The realisation that home constitutes one of the most important single factors in a child's life for his proper development has given psychological researches an orientation towards home and for that matter family. "A family's life style - their stress on education, their economic well-being, their child-rearing practices and other similar factors - is likely to have an important effect upon the child's interest and ability to carry out academic work" (Mosteller & Moynihan, 1972, p. 172). It may be said that a child with average abilities who has satisfying home experiences can do well in his school or other achievements. Home and family have thus emerged as major influential agencies for a child's mental development (Havighurst & Neugarten, 1975, p. 145). The home provides the individual with a unique environment and training which help him to play successfully the role assigned to him by the society.

Vernon (1965) showed that poor socio-economic, cultural and social environment had diminishing effect on children's spatial and practical abilities. Bloom analysing the data from about 2,000 studies "dealing with the development of various human characteristics from infancy to adulthood, concluded that variations in the environment have the greatest effect during
the early years of life - that is, during the period when
the child is growing and changing at its most rapid rate" (Havighurst & Neugarten, 1975, p. 119). Henderson and
Merritt (1968) studied the influence of varied experiences
and opined that children with experimental limitations
suffered from linguistic handicap manifested in their
school progress.

All characteristics, however, are not equally
affected by home. According to Bloom (1966, p. 209),
"educational achievement is rather obviously influenced
by environmental differences", while others may be, to
a lesser degree.

Success in school achievement as measured by
achievement tests or the average school examination marks
in different curricular subjects are more affected by home
than by the students' mental abilities - and as such, home
has been regarded as one of the important factors in the
child's educational achievement (Bloom, 1966, p. 210);
Mishra, Dash & Padhi, 1960-61).

The relationship between home environment in its
various aspects and academic achievement have been
investigated by different social scientists, specially the
psychologists and educationists. Some investigators have
dealt with home environment in its totality. The available literature on relevant studies are summarised below.

HOME ENVIRONMENT AND ACADEMIC ACHIEVEMENT

Fraser's study (1959) on home environment and its effect on academic achievement is one of the earliest and most widely cited works. Her "results have shown clearly that the factors in the home environment are more closely correlated with school progress than with intelligence" (Fraser, 1959, p. 75). According to Wiseman (1964), the home environment is more important for the child's education than his school or neighbourhood. Marjoribanks (1975) opined that change in the family environment may give "modest increment" in school performance scores. Bradley and Caldwell (1976) obtained results which indicated that home environment might produce instability of performance on infant's mental tests. Kallashan's study (1977) revealed that home environment was successful in predicting attainment scores. Garland's (1980) results showed that family background, parental values and expectations and the effect they have on their children, exert a significant impact on their school achievement. Kinmore (1981) concluded that home environment

* In the present section, investigations subsequent to Fraser's study have been dealt with.
has a "definite and ongoing" influence on the reading achievement of the child. A child's interest in reading is created by familiarity of print in his environment, and the parents' perception of reading influences the quality and quantity of reading. Kochen (1980) reported that home literary environment surpassed all other variables in predicting reading achievement of first graders.

In India, Mishra, Dash and Padhi (1960-61) found that the correlation of home environment with school achievement was higher than its correlation with intelligence. They concluded that if the home environment was not conducive to the child's study, his achievement might be poor in spite of his above average intelligence. Anantha Krishnan's study (1977) showed that deterioration in academic achievement was influenced by unfavourable home conditions.

Home adjustment boosts academic motivation which in turn influences academic achievement of a child favourably. De and Sinha (1970) found that home adjustment had a positive influence on academic motivation. Kakkar (1970 a) observed that scholastic achievement was low when there were conflicts in the home.
Studies on the effect of various aspects of home on academic achievement are being discussed in the following order:

1. Family Size
2. Socio-economic Background
3. Maternal Employment
4. Educational Environment
5. Provision of Facilities
6. Parent-child Relationship
7. Reinforcement.

1. Family Size

Fraser (1959) obtained a negative significant correlation between academic achievement and family size. Douglas (1964) reported that family size and overcrowding affect educational progress in children. This result was corroborated by the findings of Davie, Butler and Goldstein (1972). Orme (1975) showed that academically bright students tend to come from smaller families. No relationship, however, between family size, birth order and academic achievement was obtained by Kunz (1977).
Mathur and Hundal (1972) reported a low negative correlation between family size and academic achievement showing that bigger the family size, the lower would be the academic achievement of the children. This finding was supported by Chatterji, Mukherjee and Banerjee (1972).

2. Socio-economic Background

Curry (1962), Lindgren and Guedes (1963) and Miner (1968) obtained a significant positive correlation between socio-economic status and academic achievement.

Investigations in the same area in India include those of Gupta (V.P., 1968), Chopra (1969), Kakkar (1970 b), Rao (1970), Mathur and Hundal (1972), Girija and Bhadra (1976) and Anantha Krishnan (1977) reporting significant and positive relationship between socio-economic status and academic achievement.

Bahal and Saxena (1978) reviewing the investigations dealing with family ecology reported that socio-economic status was an important factor for cognitive development of the children.

Kaushal (1971) observed that students of middle and higher socio-economic class were lower in academic achievement than those coming from the poor economic standing and
concluded that class structure does not automatically help the students of higher class for better academic performance.

Ekehammar (1977) found that social background had significant correlation with continued education and career choice of senior High School students. Kwon (1977) showed that social class was a determining factor of academic achievement. Hahn (1981) reported that social class had some effect on academic achievement.

Fraser (1959) obtained a positive and significant correlation between income and academic achievement and so did Hitchcock (1976).

Gupta (H.G.; 1968) Mathur and Hundal (1972), Girija and Bhadra (1976) and Saini (1977) found that income was positively related to academic achievement.

Jawar (1963) concluded that academic achievement was positively related to father's occupation and so did Sinha (1973) and Girija and Bhadra (1976).

3. Maternal Employment

The investigations relating to mother's employment and children's educational achievement perhaps present the most consistent findings. Fraser (1959), Stoltz (1960), Roy (1961), Frankel (1964) and Banducci (1967) found no
significant difference in academic achievement between the children of working and non-working mothers. The difference, if any, appeared to be beneficial to the children of the working mothers (Fraser, 1959; Roy, 1961).

According to Finkelman (1967), mother's employment did not produce any "significant difference in the children's perception of their parents as nurturant or authority figures."

In a country like India, where unemployment presents an unsurmountable problem for educated and qualified males, only a negligible percentage of women finds jobs outside home. As such, investigations in this area are few and far between. The available work is of George and Thomas (1967) which report no significant difference in academic achievement between the children of the working and non-working mothers.

4. Educational Environment

Assessing the relationship between parental education and children's academic achievement, Fraser (1959) found the two to be positively and significantly related - which was supported by Davie, Butler and Goldstein (1972), Hitchcock et al. (1976) reported that educational level of the parents was highly correlated with academic achievement of the children. Ekhammar (1977) opined that mother's education was the most important factor
in determining the children's choice of continued education and career. Kochen (1981) reported that parent's education was correlated with the reading achievement of the child.

Gupta (H.C., 1968) reported no significant relationship between parental education and children's school achievement - but positive relationship between the two variables was obtained by Chatterji, Mukherjee and Banerjee (1972), Girija and Bhadra (1976) and Bahal and Saxena (1978).

5. Provision of Facilities

Various types of facilities provided by the parents in the home may act as encouragement for better scholastic attainment on the part of the child. Fraser (1959), Douglas (1964), Wiseman (1964) and Willmon (1969) found that parental encouragement and participation influenced academic progress favourably. The results obtained by Kelly and Worrell (1977) indicated that parents' encouragement of intellectual independence, competence and curiosity were related to the American College Testing scores of undergraduate male and female students. The results obtained by Dolan (1980) revealed that home concern and support were strong determinants of achievement together with instructional quality.

Similar result was obtained by Gupta (1968) in India showing that tuition at home was significantly related to higher
achievement. His high-achiever group showed a relationship between parental encouragement and achievement scores though this was not the case for moderate and low intelligence groups. Anantha Krishnan (1977) opined that lack of motivation on the part of the parents was responsible for lower academic achievement of the offsprings.

6. Parent-Child Relationship

In recent years, assessment of parent-child relationship has gained considerable importance in psychological researches because of its influence in all aspects of child development. According to Ausubel and Sullivan (1970, p. 289), parent-child relations constitute perhaps the most important single factor exerting the maximum influence on the socialisation and development of the child.

There is no ideal or standard pattern of parent-child relationship. It depends upon many factors - namely, the parents' nature, needs and experiences. The personality and potentialities of the child and the home environment being influenced by these factors, may accelerate or retard the child's various achievements.

Due to the lack of any standard pattern of parent-child relationship, there is no direct way of measuring it. Usually, it is assessed from the parental attitudes towards the child and child-rearing, which reflect this relationship.
The earliest study for assessment of child-rearing practices goes to the credit of Stogdill (1936), who attempted to measure the parents' attitudes towards parental control and social behavior of children. The important studies since then and the major parent-child dimensions are presented in the following table:

<table>
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<tr>
<th>Major Parent-Child Dimensions</th>
<th>Psychological Dimensions</th>
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<tr>
<td><strong>Investigators</strong></td>
<td><strong>Dimensions</strong></td>
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<tr>
<td>Symonds (1939)</td>
<td>Dimensions:</td>
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<td>Baldwin, Kalhorn and Breese (1945)</td>
<td>Syndromes:</td>
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<td>Baldwin, Kalhorn and Breese (1949)</td>
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MAJOR PARENT-CHILD DIMENSIONS (Contd."

<table>
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<tr>
<th>Investigators</th>
<th>Factors</th>
<th>Psychological Dimensions</th>
</tr>
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<tbody>
<tr>
<td>Milton (1958)</td>
<td>Factors</td>
<td>Strictness of non-permissiveness of parent behaviour</td>
</tr>
<tr>
<td></td>
<td>(based on Sears, MacCoby and Levin, 1957)</td>
<td>General family interaction or adjustment</td>
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<tr>
<td></td>
<td></td>
<td>Warmth of mother-child relationship, Responsible child-training</td>
</tr>
<tr>
<td></td>
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<td>orientation.</td>
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<tr>
<td>Zuckerman, Ribback, Monashkin and Norton (1958)</td>
<td>Factors</td>
<td>Authoritarian-control,</td>
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<td></td>
<td></td>
<td>Autonomy-control,</td>
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<tr>
<td></td>
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<td>Love-hostility.</td>
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In a more recent study Hurley (1965), concluded that the accepted child received more parental encouragement and impetus for learning; the rejected one showed a "decreased curiosity in exploring and manipulating the world of people, objects and ideas", slowing down his rate of learning as reflected in the child's educational achievement. Rolcik (1965) found a significant relationship between scholastic achievement and parental interest in school-work in happy, complete families. According to Baumrind (1967) controlling, demanding but communicative and affectionate parents have the most matured children, while
non-affectionate and non-controlling parents have discontented and immature offsprings. Honsik's findings (1967) revealed that able, concerned parents and activating mothers helped to accelerate cognitive development.

In another study Hurley (1967) reported that less intelligent children evoke more ill-feelings than the more intelligent ones and that ambitious, educated parents manifest greater malevolence towards their slow-learning children than the less ambitious and less educated ones.

Roberts (1975) concluded from his study that parents' influence on the class-room performance of the child in the elementary grades was greater than that of the teacher and that early discouragement from parents may prevent progress. Banner (1979) found that attitude of the mothers of the high-achievers and the low-achievers toward their children differed significantly. The author reported that the mothers of under-achievers exercised more rigid dominance, intolerance and restriction of independence on their children than their counterparts. Hahn (1981) concluded that perceived parental acceptance - rejection was related significantly to the academic achievement of the children.
Patel's findings (1964) showed that the amount of maternal care influenced the personality pattern of the child. Choudhury (1967) found a significant relationship between emotionality of children and parents' punishing behaviour. Bahal and Saxena (1978) suggested that parental behaviour, child-rearing practices and parental acceptance - rejection were important factors for the child's cognitive development.

7. Reinforcement

Studies on the effect of reward and punishment on learning do not report consistent results, though the effect of rewards have been found to be more favourable than punishment in learning situations.

McGeoch (1958, p. 245-246) states that reinforcement operates in a all-or-none fashion in human learning. "Learning does not always increase with increasing amounts of reward, nor when it does, is the increase in learning always proportional in a regular way to the amount of reward". Similar result was reported by Brackbill, Kappy and Starr (1962) who obtained a noticeable difference between non-reward and any value of reward. They concluded that the relationship between the two variables was not a linear one. Smith (1967) opined that punishment only suppressed behaviour without bringing any constructive change to it. Leff's findings (1968) revealed that greater suppression
of behaviour resulted from high-intensity punishment in the case of continuously punished subjects, while intermittently punished ones showed only a trend toward suppression of behaviour. Ryan and Watson's results (1968) showed that intermittent reward situations produced more vigorous performance than the continuous reward situations.

Out of the four reinforcing conditions - praise, correct, disapproval or alone, Stein (1969) found that all reinforcing conditions produced more achievement than alone. Praise was significantly more effective than others, indicating that social reinforcement enhanced children's achievement.

**INTELLIGENCE AND ACADEMIC ACHIEVEMENT**

In studies dealing with relationship between scholastic achievement and home environment, intelligence plays a very important and critical role. It becomes imperative to know how far this innate ability influences individual achievement. To disregard this aspect of individual difference will leave many questions unanswered regarding the environmental influence on attainment.

In Ormel's study (1975), intelligence was found to be the major determinant of school achievement.
A significant and positive relationship has been obtained between intelligence and academic achievement in many of the Indian studies (Kundu, 1952; Chopra & Gupta, V.P., 1968; Rao, 1970; Deb & Ghosh, 1971; Gupta, 1973; Ameerjan and Bhadra, 1978).

Banner (1979) concluded that the under-achiever, average-achiever and over-achiever groups of both boys and girls did not differ significantly in intelligence and age but were significantly different in academic achievement.

Muthayya (1962) found no significant difference in intelligence between the high-achievers and low-achievers though the high-achievers had higher mean scores. The high-achiever and low-achiever groups of Ameerjan, Girija and Bhadra (1978), however, were significantly different in intelligence.

Kochen (1981) found that though intelligence was correlated with reading achievement, its role was lower than the literacy environment of the home.

To sum up the various studies undertaken in different areas of home environment, achievement and intelligence, it may be said that the general findings suggest that home environment, intelligence and academic achievement are positively related; and home environment exerts a more
determining influence on academic achievement than intelligence (Fraser, 1959; Mishra, Dash & Padhi 1960-69; Marjoribanks, 1975; Anantha Krishnan, 1977, Banner, 1979; Kachen, 1981).

It is also evident from the foregoing survey of literature that very little investigation has been done in India to determine the effect of home environment on school learning. The major part of research out of these deals with the relationship between intelligence, socio-economic status and achievement. Moreover, the studies deal with one or two particular aspects of home and its effect upon academic achievement. The effect of all these factors and some others, such as parent-child relationship, reinforcement and provision of facilities, have not been studied in detail so far.

In the light of these findings, it was deemed worthwhile to plan the study to investigate the effects, if any, of home environment on academic achievement of school-going children. It was revealed from the survey of literature that intelligence, socio-economic background, maternal employment, provision of facilities, parent-child relationship and reinforcement had varying degrees of influence on academic achievement.

In the present study, besides some others, the variables as mentioned above have been taken into consideration. But since no Indian or Western study reported any differential effect of maternal employment on children's education, this variable has not been included.