Chapter Two

REVIEW OF LITERATURE

Demographic Correlates
- Age
- Sex
- Socio-Economic Status (SES)
- Culture

Personality Correlates
- Physiological Factors
- Intelligence
- Physical Attractiveness
- Self-Concept
- Locus of Control (LOC)
- Autism
- Anxiety and Depression
- Learning Disabilities (LD)
- Cognitive Styles
- Some Other Factors

Social Correlates
- Family Environment and Early Experience
  - Child's Experience with the Parents
  - Child's Experience with the Peers
  - Some Other Factors
- Social Problem-Solving Training
In the recent years interest has grown among psychologists in topics related to understanding of the determinants of social competence since the construct of social competence has emerged as a central component in the conceptualization of personality development. In the previous chapter we have discussed the concept and the measurement aspects of social competence. In this chapter a review of some of the important studies done in the field of social competence has been presented.

DEMOGRAPHIC CORRELATES

AGE

Age is one of the important factors which affects the development of social competence. In fact, social competence during early years of life is primarily defined by the age and stages of development of the child. Various investigators have noticed that social competence increases with the increase in age. This fact may be explained in the light of several theories about skill and competence acquisition (Bruner, 1970, White, 1959). These theories believe that competence is acquired slowly as a part of broader biological maturation process that involves small day-to-day increments throughout infancy and childhood. Biological maturation refers to the growth and change of biological structures in individuals. As children achieve maturation their physical structures become more complete which enable them to experience
their environment in a more sophisticated way. This leads to higher social competence. Some studies have indicated that social competence continues to increase from ages 3-6 in the preschool (Hope & Finch, 1982) and from Kindergarten to 4th grade in the elementary school (Hops et al, 1978). Various other studies investigating age effect in social competence are available. For example, Brag, Huttman, and Wacrh (1976) studied 3 aspects of children's social competence i.e., social method, social understanding, and role taking capacity. Subjects of 3 different agegroups (i.e., 6, 8, 12 yrs) were taken and interviewed about different conflict-situations, 6 involving a child-child interaction and 6 involving a child-adult interaction. A separate role taking task was also used. It was observed that social understanding and role taking capacity increased with age. Age-difference in social method were also noticed only in situations involving adults, where other children to a greater extent chose altruistic methods for solving the conflict.

Child's participation in play indicates his/her social competence (Guralnick & Groom 1985). Taking this view into consideration Gustafson, Green, and West (1979) examined developmental changes in games played by mother and infants during normal activities. Mother and infants were observed when the infants were 6, 8, and 12 months of age. With age participation of children in games became more frequent and
infant increasingly developed liking for participation. Rank correlations across age for games were moderately high.

Various researchers have noticed that social growth is a stage-dependent process. Furth (1980) observed that children's conceptions of society advance with age, and appear to evolve through stages. Plewicka (1981) observed that most individuals experience three distinct stages of social intelligence between childhood and adulthood. Taylor (1982) also found high correlations between increased age and child's knowledge of social system and system interactions.

Abraham and Christoperson (1982) investigated the influence of age on 2 indices of social competence. One hundred thirty seven 3-5 year old children were used as subjects. Nowcki-Duke Preschool-Primary Internal-External Locus of Control Scale and the Broke Interpersonal Awareness Test (BIAT) were used as indices of social competence. ANOVA results revealed the significant effect of age on social competence as measured by BIAT i.e., the subjects with high age showed higher social competence than the subjects with low age.

Adams (1983) explored the age-effect in social competence using 95 subjects of both the sexes. The subjects were taken from four different age groups, i.e., 14, 15, 17 and 18 years. Three indices of social competence i.e., social knowledge, locus of control, and empathy were considered. Linear age differences were observed in all the three indices of social
competence. Muralidharan (1983) reported the developmental norms of Indian children in the age group of $2\frac{1}{2}$ - 5 years on 8 different aspects—eating, sleeping, elimination, dressing, personal hygiene, communication, play and developmental detachment of personal social development of children. He found age difference in above cited aspects of development i.e., subjects with high age showed higher competence.

A study conducted by Reinhard (1984) among 1008 subjects attending a psychiatric clinic in West Germany revealed that older children demonstrated power of coping with a situation and social skill and made best use of opportunities to which they were presented. Various other investigators (e.g., Dodge, McClaskey, & Feldman, 1985; Ford, 1982; Gesten, 1976; Matson, Rotatori, & Helsel, 1983; Philippot & Feldman, 1990, Quay & Jarrett, 1984; Rothenberg, 1970; Turner & Harris, 1984) have also found that subjects of high age show higher social competence than their low counterparts.

SEX

Studies investigating the role of sex in social competence have not reached to any unequivocal conclusion. Some studies have emphasized the higher social competence of females as compared with the males whereas some have concluded males to be more socially competent than females. Still there are a few studies in which no significant difference in social competence between males and females have been observed.
The higher social competence of the females as compared to the males have been reported by various investigators. In a study Brownbridge and Vanvleet (1969) found that boys were consistently judged to be more maladjusted than girls on symptoms measure. It is worthwhile to mention here that one of the ways to define competence is ability to adjust. Similarly Gesten (1976) noticed that girls had consistently higher competence scores than boys. Zigler, Levine, and Zigler (1977) examined the relationship between premorbid social competence and paranoid-non paranoid status in a sample of 300 female schizophrenic patients. He also investigated sex-difference in social competence with the help of the data of his another study (Zigler & Levine, 1973). The results showed that the female patients obtained higher social competence score than the male patients.

Michael & Joseph (1978) studied social competence using college students. He found that females rated themselves as: (a) having higher overall social performance; (b) engaging in a greater frequency of positive social behaviour; and (c) engaging in a lower frequency of negative social behaviour. He also noticed that males rated themselves as more socially anxious than females.

In a study among 71 males and 70 females which included schizophrenic personality disordered patients, psychotic depressive, neurotics and normals, Lewine, Watt, Prentky, and
Fryer (1980) found that females were more competent than males regardless of their psychiatric status.

Glass and Biever (1981) examined the sex-differences in social competence among 64 undergraduates using 4 measures of social competence, i.e., global and specific behavioural ratings of responses to tape role-plays, cognitive measures of self-statement and self-evaluation, self-report inventories of social skill and anxiety, and a self monitored journal of social interaction. Result showed that females appeared to be more socially skilled than males on a number of measures.

Galejs and Stockdale (1982) investigated relationship among parents' rating of social competence, teachers' ratings of school-age children's social behaviours and achievement, and children's cooperative-competitive preferences, among the children of 4th, 5th and 6th grades (N=266). Results indicated that parents and teachers agreed in their rating of children's behaviour across home and school settings. No significant relationships were found between children's social behaviours and cooperative-competitive preferences. Sex-difference in social competence was observed. Teachers' ratings indicated that girls were significantly more achievement oriented than boys. In contrast, boys were rated by the teachers as more negative, more dependent withdrawn, more disrespectful, and gave more irrelevant responses than girls. Girls were seen as more affectionate by both parents than were boys. Mothers rated boys as more physically active than girls.
Kurdek and Kerile (1982) studied sex-differences in interpersonal understanding and perceived social self competence in 151 male and 162 female 3rd to 8th graders. Results revealed that girls performed significantly better than boys. Sloving (1986) also noticed that girls had fewer adjustment problems than boys.

Learning and language skills are the important aspects of social competence. McGuiness (1985) mentions that boys are two to four times more likely to have learning disability than girls. It may be explained in the light of structural or hormonal differences between male and female brain which accounts for differences in learning between the sexes. For instance, it has been observed that damage to the left hemisphere causes more deficits in language, in males as compared to females as females have a greater representation of language in the right hemisphere (Kimura, 1983; Mateer, Polen, & Ojemann, 1982). This finding may lead to believe that boys are more vulnerable to language and reading disability (Davison & Neale, 1990, p.441).

Carson, Wagner, and Schultz (1987) studied the relationship between gender and social competence in a sample of 202 children ranging from 12 to 36 months of age. Four measures of social competence were used. In all measures of social competence females scored higher on three of the measures. Similarly, Granleese, Trew, and Turner (1988) also noticed
higher competence of girls as compared to boys.

Sex difference in social competence of schizophrenic patients was examined by Muerer, Bellack, Morrison and Wade (1990) using a role play test. The result revealed that female schizophrenic were more competent than males. However, no sex difference was observed in control subjects.

In the above lines some studies in which females showing higher social competence than males have been cited. There are some such studies also in which males have been found to be more competent than females. The explanation generally given for this is that females prefer more sedentary interaction with fewer peers whereas males are more active with wider ranging contacts (Muller, 1972, Rubin, Maloni & Hornung, 1976).

Kadar (1980) investigated sex difference in the development of verbal and social competence using 369 preschool children as subjects. Result indicated the poorer social competence of girls than their counterpart boys. Steigelman (1981) noticed a stronger relationship between motor skills and popularity among 5 and 6 years old boys than for same aged girls.

Gross and fine motor skill have been considered as the facets of social competence (Anderson & Messick, 1974). The difference in their motor skills has been explained taking
sex into consideration (McGuiness, 1985). Boys are assumed to be involved more in gross motor activities as young children. Gross motor control skills become integrated primarily with sensory input to the visual system and the position of limbs in space, leading to efficiency in visuomotor integration (which males are better at than females). In contrast, it is hypothesized that girls are geared more towards fine motor control, which includes speech structure, that becomes integrated primarily with the auditory system, leading to girls' superior language skill (Davison & Neale, 1990, p.441).

Thomas, Due, and Wigger (1987) examined the model competence and its relationship to sex of subject and models. Primary grade children (N=32) were significantly more likely to imitate the ball tossing style (overhand or underhand) of filmed peer models depicted as competent (high scoring) than those depicted as incompetent (low scoring), regardless of the sex of the models. A marginally significant interaction indicated that, in the ball tossing task, the models' competence appeared to play a more important role for the male children than for the female children. This finding is related to the result of a previous study indicating that the dominance of the model affects imitation more in boys than in girls (Hetherington & Frankie, 1967).

No sex-difference in social competence has also been observed in some studies. For example, Rothenberg (1970) investigated
sex difference in social sensitivity which has been defined as the ability to accurately perceive and comprehend the behaviour feelings and motives of other individual. The subjects were 59 boys and 49 girls of third and fifth grades. He found no clear effect on the social sensitivity scores due to the sex of the child. Similarly, Spreat (1980) found no sex-difference in the scores of the Adaptive Behaviour Scale which yields reasonably objective ratings of an individual's effectiveness in dealing with the natural and social demands of the environment. Quay and Jarrett (1984) investigated the predictors of social competence in 164 preschool children and found that sex did not affect the degree of social competence significantly. Horstman and Bornstein (1985) also did not find the sex influence on social skill behaviour among 37 third graders. Similarly Sater and French (1989) examined sex-difference in social competence among learning disabled, children of 3-5 grades and noticed that boys and girls show almost equal degree of social competence. As mentioned earlier Mueser et al. (1990) also found no sex difference in social competence in normal subjects.

SOCIO-ECONOMIC STATUS (SES)

Parent's socioeconomic status play a significant role in children's development of social competence as socioeconomic statuses are reflected in their child rearing practices which
consequently, affect children's development of social competence. It becomes more important in preschool period when the primary social learning of the child occurs and basic patterns of hygiene, eating, language, and ethnic orientation are acquired. These patterns prove highly responsible for the development of social competence.

Many studies are available which have determined the role of SES on various aspects of social competence. As we have already mentioned that Anderson and Messick (1974) have stated 29 facets of social competence; some of the important studies related to various facets of social competence and SES have been given in the following lines:

Achenbach (1978) found that SES significantly affected the behavioural problems of the children (aged 6-11), with high SES subjects showing less behavioural problems. Similar results were obtained in a study by Peniston and McLean (1979). They examined the degree of parental influence on maladaptive behaviour of 35 educable mentally retarded children about 10 yrs of age. Data were collected from the subjects' parents by the means of sociometric questionnaires and from their teachers by the means of maladaptive behaviour. Results showed the significant effect of SES education level of the parents.

Some studies have reported the influence of SES on cognitive skills. For instance, Gainotti (1979) studied the influence
of social class on the performances of 60 subjects of 5 to 7 years of age in 3 Piagetian tasks that imply different cognitive operations. Subjects answered four sets of questions concerning the explanation of natural phenomena (e.g., death) and completed a classification task of geometrical figures. Results revealed that the high SES subjects developed more quickly an increase of naturalistic/objective answers and seemed to have less difficulty in the classification task.

Molly (1981) investigated the relationship between SES and cognitive task performance among 120 children from grades 1 and 4. A battery of tasks differing in transformational requirements and in cultural loading, was administered to all subjects. Results indicated that low SES subjects were more handicapped in some tasks of reasoning ability as compared to middle SES subjects. Similarly, Sameroff, Seifer, and Barocas (1983) noticed SES to be an important factor affecting subjects' cognitive development. Laosa (1984) found that the low performance of the subjects on the measures of verbal and quantitative ability, and short-term memory were due to low SES of the subjects' parents.

Haley (1984) determined the effect of SES on creative response styles of 47 subjects of 4,5-6 years old. Divergent production was measured by responses to 3 open ended problems on the thinking creativity in action and movement. Results showed that fluency in verbal, kinetic and integrative modes were affected by SES, with middle class subjects performing better.
Singh (1984) investigated the effect of SES on social conformity using 300 graduate students of 18-21 years of age as subjects. Results revealed that higher social conformity was found among subjects from middle SES than among those from low and high SES.

Some studies have been conducted in relation to SES and school attainments. For example, Bouchalova, Bystry, Horackova, and Vocova (1980) observed socioeconomic changes in families that occurred during the first 6 years of their children's lives. Analysis indicated that the families' social backgrounds affected the children's school achievement. Social differences were most obvious in arithmetic achievement and least obvious in average school grades. The greatest influence on the children's scholastic success was exerted by parental education level; the least by housing conditions. Changes were greater in boys than in girls.

Guidubaldi and Perry (1984) examined the predictive significance of a divorced versus an intact family status of 115 kindergarten children and assessed the amount of predicted variance that is independent of a composite SES factor. A battery of 9 tests was administered to measure intelligence, school readiness, achievement, social competence and maturity, and SES. Results showed that SES of father's occupation and both parents' educational level predicted school entry competencies; high SES was associated with high intellectual, academic, and personal social development.
Bursuck and Asher (1986) compared the social competence of group, of 3rd 4th grades boys with low academic achievement and low SES, low-academic achievement and high SES, high academic achievement and low SES, and high academic achievement and high SES. A social knowledge interview elicited high levels of prosocial responding by all groups and no significant differences between high and low-status subjects of comparable achievement levels approached but did not reach to significance level. However, subjects who were low in both achievement and SES were rated as significantly less competent by their teachers.

Finnie and Russell (1988) conducted two studies in which mothers of high social status (HSS) children were compared with mothers of low social status (LSS) children. The first examined mother’s behaviour in assisting her child to join in and play with a dyad of unknown children of the same age and sex. The second focused on mothers’ responses to hypothetical situations. Both studies assessed aspects of the mothers in the supervisory role (i.e., where she directly manages or assists her child in peer relationship). On the basis of the notion that children might partly require social skill from their mothers, the researchers predicted that differences in the supervisory role, would correspond with comparable social skill differences for HSS and LSS children. Many of the results were consistent with prediction.
Ramsay (1988) compared social strategies, sociometric patterns and teacher-ratings of social competence. Ninety four 3.2 to 5.7 years old responded to 5 social problem solving situations and preferentially rated their classmates. Low SES subjects more frequently responded to the hypothetical situations with aggressive actions than did their middle-class counterparts. The middle SES subjects used reassuring and sharing strategies more frequently. In both groups, reassurance was linked with high sociometric ratings in middle SES groups, aggression was negatively related to sociometric status. When teachers assessments were compared, the low SES children were consistently rated as less socially competent than were their middle counterparts. Meisel (1989) examined the relationship between interpersonal problem solving skill (IPS) and social competence of 94 1st and 2nd grade students. The social competence measure included peer ratings of open ended responses to hypothetical peer problems. To control other variables known to affect social competence, measures of IQ, academic achievement and SES were also included. Correlations between the 3 IPS scores and both peer and teacher ratings all were in the range between .04 to .20. On the other hand, intelligence, achievement, and SES had moderate to high correlation with competence. In stepwise multiple regression analysis, only achievement and SES predicted peer and teacher ratings.

CULTURE

One of the most important factor affecting the development of social competence is culture. It is a well-known fact that
almost all behaviour of the individual is derived induced and patterned through culture. Now the question arises—what is culture? Culture has several meanings and variety of connotations. Culture is the recognized, approved, shared and continuing patterns of behaviour, whether that group is large or small. A family group for example, may have a "culture" of its own, consisting of certain rituals, values, beliefs, attitudes and prescriptions for behaviour which every member of the family is expected to accept. This family culture may be idiosyncratic and unique with respect to the culture of the larger group, or it may be the result of meeting the immediate demands of a new environment. As long as it consists of behaviour shared by the members of the group and transmitted to new members, it is cultural behaviour.

Thus culture plays an important role in the development of personality and it is more significant for preschool children than infants, as firstly the culture dictates the language and many of the concepts that a child learns during this period of rapid growth in language and concept formation. Secondly, culture also directs many of the behaviour-patterns and attitudes that children acquire during their period of socialization and finally cultural impact ascertains whether schooling will be available for a preschool child, and the kind of schooling that will be available. These aspects have
determining role in the development of children's social competence. Now a brief review of some of the important studies related to culture and some aspects of social competence will be presented.

Nandi (1980) surveyed mental morbidity in 28 tribal and caste groups in a cluster of villages in West Bengal and found that different groups having a similar cultural pattern showed no significant differences in their rates of morbidity. Groups having different cultural patterns differed significantly in their rates of morbidity. In tribal groups some neurotic disorders were found to be absent.

Tseng, McDermott, Ogino, and Ebata (1982) conducted a study in which eight 305 minute videotaped segments, illustrating parent child interactions were shown to American and Japanese evaluators to (1) assess how evaluators' cultural backgrounds and professional experiences would affect their evaluations and (2) identify interactional behaviours most vulnerable to culturally influenced distortions. Evaluators were American and Japanese psychiatrist and medical students, who were asked to make their assessment with regard to cooperation or lack of cooperation and the interaction reflecting affect and control. Results showed that cultural factors influenced subjects' assessment of interpersonal behaviour particularly of parent-child roles and functions. Results indicated that American psychiatrist misinterpreted Japanese fathers as non-participatory and passive in family interactions while
Japanese psychiatrist misjudged American fathers to be actively participating as parents.

Laosa (1984) examined ethnic influences upon early performance. He administered the McCarthy Scales of Children's Abilities to 84 Chicano and 87 non-Hispanic White subjects (aged 2 years 6 months) to examine the levels and profiles of performance in 5 ability areas i.e., verbal, reasoning, quantitative, memory, and motor. Results revealed ethnic group differences in the absolute levels of performance, Chicano's average performance was poorer on measures of verbal and quantitative ability and short-term memory.

Misawa, Motegi, Fujeta, and Hattori (1984) compared the scores of Columbia Mental Maturity Scale (CMMS) of 78 Japanese children aged 4 years to 9 years 5 months with those of US normative samples. The performance of Japanese subjects was significantly better than that of American subjects, although this difference tended to decrease after 6 years of age with the start of compulsory education.

Neff (1984) interviewed 373 White and 68 Black rural adults living in Florida about family income, education, age, and psychological distress, using the 21 symptoms. Subjects were 18-89 years of age. Results showed that in all cases Black subjects were more psychologically distressed, than White subjects. The differences occurred in the rural sample. More persistent depressive symptoms were found among Black
rurals than White rurals. Blacks were more disadvantaged compared to Whites in rural areas. Findings suggested that social differences may be specific to persistent depressive symptoms in rural communities. On other distress dimensions, particularly somatic symptoms, and in urban areas, Whites may be equally or even more symptomatic than Blacks.

Fu (1984) investigated child-rearing attitudes of 411 Blacks and 553 White mothers of adolescent females (aged 12, 14 and 16 years) from low middle and high income groups. Subjects were administered 5 sub-scales of the Parental Attitude Research Instrument: Fostering dependence, excluding outside influences, loyalty to parents, encouraging independence, and dependency of mothers. Results indicated that Black subjects and subjects from rural areas were of more dependent personality. Black and low income subjects were more likely through their child-rearing attitudes, to encourage the development of dependency and loyalty to parents in their adolescent daughters.

Locale effect in some aspects of social competence has also been investigated. For example, some studies with symptom scales reported that urban children have more problems than suburbanities (Clarfield, 1972; Glidewell & Swallow, 1969). These findings are consistent with Gesten's (1976) results in which country children had significantly higher scores on a measure of personal and social competence.
The above results indicate that there are competence differences between urban and suburban children, they do not indicate why it is so. Here it is worthwhile to mention that Kagitcibasi (1979) has obtained quite contrary results. He administered the Draw-a-Man Test to 218 5th graders from rural and urban areas in Turkey. The 3 rural villages varied in their degree of remoteness from the city and in their levels of modernization. Results revealed that the rural subjects from the most remote village had the lowest I.Q. whereas the urban had the highest. The obtained results were explained in the light of environmental deprivation.

As mentioned earlier, Muralidharan (1983) has presented the developmental norms of Indian children in the age group of $2\frac{1}{2}$ - 5 years on eight aspects—eating, sleeping, elimination, dressing, personal hygiene, communication, play, and developmental detachment—of personal-social growth. The sample was taken from urban, rural, and industrial areas of 7 different big cities (i.e., Ahmedabad, Allahabad, Bombay, Calcutta, Delhi, Hyderabad, and Madras) of India. He found that different skills related to personal-social development were developed first in the urban children, followed by the industrial children, and last of all in the rural children. The higher competence of urban children was noticed in all aspects of personal-social development except in play, and developmental detachment. In these two aspects industrial sample was found
The inter-centre comparisons of aspects of development were also made and it was found that children of Madras, Bombay, and to some extent Delhi were slower than children from other centres. The Indian norms were compared with those of Gesell's and comparative results revealed that in activities such as self-feedings, taking complete charge of elimination, washing and drying hands, feet and face, in running errands, Indian samples showed higher competence than Gesell's. In dressing and communication the urban sample showed almost equal competence but industrial and rural children were found to be slower. Play, interest, and sleeping-habits were found to be quite different in two samples.

PERSONALITY CORRELATES

PHYSIOLOGICAL FACTORS

Role of biological factors in determining social competence has recently won considerable attention. Mental processes are believed to require complex interacting network that chemically stimulate participating brain structures. Part of the brain responsible for producing behaviour become interdependent, forming a communicative chain of connected subsystems (Gazzaniga, 1985, Golden, 1981). These interacting structural groups can be widely distributed throughout the brain. Injuries to any single part can cause dysfunction to the entire network.
which may directly or indirectly affect the behaviour of a person in social situations.

Neuropathology has been found to be related to social competence. Various researches (e.g., Eslinger & Damasio, 1985; Lhermitte, 1985; Stuss & Benson, 1984) have suggested that there is a strong relationship between frontal lobe functioning and the acquisition and performance of social skills. A lack of social competence is often reported for individuals with certain types of brain damage and mental illness. These individuals either did not develop normal social functioning or regressed after the skills were obtained. Studies of population with head injuries have identified specific brain areas responsible for social skill dysfunction (Gazzaniga, 1985, 1988). The frontal lobe, upper brainstem, and limbic system have been implicated in attention, concentration, and vigilance through experiments involving people who had lesions, while frontal and temporal damage is believed to disrupt social memory processing (Luria, 1973). Luria also speculated from his clinical observations that successive or social cognitive processing was handled by the anterior (frontal-temporal) regions while simultaneous processing resulted from the posterior (occipito-parietal) regions (Luria, 1980). Inability to predict one's own performance skills is thought to indicate memory problems.
relating to frontal lobe dysfunction (Golden, Hammke & Purisch, 1980). Bilateral damage to the hippocampal region may cause decreased long-term memory coding (Golden, et al., 1980).

A study conducted by Tizard (1962) revealed that the persons who suffer from temporal lobe epilepsy show changed perceptions of their world and often develop abnormal personality traits. One can assume that altered perceptual skills reflect poor internal modulation and show poor expressed social skill. Scheier, Carver, and Matthews (1983) have found that individuals continuously switch focal attention between internal and external environmental stimuli. Environmental signals labelled by the memory system as dangerous activate the brainstem and pons, producing increased heartbeat and stomach reaction. The physiological response in turn shifts awareness from the social environment to an impaired self-attention. Social competence may be partially determined by the amount of accurate environmental attention maintained before conflicting limbic, memory and frontal lobe activity are produced. Many investigators believe that perceptual shifts between internal monitoring and the environment are directed by one's last point of attention or cognitive focus. That is, the brain is continuously shifting between the considerations of self-related and environment related information (Scheier, Carver, & Mathews, 1983). If cues are incorrectly perceived by the cortex, frontal lobe, limbic and memory systems, social competence can decrease (Taylor, 1987).
Recent studies in schizophrenia and frontal-lobe head injuries provide support for understanding neurological basis of social competence. Studies using cerebral blood flow and Brain Electrical Activity Mapping as conducted at the National Institute of Mental Health (NIMH) have shown that schizophrenic patients, unlike control subjects, show reduced frontal cortex activity while performing a standardized work task (Berman, Zec, & Weinberger, 1986; Morihisa, Duffy, & Wyatt, 1983). As a result, the individual is often unable to perform social tasks equal to an obtained academic IQ and premorbid social adjustment. A damaged and defective social competence is observed among schizophrenic patients. The illness distorts social abstracting skills and forces a person to rely on primitive process. Torrey (1988) also observed consistently abnormal frontal-lobe functioning in individuals with schizophrenia.

Various studies have suggested that both clients with schizophrenia and frontal-lobe head injuries have decreased in social competence. These deficits appear after the onset of psychotic illness or head injury accident. Some researchers (e.g., Gross & Weiskrantz, 1964; Stuss & Benson, 1984; Taylor, 1987; Torrey, 1988) have observed that the level of disability is more directly related to reduced social problem solving skills and concentration than intelligence. Similarly, an investigation of relationship between neuropsychological and cognitive/social abilities revealed that verbal cognitive...
ability correlated with right-ear advantage, age, picture drawing ability and social development; and social development correlated with verbal cognitive ability but with other abilities. On the basis of these results one may conclude that both hemisphere specialization and collaboration of hemispheres are important factors for high-level verbal and social abilities (Hatta, 1989). The results of various studies made Hynd and Willis (1985) to conclude that all cognitive and intellectual processes are divided into functional neurological systems.

In brief, it may be concluded that there is a sufficient reason to believe a biological basis of social competence. Various neuropathological researches have revealed that social information is communicated through specific cell structures and chemical functions in the brain. The studies suggest that connections exist among the limbic system, prefrontal, frontal, and other cortical and subcortical areas. Together they are actively involved in processing sensory, social and other environmental information. When the structures are damaged symptoms of social dysfunction can be observed (Torrey, 1983). This systematic neural network along with environmental influence may present the biological basis of social competence.

INTELLIGENCE

Intelligence is perhaps the most important factor in the development of social competence. In fact, social competence
is viewed as an integral component of intelligence throughout development (Berg, 1986). Generally it has been observed, that the people possessing lower than average intelligence function most inadequately. The persons who are only mildly handicapped show an apparent inability to work properly and many of them commit small and silly delinquencies. Similar delinquencies and incompetencies may be shown by people of normal intelligence but the fundamental difference between the petty delinquencies of people with normal and those with subnormal intelligence is that the subnormal's approach to the socially non-conforming action is simple and direct, and because he is unable to foresee the consequences of his actions, his social incompetence is very much marked and conspicuous. It may be said that the subnormal intelligence ascertains only the poor quality of various socially non-conforming actions but not their occurrences.

It is generally thought that low social competence is related to low intellectual functioning. Therefore, a cause and effect relationship is generally assumed between the two. It is usually argued that low intelligence results into low social competence, but less attention is given to this fact that there may be comparatively low social competence and, in consequence low intelligence test scores (Masland, Sarason, & Gladwin, 1958; Kellmer Pringle, 1965). There is still another possibility that this third factor could be described as a weakened ability and will to utilize the intellectual equipment
and to apply it to social situations. It is interesting to note that I.Q. has never been considered as an explanation of social inadequacy of person with an intelligence score of 130 or over. The explanation of any incompetence of this type may be explained in the light of emotional maladjustment and neuroses but when once it is known that the socially inadequate has a subnormal I.Q., this argument is not applied.

Various studies have been conducted in order to investigate the relationship between intelligence and various aspects of social competence. Some of them have been reviewed in the following lines:

Sensitivity and understanding in social relationships have been considered as one of the components of social competence (Anderson & Messick, 1974). The social sensitivity which has been defined as the ability to accurately perceive and comprehend the behaviour, feelings and motives of other individuals has been studied in relation to intelligence. For example, Rothenberg (1970) examined the relationship between social sensitivity and intelligence among 108 third and fifth grade children. Social sensitivity was measured using a series of four tape-recorded stories depicting two adults in happy, angry, anxious, and sad interactions. The subjects were asked to describe the feelings and motives of portrayed characters. Two measures of intellectual level, one verbal and other non-verbal were administered. Results revealed
that intellectual ability positively contributed to social sensitivity. Some earlier studies have also concluded that a positive relationship exists between intelligence and social sensitivity (Gates, 1923, 1927). Similarly, Allport (1937) also noticed that understanding people is largely a matter of intelligence. Thus, the importance of intelligence in the development of social sensitivity has been established.

Kicklighter, Bailey, and Richmond (1980) studied the relationship of children's adaptive behaviour and intelligence among 30 slow learners (SL) and 60 educable mentally retarded (EMR). The children were 6-10 years old. The Children's Adaptive Behaviour Scale (CABS) which measures 5 adaptive domains (i.e. language development, independent functioning, family role performance, economic-vocational activity, and socialization) and intelligence test (i.e., WISC-R) was administered on them. A positive correlation ($r = .51$) between CABS and WISC-R was obtained. It was also noticed that EMRS scored lower on all domains than SLS.

One of the ways to define intelligence is in terms of problem-solving ability. Some studies have investigated the relationship of social competence with problem-solving skill. For example, Hopper and Kirschenbaum (1985) tested the hypothesis that skills in social problem-solving are significantly correlated with social competence. Sixty 6th graders' social competence was assessed by teachers and peers in terms of positive and negative behaviour, social problem solving skill related to alternative,
consequential, and evaluative thinking were measured. It was observed that subjects who produced solutions of relatively inconsistent quality were viewed by their teachers and peers as less socially competent than their more consistent peers. Similarly, in an earlier study by Wright (1980) social competence was found to be positively related to problem-solving skill. Here it is worthwhile to mention that Sharp (1981) obtained different result tested by 107 preschoolers (3 years 9 months, and 4 years 9 months) on verbal problem solving skill. Their social competence was rated by their teachers and independent observers. No significant relationship between problem-solving skills and social competence was found.

An important index of children's peer-related competence is an ability to engage in sustained social play (Guralnick & Groom, 1985). During the preschool years significant developmental changes in social participation occur as children progress from predominately solitary and parallel play toward increasing involvement in peer-group activities (Barnes, 1971; Parten, 1932; Smith, 1978). Guralnick and Groom (1985) examined the correlation of peer related social competence and intelligence of 33 developmentally delayed preschool children. Measures of social participation and individual social behaviour were obtained during free-play periods and correlated with intelligence as measured by Stanford-Binet Intelligence Scale. Intelligence was found to be positively correlated with social play.
Pellegrini (1985) studied the two aspects of social competence (i.e., interpersonal understanding and problem-solving ability) in relation to intelligence among 100 fourth-to seventh-grade children of both the sexes. Results indicated that both the aspects of social competence were significantly correlated with I.Q.. An earlier study by Shantz (1983) also revealed that social cognitive functioning, in general, has been found to be positively related to intelligence.

Pellegrini, Masten, Garmezy, and Ferrarese (1987) investigated the correlates of social and academic competence in 9-14 years old children. Result revealed that I.Q. was one of the important correlates of social and academic competence. In another study also general intellectual ability as measured by I.Q. was presumed to be an important factor contributing to competent functioning in the school environment (Sternberg & Powell, 1983).

PHYSICAL ATTRACTIVENESS

Social psychologists have examined the effects of physical attractiveness on interpersonal transactions (e.g., Berscheid & Walster, 1969). It has been generally observed that adults use global, positive stereotypes when attributing traits to attractive person, and conversely, they tend to attribute negative characteristics to unattractive individuals. Even preschool-age children tend to rate attractive peers as friendlier, smart and less likely to start fights than unattractive peers (Dion, 1973, Langlois & Stephan, 1981).
Some studies suggest that relationship between attractiveness and positive attributions maintains even when the raters and ratees are acquainted (Dion & Berschied, 1974). Some investigators (Langlois & Styczynski, 1979; Styczynski & Langlois, 1977) have suggested that attractiveness may interact with gender such that attractive boys receive more negative attributions (e.g., perceived as antisocial or incompetent) than unattractive boys when rated by acquainted peers.

Physical attractiveness has been studied in perspectives of various aspects of social competence. For example, Reis (1982) investigated the role of physical attractiveness in social interactions. In his study 43 male and 53 female college-seniors completed a diary of social interactions over 7-18 days, a short form of the Texas Social Behaviour Inventory, a measure of fear of rejection or trust, measures of social skills including the Rathus' Assertiveness Schedule, and Social Avoidance and Distress Scale. Pictures of the subjects were rated for the physical attractiveness by other undergraduates. For males, physical attractiveness related positively to the quantity of social interaction with females and negatively with males; for females attractiveness did not relate to the quantity of socializing. Attractiveness related positively to the affective quality of social experience for both sexes. Attractive males were more assertive and were lower in fear of rejection by the opposite sex, whereas
attractive females were less assertive and lower in trust of the opposite sex. For both sexes, assertiveness related positively to the quantity and quality of social participation. Fear of rejection led males to interact less with females and more with males and to have poorer quality of interactions. Study conducted by Steffen and Redden (1977) revealed that high socially competent men were judged to be more attractive and more socially skilled.

Vaughn and Langlois (1983) examined the role of physical attractiveness in social competence. Fiftynine preschool-children were rated for their physical attractiveness. Two measures of social competence, sociometric status and rank in an attention structure, were also obtained. Rank-order correlations among the three measures indicated that physical attractiveness was a significant correlate of sociometric rank but not of attention rank. Sociometric and attention ranks were also significantly interrelated. Separate analysis of the results by gender revealed that the relationship between attractiveness and sociometric status was stronger for girls than for boys. Attractiveness was not significantly related to attention rank. Partial correlation analysis indicated that attractiveness does not mediate the relationship between attention and sociometric rank. The results suggest that sociometric data may be influenced by variables such as physical attractiveness that are not necessarily related to social competence.
Thus, we see that physical attractiveness plays a significant role in the assessment of social competence. In this connection the statement of Calvert (1988) attracts the attention when he reports that although social psychologists have suggested the major impact of physical attractiveness on people's perception, research on the behavioural assessment of social competence has given little attention to the effects of physical attractiveness on ratings of competence. He has emphasized the need for a systematic assessment of the effects of physical attractiveness on both trained and untrained raters of social competence.

**SELF-CONCEPT**

Children's self-concept play a significant role in shaping their psychosocial behaviour and overall school adjustment. Infact self-concept is one of the components of social competence (Anderson and Messick, 1974). One of the ways to measure the social competence of the children is to measure their self-concept (Wolf & Wenzl, 1982), Various researchers (e.g., Marsh, Parker, & Barnes, 1985; Phillips and Zigler, 1980; Sprigle, 1980), have noticed that the self-perception of the children reportedly influence the manner in which they conduct themselves in their classrooms, on the playground, as they interact with other children, and to some degree determine their attitude towards authority figures such as teachers, school counselor psychologists, and other adults in the school environment.
Results of some studies (Hathaway & Rhodes, 1979; Jones, Gray & Jospotre, 1982; Williams, 1978) have revealed that programmes designed to enhance the self-concept of disadvantaged children resulted in significant improvement in behaviour and psychosocial functioning.

A study conducted by Comer, Haynes, Hamilton-Lee, Boger, and Rollock, (1987) examined the relationship of various dimensions of children's self-concept and social competence was assessed by their parents, teachers, and themselves. The study was conducted among 253 randomly selected middle-school students. Result indicated moderately high and significant correlations between various dimensions of the self-concept and children's rating of their own self-concepts. Similarly Sherman (1989) noticed that increased self-efficacy results into increased socially competent behaviour.

The above studies have emphasized the strong relationship between self-concept and psychosocial competence but there are some studies that have failed to confirm this relationship (Iglinsky, 1968, Thomas, 1976). However, in most of the studies positive relationship between self-concept and social competence has been ascertained.

Some studies have investigated strong correlations between negative-self-concept and various forms of psychopathology. For example, Norem-Hebeisen (1975) and Bay (1983) reported that children in public schools have shown high correlations
between children negative self-concept and their use of drugs. Results of their studies made them to believe that negative self-concept is one of the most significant psychosocial correlates of substance abuse. Williams (1978) assumes that the students who are at risk of becoming addicted to drugs may be helped through improving their self-concepts.

A study conducted by Coopersmith (1981) also revealed the relationship of negative self-concept with psychopathology. Eighty two mothers were asked to indicate the extent to which their children experienced emotional problems. The self-concept of the children were studied. Those children identified as having negative self-concept 60% of them were having serious emotional problems. The investigator concluded that persons who are relatively anxious and distressed are inclined to have negative self-concept which is reflected in various psychosomatic symptoms. He observed that children having negative self-concepts are prone to have destructive tendencies. Similarly, in mentally retarded and emotionally disturbed students Wolf and Wenzl (1982) found that self-concept related positive to reading and arithmetic.

Coleman (1985) examined the role of self-concept on academic achievement of 169 mildly handicapped children (aged 110-149 months) who attended special and mainstream classes. The subjects were administered the Piers-Harris Children's Self-Concept Scale. High achievers were found to have higher self-concept than low-achievers.
LOCUS OF CONTROL (LOC)

Some studies have investigated the relationship between social competence and LOC. One area of social competence which has attracted the attention of the investigators in the LOC research, has been the relationship between LOC and school achievement. Some have observed negative relationship (with LOC scored towards extremity) between LOC and school achievement (e.g., Coleman et al. 1966; Crandall, Katkovsky, & Crandall 1965; McGhee & Crandall, 1968). Others have found no significant relationship (Butterfield, 1964). Even the inverse relationship has also been reported (Hjelle, 1970).

Two types of externality have been emphasized by the investigators; defensive externality which represents a defense against anticipated failures, and congruent externality which represents a response to life experiences non contingent on one’s personal efforts (Davis, 1970; Hochreich, 1974; 1978; Phares, 1979). These two external groups show quite different behaviour in certain situations, Davis (1970) for instance, found that defensive external subjects value academic competence more highly, seek out more information, and more often act like internal subjects than do congruent external subjects. Levenson and Miller (1976) have differentiated various types of external control in different fashion. They argued that the people with external control believe that the world is ordered, not by oneself, but by powerful others. This external LOC
relate differently to the aspects of social competence. For example, Levenson found that the individuals possessing a belief in control by powerful others involved themselves more actively in social and political affairs than individuals who feel that their lives are controlled by chance. In brief, these studies suggest that LOC is a multidimensional phenomenon which has potentially different implications for individuals psychosocial competence.

AUTISM

There has been a considerable speculation and controversy for assuming autism as the basis for severe social interaction deficits (Damasio & Maurer, 1978; Fein, Penningten, Markowitz, Braverman, & Waterhouse, 1986, Rutter, 1968; Tinbergen & Tinbergen, 1976) in children. Now-a-days increasing efforts are being made in order to investigate the possibility of a cognitive basis for these difficulties. A number of studies have strengthened this possibility (Hermelin & O'Conner, 1970; Lovaas, Schreibman, Koegel & Rehm, 1971; Rutter, 1983; Sigman & Ungerer, 1981). Several other studies have examined the relationship of autism with cognitive ability (Hobson, 1982; Langdell, 1978). Studies conducted by Baron-Cohen, Leslie, and Firth (1985, 1986) reported specific social cognitive deficits in role taking ability in autistic children when compared to Down Syndrome and non-handicapped control children.

Results from these studies suggest that individuals with autism show deficits in social cognitive abilities when
compared with non-autistic persons matched for mental age. The presence of these deficits have come up as a ground work for the social interaction difficulties seen in autistic persons. Recently, Oswald and Ollendick (1989) examined the hypothesis that autistic individuals are uniquely deficient in role taking ability and that this deficiency is related to social interaction deficits. To test the hypothesis they compared 10 male autistic youth with 10 male non-autistic mentally retarded youths (aged 12 years 9 months to 17 years 10 months; nonverbal IQ range 40-88) on three role taking tasks and 3 measures of social competence. Results revealed that autistic group was relatively deficient on each of the social competence measures and on one of the role-taking measures. The role-taking measures on which the group differed also correlated significantly with each of the social competence measures. The result supported the notion that social cognitive functioning can be assessed in autistic individuals and that social cognitive variables may be useful in understanding specific social interaction difficulties.

ANXIETY AND DEPRESSION

Anxiety, an uneasy mental state of apprehension, uneasiness and foreboding has been assumed as a factor for many troubling behaviour leading to various types of mental illness. It has been recognized as an inhibitor of competent behaviour (Lange & Jackubowski 1977; Lieberman, King, DiRisis & White, 1977).
Many studies have suggested that control of anxiety has been found useful in the development of social competence (e.g., Rotheram & Armstrong, 1977).

A study conducted by Vorkonyi (1978) examined the role of anxiety on the development of situational competence. Responses from preschoolers were collected which revealed their self-reliance, dependence, skillfulness and anxiety. Anxiety was found to be a hinderance in their successful performance. On the contrary, children with low anxiety possessed more competence than their opposite counterparts.

Strauss, Lease, Kazdin and Dulcan, (1989) investigated and compared children having anxiety disorder, nonanxious children, and nonreferred children on self-report parent and teacher measures of social competence. Results indicated that anxious subjects were shy, socially withdrawn, lonely, lacking in appropriate social skills and generally socially maladjusted as compared to non-referred subjects. Although both clinic groups showed evidence of social deficits, anxious subjects were characterized as socially withdrawn and shy, whereas clinic control demonstrated inappropriate assertiveness, aggression and negative social behaviours.

Depression caused by prolonged and/or by excessive anxiety has been one of the most potential factors of mental health problems. Various studies have suggested that high degree of depression leads an individual to social incompetency. Some of the important studies related to this field have been reviewed here.
Lewinson, Mischel, Chaplin, and Barton (1980) examined the relationship of social competence and depression among 71 depressed, 59 psychiatric control, and 73 normal control individuals following a group of interaction at different time in the course of treatment. Social competence was measured by self-rating and rating by others. It was observed that depressed subjects initially rated themselves and were rated by others as less socially competent than 2 control groups and their self-perception improved with treatment. Surprisingly, the depressed were found to be more realistic in their self-perceptions than the controls. Specifically, the controls perceived themselves more positively than others saw them, whereas depressed saw themselves as they were seen. This realism of the depressed tended to decrease in the course of treatment.

Fisher and McFall (1982) tested the hypothesis that the deficits in interpersonal and problem-solving skills are significantly related to nonclinical depression. The Problem Inventory for College Students (PICS) developed by the authors was administered to 92 undergraduate males to assess the relationship between competence and depression. Depression was assessed in two ways. The current presence or absence of non-clinical stage of depression was measured by the Black Depression Inventory (BDI) and the tendency towards experiencing frequent non-clinical depression was measured by self-report method. Subjects who were currently depressed
according to their BDI scores, had significantly lower competence score on PICS than non-depressed subjects. Subjects who reported experiencing frequent depression did not earn significantly different competence than who reported seldom experiencing depression. The result partly supported the hypothesis.

Blechman, McEnroe, Carella, and Audette (1986) investigated whether children with both academic and social skill deficiencies have higher levels of peer-nominated and self-rating of depression than their more competent peers and, whether depression level can distinguish academically skilled children from socially skilled one. Objective measures of academic and social competence classified 169 3rd-6th grade children as competent (above the median on both measures), incompetent (below the median on both measures), and socially skilled (above the median only on social competence). The subjects were administered the Perceived Social Competence Scale for Children, Children's Depression Inventory, and a Peer Nominations Inventory of Depression. Results demonstrated that academic and social competence best predicted subjects' depression. It was noticed that peer-nominated and self-rated depression was the highest among incompetent subjects and the lowest among competent subjects. It was also noticed that peer-nominated happiness was higher among socially skilled than academically skilled.
A study investigating the effect of depression on accuracy of self-perception and social competence was conducted by McNamara and Hackett (1986) in 40 depressed and 42 non-depressed college students. Depression was measured by Black Depression Inventory. Subjects rated themselves and were rated by group-peers and trained observers on social competence. Results showed that self-rating of the non-depressed subjects were significantly higher than ratings of depressed subjects. No difference in social competence was found by the observers in depressed and non-depressed subjects.

Kennedy, Spence and Hensley (1989) compared 86 depressed (13 of whom were depressed and fearful), 43 fearful, and 43 normal children (aged 8.0-12.2 yrs) on indices of social competence. Independently of whether the depressed category included subjects who were also fearful, depressed subjects (1) reported lower levels of assertiveness, greater submissiveness, and less adequate social skills performance; and (2) received lower ratings of peer popularity and fewer positive nominations from peer sociometry, and (3) depressed subjects were much more likely to be rejected or isolated by their peers than were fearful or control Ss.

LEARNING DISABILITIES

Investigators have identified "learning disabilities" as one of the important factors in peer social competence. Learning disability signifies inadequate development in a
specific area of academic, language, speech, or motor skills, which is not due to mental retardation, autism, a demonstrable physical or neurological disorder, or deficient educational opportunities. Such children are usually of average or above average intelligence, but have difficulty in learning some specific skills (e.g., arithmetic or reading), thus impeding their progress in school (Davison and Neale, 1990, p.440).

Bryan and Bryan (1981) have reviewed the research on the social and personal characteristics of learning-disabled (LD) children. The review indicates that (a) LD children are likely to be socially rejected by others, (b) LD children hold themselves in low esteem and attribute their failures to lack of ability and their success to external forces beyond their control, (c) significant others are likely to hold lower, unrealistic expectations of the LD child's ability to progress academically, (d) LD children appear to be less competent in social communication than non-LD children, and (e) social-behaviour problems seem to be important factors affecting recognition of LD children. Similarly, Wallender and Hubert (1987) mention that LD children are at high risk for experiencing peer status and interaction problems.

Bruck & Herbert (1982) examined the cognitive skill of LD and non-LD subjects. Twenty LD and 20 non-LD subjects were administered the WISC-R, Peabody Picture Vocabulary Test, and the Conners Teacher Rating Scale. Results revealed that
LD subjects' cognitive and affective role taking skills were poorer than those of controls.

Maag and Rutherford (1986) studied the accuracy of 30 non-labelled (NL), 30 behaviourally disordered (BD) and 30 learning disabled (LD) students' perceptions of their behaviour as measured by the association between student and teacher rating scores on Student Behaviour Inventory. Results indicated that NL and BD subjects were fairly accurate in the degree to which they perceived their behaviour when compared to their teachers' perceptions. LD subjects' perception of their behaviour appeared less accurate. There was a significant difference in the relationship between student and teacher perceptions of LD group compared with the relationship between student and teacher perceptions of the NL and BD groups.

McConaughty and Ritter (1986) studied social competence and behavioural problems of LD boys of 6-11 years of age. One hundred and twenty three LD boys who were referred for a psycho-educational assessment were administered the intelligence, academic and neurophysiological tests. One parent of each subject completed the Child Behaviour Checklist. Results indicated that the parents of LD subjects reported significantly lower levels of social competence and more behaviour problems than the parents of normative samples. LD subjects were found to be less socially involved, and had poorer school performance than the normative samples. On the behaviour problem scales,
the LD subjects had significantly higher scores for both externalizing types of problems, including problems related to depression, uncommunicativeness, obsessive-compulsive behaviours, social withdrawal, hyper-activity, aggressiveness, and delinquency.

Carlson (1987) studied the social interaction strategies of 48 2nd and 5th grade LD and Non-LD boys. The subjects were shown 4 hypothetical social situations and were individually interviewed about their goals and strategies. Each social situation was presented in an explicit pro-social goal and no goal condition. Content analysis of the data revealed that LD subjects performed with less social competence and at lower developmental levels.

Osman (1987) studied problems particular to LD adolescent and suggested that LD frequently lacks social competence and experience interpersonal relationship problems. The social problem appears to be intrinsic to learning ability itself, rather than a result of frustrating school experience, social problems can occur on the level of social cognition, skill deficit, performance deficits and inability to self monitor.

Ritter (1989) examined social competence and problem-behaviours of 51 adolescent girls of 12-16 years having learning disabilities, Child Behaviour Checklist (CBCL) was administered on them. Results indicated poor social competence
and elevated problem behaviours of LD girls in comparison to a CBCL normative group of 250 adolescents.

Sater and French (1989) investigated the social competencies of LD and non-LD low achieving (LA) children. The study was conducted in two parts. In the first, the social status of 101 LD, 156 LA, and 608 normally achieving children in grades 3-5 were assessed using peer sociometric ratings. LD and LA subjects received significantly lower ratings than normally achieving students. LD subjects were lower in social status than non-LD subjects but did not differ significantly from LA children. Furthermore, approximately 70% of the LD children did not experience social rejection. In the second part of this study, same subjects were used. Parents' and teachers' ratings were obtained for rejected and accepted LD and LA subjects. Both LD and LA rejected children exhibited lower social competence and a greater incidence of behavioural problems than did accepted children.

Toro, Weissberg, Guare, and Liebenstein (1990) compared 86 children with learning disabilities (LD) with 86 matched children without learning disabilities (NLD) on three domains of variables: social problem-solving skill, teacher-rated school behaviour and competence, and family background. The children with LD and the NLD group differed on variables in all three domains. More specifically, the children with LD were able to generate fewer alternatives for solving social problem situations, showed less tolerance for frustration and less adaptive assertiveness, and had more overall classroom
behaviour problems and less personal and social competence in a variety of areas as rated by teachers. Children having LD also showed more family background difficulties (e.g., lack of educational stimulation at home, economic difficulties).

Vaughn, Hogan, Kouzekanani, and Shapiro (1990) studied how learning disabled students prior to identification (LDPI), low achieving (LA), average achieving (AA) and high achieving (HA) differ on peer, teacher, and self-assessment of social status and social skills in the fall and spring of kindergarten. Two hundred thirty nine Black, Hispanic and White students, 78% of a kindergarten population, participated. Controlling for age, sex, and achievement levels, four groups were identified. LDPI, LA, AA, and HA. In fall and spring of kindergarten all students were administered measures of peers' perceptions of social status, teachers assessment of behaviour problems and social skills, and self-perception. MANOVA and stepwise discriminant function analysis revealed that as early as 8 weeks after entering kindergarten, LDPI students differed significantly from their peer on social variables and attention problems. Results suggested that later social difficulties of LD students are not solely a function of a history of low achievement and low teacher acceptance.

COGNITIVE STYLES

Some studies have been conducted in order to investigate role of cognitive styles in social competence. For example,
Norquist (1985) examined the relationship between psychosocial competence and three aspects of cognitive styles: cognitive complexity, perceptual accuracy and field-independence. Data were obtained from 53 persons, rating of self and peers behaviour. Psychosocial competence was measured by two methods (a) the product of peers' mean ratings of each individuals within-group behaviours on measures of Acceptance versus Rejection of self and also of others, and (b) participants' rank-orderings of self, and of other members for interpersonal competence. Results revealed that perceptual accuracy skill did not correlate to either of the psychosocial competence measures, cognitive complexity did correlate significantly and positively with ranking based psychosocial competence measure, but not the rating based similar measure. The latter, however, was found to be significantly and positively correlated with field-independence characteristics of the subjects.

Another study investigating the relationship of cognitive style with academic achievement and social competence in fourth and fifth grade children was made by Anderson (1986). Witkins field-dependence independence (FD-I) continuum was used as a measure of cognitive style. The result revealed positive significant residual correlation (after age has been partialed out) between field-independence and achievement in regarding Language and Maths. Significant positive correlations were obtained between social competence and field-independence
also. Withdrawal, distraction, and behaviour-problems were found to be negatively correlated with field-independence.

The FD-I cognitive style has been found to be related to various facets of social competence. For example, it has been found to be related to efficiency in games (Lindquist, 1978; Loader, Edwards, & Henschen, 1982), academic achievement (Watkins & Astialla, 1980; Saracho, 1984; Sharma & Ahuja, 1982), perceptual skill (Stone, 1979), learning and memory (Reardon, Jolly, McKinney, & Farducey, 1982), and intelligence (Flexer, & Roberge, 1980; Robinson, 1985). These studies have emphasized importance of cognitive style in the development of social competence.

SOME OTHER FACTORS

In addition to personality factors already discussed, there are some other personality factors which have been studied in relation to social competence. Some important studies among them are being reviewed here.

Lewine, Watt, and Fryer (1978) studied social competence in three schizophrenic subtypes. They collected data from school records covering kindergarten to grade 12, and hospital records to examine childhood social competence, adult premorbid competence, and psychiatric outcome in adult schizoaffective, paranoid and undifferentiated schizophrenics. Fifty eight subjects were taken from a computer test of patients aged 15-34 years. Result showed that there was a significant
difference in childhood interpersonal competence and adult social competence (especially marital status) among the subtypes. Adult schizoaffectives exhibited the highest level of social competence; undifferentiated the lowest level, and paranoids were intermediate between the two. The subtypes did not differ in outcome as measured by total days of hospitalization and a global outcome rating. Results revealed longitudinally consistent subtype differences in social competence.

Haberman, Chapman, Numbers and McFall (1979) tested the hypothesis that college students high on physical anhedonia (absence of the pleasure-unpleasure feeling in situations where it is normally present) and perceptual aberration would have poor social competence. The hypothesis stemmed from the clinical reports that these characteristics are found in psychoses-prone individuals, a group also described as having poor social competence. Subjects with high anhedonia and perceptual aberration were identified and their social competence was measured. Anhedonic subjects were found to be less socially skilled than control subjects but no significant difference in social competence of perceptual-aberration-subjects and control subjects was observed.

Prentky, Watt, and Fryer (1979) examined the relationship between patterns of psychiatric symptoms of 141 patients at first hospital admission and their social competence as
measured in childhood from school records, and in adulthood by the index of social competence which was based on hospital records. Results showed that low social competence was associated with more disintegrated symptoms of withdrawal and thought disorder, but this conclusion held only when the measure of social competence was based on adult data.

Humphrey, and Kirschenbaum (1981) investigated the relationship between two types of self-control (tolerance of noxious stimulation, and resistance to temptation), gross motor control (measured by the Walk-A-Line Test) and social competence (measured by the Kohn Social Competence Scale) in 18 3-5 years olds. Results showed that tolerance types of self-control and the resistance of temptation type were correlated. However, teachers ratings of social competence correlated differentially with the tolerance and resistance variation of self-control subjects who successfully tolerated noxious stimulation were rated by teachers as more socially competent in terms of cooperativeness and competence. Resistance to temptation was a less reliable index of self-control and one that correlated with age and gross motor control.

Height of the children has been found to be a significant factor in perceived social competence of children in a study by Eisenberg, Roth, Bryniarski, and Murray (1984) examined the effect of children's height on mothers' attribution
regarding children's social and cognitive competencies. Two hundred and eight mothers of preschool children rated photographs of toddlers (aged 19-20 months) varying in height on a variety of social and cognitive abilities. The mothers also assigned punishment to the children for hypothetical transgression. Data showed that large boys were rated by their mothers as more competent than the average sized and small boys even when effects of mothers perceptions of children age was covaried. Similar findings were obtained for the girls also i.e., mothers rated small girls as less independent than average sized or tall girls.

Thorgilson (1987) examined the role of emotion in social competence. Using a peer nomination procedure, two groups of college females were identified, one high in social competence and another low. They were asked to answer various questions about their emotionality that were deemed important for social competence. All questions were asked with respect to four emotions, i.e., tenderness, happiness, anger and sadness. In addition, each subject was rated by two others who knew her well.

The results showed that high socially competent subjects do indeed experience and display stronger emotions in interacting with others. This was particularly true for two positive emotions of tenderness and happiness. It was also found, that for high competence group, there was strong agreement between self-rating and rating by others across all
the emotions. There were significantly less agreement for the low groups. For the two positive emotions of tenderness and happiness the low group rated themselves much higher than their classmate rated them. For anger the low group-subjects rated themselves lower than the other rated them.

Lee (1987) investigated the components of social competence in 68 children of 9-12 years of age out of which half were normal and remaining half emotionally disturbed. The results showed that normally developed children were found to have more positive accomodating goals and strategies than emotionally disturbed students who were more likely to produce hostile goals and strategies. Analysis of performance of the measure of social self-efficacy demonstrated a positive relation with sociometric status among normal children. Correlation computed on children's goal, strategies, and social self-efficacy to assess the strength of relations, among response categories failed to reach significance. The findings suggested that the overall pattern of greater hostile and less accomodating responses may act as major hindrance in efforts to mainstream emotionally disturbed children.

In another study an investigation of social self-efficacy in 163 high school students (aged 13-19 years) and 79 emotionally disturbed adolescents (aged 12-18 years) was made by Connolly (1989). The Adolescent Social self-efficacy Scale developed by the author was administered on subjects. Emotionally
disturbed subjects rated themselves more poorly than did their well-functioning peers.

Campbell, Steffen, and Langmeyer (1981) investigated the relationship between psychological androgyny (determined by a measure based on Personality Research Form) and 3 self-report indicators of social competence (quality of interpersonal behavioural skills, levels of interpersonal anxiety, and amount of social activity). Two hundred sixty one college students were used as sample. Results indicated that students of high androgyny were significantly more competent than low androgyny subjects.

Some investigators have studied social competence in the light of human biology. For instance, Weinstock, Copelan, and Bagheri (1984) studied the social competence of 30 male non-psychiatric subjects mean age 59 years with some primary medical problems. The elements used to assess competence were (1) subject evidenced a choice, (2) the choice was based on rational reasons, and (3) the subject had the ability to understand the specific procedure being contemplated. Results indicated that only subjects with organic brain syndromes were found to be incompetent.

Morrison, Bellack, and Manuck (1985) examined social competence of 22 male borderline hypertensive (aged 19-45 years) in relation to cardiovascular responsivity to a behavioural role-play test (RPT) of assertiveness. Subjects were divided
into two groups. One group experienced large increase in pulse pressure (PP) in response to social challenge (Group 1), with the other group showed small changed in PP (relatively equal rise in systolic and diastolic blood pressure) under the same stimulus condition (Group 2). These differential group patterns of cardiovascular response were specific to interpersonal stressors because the group did not differ in reactivity to cognitive challenges. Group 2 subjects evidenced unassertive responding on a role play test of negative assertive and were rated by significant others as the least socially incompetent as compared to the normative controls (who received the highest social competence ratings) and subjects in group responded in an inappropriately associative fashion in the RPT and had shorter response tendencies during the RPT than the subjects in Group 2, suggesting that subjects in group 2 had greater levels of interpersonal anxiety. Results indicated that hostile 'inappropriate assertiveness and inappropriate submissiveness may be associated with hypertension.

Biranbaum, Robinson, Phillips, Stewart, (1990) investigated the behavioural adjustment of 61 children (ages 4-16 years) during the terminal illness and 1st year following a sibling's death from cancer. Data were collected before death during the terminal phase, and 2 weeks, 4 months, and 1 year post death. Results indicated that the afflicted siblings demonstrated
significantly higher levels of behavioural problems and significantly lower social competence than normal children.

The review of the above studies clearly indicate that various personality factors are responsible for development of social competence in children. It is, therefore, necessary to take into consideration various personality factors in order to have proper understanding of social competence.

SOCIAL CORRELATES

Social factors have been the topic of increased attention in studying social competence of children. Various studies have suggested that poor peer acceptance in childhood is predictive of wide range of adjustment difficulties in adolescence and adulthood (Cowen, Pederson, Babigian, Izzo, & Trost, 1973; Robbins, 1966; Roff, Sells, & Golden, 1972; Ullman, 1957) and is the result of social skill deficits (i.e., deficienct social knowledge and social behaviour; Asher, Renshaw, & Hymel, 1982). Study of social factors in social competence has progressed along two parallel paths. One path has been followed by researchers who have focused family environment and early experiences, and other by those who have focused on social problem-solving training. Until recently these two paths have not crossed. Now a brief introduction of some of the studies conducted within these two paths would be presented.
FAMILY ENVIRONMENT
AND EARLY EXPERIENCE

Role of various factors related to family environment and early experience has been studied in determining social competence of children. Role played by socioeconomic status and culture has already been discussed while discussing the demographic factors. In addition to these factors, some other factors related to family environment and early experience would be discussed here.

Child's Experience with the Parents

Parental experiences are the first and the most important experiences which the children receive in their lives. Some studies have attempted to relate actual parental behaviour to children's social competence and have indeed found that certain parental actions are associated with competent behaviour in their children (Elardo & Freund, 1981; Liberman, 1977; White & Watts, 1973). Similarly some studies have suggested that hostile, inconsistent parenting predicts the development of socially incompetent behaviour in children (Baldwin, 1955; Baumrind, 1967; Eron, 1982; George & Main, 1979; Winder & Rau, 1962). It seems that parental attitudes towards child-rearing are related to the ways in which parents interact with their children which in turn have an effect on the personality and behaviour of the child including child's social competence. It has also been observed that parental practice methods.
especially parental teaching and dialoguing have also been found to be associated with children’s development of social competence (Pettit & Bates, 1987; Spivack, Plat & Shure, 1976). These studies emphasize the importance of child-rearing practices in the development of social competence of children. In the following discussion a brief review of some of the important studies related to parent-child relationship/child-rearing practices has been presented.

Impact of mother-infant relationship on social competence was investigated by Bronson (1971, 1974) who periodically observed mother-infant pairs in a play group during the second year and the child in nursery school at 3½ years. She assumed that maternal-sensitivity in the second year (letting the child set the pace and tone of the dialogue) produces a child who is "self-directed", confident and at ease with itself and with others. Waters, Wippman, and Sroufe (1979) classified the same children as securely or anxiously attached to their mothers in the strange situation at 15 months and found the securely attached infants to be more directed, more curious, more often sought by other children, less withdrawn, and more sympathetic to the distress of peers two years later.

A study conducted by Wilkinson, and O’conner (1977) investigated the effect of mothers’ involvement in the development of social competence of children. The investigators studied 101 males of 16 and 17 years for whom mother had functioned
as role parent from infancy to high school entrance. Demographic and ratings of the amount and type of social practices employed in each of 13 ecosystem areas were analysed. Ratings for the 13 areas were made for both mother and son for the periods from kindergarten to 3rd grade and grades 4-6, and a single current area was rated to determine the son's social competence. Results indicated significant association between maternal emphasis on the development of social, educational, and community orient skills and the son's social and academic competence.

The impact of mother-infant relationship on later cooperation with the mother, problem-solving skills, and competence in nursery school were examined in longitudinal study encompassing a four-year period by Sroufe and his colleagues (Arend, Gove & Sroufe, 1979; Matas, Arend, & Sroufe, 1978; Sroufe, & Waters, 1977). Those who had been judged earlier to be securely attached sought and accepted their mothers' help at two years with a problem they otherwise could not have solved. Those who were anxiously attached and showed avoidance neither sought nor accepted their mothers' help; they were more likely to turn to the the experimenter for assistance. Those who were anxiously attached and ambivalent gave up easily and became distressed (Matas, Arend, Sroufe, 1978). At age five, those earlier classified as securely attached were rated by kindergarten teachers as more "age resilient"—more able to adapt resourcefully to changing personal and environmental circumstance (Arend, Gove, & Sroufe, 1979).
Klein and Durfee (1979) studied the later consequences of the early mother-infant relationship on 26 children of 12 months of age. Various measures of social, emotional and cognitive motivational development were correlated with two measures of preschool adjustment. Subjects were rated on social competence, attachment to mother, persistence at practicing emergent sensory motor skills, and the Mental Development Index from the Mental Scale of the Bayley Scales of Infant Development. When subjects' mean age was 45.1 months, preschool ratings were obtained on the social competence scale. Results indicated that both measures of early social functioning were related to more optimal adjustment in a peer setting at age 3.5 years. Results presented an empirical support for the notion that the quality of early mother-infant relationship has important consequences in most of the areas of child's subsequent development.

Mendell and Tyler (1981) examined the relationship of parental psychosocial competence and parent interaction behaviour in a joint problem-solving/play session. Parents were assessed using self-report questionnaires to determine the degree of self-efficacy, optimistic trust, and an active competent coping style, children and parents participated in a semi-structural problem-solving/play task. Observers rated the parental behaviour in the interactions. Children's responses were not significantly studied. More competent parents treated the child as being more capable and resourceful, showed
generally warm and positive feelings, and were more helpful with problem solving. The results confirmed the parental competence attributes and their style of interaction as significant variables for child-development as they are the part of the socialization content of their children.

MacDonald and Parke (1984) examined whether attribute of the parent-child relationship is anyhow related to children's social behaviour and acceptance in the peer group. They observed mothers and fathers interacting with their preschool children, and then correlated observed attributes of this interaction with the child adaptation among peers, as noted by teachers. Results revealed that competent boys had fathers who were more physically playful, eliciting positive effect during play, and mother who were verbally stimulating. Competent girls had fathers (but not mothers) who were verbally stimulating. MacDonald concluded that affect-arousing encounters such as physical play may assist children in the acquisition of friendship making skills by providing the children with practice in encoding and responding to others affective signals.

Turner and Harris (1984) investigated the relationship between parental attitudes towards child rearing and preschool children's social competence. Twenty male and 22 female preschool children and their parents were used as subjects. Results indicated that parental indulgence and protectiveness were
associated with higher scores on measures of child self-concept, vocabulary, apathy, and altruism, although not all correlations were significant. Similarly, Kennedy and Bakeman (1984) found that mothers' responsiveness of the children of 3 months was related to children's later social competence with adults, while the infants' responsiveness (at the age of 3 months) to mother was not correlated with any measure of social competence either with adult or peers.

Bell (1985) examined the association between family relationships (reported closeness to parents and siblings) and perceived social competence. The study used 1833 undergraduates reared by both biological parents. Significant positive correlations were found between family relationship and the social competence measures which included self-esteem, instrumentability, expressiveness, shyness, and degree of satisfaction/ease in same and opposite-sex peer relationships. Similarly, Jones and Lenz (1986) found that parental interactional behaviour with newborn children (2-3 days) was the predictor of children's stimulating behaviour.

Ekblad (1986) investigated the relationship between child-rearing practices and children's functional adjustment. Mothers' child-rearing practices with 155 boys and 135 girls (mean age, 10-30 years) and related these to teachers' ratings of children's functional adjustment in school. The correlations between mothers' child-rearing practices and teachers' ratings of subjects functional adjustment showed few significant relationships.
Putallaz (1987) studied the relationship between parenting variables and children's social behaviour. A number of maternal behaviours assessed in a standard laboratory parent-child interactions were found to be significantly correlated with first-grade children's sociometric status and social behaviour with peers. Mothers who used positive verbal statements (e.g., polite requests and suggestions) and were less disagreeable and demanding had children who were more socially accepted as well as more positive and less abrasive in observed interactions with peers. Putallaz also examined the relation between maternal behaviour and children's social knowledge and their social status. The quality of a child's solutions to hypothetical social problems was found to be predictable from maternal behaviour, and a child's social problem-solving skills in turn predicted that child's social status. Thus the result revealed that parent child interaction affects peer competence by leading to increments in social cognitive skills that are the basis of competent peer-directed behaviour.

Ladd and Golter (1988) explored the relationship between parents' efforts to initiate and monitor children's peer contacts and qualities of children's peer relations in school and non-school settings. Parents of 58 preschool children completed logs of their initiation and monitoring practices and of their children's peer contacts in non-school setting during late preschool. Parents were classified to as high
versus low initiation, and direct versus indirect monitors, depending on the form of management they tended to use for children's peer contacts. Information about children's peer relations in school was obtained through observational, sociometric and teacher-assessment conducted during preschool and kindergarten. Parents who initiated a high proportion of peer contacts tended to have children who possessed a larger number of different play partners and more consistent companions in non-school settings. For boys, higher level of parental initiation were also associated with greater peer acceptance and lower levels of peer rejection in school. Direct or indirect forms of parental monitoring were unrelated to children peer relations in non-school settings, but directive styles were predictors of children's social maladjustment in school.

Unwanted children generally do not get healthy treatment from their parents as compared to normals. The difference in the treatment leads to difference in the development of social competence in children. This aspect was studied by Myhrman (1988). He presented 14 years follow-up of data on 41 unwanted boys (UES) and 47 unwanted girls (UGS) whose mothers did not want the pregnancy, and of 42 male and 46 female controls. Subjects, controls, and teachers completed questionnaire and subjects were also interviewed. Results revealed a consistent difference between the UGS and their controls, especially in their relations with their fathers.
UGS were rated lower by their teachers in personal behaviour and relationship with schoolmates. UBS were more conservative on social issues such as divorce, coping with alcohol and drugs, and the resolution of unplanned frequencies.

Heath and MacKinnon (1988) investigated the factors related to social competence of children in single parent family. Eighty mothers with custody of an 8-11 years old children who had been separated for at least one year completed the Perceived Competence Scale for children; their children completed the Children's Report of Parental Behaviour Inventory. Childrearing behaviours of single parent emerged as important contributors to their children's social competence.

Amato (1989) examined the relationship of family processes and the competence of adolescents and primary school children. Twelve measures of family process and 6 measures of parental and social competence were administered on 102 subjects of 15-16 years old and 99 subjects of 8-9 years old. Analysis revealed that general competence (GC) among primary school subjects was associated with high levels of support from parents, a high allocation of household responsibility a high level of parental control, and a low level of parental punishment. Among adolescents, GC was associated with a high level of support from parents, a low level of parental control a high allocation of household responsibility, parental use of induction, a low level of parental punishment, high
quality sibling relationship, and high family cohesion. Findings suggested that as children enter adolescence, GC becomes more closely bound up with the quality of sibling relations and the degree of parental control.

Swick and Hassell (1990) investigated the importance of parental efficacy for children's development of social competence. They found that (i) Externally controlled parents had a negative influence on children's social competence, (ii) the availability of close interpersonal supports strengthened parental efficacy, and (iii) children's developmental patterns were an evidence of an interactional influence from the environment.

Thus, the above studies, indicate the influence of parental experience on social competence of children. There are many other ways also by which parental experience may have an impact on child's social competence. For instance, parents may or may not provide their children with early opportunities for peer experience (see Parke, McDonald, Beital, & Bhavnagri, 1989), and this has been shown to have consequences for child's level of social competence in later peer settings (Harper & Huie, 1985; Ladd & Price, 1986; Lieberman, 1977; Roopnarine, 1985). At still another level, parents may influence their children's level of social competence by minimizing the child's exposure to violence and social trauma (see reviews by Hetherington & Martin, 1979; and Rutter, 1981).
Parents who have negative or developmentally inappropriate expectations for the child's behaviour may also contribute negatively to their child's development of social competence (Dix & Grusec, 1985). These studies make us believe that restrictive disciplines, the absence of proactive teaching, lack of early peer experience, the experience of social trauma, and exposure to deviant social expectations may generate obstacles in the social development.

Child's Experience with the Peers

One of the most important factors contributing to the psychosocial adjustment of a child is the quality of child relationship with peers (Roff, Sells, and Golden, 1972). When young children are friendly and involved with peers, they are likely to be active, vigorous, assertive, expressive, aggressive and not fearful or withdrawn (Waldrop & Halverson, 1975). Studies related to peer relationship during preschool children have revealed that peer accepted children of all ages are friendlier, more sociable, and less aggressive with their peers than are less accepted children (Hartup, 1970). In fact, acceptance from peers during the elementary school years is a strong predictor of later emotional adjustment (Cowen, Pederson, Babigian, Izzo, & Trost, 1973); they are also more likely to receive bad-conduct discharges from the armed forces (Roff, 1961). It has also been found that proportion of social isolates in adult manic depressive and schizophrenics was close to zero. Manic depressives were as likely
as schizophrenics to have been isolated. Stengel (1971) in a survey of research on suicide concluded that "social isolation is the common denominator of a number of factors correlated with a high suicide rate" (p.28). Roff, Sells, and Golden (1972), studied a sample of 40,000 children in 21 cities. Except for the lowest socioeconomic class, the relationship was highly positive between percentage delinquent and low peer-acceptance scores taken 4 years earlier.

A number of studies have related social behaviour to peer popularity. Hartup, Glazer, and Charlesworth (1967) observed nursery school children in the classroom and categorized social behaviour as positive or negative. The category of positive behaviour included giving attention and approval, giving affection and personal acceptance, submitting to others wishes, and giving things to another. Negative behaviours included noncompliance, interference, derogation, and attach. Using a sociometrics instrument in two nursery school classes, these investigators found that positive behaviour dispense to peers were related to acceptance scores in both classrooms. Negative behaviours dispensed were related to rejection scores in one classroom but not in the other.

Gottman, Gonso, and Rasmussen (1975) examined the relationship between social skill and popularity in 198 third and fourth grade children. Results revealed that popular and unpopular children differed in their knowledge of how to make friends.
In classroom, popular children distributed and received more positive reinforcement than unpopular children and spent less time in daydreaming.

Lieberman (1977) explored the relationship between peer-acceptance and two antecedent variables, the security of the attachment relationship with the mother and the amount of experience with peers. Forty 3-year-olds were used as subjects. Peers' competence was assessed from the subjects' behaviour in a familiar laboratory playroom with an unfamiliar same-age, same-sex, playmate. Security of attachment as assessed at home was highly and positively correlated with peer experience. Partial correlations showed that security of attachment was correlated with only non-verbal measures of peer competence, whereas peers' experiences were correlated only with verbal measures. It was concluded that security of attachment and peers' experiences were related to different aspects of peer competence.

Effect of children's social skill on their acceptance by peer group has been examined by Asher, Renshaw and Geraci (1980). The study was conducted on 65 children of Kindergarten age. Result showed that popular subjects gave responses that were judged to be more socially competent than those of unpopular subjects.

Cauce (1986) explored the relationship between friendship social network variables and social competence, indices, using 98,
11-13 year old subjects of lower socioeconomic status. Results revealed that perceived emotional support received from friends and a number of reciprocated best friends in subjects' social network were positively related. It was also noticed that perceived emotional support by friends and number of reciprocated best friends contributed independently to social competence, peer acceptance, and perceived self-competence measures. The friendship network was positively related to school competence but was unrelated to peer or perceived self-competence.

Hatch (1987) reviewed the literature related to researches in child-to-child interaction and its relationship to development of social competence in young children. He concluded that peer interaction is a significant contributor in the development of social competence in young children.

Howes (1988) examined sequences and individual differences in peer interaction and friendship by using classroom observation, teacher and sociometric ratings. Three thousand two hundred ninety eight subjects 1-4 year old in full-time child care centers were studied. Results indicated that subjects classified as rejected were rebuffed by their peers in general and their experiences within stable peer groups were related to individual differences in social competence with peers.

Waas and French (1989) studied the scores of 56 4th grade children obtained from the Open Middle Interview (OMI) and the Children's Assertive Behaviour Scale (CABS). Analysis of
the data revealed that rejected and popular subjects were different in various aspects i.e., social competence, behaviour in naturalistic setting and peer rating of their likability. It was also observed that though the OMI and the CABS measure the similar constructs, significant differences were found.

Eidusen (1990) examined the peer relationship among students with moderate mental retardation and identified those students who were isolated from their peers. Results revealed that socially competent students with moderate mental retardation have friends, play with a variety of games and toys cooperatively, and appear to feel good about being with others. Isolate students did not participate with their peers in play activities, did not have friends in the group, and appeared shy and reluctant to join others in social activities. On the other hand, social students spent most of their time playing with others in a positive manner while isolated students watched them or were ‘turned out’ from all interactions.

Thus, the review of the above researches indicates that popularity among peers or peer competence is one of the most important factors for the development of social competence in children. Especially, for elementary school children, peer acceptance has been identified as a most reliable predictor of later psychosocial adjustment. It is, therefore, suggested by various investigators to study peer relationship, while making assessment of social competence of children.
Some Other Factors

We have already discussed the role of culture socioeconomic status and children's experience with parents and peers in determining social competence of children. There are some other factors related to family environment which have some bearing on the development of social competence of children. For example, family-structure has been found to be related to the development of social competence. Freund and Elardo (1978) conducted a study on mothers and their 17 clinically diagnosed learning disabled (LD) children (16 males, 1 female; mean age 9.8 years) to study whether maternal and family variables could predict social competence. An interview observation measure and the Home Environment Process Interview (HEPI) were administered to mother to assess the child's home as a learning environment for social skills. Children were given tasks of role-taking and interpersonal problem solving as a measure of social competence. Results revealed that children from large families were socially more competent than children from small families. Similarly, Belmont, Wittes, and Stein (1977) also observed that family structure variable play significant role in intellectual development of children.

Long, Forehand, Fauber and Brody (1987) investigated the role of parental conflict in cognitive and social competence of 40 adolescents of 11 to 15 years. Data were analysed through a 2x2 ANOVA in which parental marital status
(married vs recently divorced), and parental conflict (high vs low) were taken as independent variables and scores of subjects on measures of self-perceived competence, teacher-completed measures, behavioural observations, and school-grades were considered as the dependent variables. Results indicated that the level of parental conflict appeared to be the clinical variable associated with subjects' independently observed levels of cognitive and social competence. In regard to subjects' self-perceived levels of cognitive and social competence, parental marital status was found to be the clinical variable.

Wynne (1987) reported and discussed the results of the research programme taken by the University of Rochester Child and Family Study (URCAFS) in order to identify the parental and family variables that differentiate among healthy and malfunctional children, all of whom are presumptively at genetic risk for serious psychopathology in future. In the programme 195 families were initially assessed from 1972 to 1976. The criteria for sample selection were: (a) Caucasian, functional psychiatric disorder, and (b) an index son, in one of the three age groups (4, 7 or 10), who was being reared in the house of both biologic parents, and who was not initially in psychiatric care.

The results revealed that parental psychopathology appeared, to be related to child functioning outside the family in the school setting. Chronicity and a narrow range of affective
expression seemed to be associated with poor child functioning. Children were more competent if parents were ill episodically and if they had wide range of available affect. In contrast, no association could be found between traditional diagnostic categories, such as schizophrenia, and either child school functioning or adolescent psychiatric breakdowns. That is, dimensions of parental psychopathology, but no 'Typologic' diagnostic categories of mental psychopathology, differentiated competent and incompetent children who had not passed through the age of risk for adult mental illness.

It was also observed that family relationship variables—the presence of healthy communication, deviance, positive affective relationships, and an age-appropriate balance interaction between parents and children, with each taking the initiative—are associated with favourable or even superior functioning of the children in this sample, despite, the risk factor of a parental psychiatric hospitalization.

Lamb, Hwang, Bookstein, and Broberg (1988) investigated the determinants of social competence in 140 first born Swedish children, averaging 16 months of age who were on the waiting list for child-care centers. Parents were interviewed about demographic variables, social support, and child temperament. The quality of homecare was assessed, and children were observed interacting at home with familiar peers. Fifty three children were then admitted to day-care center,
33 were offered places in family day-care facilities, and 54 remained at home with their parents. Shortly after enrolment, and again one year later, the quality of alternative care was assessed. In follow-up assessments 1 year after the initial interviews and observations, peer social skills, sociability with strange adults, and child personality (as rated by parents and care-takers) were assessed. Type and quality of non-familial child-care had no significant effect on these aspects of child development. The major determinants of personality maturity were background variables, i.e., high socioeconomic status, high quality of home care, and easy temperament facilitated personality maturity. Availability of support from maternal grand parents had a small but significant effect.

Lamb, Hwang, Broberg, and Bookstein (1988) studied the effect of out-of-home care in the development of social competence. One hundred forty Swedish preschoolers and their parents were first contacted, observed and interviewed when the children were aged 11-24 months. Subsequently, 53 children entered day-care centers, 33 were enroled in family day-care facilities, and 24 received home care. Further assessments of the children, their families, and their care facilities took place, 3,12, and 24 months after the initial assessment. Type of child care had no apparent impact on the children's sociability or personality maturity, as measured at 24 months.
However, the quality of care received both at home and in the out-of-home care facilities, reported family social support, and child gender helped to predict (1) personality maturity (as reported by mothers) and (2) social skills observed with familiar peers and unfamiliar adults.

SOCIAL PROBLEM-SOLVING TRAINING

Social problem-solving can be viewed initially as a function of appropriate application of performance-related variable such as skill and abilities. These skills and abilities can be cognitive or behavioural in nature, practical or impractical, articulated and unarticulated depending on the specific problem to be solved. As long as a person's perceptions of a social situation is accurate and a strategic repertoire appropriate to the social problem is applied, problem resolution will be judged as competent. The socially competent outcomes require that components of social cognition be linked with cognitive and behavioural skills. The problem that constitutes social competence and how socially appropriate functioning can be established and maintained, emphasizes the child's responsibility for reading social situations, generating appropriate strategies, and applying or engaging in some strategic plan. Now a basic question arises whether the social competence of the person may be improved or not? Training for social problem solving represents a promising approach to improvements in effective social functioning.
The proponents of problem-solving training believe that if a person acquires the set of cognitive strategies thought to be associated with the process of solving problems, he or she will apply these strategies to a variety of new situations and so be more effective generally. D'Zurilla and Goldfried (1971) were instrumental in identifying social problem-solving as a behavioural process which might be learned as a general coping strategy for improving effective behaviour and similarly, Shure and Spivack (1972, 1974) were among the first to report improvements in social functioning following training in problem-solving. Since then, various studies have been conducted which revealed the role played by problem-solving training in performance. Some of these studies have been reviewed here.

Intagliata (1978) conducted a study to examine the effect of training in interpersonal problem-solving skills. He trained 31 male alcoholics in a hospital to solve problems regarding difficulties they would likely to face on leaving the hospital. A written problem-solving test and a predischarge interview was conducted in which preparatory problem-solving skill exhibited was measured. Results showed a significant increase in problem-solving. A follow-up study was made in which 22 clients were contacted 1 month after discharge, out of which 14 reported having made practical use of the principles. However, the author, stated that it was evident that subjects had already forgotten significant portion of the training material.
In another study by Edelstein, Couture, Cray, Dickens and Lusebrink, (1980) twelve adult psychiatric patients were trained to solve problems. Assessment was made by obtaining oral responses to trained and untrained problem situations. Results revealed significant increments in verbalizing the problem-solving steps—presented during training. Generalization (transfer) was assessed by stimulating a grocery shop incident through pre and post training in which subject was overcharged on a number of purchases. Results showed a substantial increase in number of adequate alternative solutions generated and implemented. However, verbal prompts were used to aid the subject in this analogue situation.

Effect of interpersonal problem-solving training on problem-solving component skills and effectiveness of solutions were examined by Hansen, St. Lawrence and Christoff (1985). They reported data from seven chronic psychiatric after-care patients. Subjects received instruction and a rational for skill to be learned. Modelling, behaviour rehearsal, feedback and praise were presented with a series of modules, each dealing with one of the steps in problem-solving. Twenty two problem situations were generated and validated with the patients, with four being used for training and remaining 18 for assessment of generalization (transfer). Scores were produced on the basis of the presence or absence of the component steps when responding to the problem situation and follow-up was conducted at 1-and-4 months after training.
multiple baseline demonstrated clear training effects over baseline measures for each component module. However, these gains decreased markedly at follow-up. In addition to the component scores, overall effectiveness ratings were also obtained and were compared with those produced by a non-clinical sample matched for age and educational level and recruited from the same population as the subjects. The mean effectiveness ratings of the clinical sample approached the mean of non-clinical sample as training progressed but again fell away at follow-up.

Kazdin, Esveldt-Dawson, French, and Unis (1987) investigated the role of problem-solving skill training and relationship therapy in the treatment of antisocial child behaviour. Forty six children between the age of 5-13 in psychiatric in-patient faculty were used as subjects. The researchers were interested to know whether problem-solving training might be an effective alternative to parent management where this approach was contra-indicated. Assessment included parent and teacher checklist ratings with post-tests carried out one month after discharge and at follow-up after a further 4, 8, and 12 months. Results revealed significant effects for treatment which were greater and maintained longer than two control groups. Kazdin et al. (1987) also went on to compare mean ratings with those for a non-clinical sample, on others they achieved this status at post-test but fell back on follow-up, and on one scale they
achieved this status at post-test and maintained it one year later. This suggested some efficacy of training for problem-solving.

The effect of training in the adolescent problem-solving skill was studied by Tisdelle and St. Lawrence (1988). Eight male conduct-disordered in-patient aged 13 to 19 years served as subjects. Several problem-situations relevant for the adolescent were developed with some being used for training and others for evaluation of progress. Adolescents were instructed in the components of problem-solving approach, with assessment after each session used to determine progress to the next components. Assessment included verbal responses to problem-situations, contrived in-vivo problems and behavioural checklist ratings made by adolescents' teacher and counsellor. Verbal response measures taken during training indicated improvements in the use of problem-solving components, both for trained and untrained problems, suggesting transfer of problem-solving skills. However, the author reported that the youths displayed little improvement in their actual behaviour during in-vivo situations. They opined that, although they appeared to have learned cognitive strategies for more effective problem resolution, they failed to employ them when they actually encountered identical problem-situations in their daily lives. The checklist rating also failed to show significant improvements as they believed that in overall
behavioural adjustment, problem-solving intervention was insufficient to produce broad measurable changes.

In addition to the above cited studies there are several other studies in which training for social problem-solving has been found to be useful. For example, Hussain and Lawrence (198D) noticed that depressed older adults in nursing home shed more of their depression after such training than patients given a more behaviourally based treatment. Similarly, Nezu (1986) also observed social problem-solving training useful as it helped in greater reductions in depression among subjects who received social problem-solving training as compared to a control group who did not receive social problem-solving training. Another study by Weissberg et al. (1981) among school aged children revealed that subjects who acquired problem-solving training were able to generalize the training to the situations different from those dealt in problem-solving training. In general, in problem-solving training, the subject learns a general attitude and set of skills. The attitudes and set of skills are applied by the subjects successfully to a wide range of future situations and in this way they may improve their competence in social situations.

It is noteworthy to mention here that while there is support for problem-solving approach to improve social competence, it has been criticized also by some investigators for its overall
approach to life (Goldfried, 1980, Price, 1982). Future researches in this area would be more able to underlie merits and demerits of social problem-solving training in order to increase social competence.