REVIEW OF RELATED LITERATURE
Previous research studies form a background for the development of the present study and bring the researcher update. Survey of literature is an important pre-requisite to actual planning and the execution of any research project. Best (1986) writes that the search for reference material is a time consuming fruitful phase. A familiarity with the literature of any problem area helps the student to discover what is already known, what others have attempted to find out, what methods of attack have been promising or disappointing and what problems remain to be solved.

A review of related literature not only helps to clearly understand the problem and the complexities involved, it also provides guidance about the sanctity of the problem, its nature and scope and uses in real life situations. With such information available the investigator can proceed to develop new perspectives in the little known areas or add some new dimensions to the vast world of knowledge.

Review of related studies with regard to behavioural manifestations of sexual development of adolescents in relation to their attitude towards sex has been presented with a view to identifying the research trends so as to formulate appropriate hypotheses. Studies have been organised under the following four sub-heads by taking three parameters of behavioural manifestations of sexual development among adolescence one at a time followed by their relationship with attitude towards sex. It may be mentioned here that researcher could lay her hands on very few Indian studies related to the area which still remains one of the least explored in the country.

(a) Pubertal Changes and Sexual Development.

(b) Sex Awareness and Sexual Development.
(a) **PUBERTAL CHANGES AND SEXUAL DEVELOPMENT**

It may be recalled that Pubertal Change as part of the sexual development has been defined as the stage of physical development in which an individual begins to show primary and secondary sex characteristics. These changes at the end of puberty are reflected in physical appearance and sexual maturation. Related studies on these two behavioural aspects have been reviewed in this section.

Society, by and large, has a strong positive bias toward "good looks". Beauty and physical attractiveness remain highly valued traits in society. The choice of friends, associates, lovers and spouses is strongly influenced by physical attractiveness. Studies have shown that the attractiveness of a specific boy to a specific girl or vice versa, is so unique a thing that it is often difficult to relate it to any list of characteristics (Reader and English, 1947).

Walster et al. (1966) randomly paired university freshmen in a "computer dance". Each person was asked to rate his or her date on a variety of characteristics. It was found that the attitude of a freshman towards his date was largely determined by the date's physical attractiveness. The more attractive the date, the more he or she was liked and more likely the respondent wanted to date that partner again. Personality intelligence and social skills were viewed as insignificant. Jersild (1965), Douvan and
Adelson (1966) and Dwyer and Mayer (1969) found physical attractiveness to be of significance for the opposite sex.

In another study by Sigal and Michela (1976), male students were asked to complete the California Personality inventory. They, then, received evaluative feedback on their performance from either an attractive or unattractive female graduate student. The male students were most pleased when an attractive female gave positive feedback and least pleased when she gave negative feedback. On the contrary whether the unattractive female gave positive or negative feedback made little difference. Dion et al. (1972) found that more physically attractive people expect to date more physically attractive partners.

Physical attractiveness is such a powerful force in behaviour that it generates a bias that can be phrased "this what is beautiful is good" was concluded by Byrne (1972), who asked students to rate strangers solely on the basis of a photograph. Results showed that attractive females were rated as more intelligent.

In a study by Sigal and Michela (1976) males were given the chance to volunteer to help the female experimenter in another setting. Irrespective of whether an attractive female gave positive or negative feedback the males wanted to help attractive girls. Apparently it made no difference that she had just given them negative feedback on their performance on a personality inventory. It was more important to the males to be close to her so that they might change her opinion.

Studies as far back as in 1950's (Jones, 1950) on early and late mature adolescents in pubertal changes found that late maturers sexually were rated
as less attractive in physique, were less well poised and more tense in manner. They engaged in more attention getting behaviour, were more restless, talkative and bossy, were less popular with their peers and fewer of them were leaders (Jones, 1957). In contrast, early maturers emerged as more reserved, more self-assured, more matter of fact, more likely to be engaged in well modulated, socially approved behaviour and more able to laugh at themselves.

Among both boys and girls, more advanced pubertal status is related to calling the other sex on the telephone and dating. This is similar to above findings which link earlier maturation to members of the opposite sex before their parents are ready to give them permission to do so.

Magnusson, Strattin and Allen (1985) and Gargiula, Attie, Brooks Gunn and Warren (1987) found early female maturer experiencing sexual arousal earlier. They demand independence from their parents and older friends and elicit responses from males that lead to earlier dating and earlier sexual experiences.

Early adolescents appear to feel somewhat less happy about themselves compared to older adolescents. Feeling about pubertal change are negative and less stable in them than in late adolescents. Brooks-Gunn et al. (1985) and Brooks Gunn (1988), report that literature on the timing of puberty suggests that early matureness renders girls vulnerable to various behaviours - smoking, drinking, depressive symptomatology and negative body image. Similarly, Simmons and Rosenberg (1971) in their study, found young adolescents somewhat less happy about themselves than older adolescents.
Petersen (1982) stressed that feelings about the body image differ for young adolescent boys and girls, with girls seeming to feel less satisfied with their bodies. The more she thinks, the more dissatisfied she is with both her weight and figure. Faust (1983), Simmons Blyth, and Mckinnoy, (1983), Tobin-Richards et al. (1983) also corroborate Peterson's view.

Offer, Ostrov and Howard (1985) studied the body images of normal adolescents aged 13-19 years. ANOVA indicated that most of the adolescents were not in a state of turmoil and were functioning well. Most of the subjects reported having adapted without conflict to the bodily changes and emerging sexuality associated with puberty. Gender also played an important role in influencing feelings about the body sexuality and vocational aspiration.

In a similar vein, Attie and Brooks-Gunn (1989) and Attic Brooks Gunn and Peterson, (1990) conducted a study on adolescent boys and girls. Their findings revealed that girls are more likely to have poor body images than boys and exhibited more eating disorders than boys.

Douvan and Adelson (1966), Dwyer and Mayer (1967) and Jersild (1965) observed that adolescent girls tend to be more concerned and interested about their physical development than boys. The adolescent girl who, in terms of current cultural stereotypes, is really quite beautiful may view herself as unattractive because she has been told for years that she "looks just like" a parent which she resents.

Gross (1984) also found girls less happy with their bodies than boys throughout the pubertal period. Dissatisfaction of girls increases with pubertal development while boys, discontent decreases.
The appearance and choice status during adolescence was studied by Roff and Broody (1953). They found that both boys and girls were disturbed by unwanted attributes such as fatness, unattractiveness, facial features, poor complexion and lack or excess of height. Obese students are selfconscious and blame their body image for causing personal problems. When given openended questions about social interaction, obese girls gave more weight related responses than their normal counterparts (Canning and Mayer, 1967).

Crisp et al (1970) found obese adolescents often report hating their body and attributing past and present unhappiness to their physical appearance. McQueen (1973) and Wunderlich and Johnson (1973) also reported that obese adolescents rated themselves as aggressive, socially isolated, selfconscious, hostile, phobic and fearful.

According to Roberts and Ludford (1976) acne and other skin eruptions during adolescence are a source of concern for both boys and girls. With the increase in the severity of acne, there is increase in concern. Concern is often as great for boys as for girls because they realise that acne mars their chances for physical attractiveness and they cannot use cosmetics to cover it up as girls can.

Katchadorian (1977) concluded that adolescent girls may worry about the size of their breast - too small or too large, depending on the current fad, and boys about the size of their penis - "too small" usually, but occasionally "too large". The growth of facial hair appears to be one of the most important visible "pubertal changes" to a young male adolescent's feeling about his physical self (Tobin-Richards et al., 1983 and Abramowitz, Petersen and Schulenberg, 1984).
Singh, Singh and Goburdham (1982), in a comparative study of the Indian and foreign students reported problems related to health and physical development. Mankad (1982) studied the problems of adolescents in Rajkot and found that high school pupils had significantly more problems than college students in the areas of physical health, appearance, family and interpersonal relationships.

Singh and Bhangoo (1989) surveyed 120 male and female undergraduates to identify common adolescents' resentments. Male adolescents were found to be more resentful in all areas and demanded more privacy and privilege than female adolescents.

Atallah (1990) identified personal problems and counselling needs of Saudi Arabian adolescent girls studying in 10th, 11th and 12th grades. Results indicated Saudi Arabian High School females having greater problems in the areas of personal psychological relations and social psychological relations. However maximum problems were identified in the areas of finances, employment, home and family, health and physical development.

(b) SEX AWARENESS AND SEXUAL DEVELOPMENT

Sex awareness is one of the important behavioural manifestations of sexual development. Various aspects of sex awareness like source of information regarding sex related matters, differences in sex awareness of boys and girls, feelings about sex awareness and role of elders/parents in the sexual awareness of adolescents are discussed below.

In a study by Angelino, Edmunds and Mech. (1958) mothers proved to be their daughters' most frequent source of information about the origin of babies and menstruation.
Finkel & Finkel (1975) opine that peers are the main source of sex information. Peers are more important for males than females. According to a survey conducted by Thornburg (1975) forty percent of adolescents obtain their information about sex from peers and twenty percent from reading. Girls get more information from mother as compared to boys.

Commission on Obscenity & Pornography (1971) found independent reading as a major source of information. Gebhard (1977) and Spanier (1977) reported that adolescents today as compared to 1930-40 receive more information from mother than from same sex peers and sexual learning too occurs earlier.

In a study of Tata Institute of Social Sciences (TISS) in Mumbai on college going youth in the low income bracket, the main sources of information regarding sex came from pornographic films, magazines and friends (cited in The Hindustan Times, 1998).

Shipman (1971) studied sex awareness at three development stages of adolescence and found that, for girls the sex awareness in prepuberty, puberty, and adolescence respectively was sixteen percent, forty five percent, and seventy eight percent; for males it was, during the same periods, twenty percent, forty four percent and seventy one percent. Generally speaking, girls are concerned about menarche, which is especially for the girls' sexual identification. Autobiographical accounts indicate that it is one overwhelming evidence of femininity and it marks the final crystallization of sexual identity.

Studies by Spanier (1976) and Soreson (1973) revealed that girl were specially curious about birth control pill, pregnancy and abortion. Whereas boys wanted to know about V.D, enjoyment of sex, sexual intercourse and...
birth control. Major interest of adolescent boys was advanced in matters of sexual intercourse, its context and consequences. Males were found to be more knowledgeable than girls only in the area of condoms and females were aware of menstruation and abortion earlier in life than males. Results of the study by Gebhard (1977) are similar to these two studies.

Veena Gupta et al. (1979) conducted a study on "Awareness of adolescent towards population dynamics, human reproduction and family planning programme". Results indicated greater knowledge of girls about human reproduction and family planning methods as compared to population dynamics.

Research co-ordinated by the Washington-based International Centre for Research on Women (ICRW) revealed that adolescent boys and girls had very little knowledge about reproductive anatomy, physiology, sex or contraception. Girls had almost no information and boys were misinformed (News item from The Hindustan Times dated May 9, 1998).

According to Kleinerman, Grossman, Breslow and Goldman (1971) and Thornburg (1972), much of the information adolescents receive is either inaccurate or incomplete. Many experts have documented the scarcity of accurate information about sexual matters among adolescent population. (Furstenberg, Gordis and Markowitz, 1969; Kantner & Zelnik; 1972 and Finkel and Finkel, 1975). Surveys conducted by Burchinal (1969) and Place (1975) have shown that most adolescents have inadequate knowledge about sex. In the beginning they feel shy, self conscious and uneasy. Majority of them are afraid of doing something wrong.
Kantner and Zelnik (1972) and McCoy (1974) too reported lack of accurate information regarding human sexuality. Adolescents lack basic biological information about the female menstrual cycle as well as information on the period of greater risk for conception (Finkel and Finkel 1975). A significant association of increase in age of females and sexual experience with more accurate knowledge about biological functioning was observed by Kantner and Zelnik, (1973).

Rubenstein, Watson & Rubensein (1977) conducted a study on content of books on sexuality. Sample consisted of thirty books on the topics - Love, Abortion, Pregnancy, Intercourse, Birth control, Guilt about sex. Analysis indicated a gap between what is given in books and what adolescents want to know.

Morrison, (1985) and Zelnik & Kanter, (1977) stressed that teenagers were often misinformed or uniformed about the matters of sex and pregnancy. Only eleven percent of all teenagers in their study could identify the phase of the cycle in which the risk of pregnancy was greater.

Delene and Brogowiez, (1990) surveyed 1056 under-graduates to study their health care needs, attitudes and behaviour. Data revealed that college students were not well informed about health care issues and they were more concerned about body image, physical fitness, personal attractiveness and weight control than about preventing serious diseases and illnesses.

In a study concerning sexual matters and AIDS by a group of medical professionals and social scientists of All India Institute of Medical Sciences, (1994) on 716 adolescents-303 girls, 413 boys in the age group of sixteen-seventeen years selected from six schools of Delhi, adolescents were
found to have poor knowledge of sex related matters. They were too young to go for permanent relations, had unsafe sex and act was done in complete privacy and unplanned manner.

Pune based KEM Hospital and Research Centre found the reproductive health knowledge of adolescent boys and girls generally incomplete. (The Hindustan Times, 1998). Likewise a study by Vellore based Christian Medical College also found that adolescents did not use contraceptives for spacing. Induced abortions were used as spacing method and adolescents mainly visited quacks for abortions. (The Hindustan Times, 1998).

Katz et al. (1968) noted women achieving a more mature orientation to sex than men at an earlier age. It was observed by Reiss (1967) that as one moves toward courtship and away from the family and to college, one becomes more permissive in sexual attitudes and behaviour (because of less parental control). Among adolescents there does seem to be widespread knowledge of the pill, condom and withdrawal was found by Kantner and Zelnik, (1972) in sharp contrast to results of the studies in India. In a study of adolescent sexual attitudes and reported behaviour, Soreson (1973) indicated that over two-thirds of adolescents feel they understood more about sex than most older people in their forties or fifties.

In Gardon & Dickman's (1977) study, parents were found to assume that no or little knowledge about sex was advantageous for their children's well being. Further informed adolescents were found likely to be engaged in pre marital intercourse at an early date. Even if they engaged in premarital intercourse at an early date they were more responsible in their use of contraceptives. (Lewis, 1973; Miller and Simon, 1974; Shah, Zelnik and Kantner, 1975).
Similarly, Conger (1987) and Harris (1987) reported that despite greater openness about sex in contemporary society, many parents were not providing the knowledge their children need. Conger (1988) concludes in his study on adolescents that adolescents who are able to discuss sex freely and openly with their parents are less likely to engage in premarital intercourse.

**GENERAL BEHAVIOURAL MANIFESTATIONS AND SEXUAL DEVELOPMENT**

With regard to studies concerning various forms through which sexual development is manifested in behaviour, Ehrmann (1952) classified dating behaviour of adolescents on a scale of love making ranging from no physical contact or only holding hands to sexual intercourse. Responses of five percent were limited to only holding hands, thirty-one percent and sixty percent respectively reported kissing and hugging, while intercourse was initiated by boys in three fourth of instances. Christensen (1952) in a study on adolescents concluded that the youngsters embark on their first real date with some apprehension and shyness. Adolescents begin to date in order to conform to group expectations, rather than from an impelling personal desire. (Crist 1953).

In a National survey by Halleck (1967), Rainwater (1969), Schofield (1971) and Dreyer (1975) of unmarried 15-19 years old girls, ten percent had sex with six or more partners, sixty percent reported sexual experience, having intercourse with one partner and seventy percent had sexual relations just once or twice only. This suggests that promiscuity is rare in adolescent and when it occurs it is usually a sign of psychological maladjustment.

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In one study Kaat and Davis (1970) found the premarital coital rate among college women climbed from twenty-five to the forty-four percent range but the premarital coital rate for college men remained at the same-sixty percent level that has existed since World War I (Robinson et al., 1968).

Teenagers can only be responsible about sexual behaviour to the extent that adult society provides models of responsibility and teachers guide adolescents in their quest for knowledge and sound values. Kantner and Zelnik (1974) surveyed a national random sample of 4611 girls aged fifteen to nineteen and found that nearly three out of ten teenage girls who were engaged in premarital intercourse became pregnant. Only a thin minority of adolescents who did not date at all during their high school years. Kopecky (1974), in his study, noted the percentage who did not date at all, declined from the early 1960s onwards.

In a survey, Smith (1952) found that about 50 percent of college men reported they had started to date at age 14. Over 50 percent girls started dating at 14 or even at younger age. Early dates usually involve going to movies or to get something to eat. Both sexes initiate dating and sexual behaviour within a relationship (Allgeier, 1981; Korman 1983; Muchlenhard and Linton, 1987). Most boys and girls say that they hold hands and perhaps kiss on their first day; only few report going any further (Spreadbury, 1982).

In a study of girls in several lower communities Burchinal (1969) found the age at first dating was fourteen for girls. Reevy (1961) found that petting among adolescents increased considerably in recent years.

Adolescents in urban areas start dating earlier than those in rural areas but middle class adolescents tend to do more casual dating before going
steady and getting married (Lowrie, 1961). Most young people start dating between the ages of thirteen and fifteen years although some date earlier and others later. Douvan and Adelson (1966) reported that by age fourteen, nineteen percent of girls were dating, by age sixteen, seventy-two percent and by age eighteen, ninety-one percent were dating.

Dating at an age earlier than fourteen is also reported by certain authors. Place (1975) who on the basis of his study on twenty adolescents aged fifteen-sixteen years from middle class families concluded that girls started dating at twelve-thirteen years. Girls used peer pressure to change parents' beliefs. But girls reported they had to learn how to discourage unwanted sexual intimacy.

Bibbs (cited in Adams, 1977) studied sexual behaviour of 1040 high school students and found that thirteen percent of girls and five percent of boys were "going steady" at fourteen years of age. Nearly twenty percent of girls and twelve percent of boys were "going steady" at fifteen years. The number was slightly increased with twenty-two percent girls and fourteen percent boys "going steady" at seventeen years. At eighteen-nineteen years there were almost equal number of adolescents (twenty-six percent girls and twenty-five percent boys) "going steady".

Hansen (1977), in a study of 350 students within the age range of fifteen-nineteen years examined dating choices of subjects and found that twenty-five percent of them dated steadily, twenty-five percent on random basis and thirty-three percent occasionally. He further observed romantic contact in twelve-thirteen years age group. Greater number approved movie love scenes. Among the fourteen-fifteen years age group, frequency and
number of dating pattern increased with ninety percent adolescent involved in dating, whereas sixteen-seventeen years age group showed heterosexual interests.

Regarding the progressive increase or decrease with the changing time Hofferth et. al. (1987) reported that Rate of Intercourse among fifteen-nineteen years old female teenagers has continued to increase since 1960, so that by 1982, thirty percent of sixteen years old and nearly three to four of nineteen years old acknowledged having been sexually active.

Cultural differences and gender related differences in sexual behaviour have been observed by Kinsey et. al. (1953) who reported that boys are sexually more active than adolescent girls and that undoubtedly there were cultural differences also. While boys had more freedom, girls were more carefully supervised, and warned against the threat of pregnancy outside of wedlock. Adolescents tend to regard forbidden sex behaviour as a more serious offence for girls than for boys. He originally indicated that nearly twenty percent of adolescent females reported premarital intercourse, while about sixty two percent of adolescent males reported intercourse by age seventeen. Most of the male intercourse was with prostitutes (twenty-two percent of males reported engaging in intercourse with a prostitute) or it was in a casual relationship.

Cole and Hall (1964) found that social problems trouble girls more than boys, as do problems related to morals, religion, sex, marriage and problems about personal attractiveness. Schofield (1965) surveyed a random sample of 1873 teenage boys and girls aged fifteen to nineteen in England.
He found that thirty percent of the boys and sixteen percent of the girls aged seventeen to nineteen reported engaging in premarital intercourse.

According to Hettlinger (1970) feminine sexuality is more "deeply integrated with the whole person, more diffuse than specifically genital, less easily aroused by external stimuli and personal relationships for meaning and value".

Collins (1974) administered questionnaires to adolescents in the age group of 12-17 to assess dating behaviour according to sex, level of intimacy and courtship stage. Results showed males were more experienced sexually at earlier ages than females, with girls' behaviour approaching those of boys as their affectional commitment increased. Boys and girls who were going steady not only felt personally insecure but also had lower educational, occupational aspirations than those who were not going steady at so early an age.

Gupta and Gupta (1979) administered Mooney Problem checklist to 500 college girls between fourteen-eighteen age group. Results showed that the only area in which early and late adolescent girls differed significantly was in personal psychological relations. Girls were least concerned about courtship, sex and marriage. Gupta (1981) found that all adolescent girls had maximum number of difficulties in areas like social, school and personal psychology and minimum difficulties in the areas of courtship, sex and marriage.

Himadi, Ackowitz, Hinton and Perl (1980) found that among older male adolescents dating experience, adjustment scores were lower. Goswami (1980) constructed an Adjustment Inventory for assessing personality
adjustment of adolescent girls. The study revealed that adolescent girls had maximum problems in the area of emotional, mental, school, study and house adjustment. The least problematic areas were physical adjustment and sex adjustment.

As dating continues, especially dating with one partner, petting and sexual experimentation become more likely. Vener et al (1972), Sorensen (1973) and Vener & Steward (1974) found kissing and light petting were nearly as common as dating and were thought to serve to enhance feeling of sexual adequacy. In those same studies, genital petting was much less common, but by age seventeen, fifty nine percent of females and sixty two percent of males reported genital petting as compared to seventy-one percent of both sexes reporting light petting.

In a similar study by Miller and Simon (1974), approximately fifty-sixty five percent of fourteen and fifteen years old boys were found to engaged in light petting compared to forty-seven - fifty five percent of girls by ages sixteen and seventeen. These figures increased to about sixty five-seventy three percent for boys as compared to sixty five -sixty nine percent for girls. Heavy petting is less common for younger teens. The average percentages for boys in the age group of fourteen-fifteen years was twenty eight-fifty six percent as compared to twenty four to forty percent for the girls, at age seventeen. Fifty-sixty percent of boys and forty six–forty nine percent of girls had been involved in heavy petting. According to King and his colleagues (1977) genital petting is very common among college students. Hass (1979) and Chilman (1983) also agree that petting tends to occur slightly earlier.
Hass (1979) conducted a study on teenagers and concluded that heavy petting was less common for younger teens with average percentages for boys and girls equaling to about forty five percent and thirty three percent respectively but for older adolescents in the age group of sixteen to seventeen these figures increased to about fifty five percent and forty five percent respectively.

Chilman (1983) reports petting (touching/feeling the body) appears to have increased in the past few decades and it tends to occur slightly earlier with changes in frequency of petting, techniques of petting, intimacy of techniques involved and frankness about this.

Sarojni (1971) studied personality problems of pupils of age group eight-sixteen. Findings revealed that during the ages between fourteen-sixteen, boys had more adjustment problem than girls. Behaviour emotionality and adjustment problems were significantly more for boys than girls during the period of early adolescence.

Chawdhary (1979) in her study on university students found that majority of students reported adjustment problems as being the most dominant followed by emotional, academics and sexual problems.

Spanier (1975) found that the current dating situations and demands took precedence over prior peer, parental and religious influences; youth often change their sexual behaviour, values and standards in a short period of time. With an objective to find rank values important for 'date' selection. Hansen (1977) conducted a study on 350 students, aged fifteen-nineteen years and identified dependability, considerateness, pleasantness, cheerfulness, sense of humour, dress neatness in order of preference.
Simmons, Blyth, Van Cleave and Bush (1979) found that early data combined with puberty may be stressful and lead to lowered self esteem. Sexual behaviour may lead to a stressful situation. Donahue (1987) studied stress in college students by bringing together past research with three surveys conducted at university of California, Los Angles. Source of stress included academic demand, interpersonal issues, financial concerns, sexuality and emotional distress. Subjects experienced high stress levels in the domains of friendships, romantic and family relationship, financial affairs and academic work.

BEHAVIOURAL MANIFESTATIONS OF SEXUAL DEVELOPMENT AND ATTITUDE TOWARDS SEX OF ADOLESCENTS

Changes in behaviour of the individual bring about changes in the attitude and vice-versa. An attempt has been made to present the studies which highlight this relationship.

According to Rosenberg (1965) and Reiss (1966), college students, both males and females, place a greater emphasis on the meaningfulness of personal relationship between the partners than on what they view as arbitrary social standards of right and wrong.

In a study conducted by Reiss (1967) concerning parent influences on sex differences in sexual behaviour of adolescents, college students and adults, males tended to be more permissive than females and blacks tended to be more permissive than whites. Sixty five percent adolescents had sexual standards similar to parents. Further it was found that twice as many females as males favoured abstinence from intercourse prior to marriage.
Yankelovich (1969) studied the sexual behaviour of seventeen years and older American youth. It was found that those in college were significantly more likely than their non college counterparts to believe that sexual behaviour should be bound by mutual feelings and not by formalities. They also expressed a greater desire for more sexual freedom.

Luckey (1969) and Packard (1970) studied the adolescents in matters of sexual behaviour and found that acceptability of heterosexual behaviour was highly dependent on the degree of closeness to the relationship shared by the partners involved.

In another study by Luckey (1969) and Packard (1970), it was observed most adolescents felt that everything depended upon the “Quality” of the “Relationship” between two people. It two people feel that it is right and meaningful for them and they are prepared to meet the consequences then it is all right and it is no one else’s business. The respondents seemed to want to eschew traditional labels on stages of relationship.

They further observed that most United States students disapproved of pre-marital sexual relations between persons who were merely “casually attracted or good friends, regardless of their ages. A majority of the males felt that couples should at least be “going steady”. Girls went further, a majority believing that the couples should also be atleast officially engaged, with four in ten believing that they should be married. Sexual attitudes and values of the girls tend to be significantly more conservative than those of males. Career oriented girls have been found to be less concerned with continuing sexual intercourse prior to marriage than girls not oriented to careers. (Packard, 1970). None of the studies according to Hunt (1970)
shows a younger or older adolescent approving of pre-marital sexual relations for couples who are not in love or engaged.

Students at "permissive" literally oriented colleges were less conservative than those at more traditional colleges (Adams, 1977). He also observed that college youths were significantly less conservative, at least in their attitudes, than their non-college peers.

The attitudes of younger adolescents appeared more conservative than those of older adolescents. Harris (1971) also more or less corroborates the views of Gallop Poll.

Research from 1960s' to mid 1970s' shows that 93.5 percent of fourteen-seventeen years old felt that a couple should be going steady before they should consider having intercourse, and twenty eight percent felt that they should be married. Older subjects showed more liberal attitudes, (Luckey and Hass, 1969; Conger 1975; Kantner and Zelnik, 1972 and Lewis and Burr, 1975).

It has been asserted by Hunt (1970) that there may be basic physiological differences between males and females in the levels of their sexual drive and responsiveness or in the capacity of various stimuli to arouse them or both. A majority of today's adolescent girls however do not subscribe to such views. They express the belief that "women enjoy sex as much as men".

Studies by Luker (1975) revealed that the undesirable traits and behaviour patterns developed during pubertal changes have negative effect on attitude towards sex of adolescents.

Although most studies confirm that the majority of American teenagers are increasingly accepting in their attitudes toward dating, petting, pre-
marital sexual intercourse, homosexuality, masturbation, and oral sex, some significant general differences of opinion still exist, even though the scope of the difference has narrowed. In Hass' (1979) study of 625 teen-agers aged fifteen-eighteen, eighty three percent of the boys (with no differences between younger and older boys) responded affirmatively to the statement "I believe it is okay for a boy (girl) my age to have sexual intercourse with a girl (boy)". Fifty four percent of girls aged fifteen-sixteen and sixty four percent of girls aged seventeen-eighteen, likewise affirmed this statement. Thus, something of a double standard remains. Most girls still feel that a romantic involvement is a necessary component of sexual activity while only a minority of boys would agree with a romantic requirement for sexual relations. (Scales, 1977)

In a national random sample of 1177 college youth in late 1960s, it was found that a majority of females cited fear of the reactions of others, fear of parental disapproval (sixty percent) and fear of damaging personal reputation (fifty five percent). In contrast, fifty five percent of the males said that the unwillingness of a partner was the major reason that they did not have premarital coitus (Miller and Simon 1980).

McBride (1962) and Lipsitz (1972) opine in general, there were fairly wide social class variations. Black youth (boys and girls both) appeared significantly less conservative than white youth in sexual attitudes.

Roebuek and McGee (1977) found that permissive attitude towards sex was related to family structure. Fifty five percent of black girls from father-dominated homes had permissive attitudes. Contraceptive use was lower in youth who had negative attitudes about having sex than among those who had positive attitudes. (Fisher, Byrne and White, 1983).
In a study by Conger and Peterson (1984) most young people opposed "exploitation pressure or force in sex and sex solely for the sake of physical enjoyment without a personal relationship. In Conger and Peterson study most adolescents expressed liberal attitude when they said "It is all right for young people to have sex before getting married if they are in love with each other".

Jones et al. (1985) report mixed messages from adult society may deter adolescents from developing positive attitudes. While adolescents are told to act responsibly, birth control services are not effectively made available to teenage population. Adolescents' attitudes and values regarding sex are changing although the extent of the change varies widely from one segment of population to another.

Moni Nag in his article entitled "Sexual Behaviour and AIDS in India" points out a survey conducted for assessing adolescents' attitude towards pre-marital sex related to family planning (FPF and OKG, 1992). Sample of the study consisted of 13331 male, 3859 female. Students of 9th, 10th and 11th grades and below 18 years in urban and rural areas of UP, Haryana, Rajasthan and Delhi. Results indicated one fourth agreed with "I believe in getting sexual pleasure where and when I get it" and "it is alright to have sex before marriage if two people are in love", reflecting liberal sexual morals among the adolescents.

Review of related literature on behavioural manifestations of sexual development of adolescents in relation to their attitude towards sex shows that by and large the studies are from outside India all these studies conducted in India and abroad, are tabulated parameters wise in the summary table below:


**TABLE-3.1**

**LIST OF STUDIES CONDUCTED IN INDIA AND ABROAD**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Total Studies</th>
<th>Studies (Abroad)</th>
<th>Studies (India)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pubertal Changes</td>
<td>37</td>
<td>33(89.7)</td>
<td>4(10.3)</td>
</tr>
<tr>
<td>Sex awareness</td>
<td>34</td>
<td>29(85.3)</td>
<td>5(14.7)</td>
</tr>
<tr>
<td>General behavioural manifestations</td>
<td>39</td>
<td>35(89.8)</td>
<td>4(10.2)</td>
</tr>
<tr>
<td>Attitude towards sex</td>
<td>18</td>
<td>16(88.9)</td>
<td>2(11.1)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>128</strong></td>
<td><strong>113(88.3)</strong></td>
<td><strong>15(11.7)</strong></td>
</tr>
</tbody>
</table>

Summary table shows that sex related research has been the most neglected area in India. Most of the studies were conducted in western countries and the nature of topics covered were bold in nature. Only 11.7 percent studies carried out in India and whatever little research has been done, is of very general nature. Close analysis of the studies leads to the emergence of the following trends particularly in relation to variable taken in the present study i.e. pubertal changes, sex awareness, form of behavioural manifestations and attitude towards sex.

Physical attractiveness is a highly valued trait in the society. Girls are less satisfied with pubertal changes reflected through body image as compared to boys. Early maturing boys are more confident and more popular among their peers as compared to girls. Girls tend to be more concerned and interested in their physical development than boys and early adolescents appeared to feel somewhat less happy and less stable about themselves than mid/older adolescents.
Adolescents by and large remain uninformed or are misinformed about sex. Much of the information received by adolescents is either inaccurate or incomplete. Despite openness about sex in society parents do not provide sufficient guidance on sexual matters to their children.

Dating as a behavioural manifestation is one of the first few forms among adolescents. Adolescents primarily 'date' to conform to group expectations. Dating in urban areas starts earlier as compared to rural areas. Petting has increased in the past few years. It occurs earlier in adolescents and there are changes in the frequency, technique and intimacy of petting.

Attitudes of younger adolescents towards sex are conservative as compared to older adolescents. Girls are more conservative in their attitude towards sex than boys. During the present time adolescents have become increasingly more open and honest about sex than their predecessors in the past date tend to base decisions about appropriate sexual behaviour on personal values and this change has manifested itself in greater freedom in sexual relations.

Consequent upon the research trends as cited above following hypotheses were formulated for the conduct of the present study.

**HYPOTHESES**

1. Early adolescents in the age group 15-16 years differ significantly in their adjustment with pubertal changes and sex awareness as compared to mid adolescents in the age group of 17-18 years.

2. Adolescent boys differ from girls in their behavioural manifestations of sexual development in terms of adjustment with pubertal changes and sex awareness.
3. Significant differences exist between urban and rural adolescents on behavioural manifestations of sexual development, that is, adjustment with pubertal changes and sex awareness.

4. There is significant interactional effect of age x sex; age x area and sex x area on behavioural manifestations of sexual development in respect of pubertal changes and sex awareness.

5. The second order interactional effects of age x sex x area contribute to significant variations in adolescents' behavioural manifestations namely adjustment with pubertal changes and sex awareness.

6. Adolescents' behavioural manifestations of sexual development in respect of satisfaction with pubertal changes and sex awareness and their attitude towards sex are positively and significantly related.