SUMMARY AND CONCLUSIONS
INTRODUCTION

“They are passionate, irascible, and apt to be carried away by their impulses... Youth is the time when people are most devoted to their friends or relations or companions. If the young commit a fault, it is always on the side of excess and exaggeration... for they carry everything too far, whether it be their love or hatred or anything else.”

....Aristotle

“As the roaring of the waves precedes the tempest, so the murmur of rising passions... warns us of the approaching danger. A change of temper, frequent outbreaks of anger, a perpetual stirring of the mind, make the child ungovernable... keep your hand upon the helm or all is lost”.

....Rousseau

Although these impressions were not based on scientific evidence, they do reflect the fact that for most people adolescence is a time of profound change and sometimes turmoil. Hall introduced the notion of adolescence as a period of great “storm and stress” as well as immense physical, mental and emotional potential. A number of prominent clinicians and psychoanalytic theorists still view adolescence as a psychologically disturbed state. However, empirical investigations of typical adolescents indicate that the extent of adolescent turmoil during this period has been greatly exaggerated (Conger, 1977).

Adolescence, as a meaningful concept, is best considered within a broad framework of the total development of the individual when the child begins to feel less need for the security of familiar supervision and protection, when physiological and hormonal development begins to approximate adult maturity, and when psychological maturity moves the child in the direction of becoming responsible in society: adolescence has begun.
Physical changes leading to sexual maturity and sexual behaviour are important areas of adolescent development. The inherent maturational processes lead to a rapid acceleration of physical growth, and changing bodily dimensions.

The physical changes that occur at the start of adolescence, which are largely a result of the secretion of various hormones mark the start of puberty, a period in which maturation of the sexual organs occurs. Primary sex characteristics involving reproductive organs and secondary sex characteristics serve as additional signs of sexual maturity. With the arrival of puberty hormonal changes in young people of both sexes lead to an increase in sex drive (Udry, 1990). In response, adolescents become very concerned about how to manage sexuality in social relationships, and new cognitive capacities affect their efforts to do so. Yet the adolescent’s sexual attitudes and behaviour are heavily influenced by the social context in which the adolescent is growing up.

In Indian society it is generally a taboo to talk about sex. Parents give little information about sex, discourage them from engaging in sex play and rarely talk about sex in their presence. The conservative attitude of the parents towards sex prevents adolescents from knowing healthy facts of sex life. (Berk, 1994).

The atmosphere in which the present day adolescent develops has changed radically. Sexual matters are projected everywhere through different mass media like the cinema, magazines, newspapers, radio, television and advertisements on prime time television shows, which the adolescents watch most. The living atmosphere is saturated with sexual awareness, that no one can be shielded from its impact. Therefore it is imperative that parents unfold the true significance of sex in the wholesome development of the adolescent.
into healthy and intelligent adulthood, lest adolescents pick up unwholesome information from the street corner, and incomplete knowledge, which is more dangerous than no knowledge on sexuality, may lead to erotic and erratic forms of social indiscipline.

Likewise while on one hand, adults emphasize that sex at a young age and outside marriage is wrong on the other hand, adolescents encounter much in the broader social environment that extols the excitement and romanticism of sex. These mixed messages leave the adolescent bewildered, poorly informed about sexual facts and with little sound advice on how to conduct their sex lives responsibly (Gordon and Gilgun, 1987). In fact the influence which the first impression and conception of sex makes upon the plastic mind of adolescent is likely to mould his viewpoint for several years, if not for life. Like soft wax, his character receives impressions which gradually harden and shape it for sexual pleasure or woe.

Trends in sexual activity of adolescents are quite consistent with their beliefs. Adolescents' sexual activity is linked to a wide range of personal, family, peer and educational variables including physical maturation, family size, sexually active friends and older siblings, poor school performance and lower educational aspirations (Santelli and Beilenson, 1992). Fundamental changes have occurred in the attitude of society generally towards sexual behaviour. It is these general changes which form an essential background to an understanding of the adolescent's sexual development.

Today's adolescents are more open and honest about sex than their predecessors, and increasingly tend to judge the morality of sexual behaviour not so much by the nature of the act itself as by its meaning to the individual
involved. There has been a transformation not only in sexual attitudes and values but in sexual behaviour as well. Though sexual behaviour is learned, the acts of learning vary in content, rate, age of onset and of context for different adolescents. This results in tremendous variability in manifestation of sexual attitudes, standards and behaviours. Peers are a major source of sexual information and also provide the social context in which sexual learnings are tested and practised. Although adolescents have limited accurate knowledge, they want information on all aspects of human sexuality as well as opportunity to discuss value laden issues.

Adolescents need assistance in learning to understand themselves as sexual beings and in learning to use their sexuality responsibly. Failure to instruct and train adolescents concerning the guidance of sexual development and control of sexual drive is likely to result in misshaped personalities.

Ignorance in these matters is neither innocence nor prophylaxis against erroneous conceptions. It is a positive danger to the normal and wholesome development of the adolescent into a healthy adult. Until such time as parents assume their roles more successfully, community agency and educational institutions will be needed to provide information and support for adolescents struggling to grow towards responsible behaviour.

STATEMENT OF THE PROBLEM

"A STUDY OF BEHAVIOURAL MANIFESTATIONS OF SEXUAL DEVELOPMENT OF RURAL AND URBAN ADOLESCENTS IN RELATION TO THEIR ATTITUDE TOWARDS SEX".
OBJECTIVES

1. To study differences in behavioural manifestations vis-a-vis two parameters of sexual development namely (a) satisfaction with changes (b) sex awareness between adolescent boys and girls.

2. To study differences between early (15-16 yrs.) and mid-adolescents (17-18 yrs.) on (a) satisfaction with pubertal changes (b) sex awareness.

3. To study differences between urban and rural adolescents on (a) satisfaction with pubertal changes (b) sex awareness.

4. To examine the first order interactional effect of age x sex and age x area and sex x area on adolescents behavioural manifestations of sexual development namely (a) satisfaction with pubertal changes (b) sex awareness.

5. To examine the second order interactional effect of age x sex x area on adolescents behavioural manifestations of sexual development namely (a) satisfaction with pubertal changes (b) sex awareness.

6. To establish relationship between various parameters of behavioural manifestations of sexual development on one side and adolescents attitude towards sex on the other side.

DELIMITATIONS OF THE STUDY

Behavioural manifestations of sexual development of adolescents present a problem of vast dimensions. Hence the study is limited in the following ways.
1. Considering the vastness of the subject, study of behavioural manifestations of sexual development of adolescents is restricted to only important dimensions of sexual development, namely: (a) pubertal changes (b) sex awareness (c) general behavioural manifestations.

2. The study has been limited to school going adolescents of 15 to 18 years drawn from class 10th through 12th.

3. Sample has been drawn from urban and rural areas of the Union Territory of Chandigarh.

4. On account of non-availability of standarized tools in this area, all the five tests have been locally developed out of which only one has been standardised.

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 satisfaction with 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.

**DESIGN** - Descriptive survey method coupled with factorial design was employed in the present study. Behavioural manifestations of adolescents' sexual development as reflected in their adjustment / satisfaction with pubertal changes and sex awareness have been studied through questionnaire, scale and information proforma. Information thus obtained has been analysed in respect of percentage for preparing a profile of the Indian adolescent. Further, their sexual development (as measured by way of behavioural manifestations) has been compared across age, sex and urban/rural areas.

In the second part, data has been analysed by employing a 2 x 2 x 2 analysis of variance in order to see the main as well as interactional effect of age x sex x area on adjustment to pubertal changes and awareness on sexual matters taken as indicators of behavioural manifestations of adolescents' sexual development. The third part of the study deals with relationship of general behavioural manifestations of sexual development (such as satisfaction with pubertal changes and sex awareness) with adolescents' attitude towards sex.

**SAMPLE** : Stratified random technique of sampling was used. Urban/rural area schools of union territory of Chandigarh, sex (boys/girls) and ages (15-16 yr. and 17-18 yr.) were taken as strata within which selection of subjects was done randomly. In all 50 boys and 50 girls in each of two age ranges (15-
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.

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16 yr and 17-18 yr) and each of two areas i.e. from urban and rural area were selected, thereby making total sample of 400 adolescents.

TOOLS :- The following tools were employed in the study. Except for the one tool at serial number one which was developed and standardised by the researcher all other tools were locally developed but not standardised.

1. Attitude towards sex scale (ASS) was used to study attitudes of adolescents towards sex.
2. Student information form (SIF) was employed to collect information about adolescents' family background.
3. Sexual maturity performa (SMP) was prepared to study satisfaction of adolescents with their pubertal changes.
4. General behavioural manifestations questionnaire (GBMQ) was used to collect information about sexual behaviour of the adolescents.
5. Sex awareness scale (SAS) was administered to examine sexual knowledge possessed by the adolescents.

DATA COLLECTION

Principals' co-operation was required and ensured before starting data collection. All the five tests/scales/questionnaires were administered on students of selected schools in small groups of 30-35 adolescents. Students took about one hour time to complete the information required in filling all the five tests. The sequence and procedure of administration of tests was kept the same for all the groups.

STATISTICAL TECHNIQUES USED.

1. For concrete variables calculation of percentage and \( \lambda^2 \) test was done on general behavioural manifestations.
2. Descriptive statistics such as mean, median, mode or standard deviation for continuous variables were computed to examine nature/normality of data.

3. Significance of difference between means for tracing the pattern of growth from early to mid adolescence as also for finding out differences across sexes and urban/rural areas.

4. Bivariate co-relation to examine the nature and degree of relation between attitudes towards sex and between behavioural manifestations.

5. Analysis of variance technique was used in order to examine interactional effect age x sex, age x area, sex x area as also age x sex x area on behavioural manifestations of sexual development.

RESULTS

I. GENERAL BEHAVIOURAL MANIFESTATIONS OF SEXUAL DEVELOPMENT

1.(a) An Indian adolescent, by and large, has a mixed feeling of being uncomfortable (39.25%) and normal (34%) with pubertal changes rather than feeling embarrassed (10%) or irritable (16.75). More boys (52%) as compared to girls (26.4%) and greater number of mid adolescents (48%) than early adolescents (38%) felt uncomfortable.

(b) ‘Friendship with opposite sex’ was viewed as essential and desirable (66.5%) rather than non essential (33.50%); greater percentage of boys (74%), early adolescents (67%) and urban adolescents (84%) considered it essential and desirable as compared to girls (59%), mid adolescents (65%) and rural adolescents (49%); irrespective of age; sex and area
more than two third adolescents preferred platonic relationship whereas a small percentage (11.5%) would like to enjoy physical relationship with opposite sex; more boys (23%) than girls (0%), greater percentage of mid adolescents (14%) than early adolescents and more rural (13.5%) than urban (4.5%) adolescents expressed their desire for physical relationship.

(c) ‘Outings’ were rated as most favourable activity to be enjoyed with opposite sex (53.75%); more boys (60.5%) than girls (47%), more adolescents at early (59%) than later stage (48.5%) and almost the same percentage of urban (52.5%) and rural (55%) adolescents preferred outings with opposite sex.

(d) ‘Crush’ was felt by majority (82.25%) of the adolescents; girls (90%) experienced it more than boys (74.5%), early adolescents (87.5%) had more crush than mid adolescents (77%) and likewise urban adolescents (86.5%) had greater crush than rural adolescents (78%).

(e) Overall 37.5% of adolescents fell in ‘love’; more boys (44.5%) experienced love than girls (30.5%); almost same percentage of early (36.5%) and mid adolescents (38.5%) experienced love; and urban adolescents (48.5%) outnumbered rural adolescents (26.5%) in experiencing feeling of love. As regards emotional attachment in love 43.75% of adolescents (girls, 53.5%; mid adolescents 52.5%; and urban adolescents, 58%) viewed it as a ‘must’.

(f) On an average whole 50.5% adolescents preferred ‘occassional date’ while 60.5% boys, 67.5% early adolescents and 69.5% rural adolescents preferred ‘occassional date’, the percentage who favoured ‘steady
date’ was 57% for girls, 62% for mid adolescents and 59% for urban adolescents favoured.

(g) ‘Kissing’ was most indulged activity on ‘date’ (52%) of adolescents. More boys (60%) than girls (40%), more early adolescents (71.5%) than mid adolescents (32.5%) and more urban (62%) than rural adolescents (42%) indulged in it.

(h) Almost half of total adolescents (33.75%) preferred car as mode of transport while on ‘date’. 42.5% girls, 37.5% mid adolescents and 53.5% urban adolescents preferred ‘car with tinted glasses’. Out of the total sample 40.5% boys preferred ‘motorcycle’ as mode of transportation.

(i) ‘Friends’ were the most important source of sex information for adolescents (38.5%). Irrespective of age, sex and area nearly one third of adolescents got sex information from friends. Parents were perceived as source of sex information by only 8% of the adolescents.

(j) Majority of adolescents (60.5%) viewed homosexuality as not normal for their age. It is noticeable that 39.5% of adolescents considered it as natural (32%) or normal (7.5%).

(k) More than 75% adolescents wanted information on sexual matters. This need was expressed almost vehemently by early adolescents (98.5%), mid adolescents (78.5%) as well as rural (90.5%) and urban adolescents (86.5%). Likewise boys (94%) and a little less number of girls (83%) expressed unawareness in sex related areas. Information was needed in areas like masturbation, sexual intercourse, sexual relationships and homosexuality. Some areas in which adolescents felt they did not require much information include child birth and birth control.
It is worth noting that 11.5% of adolescents desire physical relationships on a date and 23% of boys indulge in it. Kissing is preferred by 52% of the adolescents. In terms of percentages, these figures may not be very high but are very significant in terms of social and moral implications. They depict that a small percentage of adolescents are going ahead in the direction where social, moral codes of the Indian society in respect of pre-marital relationships may not be followed. Unlike the Y2K bug, which fell flat on its face, a small percentage of adolescents desirous of physical relationship has its bare fangs on the prowl. We seem to be sitting on a time bomb which is ticking away fast. (Raj, 2000)

II. FAMILY BACKGROUND VARIABLES

Some important family background variables were examined for their significance between mean differences that is t-ratios in order to see whether or not these variables made a significant difference in sexual development of adolescents in respect of their satisfaction with pubertal changes and sex awareness. The differences between means which reached atleast .05 level of significance were considered to be significant. The results which reached the level of significance are presented below:

(a) Significance of difference between means of adolescents across three categories of ‘current living status’ revealed that adolescents living in nuclear families scored significantly higher (M=39.90) than adolescents living in hostels (M=39.88) as well as in joint families (M=37.27) and had better satisfaction with pubertal changes. In areas like abortion, pregnancy, birth control, masturbation, sexual relationships, adolescents living in hostels scored significantly higher (M=29.44) than adolescents living in nuclear (M=28.68) as well as joint families (M=27.27).
(b) Significance of difference between means of various categories of
'parents' education' revealed that adolescents having educated fathers and mothers were better adjusted to pubertal changes and had better sex awareness as well (vide tables 7.2 and 7.3).

(e) Adolescents of 'working mothers' had better satisfaction with pubertal changes ($M = 41.01$ and $M = 29.45$) and had better sex awareness ($t = -3.95$ and $t = -6.78$) as compared to adolescents whose mothers were housewives. Test of significance of difference between means across different categories of 'fathers' occupation' on adolescents' satisfaction with pubertal changes and sex awareness showed that satisfaction with pubertal changes was maximum in adolescents whose fathers were in business ($M = 39.32$) as compared to adolescents whose fathers were in service ($M = 38.86$) or doing something else ($M = 36.22$). Deviating from sex awareness was more in adolescents whose fathers were in service ($M = 28.80$) as compared to adolescents whose fathers were doing business (28.23) or something else ($M = 26.83$).

(d) Significant differences also existed between adolescents across various categories of 'monthly income'. Adolescents coming from high socio-economic strata had more satisfaction with pubertal changes and had better sex awareness than adolescents from low-socio economic strata (vide table 7.6).

III. INTERACTIONAL EFFECT OF AGE x SEX x AREA ON SEXUAL DEVELOPMENT IN TERMS OF SATISFACTION WITH PUBERTAL CHANGES AND SEX AWARENESS

The 2 x 2 x 2 analysis of variance (age x sex x area) in respect of two criterion variables that is satisfaction with pubertal changes and sex awareness
as indicted in terms of behavioral manifestations of sexual development yielded the following significant effects.

(a) There was a significant effect on account of age on satisfaction with pubertal changes and sex awareness (vide tables 7.8 and 7.9). In other words early adolescents were found to be more satisfied than mid adolescents as far as their satisfaction with pubertal changes such as changes in height, weight etc. Likewise sex awareness on matters of abortion, pregnancy birth control, masturbation, sexual relationships was significantly better in early adolescents as compared to mid adolescents.

Hence hypothesis I “early adolescents in the age group 15-16 yrs. differ significantly in their adjustment with pubertal changes and sex awareness as compared to mid adolescents in the age group of 17-18 years” stands accepted.

(b) There was a significant main effect on account of sex on satisfaction with pubertal changes (vide table 7.8 and 7.9); that is boys (M=36.38) had significant edge over girls (M=41.61) in making adjustment to pubertal changes. Sex did not yield significant variation in the criterion variable sex awareness.

Hence hypothesis II “adolescent boys differ from girls in their behavioural manifestations of sexual development in terms of satisfaction with pubertal changes and sex awareness” stands accepted only partially for pubertal changes.

(c) There was a significant main effect on account of area on satisfaction with pubertal changes and sex awareness (vide tables 7.8 and 7.9); this
effect was in favour of urban adolescents whose adjustment with pubertal changes was superior (M = 41.02) than that of rural (M = 36.97). Urban adolescents (M = 29.47) were also found to be more aware on matters of sex as compared to rural adolescents (M = 27.49).

Thus the hypothesis III, “significant differences exist between urban and rural adolescents on behavioural manifestations of sexual development that is adjustment with pubertal changes and sex awareness” may be accepted.

(d)(i) There was significant interactional effect on account of age x sex on sexual development both in respect of adolescents’ satisfaction with their pubertal changes and sex awareness (vide tables 7.8 & 7.9). Intergroup comparisons yielded significantly better satisfaction with pubertal changes and sex awareness in mid adolescent boys (M = 21.25 & M = 27.14) (vide table 7.13) as compared to other three groups namely mid adolescent girls (M = 20.42, M = 22.40); early adolescent boys (M = 20.42, M = 25.53) and early adolescent girls (M = 19.25 & M = 26.55).

(ii) There was a significant interactional effect on account of age x area on behavioural manifestations of sexual development of adolescents in respect of sex awareness of adolescents (vide table 7.9). Value of F = 11.09 was found to be significant at .01 level. Interaction of four groups (urban / rural early adolescents and urban, rural mid adolescents) revealed that sex awareness was maximum in rural mid adolescents (M = 26.51) vide table 7.14 followed by rural early adolescents (M = 26.22), urban early adolescents (M = 25.96) and urban early adolescents (M = 23.03) in descending order.
(iii) There was significant interactional effect on account of **sex x area** in causing variations in behavioural manifestations of sexual development of adolescents which was observed only on the criterion variable of sex awareness at .01 level (vide table 7.9). A comparison of four groups involved in the Sex x Area interaction (urban adolescent boys and girls, rural adolescent boys and girls) revealed that urban adolescent girls had maximum sex awareness (M=26.49, vide table 7.15). Age x area (F=.30) and also sex x area (F=1.94) did not yield significant effect on sexual development in terms of satisfaction with pubertal changes (vide table 7.8).

Thus the hypothesis IV, "there is significant interactional effect of age x sex, age x area and sex x area in behavioural manifestations of sexual development in respect of satisfaction with pubertal changes and sex awareness" stands accepted in respect of sex-awareness whereas in case of satisfaction with pubertal changes, it may be accepted only partially for interactional effect of age x sex.

(e) There was significant interactional effect of **age x sex x area** on sexual development of adolescent as revealed both by of adolescents their adjustment to pubertal changes (F = 6.29) and sex awareness (F = 14.15, vide tables 7.8 and 7.9). Inter comparison of eight groups involved in the interaction of age x sex x area revealed that mid adolescent rural boys had maximum satisfaction with their pubertal changes (M = 22.98) whereas early adolescent rural boys had better sex awareness (M = 27.70) than other groups.
This leads to the acceptance of hypothesis V, "the second order interactional effect of age x sex x area contributes to significant variations in adolescents' behavioural manifestations namely adjustment with pubertal changes and sex awareness" stands accepted.

IV. RELATIONSHIP BETWEEN BEHAVIOURAL MANIFESTATIONS OF SEXUAL DEVELOPMENT AND ATTITUDE TOWARDS SEX.

Pearsons Product-Moment correlations between scores obtained by adolescents on behavioural manifestations of sexual development in respect of satisfaction with pubertal changes and sex awareness on one side and attitude towards sex on the other side were computed. Inter-relationships between pubertal changes and sex awareness were also calculated. Results revealed a positive and significant relationship between adolescents' sexual development as indicated by their satisfaction with pubertal changes (r = .335, vide table 7.20) as well as their sex awareness (r = .227) was positively and significantly correlated (at .05 level of confidence) with their attitude towards sex. The greater was the adolescents' satisfaction with pubertal changes and their sex awareness the more positive was their attitude towards sex.

In the light of these findings the hypothesis VI, "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" stands confirmed.

CONCLUSIONS

1(a) An Indian adolescent in general has a mixed feeling of being 'uncomfortable' and normal during pubertal changes. He does not consider homo-sexuality normal for his age. Friendship is considered
by him as essential and desirable without any physical relationship with members of opposite sex. A greater percentage of adolescents experience ‘crush’ but little more than one third fall in love. Slightly less than half view emotional involvement in a relationship with members of opposite sex as necessary. Love relationship is limited to ‘conversational thrills’ through phone, sending cards and rarely kissing. Half of them prefer ‘occasional date’ to ‘steady date’. Given a chance more than fifty percent would like to indulge in kissing. Because of convenience car is the most preferred mode of transportation on a ‘date’.

‘Friends’ are rated as the best source of sex information. Parents do not figure as important sources adolescents can turn to for sex information. More than two thirds are in need of information on ‘sexual matters’ like masturbation, sexual intercourse, sexual relations and homosexuality.

(b) **Comparison of early and mid adolescence** shows that early adolescents prefer ‘outings’ with opposite sex whereas ‘library work’ with members of the opposite is enjoyed more by mid adolescents. Almost two thirds early and mid adolescents have ‘crush’ but only one third fall in love. More mid adolescents considered emotional attachment ‘must’ as compared to the preference shown by early adolescents. ‘Kissing’ is the most preferred activity of early adolescents on ‘date’ who also consider motor cycle as the most favourite mode of transport in comparison to mid adolescents who prefer ‘car with tinted glasses’.
As far as information on 'sexual matters' is considered, adolescents at both early and mid-stage express the need for greater information. Mid adolescents want to know more about masturbation and sexual relations whereas early adolescents want more information on masturbation, sexual intercourse and homosexuality.

Gender differences are also observed in adolescents' sexual development. Greater percentage of boys fall in love as compared to the percentage of girls falling in love. Boys prefer 'occasional date' whereas girls prefer 'steady date'. More boys prefer kissing as important activity on 'date' than the preference shown by girls. Boys prefer 'motor cycle' because of 'speed' whereas girls prefer 'car with tinted glasses' because of convenience.

Most of the boys want to know more about sexual matters like masturbation, sexual intercourse and homo-sexuality whereas girls are desirous of more information on sexual relations and birth control alongwith information of sexual intercourse.

Differences on account of environment where in adolescents are residing also depict variations in adolescents' satisfaction with pubertal changes and sex awareness. These comparisons were made in respect of adolescents residing in urban and rural areas. 'Crush' and falling in love as behavioural manifestation of sexual development has been preferred by greater number of urban adolescents, as compared to rural adolescents. Urban adolescents prefer 'steady date' whereas rural adolescent prefer 'occasional date'; former like to go for dating in 'car with tinted glasses' whereas latter prefer both car and motor cycle as mode of transport.
Most of the urban as well as rural adolescents rate 'friends' as the most important source of sex information and want more information on sexual matters; while urban adolescents need information on masturbation and sexual relationships, rural adolescents wish to be informed on masturbation, sexual intercourse and homosexuality.

II (a) Adolescents living in nuclear families are better adjusted to pubertal changes than adolescents living in hostels as well as in joint families. On the contrary adolescents living in hostels have better sex awareness than adolescents from nuclear and joint families. Thus peer groups in hostels are not of significant help to adolescents in making adjustments with pubertal changes but they definitely serve as a good source of information on sexual matters.

(b) Adolescents having educated parents (father and mother) as compared to those whose parents are illiterate, are better adjusted to pubertal changes and also have better sex awareness.

(c) Adolescents of working mothers are better adjusted to pubertal changes and have better sex awareness than adolescents whose mothers are housewives. Satisfaction with pubertal changes was maximum in adolescents whose fathers are businessmen, whereas sex awareness is more in adolescents whose fathers are in service.

(d) Adolescents coming from high socio-economic status have more satisfaction with pubertal changes and also have better sex awareness than adolescents from low socio-economic status.
III.(a) The variable of age had a significant effect on sexual development in terms of satisfaction to pubertal changes and sex awareness. Early adolescents in the age group 15-16 years showed better adjustment to pubertal changes and had better sex awareness than their counterpart mid adolescents in the age group 17-18 yrs.

(b) The variable of sex had a significant effect pubertal changes. Boys showed better adjustment to pubertal changes than girls, but girls outperformed boys in sex awareness.

(c) The variable of area had a significant effect on satisfaction with pubertal changes and sex awareness. Urban adolescents were better adjusted to pubertal changes and also showed better sex awareness as compared to rural adolescents.

(d) Interaction of age x sex significantly affects pubertal changes as well as their sex awareness. Mid adolescent boys showed maximum adjustment to pubertal changes as compared to mid adolescent girls and early adolescent boys and girls.

(e) Age x area interaction showed a significant effect on sex awareness but a non-significant effect on pubertal changes. Rural mid-adolescents had better sex awareness as compared to remaining three groups, that is urban mid-adolescents, and urban and rural early adolescents. Satisfaction with pubertal changes was higher in urban mid adolescents as compared to rural mid adolescents, urban and rural early adolescents.

(f) With regard to the interaction of sex x area on satisfaction with pubertal changes and sex awareness it was observed that interaction was significant in the case of pubertal changes but non-significant for
sex awareness. In other words urban adolescent girls showed maximum sex awareness as compared to other groups, that is, urban as well as rural adolescent boys and rural adolescent girls.

(g) Interactional effects of age x sex x area were significant both in the case of satisfaction with pubertal changes and sex awareness. Mid adolescent rural boys scored highest mean on satisfaction with pubertal changes as compared to all other seven groups. Mid adolescent urban boys had better sex awareness as compared to mid adolescent urban and rural girls, mid adolescent rural boys, and early adolescent urban and rural boys and girls.'

IV. Behavioural manifestations of Sexual Development of adolescents in terms of satisfaction with pubertal changes as well as their sex awareness was positively and significantly correlated with their Attitude Towards Sex implying thereby that the greater is the adolescents’ sex awareness and adjustment with their pubertal changes, the more positive is their attitude towards sex.

EDUCATIONAL IMPLICATIONS

Results of the present study have implications for adolescent development which formulates a basic unit of curriculum of Home Science. The subject of Home-Science is taught in school with a view to generating knowledge, skills and attitude in various areas, such as food and nutrition, home-management, textiles and clothing, extension education and child development. The study of child development closely relates to the physical, emotional, social and cognitive development of the child. It also lays stress on discovering the characteristic changes in appearance, behaviour, interests and
goals and developmental related problems as the child passes from one development period to another. In fact these developmental patterns lead to changes in behavioural patterns through which children express their growth and development from pre-natal period to adulthood. The behavioural patterns are learnt within the overall cultural patterns. The results of the present study can help adolescents become aware of the expectations of the society as also to fix for themselves a reference point on the map of general developmental pattern considered to be normal. It acts like a canvas to adolescents through which they can relate to the society.

The study has revealed that most adolescents possess incomplete knowledge about sex related matters and their source of such knowledge is itself devoid of proper information. Adolescents look towards peer groups, literature, media and adults to satisfy their curiosity in matters related to sex as also to seek answers and solutions to their problems. In fact the adult best equipped to help the adolescent is one who is aware of the stages of heterosexual development through which the normal child passes from infancy to adolescence; is cognizant at the pressures placed on individuals in a changing society; recognizes the influence of the family and adults upon the child and is burdened with a minimum of problems related to interpersonal relations. That the number of such adults who interact with adolescents directly or indirectly is miserably small is depicted by the results of the present study. Hence result of the study can help adults to equip themselves for guiding sexual development of growing children.

The two most important people in the life of an adolescent are parents and teachers. They need to treat adolescents not as children but as ‘adults in the making’. Home has special significance during adolescence. In spite of
the rapid changes within the modern family, the home is still the most potent factor in regulating the behaviour of young people. Results of this study reveal that many parents lack the correct knowledge, are ill equipped and constrained by discomfort over discussing sex with their children when they turn to parents for sexual knowledge. Results of the study can be utilised both by parents and teachers in guiding the process of sexual development of children and adolescents.

Too often, the onus of education falls on schools. Schools are viewed as vehicles for imparting knowledge in a variety of domains (sexual problems being one of them) beyond the traditional curricula. Teacher is one of the important persons surrounding the adolescent so it is very important that teachers be positively oriented in their attitude towards sex. The teachers should be able to create a healthy climate for effective adolescent teacher interaction. Results of the present study have significant implications for inservice programmes for teachers that is, in empowering the teacher with necessary knowledge, skills and techniques which are needed in order to enable developing adolescents to make adjustments in various areas of pubertal changes as also to be aware on sex-related matters.

Apart from implications of the results of the study for various programmes which form regular feature of schools, educationists may use these results for planning and policy formulation as to whether knowledge of sex related matters can be provided to growing adolescents by introducing sex education as a separate subject or atleast efforts can be initiated in this direction to make it as a unit within curriculum of Home-Science wherein essential components on sexual development can be integrated within themes such as types of developments from infancy to adulthood. Topics of sex
education can also be included to inculcate positive attitude towards sex by rooting the details of the topic in the social moral fabric of the Indian society.

Effective sex education may be thought of in its own forms of three R’s—Respect, Responsibility and Restraint. Adolescents must understand that misuse of sexuality has the risk of dire consequences. The ramifications of an unwanted pregnancy last long after the fun and excitement of a sexual act is over. If young persons desire to be sexually active then they must act responsibly about that decision. Adolescents must respect the sexual rights of others. Boys and girls need to understand their mutual right to say ‘no’. Further, young people need to be prepared to deal with sexual coercion, should it occur. Adolescents should be encouraged to practice restraint. A decision to be sexually active may be terribly difficult to undo and may lead to feelings of guilt and lowered self esteem. A good programme must fit the community.

Results of present study specifically related to adolescents’ desire for dating and having physical relationship are quite revealing. Though the percentage of adolescents who prefer these types of behavioural manifestations is minor, nevertheless it is significant in suggesting that society cannot close eyes to it. From being secretive and silent on sexual practices it necessitates frank discussion on sex related matters otherwise increased sexual promiscuity coupled with ignorance regarding sexuality will make young people more vulnerable (Marwaha, 2000).

In revealing that friends are the best source of sex information, the present study has an implication for stimulating peer group interactions and educational institutions. Peer groups are composed of children or adolescents of approximately the same age, with similar interests and ideas. These groups often arise spontaneously to meet certain needs. Some groups are slightly
cohesive, others more closely knit. The adolescents peer group relationships can be guided to serve as resource persons on matters related to sexual development for growing adolescents; these groups can help the adolescent to deal with his stresses and strains, pubertal changes and self concept; define his social roles vis-a-vis members of the opposite sex; broaden his knowledge and values, thereby helping him to adopt behavioural patterns which fall within the social approval. The teacher can help evolving these peer group relationships through field trips and cultural activities etc.

The results of the study also have implications for guidance and counselling workers. An effective programme requires that the counsellor be able to reach out to the students with factual information, be able to elicit responses from students about their sexual concerns and allow the students to unravel their own solutions without imparting his or her own value system. Adequate knowledge of sex related matters which adolescents need to be aware of will sharpen the counsellors’ job skills and this would help them to provide guidance to adolescents in making them aware of sexual behaviour patterns as also in adjusting to pubertal changes, thereby adding to the latters’ satisfaction with sexual development.

Although different emphases are placed on home and school, both should co-operate in the task of helping the adolescent make satisfactory adjustment to pubertal changes. Parents are often torn between pressures to be lenient and strict. The picture today is one of declining authority in the home. The young persons’ right to maturity takes precedence over parents demand for obedience. Parents teacher meetings offer the platform to improve environmental factors in which the child grows.
The investigator submits that the generalizability of conclusions based on this study be viewed within the constraints of the sample and the efficiency of the tools used in the study. Greater confidence can be placed on findings by extending such types of studies to adolescents belonging to different strata.

SUGGESTIONS FOR FURTHER RESEARCH

1. The study can be replicated on samples drawn from different types of schools such as convents, privately managed schools and Navodaya Vidyalayas.

2. Cross cultural studies may be taken up in this area.

3. In place of descriptive methods, case studies approach on this topic may lead to some penetrating results with regard to some bold behaviour patterns like masturbation, kissing petting, sexual intercourse of adolescent sexual development.

4. It would make an interesting study to examine and analyse the attitude towards sex of engaged couples so as to provide them pre-marital counselling if needed.

The present study is a pioneering work in Chandigarh to the best of information of the researcher. Thus, for the Indian researcher, it is a virgin field ready to be explored more and more.