 1995) suggested that imagery and perception or imagery and movement require common central nervous system and processes. Imagery is like actual physical practice except that it does not involve the final execution of the motor commands (which are generated centrally in the brain). This functional equivalence helps to improve performance.

**Cognitive theories**

**Symbolic learning theory** (Sackett, 1934) suggested that imagery of a task provides opportunity to rehearse the movement symbolically. That is, movement patterns are symbolically coded in the central nervous system, and imagery assists in coding movements into symbols that make movement easier to perform. Repetitive mental practice could focus attention on key cues within the skill, reinforcing those cues and allowing the construction of subconscious perceptual-motor plans or schemas in the premotor cortex.
Imagery works because the individual literally plans his/her action in advance. Motor sequences task goals and alternative solutions are considered cognitively before a physical response is required. This theory limits imagery to its cognitive benefits only.

**Self-efficacy/self-confidence theories** (Bandura, 1977; Budney et al., 1994; Grouios, 1992; and Perry and Morris, 1995) suggested that expectations of success are based on past performance success, vicarious experience (modeling), verbal reinforcement and emotional arousal. The idea is that imagining oneself performing a task successfully is similar to observing someone else performing the skill (modeling) or overtly
performing the skill (past performance success). Imagery increases the athlete’s success expectations and this increases performance. The theory accounts for the external perspective of imagery and it does not explain internal perspective of imagery.

**Motivational expectation theory** (Paivio, 1985) suggested that imagery plays a motivational and cognitive role in enhancing performance. This is a $2 \times 2$ factor model, in which imagery plays motivational and cognitive role at general or specific level. Thus, four combinations emerge: (1) Motivational specific (2) Motivational general (3) Cognitive specific (4) Cognitive general. This theory talked about the cognitive and motivation roles of imagery in detail but it does not say anything about the physiological changes produced during imagination.

**Schema Theory** (Schmidt, 1975) described movement as being primarily controlled by central structures with minimal input from sensory information that stores pre-programmed commands in the form of generalized motor patterns that are retrieved and executed upon demand. By mentally rehearsing the specific motor pattern the psychological “script” becomes more explicit in its expression, and tendencies to intervene at critical moments can be alleviated when the requisite cues have been made aware to the individual.

**Motor Learning theory** (Fitts and Posner, 1967) described the stages of motor learning as (a) the cognitive phase, i.e., consciously learning a new
skill, (b) the associative phase, i.e., making minor adjustments to the newly learned skill in striving for perfection, and (c) the autonomous phase, i.e., the newly learned skill is capable of being executed unconsciously. Practiced mental rehearsal can help to reinforce the appropriate neural coordination to allow the specific motor patterns to be retrieved and used. This theory explains use of imagery in learning new skill but it does not account for the performance benefits produced through imagery in already learned activity.

**The Set Hypothesis** (Nascon & Schmidt, 1971) suggested that before a successful motor skill can be executed a specific internal state is necessary for optimal conditions of activation. Imagery sets these optimal internal states in the athlete, especially after prolonged periods of specific motor skill inactivation, as in the case of golf because of nature of the game. This theory does not account for the use of imagery in countering negative feelings and states which interfere during performance.

**Gross framework or insight theory** (Grouios, 1992; Hale, 1994) is based on the Gestalt psychology which emphasized the understanding of the “whole” rather than the parts that make up the whole. The learner must be able to conceptualize the entirety or gestalt of the task in order to improve the skill performance. Imagery helps the learner get the idea or the “whole” of the skill rather than the details of the movement. This theory denies the
use of imagery for correcting a particular skill which could hinder the athlete’s performance.

The arousal activation theory (Schmidt, 1982) suggested that imagery functions as a preparatory set that assists the performer in achieving an optimal arousal level and thus peak performance. Imagery is a means by which the subject prepares for action both physiologically and psychologically. This can occur through reducing any inhibition to action and improve the attention of the performer to cues for motor response. This theory fails to account for imagery training as a tool for enhancing skill.

Information processing theories

Dual-code theory (Paivio, 1975) suggested that images are effective in learning because they provide two independent memory codes. Information in memory can be stored through one of two independent codes (an image or a word). Having two memory codes gives us a better chance of remembering an item or movement. For example, if we store both the word “ball” and an image of a ball, we can retrieve the ball from memory as either an image or a word. Similarly, it might be possible to learn movement sequence both verbally and through images. These two memory codes are independent – we can forget one code without forgetting the other. This theory does not emphasis on the importance of the meaning and the interpretation of a word.
**Bio-informational theory** (Lang, 1977) described imagery in context of the bioinformation-processing abilities. Images are prepositional structures. There are three main classes of prepositions: stimulus (the scene), response (the response to the scene), and the meaning (interpretation of the events). The stimulus prepositions describe the content of the scene to be imagined e.g. “a heavy, wooden baseball bat” and the response prepositions describe the response to the scene e.g. verbal response, overt motor response, and physiological response. Individual gains more control and hence improves performance by modifying response to given situations through imagery. This theory does not describe as to how imagery helps in learning new skills.

**Triple-code theory** (Ashen, 1984) suggested that imagery has 3 important components: the image (I), the somatic response (S), and the meaning of the image (M). Image is viewed as a centrally aroused internal sensation that possesses all the attributes of actual sensation. The second component is the somatic response (S). Ashen suggested that Imagery produces psychophysiological changes in the body (somatic response). The third component is the meaning of the image (M) which is ignored by most imagery models. People bring their backgrounds and histories with them into imagery (meaning), so even if they receive the same imagery instruction, the experience will be different for each individual which influences outcomes.
of imagery. This theory explains how same imagery could produce different results but it does not suggest how benefits could be maximized.

**Effective use of imagery models**

**Four W’s of imagery use:** Munroe, Giacibbi, Hall, and Weinberg (2000) categorized key aspects of how athletes incorporate imagery into their involvement in sport. They suggested that by responding to the following four questions a broad understanding of sport imagery might be acquired:

*Where is imagery used? When is imagery used? Why is imagery used? And what is being imagined?* Where relates to the context of imagery use within training and performance activities. When refers to the timing of imagery use – before, during, or after competition. Why represents the functional aspects of imagery use. What deals with the content of imagery. This model does not answer the question as to how imagery actually improves performance.

**Three-level model of imagery use in sport:** Murphy and Martin (2002) provided three levels (a) nature of imagery, (b) use of imagery to achieve goals, and (c) meaning of the image to the athletes. Level 1 concerns the nature of the constructs and represents an overview of the physiological and cognitive processes associated with imagery. Level 2 deals with both the general use of imagery by athletes and how incorporating imagery within mental preparation affects performance. Level 3 include role of imagery meaning in the context of sport imagery. Each level is important in
determining the effectiveness of imagery intervention. This model does not account for the use of imagery in accruing new skills.

**PETTLEP model:** Holmes and Collins (2001) proposed a model for optimizing the efficacy of these interventions. They outlined the model’s structure, which comprises “physical, environment, task, timing, learning, emotion, and perspective (PETTLEP) elements derived from neuro-scientific functional equivalence literature. These factors relate to the construction of effective motor-imagery script. But the model rarely accounts for how imagery produces peak performance.

**Performance-enhancement imagery model** (Rushall, 1991) suggested that an effective performance imagery consists of the following features.

- Rehearsing at the intended speed of the performance so that exact motor patterns will be practiced (neuromuscular facilitation will occur).
- Focusing on the most desirable performance aspects in a positive and successful manner.
- Perceiving from an internal perspective emphasizing what the activity feels like and including all other senses as they will occur in the performance (e.g., what will be seen and heard).
- Repeating the imagery a sufficient number of times to satisfy the athlete.
• Imagining the features of the performance environment or looking at the actual arena section where the contest will occur.

• Rehearsing performance units in their entirety.

• Including the thought content of competition strategies.

• Concluding each imagery trial with covert positive reinforcement.

Present research focuses on enhancing sport performance through improving flow state, intrinsic motivation, concentration, and sport confidence using mental imagery while keeping in view the important elements emphasized by different models in preparing the script for imagery and conducting the whole process of visualization.

**Flow state** is related to high level of performance in sport. Csikszentmihalyi (1975) developed the concept of flow after examining ‘autotelic’ (from the Greek auto = self and telos = goal), or self-motivating activities. Csikszentmihalyi (1975) defines the flow experience as “a unified flowing from one moment to the next, in which we are in control at our actions, and in which there is little distinction between self and environment, between stimulus and response, or between past, present, and future”. Csikszentmihalyi (1990) described flow as “an optimal psychological state that typically occurs when a person perceives a balance between the challenges associated with a situation and his/her own capabilities to accomplish these demands”.

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In addition to the skill-challenge balance, flow is described by a further eight dimensions. **Action-awareness merging** is when the athlete ceases to be aware of themselves as separate from their action and experiences a feeling of oneness with the activity. **Clear goals** occur when goals are clearly defined and the athlete has a strong sense of what they are going to do. **Unambiguous feedback** involves immediate and clear feedback, which is received from the activity, enabling the athlete to know how successfully they are completing their set goal. **Concentration on the task at hand** is when the athlete has complete focus on their task and is the clearest indication of a flow state. During flow the athlete experiences a sense of control, without trying to exert any control. **Loss of self-consciousness** is when concern for the self disappears during the flow state. **Transformation of time** is when the perception of time by the athlete alters by either speeding up or slowing down. **Autotelic experience**, which has been described as an intrinsically enjoyable state. The final dimension of flow is the **paradox of control**. Originally; this component was labeled as “being in control”. Later Csikszentmihalyi (1990) explains that it is the possibility of control, especially the sense of exercising control in difficult situations that people enjoy, not the feeling of being in control per se. One feels in control without actively trying to be in control.

Csikszentmihalyi (1975) developed the **flow model**. The framework suggests that a balance between one’s perceived skills and the challenge of
an activity results in flow. Other experiential states occur when the skill/challenge ratio is unbalanced. Boredom is experienced when an individual’s skills are perceived to be in excess of the current set of challenges in the environment. An extreme mismatching of skills and challenges in either direction results in anxiety.

The flow model, as proposed by Kimiecik and Stein (1992), provided a theory-based, sport-specific framework for the examination of flow. It is suggested that situational and personal factors, emphasizing dispositional and state variables, would underlie and interact in the generation of flow state. Situational factors that would interplay with personality factors in the experience of flow were proposed as type of sport, competition importance, competitive flow structure, opponent ability, and coaches’ behaviour.

**Intrinsic motivation** is one of the important dimensions of flow state. Intrinsic motivation occurs when an individual is doing something for its own sake (Wang, Liu, Lochbaum, & Stevenson, 2009). Intrinsic motivation is defined as the motivation to engage in an activity for its own sake (Deci, 1975). Performing an activity for the pleasure and the satisfaction that one experiences while learning, exploring, or trying to understand something new (Vallerand et al., 1992). Intrinsic motivation is the drive to pursue an activity as an end in itself. On the other hand, extrinsic motivation represents engaging in an activity as
means to an end, such as for gaining rewards or contingent psychological outcomes (Wang, Hagger, & Liu, 2009). **Self-determination theory** demonstrated as to how external factors influence intrinsic motivation (Deci & Ryan, 1985). It is based on the notion that human behaviour is motivated by three psychological needs, i.e. autonomy, competence, and relatedness with others and sport activities provide a variety of situations to fulfill these needs. Ryan and Deci (2002) referred to autonomy as individuals’ perception that they are the source of their own actions and behaviors. Competence refers to individuals’ perceptions of effectiveness to other individuals and the community. Relatedness refers to individual’s need to relate with others. The perception of self-determined actions is the main factor for intrinsic motivation. Self-determined actions lead to more intrinsically-motivated results, indicating the interest in participating in an activity for its own sake, which offers inherent satisfaction.

The level of intrinsic motivation underlies the perceived competency within an optimally-challenging activity. More particularly, feedback that reinforces one’s perceived competency will increase the level of intrinsic motivation in sport. In the opposite event, a loss of optimal challenge would increase athletes’ perceived extrinsic control over their participation. The level of flow intensity would indicate the degree of athletes’ optimal involvement in the activity and when the player is deeply involved into the
activity they are more likely to have better concentration on the task at hand.

Concentration is another important dimension of flow state. Concentration is defined as the ability to focus on relevant tasks' cues while ignoring distractions, and is considered to be an important component of attention (Wilson, Schmid, and Peper, 2006). The most useful research on the role of attentional styles in sport has developed from the theoretical framework of Nideffer (1976, 1981), who views attentional focus along two dimensions: width i.e. broad versus narrow and direction i.e. internal versus external. The focus of present study is on football and hockey players. Both the games demand different kinds of attentional focus while performing. So it is important to understand various attentional focus and their combinations with each other.

A broad attentional focus allows a person to perceive several occurrences simultaneously. This is particularly important in sports where athletes have to be aware of and sensitive to a rapidly changing environment. A narrow attentional focus occurs when one responds to only one or two cues, such as when a baseball better prepares to swing at a pitch. An external attentional focus directs attention outward on an object, such as a ball in baseball or a puck in hockey. An internal attentional focus is directed inward on thoughts and feelings, such as when a high jumper prepares to start his run-up or a bowler ready his/her
approach. By combining width and direction of attentional focus, four different categories emerge, appropriate to various situations and sports.

**Broad-external** style is used to rapidly assess a situation e.g. a football quarterback rapidly assess the positioning of the defensive backs. Whereas **broad-internal attention** is applied in analyzing and planning strategies of the game e.g. developing a game plan or strategy in hockey regarding how to coordinate. **Narrow-external** style helps in focusing exclusively on one or two external cues e.g. focusing on the ball in cricket. **Narrow-internal** can be used to mentally rehearse an upcoming performance or control an emotional state e.g. mentally rehearsing golf putting or taking a breath to relax.

Concentration or selective focus of attention can vary in intensity. The more complete the focus of attention, the greater the level of concentration. Skills involved in concentration fall into two major categories: First, focus of attention on targeted, relevant information, and second, dissociation from non-targeted, irrelevant, and, potentially distracting information. Nideffer and Sagal (2001) argue that Concentration is often the deciding factor in athletic competition. Regardless of the specific sport, attention and concentration are essential for success. Concentration is one of the most important components of flow as well. Players who show higher level of intrinsic motivation and concentration
tend to perform better on the task and are more likely to have higher level of confidence.

Confidence is being defined as the belief that you can successfully perform a desired behavior (Weinberg and Gould, 2003). Vealey (1986) defined sport confidence as the belief or degree of certainty individuals possess about their ability to be successful in sport. Confident athletes believe their ability to acquire the necessary skills and competencies to reach their potential. Albert Bandura (1977, 1986) formulated a model of self-efficacy. Self-efficacy, the perception of one’s ability to perform a task successfully, is really a situation-specific form of self-confidence. Bandura’s concept of self efficacy is closely related to the concept of sport confidence. As self efficacy is one’s judgment about one’s ability in a particular field, sport confidence is viewed as one’s faith upon his/her ability to master a particular sport.

Emerging from general concepts of self-confidence, such as self-efficacy, perceived competence, and movement confidence, Vealey (1986) distinguished between event specific state sport confidence and global trait sport confidence. Conceptually, trait sport confidence is the belief or degree of certainty that individuals usually possess about their ability to be successful, whereas state confidence is defined as the belief or degree of certainty individuals possess at one particular moment about their ability to be successful in sport (Vealey, 1986). Furthermore, Vealey (2001)
developed an integrative model of sport confidence in which confidence is viewed as a single construct distributed on a continuum that varies from trait-to state-like.

In the re-conceptualization of confidence, Vealey proposed reciprocal relationship between sport confidence, sources of sport confidence, and consequences of sport confidence. Sources of confidence relate to the three domains of achievement, such as mastery and demonstration of ability, self-regulation, such as physical and mental preparation; and social climate, such as social support and vicarious experience by watching successful performances by other athletes. The consequences of sport confidence impact on athletes’ affect, behavior, and cognition, which Vealey labeled the ABC triangle. Hence, high levels of confidence would affect the way athletes feel, behave, and think, which in turn influences the level of confidence. Performance is a result of interaction between sources and levels of confidence. Vealey’s confidence framework provided theoretical support for the interplay between confidence and cognitions and affect, such as flow and performance.

Conceptual frameworks indicate that there is relationship between flow state, intrinsic motivation, concentration, confidence, and sport performance. Whereas, imagery seems to have potential to work both ways to improve sport performance through contributing to these psychological states as well as through directly enhancing performance which could lead
to positive changes in the psychological states. For that reason, the present research has formulated the following objectives and hypotheses.

Objectives:-

1. To examine the effect of mental imagery on flow state.
2. To examine the effect of mental imagery on intrinsic motivation.
3. To examine the effect of mental imagery on concentration.
4. To examine the effect of mental imagery on sport confidence.
5. To examine the effect of mental imagery on sport performance.

Hypotheses:-

1. Mental imagery would enhance the flow state.
2. Mental imagery would enhance the intrinsic motivation.
3. Mental imagery would enhance the sport-confidence.
4. Mental imagery would enhance the concentration level.
5. Mental imagery would enhance sport Performance.