INTRODUCTION

1.1 Significance of children’s and adolescents’ drawings:

Drawings are expressions of creativity (Waters & Harris, 1993). Researchers have argued that drawings are distinguished from other modes of symbolization by three different characteristics: firstly, aesthetic and formal qualities, secondly, emotional content of the artist and the audience, and thirdly, the union of the former attributes that is formal qualities and the emotional content represented in the image (Arnheim, 1954; Langer, 1953). Investigations have indicated that children's drawings of human figure reflect their intellect (Abell et al., 2001) and children's and adolescents' drawings may be considered as effective tools for assessing neurocognitive development (Dilworth et al., 2004).

Drawings created by children and adolescents also reflect their personality characteristics (Madigan et al., 2003; Coopersmith et al., 1976) and behavioral problems (Zalsman et al., 2000; Earwood et al., 2004). Emotional problems of children and adolescents which can not be expressed verbally find expression in drawings (Veltman and Browne, 2003). The reason behind this can be, that drawings are a better form of expression than speech and drawings may express a subtlety of intellect and affect that is beyond the power of verbal expression (Dileo, 2007). Drawings also prove to be effective tools of therapy (Frostig and Essix, 1998). Art therapy helps children and adolescents overcome emotional and behavioral problems.
1.2 Psychological Significance Of Visual Art: Overview Of Some Major Theoretical Perspectives:

1.2.1 Psychoanalytic Theory of Art

Sigmund Freud (1856 – 1939) regarded art as an embodiment and a projection of the artist's inner world consisting of infantile wishes, conflicts, repressed anxieties, hostilities etc. He introduced the term pathography to mean the exploration and analysis of artworks to discover the artist's unconscious dynamics (Glover, 2005). Freud, therefore, considered art to manifest a special form of neurosis. He believed that creative products such as art are largely the outcomes of the ego – defense mechanism of sublimation. He suggested that the sexual impulses of creative people were partly channelized and gratified through the creation of aesthetically appealing and socially valued products (Morgan et al., 1987). Freud tried to analyse the symbols used in artwork (as he would analyse the symbols appearing in dreams) in order to gain insights into the artist's psyche. His studies on the famous artists, Leonardo da Vinci and Michelangelo testify his approach to art. However, Freud’s approach had obvious limitations. Firstly, his emphasis on neurotic basis of art and his analyses of artists bolstered his psychoanalytic theory but did little to probe the formal structure of art and the nature of the aesthetic experience. Secondly, he neglected the emotional reaction of the analyst (countertransference) in the analysis of artists and their artworks. Thirdly, Freud could not clearly explain why art (or any other creative product) is far superior to mere neurotic wish – fulfillment (Glover, 2005).

However, Freud realized that his analysis of the joke mechanism had more potential for the understanding of aesthetics than his pathographic account. Unfortunately, he could not develop his joke mechanism to fully understand art. In his joke mechanism, Freud suggested three stages in the evolution of the joke. The first stage manifests itself in the verbal play of children which gives pleasure.
In the second stage, the joke is elevated from play to jest which satisfies the intellect somewhat while providing pleasure. The joke proper appears at the third and the ultimate stage. The joke now has a definite purpose – challenging persons or social inhibitions. The jokes could be hostile or obscene. Freud considered such jokes to be enmeshed in a triadic relationship. The teller (first person) is in league with the listener (third person) against the second person or object (the butt of the joke). This is as if the joke, the teller and the listener represent the artwork, the artist and the spectator respectively. The object of the joke could be imagined to be the content of the artwork. Freud’s joke mechanism was utilized by the ego -- psychologists in delving into aesthetics (Glover, 2005).

Ego – psychology is mainly concerned with the psychic mechanisms which mediate the relationship between the ego and the id. It proposed that these mechanisms influence an artwork and also the audience of the artwork. The ego – psychologist, Ernst Kris (1952) believed that jokes stimulated the play of psychic energies which made jokes pleasurable. This refreshed and strengthened the rational ego. Thus the conscious ego is construed not only as the locus of aesthetic experience but also as a stabilizing and synthesizing agent. The art historian, E. H. Gombrich (1966) drew parallels from Freud’s view that the joke was a preconscious idea that had been briefly exposed to the activities of the unconscious. According to Gombrich (1966), therefore, the content of artwork should not be of as much interest to the psychoanalyst as it’s form. He emphasized the dream – like condensation of meaning in creative products highlighting the significance of both the medium and it’s mastery. Gombrich and Kris have proposed that the value of any artwork is determined by the extent to which it reflects the adjustment to reality which means the conversion of the unconscious and unacceptable into a creative product which is a representation of the stable, rational ego (Glover, 2005).

Freud’s joke mechanism also influenced the art theoretician Anton Ehrenzweig in his attempt to understand the formal aspects of art. He disagreed with the
Freudian view that primary (id-dominated) and secondary (ego-oriented) processes involved in artistic activities are sharply distinct. Ehrenzweig (1967) described a *hidden order of art* with a three-phased creative process wherein, firstly, there is a fragmentation of reality followed by a fusion of the fragments into a *receiving womb* within the unconscious and eventually, a re-integration of the fragments into the new structure which may give rise to the creation of a concrete object. He pointed out that visual images in art (as in dreams) are condensed to combine features belonging to a number of figures which the conscious may not make sense of. While Kris regarded the primary process as an archaic form of thinking at the service of the ego, Ehrenzweig considered it to be primitive and uncontrollable. Inspite of the differences in the views of Kris (1952) and Ehrenzweig (1967), both agree in de-emphasizing Freudian pathographical interpretation of art and stress its formal qualities (Glover, 2005).

The psychoanalyst Melanie Klein (1882–1960) addressed the intersubjectivity of the aesthetic experience which was somewhat neglected by the ego-psychologists. The Kleinian perspective highlighted the psychic processes mediating the relationship between the self and the world and how these processes impact the formal aspects of art and the aesthetic experience. The focus is thus on the interplay between one psyche and another, the relationship between the artist and the medium; the artwork and the audience (Glover, 2005). Klein’s theory gave prominence to the drive towards death and the negativity of experience as conveyed through art. According to her, infantile anxiety situations are reflected in works of art and in creative impulses (Klein, 1975). However, the life urge also formed part of the Kleinian theory. A noted Kleinian, Hannah Segal (1991) pointed out the intimate relationships among the life urge, symbolic thought and creativity. In fact, Klein and her followers not only re-assessed the significance of symbols but also the mechanism of symbol-formation (which underlies art, dream and phantasy). They also examined the development of symbol-formation. So Kleinians de-emphasized the Freudian practice of finding the meanings of symbols and encouraged the search for the workings of
the psyche in symbolic activity. The significance of the processes of creating and experiencing art both for the artist and the spectator seemed more important to the Kleinians (Glover, 2005).

1.2.2 Gestalt Views on Art

Gestalt psychology was founded by Max Wertheimer (1880 – 1943), Kurt Koffka (1886 – 1941) and Wolfgang and Kohler (1887 – 1967). Since gestalt psychology focused on the study of perception so it has contributed substantially to the understanding of visual art. In fact, the German word *gestalt* means form or configuration. According to gestalt psychologists, the whole pattern of sensory activity including the organization and relationships of elements within this pattern determine a person's perceptual experience (Morgan et al., 1987).

Gestalt psychology probed the relation between the object of perception (*figure*) and it's general background (*ground*). It implied that the perception of an object may change with the change in it's background. In 1923, Wertheimer spelt out the *principles of perceptual organization* which were being used by artists and influencing perceivers since time immemorial. According to him, certain gestalts become prominent by our inborn tendencies of grouping things together which appear alike (*similarity principle*), are close to one another (*proximity principle*) and make a symmetrical figure inclusive of all parts (*good figure principle*). It was also proposed that something which begins in a specific way would continue in the same way (*continuation principle*) and the *principle of closure* which refers to the perceptual processes that fill in gaps in sensation (Wertheimer, 1923; Morgan et al., 1987). These principles are used, knowingly or unknowingly, by painters, graphic designers, architects etc. to this day. These are even utilized by children and adolescents when they create and perceive art.

Some artists interpreted gestalt psychology as promoting minimalism and abstract patterns in art. Thus gestalt theory was thought to be in agreement with
Japanese aesthetic principles and to foster modern, abstract art. But Rudolph Amheim, an authority on gestalt theory and the psychology of art questioned such interpretations (Behrens, 1998).

1.2.3 Cognitive Developmental Perspectives on Art

Jean Piaget's (1896 – 1980) theory of cognitive development, inspite of the criticisms levelled against it, is perhaps the most influential among the theories dealing with the subject. It has suggested an invariant sequence of stages of cognitive development through which individuals pass. The stages are presented in Table 1.1. Piaget believed that individuals undergo qualitative changes in cognitive abilities as they progress from one stage to the next (Morgan et al., 1987).

Piaget proposed that these qualitative changes in cognition are reflected in an array of activities including artistic ones. Piaget and Inhelder (1956) refused to admit that scribbles of very young children stem only from lack of motor skills. They argued that the drawings would be chaotic if these were merely the products of poor motor control. They reasoned that it seems more likely that in the beginning, children do not possess the concepts of physical and visual properties to guide their hands. As they grow older, their drawings display an orderly progression of visual properties from simple to more and more complex (Smith, 1982). Piaget and Inhelder (1956) opined that the origin of drawing is the rhythmic pattern of small children's movements by which they produce a confused mass of lines. These tangles of lines contain the rudimentary features of drawings. Proper drawings would emerge gradually from these tangles as children acquire concepts. Children seem to teach themselves the performance skills and motor sequences necessary for creation of controlled forms of graphics through their attempts to draw (Piaget and Inhelder, 1956; Smith, 1982).
TABLE 1.1
SALIENT FEATURES OF PIAGETIAN STAGES OF COGNITIVE DEVELOPMENT

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Piagetian Stages</th>
<th>Approximate Age Level</th>
<th>Salient Features of Cognitive Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sensorimotor Stage</td>
<td>Birth - 2 years</td>
<td>Knowledge is gained through sense organs and motor movements. Object constancy is gradually achieved.</td>
</tr>
<tr>
<td>2</td>
<td>Preoperational Stage</td>
<td>2 - 7 years</td>
<td>Development of internal representation and language. Reasoning is not systematic. Egocentric thought.</td>
</tr>
<tr>
<td></td>
<td>2a) Preconceptual Substage</td>
<td>2 - 4 years</td>
<td>Language development is fast. Does not understand concepts well. Has some understanding of symbols.</td>
</tr>
<tr>
<td></td>
<td>2b) Perceptual or Intuitive Substage</td>
<td>4 - 7 years</td>
<td>Limited development of reasoning. Focus on appearances rather than implications. Does not understand the principle of conservation of entities. Confusion between reality and fantasy.</td>
</tr>
<tr>
<td>3</td>
<td>Concrete Operational Stage</td>
<td>7 - 12 years</td>
<td>Reasoning is systematic but limited to the area of concrete experience. Understands conservation of entities. Ability of seriation appears.</td>
</tr>
<tr>
<td>4</td>
<td>Formal Operational Stage</td>
<td>12 years and over</td>
<td>Deductive and inductive reasoning manifested. Thought is abstract. Hypothetical thinking appears. Can evaluate own thinking.</td>
</tr>
</tbody>
</table>
Very young children below eighteen months of age (sensorimotor stage) merely scribble because they are incapable of thinking about and producing symbolic representations through drawings. When they are around two years of age (beginning of preoperational stage), they start symbolizing by post-facto naming of the drawing they had produced. So at this stage the features of the drawing produced dictate its naming and not vice versa. It is not until the children reach the age of about four years, do they decide first the theme of their drawing and then attempt to draw it (Smith, 1982; Lowenfeld and Brittain, 1987). Piaget and Inhelder (1956) reported that children of six to eight years of age displayed egocentrism in responding to works of art while older children of nine to ten (concrete operational stage) could easily understand that others might have perspectives different from their own. The drawings of the adolescents (formal operational stage) become more detailed and depict greater attempts at gender and role representations (Lowenfeld and Brittain, 1987) manifesting improved reasoning.

So the piagetian viewpoint advocates that a young person’s cognitive developments are mirrored by his or her drawings. However, the cognitive developmental account of visual art has been challenged by some critics. Bremner (1996) pointed out that children’s drawings can not be construed simply as direct reflections of how they understand reality; practical problems in production of art (including motor – skill limitations) are bound to affect the quality of drawings. So it seems safer to consider drawing as a specific skill rather than a phenomenon displaying all the general principles of cognitive development (Bremner, 1996). Gombrich (1960) negated the cognitive development – evolution of art linkage by stating that changes in artistic styles occur as the intentions of the artists (including children and adolescents) change to keep pace with cultural changes. But developmentalists would argue that cultural evolution is intertwined with the cognitive development of individuals within it (Bremner, 1996).
1.2.4 Vygotsky’s Views on Art

The Russian psychologist, Lev Vygotsky (1896 – 1934) is known more for his socio-cultural theory of cognitive development. But he was an avid researcher in the field of psychology of art. He integrated diverse theories and viewpoints in the field and opined that studies on perception; emotion; imagination and fantasy are implicated in the psychology of art. He harmonized the works of famous psychophysicists, art critics and art historians. Vygotsky (1925; 1971) clarified that art permits the expression of psychic energy as economically as possible. Artistic style allows the condensation of many creative ideas (Principles of Economy of Force). He remarked that it is possible that the sensorial, motor, associative and intellectual characteristics of art elicit emotional reactions from the audience. But Vygotsky also partly accepted Lipp’s (1897) position that artistic elements do not induce emotional tones in spectators but the latter introduce emotions into artworks through empathy. These opposing views sum up Vygotsky’s (1925; 1971) Theory of Emotional Tone and Feeling. Therefore, Vygotsky (1925; 1971) acknowledged that the basic aesthetic response comprised of the emotion expressed by the creator through the art and the emotion expressed by the audience (The Law of the “Double Expression of Emotion”). The emotional experience of the audience is so vivid that it appears real (The Law of the “Reality of Emotion”). Such an emotional experience stimulates the imagination in order to find expression (Central Discharge of Emotions). It either inhibits or delays the external or motor aspect of emotional expression (Peripheral Discharge of Emotions). Thus, art provokes emotional expression but simultaneously inhibits or delays it’s overt expression. So it makes opposite impulses collide (Affective Contradiction and Antithesis). According to Vygotsky (1925; 1971), the aesthetic experience is nothing but a release of pent-up emotions (Catharsis). The antithesis is evident in artworks of merit where the creators deliberately contrast the content and the form. This is the Rejection of the Content of Form (Vygotsky, 1925; 1971).
So Vygotsky produced a logically integrated, coherent account of the aesthetic experience addressing both its emotional and formal qualities.

1.2.5 Art in Relation to Guilford’s Structure of Intellect Model

J. P. Guilford’s (1967) structure of intellect model grew out of extensive factor analysis of many psychological tests. It proposed a three-dimensional, cubical model of intelligence comprising of 120 small cubes, each representing a particular ability which was a unique combination of one of five kinds of operations, one of six kinds of products and one of four kinds of contents. Guilford’s operations include divergent production (thinking) which is creative or original problem solving (Morgan et al., 1987). Since art expresses creativity, it seems safe to assume that creators of artworks engage in some amount of divergent production. A child may engage in rudimentary divergent production while a famous artist displays its pinnacle.

Guilford (1969) explained that the term creativity sometimes referred to creative potential, sometimes to creative production and in yet other contexts to creative productivity. Creative potential was a set of relatively enduring personal qualities that prepared the individual for creative thinking which might result in the creation of tangible products such as paintings. But the term creative production does not necessarily mean tangible products. It meant the processes of productive thinking (divergent production). While creative productivity referred to the quantity of output in the form of socially recognized products — both tangible e.g., sculptures, poems and intangible e.g., novel ideas, words etc. (Guilford, 1969). Thus Guilford regarded original art (even those produced by children) as expressions of creativity.

It is clear from the above overview that there is a diversity of theoretical points of view (with some areas of convergence) regarding the psychological significance
of visual art. The literature in this domain is vast. So a few of the prominent theoretical viewpoints could be discussed within the limited scope of this study. However, from among the above viewpoints, the cognitive developmental perspective appears to be the most relevant in the context of the present investigation.

1.3 Relations among human-figure drawings, cognitive style and self esteem:

The inclusion of details is the focal point of assessment using human-figure drawing tests. So the question of the test-taker's cognitive style becomes relevant. Many studies (e.g. Ward and Elliot, 1987) have found that human-figure drawing tests effectively measure cognitive style. Researchers (Witkin et al., 1962; Witkin, 1965) have revealed that human-figures drawn by field-dependent children depict minimum details, unrealistic proportioning of body parts etc. But the drawings of field-independents are detailed, show realistic proportioning of parts, clear gender and role representation (in accord with the gestalt principle of good figure as mentioned in subsection 1.2.2). So the scores of the field-independent subjects are expected to be higher on human-figure drawing tests.

Human-figure drawing tests effectively measure the intelligence of subjects (Abell et al., 2001). Researchers (e.g. Bardhan Roy, 2005) reveal that test-takers obtaining higher scores on such tests (therefore, higher I.Q.) tend to have higher self esteem. The opposite is true for the low scorers. So the quality of the human-figure drawn appear to bear close relations with test-taker's self esteem. The relation between human-figure drawing and self esteem can be thought of in another way as suggested by the findings of Cole et al. (2001) who indicated an inverse association between self-perceived competence and self esteem. It can be, therefore, reasoned that either those children and adolescents...
who draw human – figures in better ways feel more competent which boosts their levels of self esteem or those children and adolescents who have higher self esteem typically put in more effort and care in all the tasks (including human – figure drawing) they perform in order to feel competent and keep their self esteem intact.

Investigations show that field – independent persons typically possess higher self esteem than field – dependents because field – independent persons have prominent sense of self. Therefore pathologies common among them include delusions of grandeur, aggression, paranoia etc. The less developed sense of identity among field – dependent persons lowers their self esteem. They tend to suffer from dependence, helplessness, conversion disorder etc. (Witkin et al., 1971). According to Willing (1988) field – independent persons experience self with a great deal of internal differentiation and complexity. Such persons largely define their personal identities and social roles. The self esteem of field- independent persons are thus not much dependent on the opinion of others. In contrast, field – dependent persons have greater tendency to defer to their social group for self – identity and role – definition (Willing, 1988).

Thus, human – figure drawing, cognitive style (field – dependence – independence) and self esteem scores of children and adolescents seem to be positively interrelated.

1.4 Developmental Changes in Human – Figure Drawing:

Qualitative changes take place in drawings (including drawings of human figures) created by individuals as they progress through the life span. Lowenfeld and Brittain (1987) related these changes to the intellectual and socioemotional developments which occur as individuals grow up. They could identify six distinct stages through which children’s and adolescent’s drawings progress.
These are:

i) **Scribble Stage** – Though infants start scribbling around eighteen months of age yet this stage spans from two to four years. Haphazard scribbles at the beginning of the stage gradually give way to more controlled scribbles. At the close of this stage, scribbles start looking like recognizable objects (Lowenfeld and Brittain, 1987). This stage coincides with piagetian *preconceptual substage of preoperational stage* (Morgan et al., 1987).

ii) **Pre – Schematic Stage** – It generally covers the fourth through the seventh year of a child’s life. This stage is marked by the search for simple symbols for objects (including human beings). Initially, a human figure is drawn as a circle with two dangling lines for legs. Sometimes rectangular shapes for trunks of bodies are drawn. Little marks inside the circle may be drawn to depict facial features. This is referred to as the *tadpole schema*. Colours are used unrealistically and space is treated freely (Lowenfeld and Brittain, 1987). This stage coincides with the *perceptual (intuitive) substage of piagetian preoperational stage* which is characterized by development of symbolic representation, unsystematic reasoning and confusion regarding reality (Morgan et al., 1987). These features of cognitive development are apparent from children’s pre-schematic drawings.

iii) **Schematic Stage** – It generally occurs between seven and nine years of age. Now the child relies on fixed schemes for frequently drawn images. Details appear in drawings. Colours are used realistically. Space is represented by adhering to a *baseline* and a *skyline* (Lowenfeld and Brittain, 1987). Since this stage is included under *piagetian concrete operational stage* (Morgan et al., 1987) so the drawings at this stage reflect the systematic reasoning of concrete operations. A noteworthy feature of this stage is the appearance of X-ray drawings wherein children draw things that are not visible in real life e.g., the side-view of a man riding a horse with both legs showing. Vygotsky (1978) had clarified this phenomenon by asserting that children do not draw exact
representations of what they see but instead draw what they know. Thus X-ray drawings also present evidence in support of the cognitive basis of art.

iv) **Dawning Realism Stage** – From the age of nine to eleven years, children become self-conscious about what they draw. Their drawings become more standardized. They try to draw realistically and feel frustrated if the images do not look as intended. Perspectives and partial occlusions appear. These indicate improved spatial representation. Drawing of detail and design (particularly in clothing) are paid more attention. In fact, many adults produce drawings of this level (Lowenfeld and Brittain, 1987). These characteristics correspond to the features of the *piagetian concrete operational stage* which includes the schematic and dawning realism stages.

v) **Reasoning Stage** – Twelve to fourteen year old adolescents incorporate more details in their drawings. They highlight the differences between male and female figures. Their drawings reflect their greater awareness of their environments. They are deeply aware of the drawbacks of their artworks (Lowenfeld and Brittain, 1987). These are the features of the *piagetian formal operational stage* which subsumes this stage.

vi) **Decision Stage** – Though it generally occurs between fourteen and seventeen years of age yet it can be considered as the ultimate stage for people without specialized art education. At this stage many forms of art materials are mastered. Drawings are created with much emotions. Sometimes naturalistic drawings are attempted (Lowenfeld and Brittain, 1987). The drawings are highly imaginative, aspirational and aim for the enrichment of the society (Torrance, 1969). These features also mirror *piagetian formal operations* (Morgan et al., 1987).

Several other scholars have also suggested stages in the development of drawings but Lowenfeld and Brittain's (1987) formulation appears to be the most comprehensive.
1.5 Developmental Changes in Cognitive Style (Field – Dependence – Independence):

Studies have reported evidences in support of the clear age-related changes in field – dependence – independence over the life span. Cognitive style data obtained by administering different tests of field – dependence – independence viz., the Embedded Figures Test, the Rod and Frame Test and the Body Adjustment Test covering the eight through twenty four years of age period were graphically plotted. The resultant developmental curves showed a definite, continuous increase in field - independence between eight and fifteen years of age. Although in that period the rate of change became slower with increasing age. After age fifteen, the curves showed a levelling off and appeared like a plateau in the period of young adulthood. In elderly persons, there was a decrease in field - independence and a return to field - dependence. It was inferred that at some point between twenty four years and old age, the process of increasing field - dependence began. It was further inferred that the point of changeover was in the late thirties, after which the rate of change towards field - dependence gained strength (Witkin et al., 1971).

The developmental changes in field – dependence – independence stem from an interplay between maturational changes in the body (particularly the nervous system) and the changing socialization experiences. During the growth years, a person’s standing on the field - dependence – independence dimension typically display relative stability. In other words, children tend to maintain the same position relative to their peers on the dimension as they grow up. But as a group they manifest a progress towards increasing field independence. In young adulthood, field – dependence – independence displays absolute stability (Witkin et al., 1971).
1.6 Developmental Changes in Self Esteem:

Research findings indicate that it is difficult to accurately measure the self esteem of children below seven years of age because they can not comprehend the true meaning of self esteem. Preschoolers almost always report being satisfied and happy without understanding the implications of these words. By age nine or ten, children develop more distinct sense of self worth and competence in different areas. Therefore, they may report lower self – evaluation than they had reported earlier (Mussen et al., 1990). Coopersmith (1981; 1990) in fact report a study in which self esteem scores were found to be high at grade three and the scores declined significantly at grade five. However, some children older than ten years of age may not want to admit that they have undesirable characteristics or may be unaware that some of their characteristics are regarded as undesirable by others. Children's self esteem scores are sometimes higher than those of the adolescents because either the children had inflated self esteem ( due to immaturity) or they deliberately reported more positive self images than they really felt ( Kagan et al., 1982). Pre – adolescent children also do not realize the multidimensional nature of self esteem ( Coopersmith, 1967). The self esteem scores of individuals tend to decline as they reach adolescence ( Hoare et al., 1993) because they engage in more realistic self – appraisals.

The decrease in self esteem during adolescence can be due to the significant changes that take place during the changeover from childhood to adolescence. The entry into adolescence is marked by enormous biological, cognitive, socioemotional and academic changes (Robins et al., 2002). All these changes make adolescence a stage of great stress. The rapid changes of adolescence make boys and girls prone to strong feelings of social inadequacy. However, once the changes settle down, adolescents gradually regain their self esteem (Bos et al., 2006).
Adolescents typically have a more sophisticated view of what a sense of self encompasses than children do. While the self-descriptions of children focus on concrete characteristics like appearance, possessions, behaviours etc., those of adolescents are more abstract and revolve around psychological characteristics, interpersonal relationships, self-evaluations and conflicting feelings. Self-evaluations become more differentiated and better organized during adolescence. These age-related changes in self-esteem are associated with cognitive and socio-emotional developments (Mussen et al., 1990).

1.7 Gender Difference in Human-Figure Drawings:

Research literature is replete with evidences of gender difference in human-figures specially those drawn by children and adolescents. Since the content and form of children's and adolescents' artworks appear to differ significantly by sex, Reeves and Boyette (1983) asserted that an individual's gender socialization can be inferred from his or her artwork. A rigidly gender socialized person would tend to draw gender stereotyped images.

Zoller Booth (2004) reviewed investigations on human-figure drawings of children and adolescents carried out in Western cultures and remarked that the majority of the studies have reported the better performance of girls over boys. The girls' drawings are generally more proportionate, detailed and embellished (e.g., Brown, 1990; Cox et al., 2001; Chemey et al., 2006). This is a reflection of gender socialization which dictates that girls should cultivate gentle, decorative skills (Geetha, 2006).

Zoller Booth (2004), however, pointed out that the superiority of girls in human-figure drawing is mostly confined to the Western and Western-influenced cultures and is not universal. The opposite is true in some parts of Mexico, Nigeria and Swaziland. She proposed a contextual relation between culture and gender in human-figure drawing. By gender, she meant not only the gender of
the artist but also the gender depiction in the drawing. In some cultures untouched by the Western civilization e.g., among the Hopi and the Australian aborigines, the boys surpassed the girls in human – figure drawing scores because the former are involved in the production of ceremonial art (Dennis, 1966; Money and Nurcombe, 1974). So socialization (an agency of culture) may bring about gender difference in human – figure drawing. It seems logical to assume, then, that egalitarian socialization can bridge the gender gap in human – figure drawing.

1.8 Gender Difference in Cognitive Style (Field – Dependence – Independence):

Consistent gender differences have been found in field – dependence – independence dimension. Boys and men tend to be more field – independent than girls and women. This finding has been reported repeatedly across cultures (Witkin et al., 1971). The major reason for a finding such as this is gender distinction in socialization. It seems plausible that males are more field – independent because they are encouraged to develop autonomous functioning more often than females in most cultures.

A minority of studies have either denied the existence of significant gender difference in field – dependence – independence (e.g., Pushpavathamma, 1980; Howe and Doody, 1989) or have favoured a superiority of females over males in field – independence (e.g., Chynn et al., 1991). Since socialization influences field – dependence – independence, egalitarian socialization may wipe out gender difference in field – dependence – independence. Socialization promoting greater autonomy among girls may make them more field – independent than boys.
Witkin et al., (1971) reported that gender difference in field – dependence – independence is usually not evident before the age of eight years and among elderly persons. One reason for this could be that gender plays a prominent role in functioning only in the reproductory period – not so much at the stages preceding and succeeding it.

1.9 Gender Difference in Self Esteem:

An overwhelming number of investigations affirm the presence of gender difference in self esteem. Most of these studies (e.g., Hoare et al., 1993; Wood et al., 1996; Maykel and Jochem, 2004) present evidences in support of the male superiority in self esteem. The prizing of masculinity by most cultures and the hardening of sexual differences by disparate socialization are mainly responsible for this (Geetha, 2006). In fact it was reported that girls tended to perceive themselves as less academically capable; craved for social desirability; and manifested more conforming social behavior than boys even when the two gender groups did not differ much in overall self esteem (Coopersmith, 1981; 1990). The locus of the lower self esteem of the girls, according to Bosacki et al., (1997), is the school environment which provides an important context for self esteem development. Children and adolescents experience varying degrees of success in both academic tasks and social interactions with peers within the school setting. Besides most pre – adolescent girls experience an intense conflict between success in these domains and conformity to gender role stereotypes within the school setting. This conflict occurs because in the early elementary grades, academic achievement for girls is congruent with the stereotyped female ideals of conformity, obedience and conscientiousness. But this gendered pattern undergoes a sea change during pre – adolescence when adoption of the traditional masculine behaviours such as ambitiousness, autonomy and determination ensure both academic and social success. The pre – adolescent and adolescent girls are, therefore, confused about whether to sacrifice their gender role stereotype to achieve success or to drop out of the race to success.
in order to remain steadfast to their stereotyped feminine behavior. This conflict typically undermines their self esteem (Bosacki et al., 1997). Most of the investigations in the area have shown that self esteem decreases more sharply with the onset of adolescence among girls than among boys (Robins et al., 2002).

However there are some studies (Major et al., 1999; Robins et al., 2002) which have reported no gender differences in self esteem at least among children, if not among adolescents. An important aspect of self esteem is its stability. It has been observed that girls and boys do not differ in their self esteem stability in either childhood or adolescence (Trzesniewski et al., 2003). Self esteem is a characteristic one is not born with but it is acquired through life’s experiences. Socialization largely influences self esteem. So socialization experiences devoid of gender differentiation, at least the absence of pronounced gender discrimination, may be the reason for equalizing of the self esteem levels of the two gender groups.

1.10 Purpose of the Study:

The present investigation will be carried out mainly for the following reasons:-

i) There are many Western studies on the age – related changes and gender differences in human – figure drawing, cognitive style(field – dependence – independence) and self esteem of individuals. Similarly, many studies in the Western culture have examined the relations among human – figure drawing, cognitive style (field – dependence – independence) and self esteem. However, there appears to be a paucity of such studies in the Indian context. So the present investigation intends to fill in this lacuna. From an academic standpoint, this would shed light on whether the developmental changes and gender differences reported in case of human – figure drawing, cognitive style
and self esteem found in the Indian setting are the same or deviate from the relevant findings obtained in the Western culture. The present study will also reveal whether the nature of relations among the above variables viz., human – figure drawing, cognitive style and self esteem obtained in the Indian setting are the same or different from that found in the Western milieu. Thus the outcomes of the present study may enhance knowledge in the area.

ii) The present study will also try to find out whether cognitive style (field – dependence – independence) and self esteem of children and adolescents’ are reflected in the human – figure drawings they create. In case this investigation finds out that children’s and adolescents’ psychological variables such as cognitive style and self esteem influence their human – figure drawings, then such a finding would be of immense practical implication. Then the outcome of the present study could be used in the advocacy of the use of human – figure drawings instead of the conventional psychological tools like questionnaires, inventories etc. to ensure stress – free testing of children and adolescents.

As a step towards fulfillment of the above purposes, a survey of relevant research literature was carried out, the details of which appear in the next chapter.