CHAPTER 2

REVIEW OF RELATED LITERATURE

The related studies of the earlier researchers are presented and evaluated in this chapter.

2.0 Bilingualism and age:

Biological factor like age is a predominating factor influencing language development. The interesting questions such as when (early or late) and how (simultaneously or successively) the second language should be introduced to optimise the beneficial effect of bilingualism and the developmental process of learning two languages have attracted much attention of the researchers.

2.01 Brain and language learning:

Penfield and Roberts (1959) from neurophysiological experimental studies concluded that the critical periods for language development was completed before nine years. They inferred that during this period, children can acquire one or more languages with ease because the corticothermal speech mechanism of brain is still in the process of development.

Basser's survey of literature (1962) revealed that cases of left hemispherectomy were devoid of speech disorders. These subjects were able to transfer the speech functions to the less dominant hemisphere. Reanalysing Basser's data, Krashen (1973) pointed out that the unilateral brain damage in the right hemisphere incurred before the age of five years resulted in speech disturbance. Similarly, all cases of left hemispherectomy without speech disturbance, involved children below the age of five years. He concluded that completion of lateralisation occurred earlier than five years.
Based on his studies Lenneberg (1967) found evidence for the critical period of language development. According to Lenneberg, the period is between two years and puberty. During this period, the completion of the process of cerebral dominance or the lateralisation of language function takes place and mere exposure will stimulate natural language acquisition.

Research on dichotic listening was carried out by Berlin, Lowe-Bell, Hughes and Berlin (1972), in which subjects were presented with competing simultaneous auditory stimuli. Normally the right ear excels for verbal material which reflects left hemispheric specialization. It was predicted that if lateralisation is not complete until puberty, the right ear superiority will not be established. The tests were administered to subjects between four and nine years. Results revealed no significant changes in the degree of lateralisation and scores of the children did not differ from those of the adults tested under similar conditions. This indicated that the process of lateralisation was completed as early as the age of four years.

Harney and Wright (1974) studied the relationship between age on arrival in a foreign country on immigrant children and their achievement in English skills in the fifth, seventh, and ninth grades. Although the children, who had arrived between six and seven years had initial difficulties, their performance was close to average. The performance of the children, who had arrived later progressivelly declined. This provided indirect support for the existence of critical age for optimum instruction in second language.

Ervin-Tripp (1974) made a report on the bilingual children between the age of four and nine years and who heard the second language most of the day. Although the period of exposure to second language was equal, the older children performed better than the younger children. She attributed the higher level of acquisition of morphology and syntax by the older children to their efficient memory heuristics, problem solving ability and ability to learn the rules of the languages.
2.02 The context of language learning:

Ronjat (1913) recorded verbatim of his son who heard German from his mother and French from his father. The parents never interchanged the languages. This principle of one person-one language was strictly followed. Although the initial linguistic retardation and interference errors were within the normal range, he learned both the languages equally well with no deteriorating effect on his intellectual development.

Kenyerés (1938) observed his daughter's acquisition of the second language which was introduced at the age of six and half years. He inferred that second language was acquired in a manner that was different from the way in which she acquired the first language. By the method of analogy and by utilising her knowledge of the first language, she learned the phrases and words in the second language.

Leopold (1949) made a linguistic analysis of his daughter who was spoken to in German by her father and heard English from the mother. He concluded that though there was initial imbalance and interference between the languages, by the third year the child differentiated the two languages as two separate systems.

When two languages are learned from different contexts, that is, one language from home and the other from playmates, the balance between the languages is lost with the dominance of either of the languages and greater interference between the languages was present. These results were revealed by the studies of Burling (1959) and Murrell (1966).

Huntsberry (1972) from parental reports concluded that maximum interferences from first to second language was experienced by bilingual children who are very young or when contact with children and adults through second language was lacking. Imbalance in exposure to the two languages facilitated interference between the languages. Stern (1973) supported the results with empirical evidences. The following review of literature will be given under the titles of positive, negative and
neutral effects of bilingualism in each of the variables under consideration.

2.1 Bilingualism and intelligence:

The covariation between language and intelligence has been an area of vigorous research in the past two decades. Even though geneticians consider intelligence to be a hereditary factor, the problem probed is, whether bilingualism is an environment that imparts congenial or deteriorating effect on the endowed intelligence.

2.1a Studies revealing positive effect of bilingualism:

Darcy (1952) administered verbal and nonverbal series of the Pitner General Ability test to bilingual Puerto Rican children of fifth and sixth grades. The mean IQ and mental age were significantly higher on the nonverbal tests. He inferred that both verbal and nonverbal tests yielded a better index of intelligence of bilingual population than either verbal or nonverbal test as a sole means of appraisal.

The study of Peal and Lambert (1962) reported superior performance of ten year old balanced bilingual children (those who had balanced skills in the two languages). A battery of verbal and nonverbal intelligence tests as well as measures of attitude towards English and French communities were used. The superior performance of bilingual children was due to their more diversified set of mental abilities. They had higher general reasoning ability. They think in terms of abstract concepts and relations, independent of the actual word, which is apparently required in symbolic reorganisation. The study was criticised by Macnamara (1966) on the selection of the samples. Bilingual samples were balanced in the skills of both the languages and it is more likely the samples were linguistically gifted and were superior in intelligence. This was refuted by Peal and Lambert since the bilingual sample consisted of those who were equally proficient and equally poor in both the languages. So the resultant superior performance was due to the fact that bilinguals had supplemented their knowledge of French and English. By becoming bilingual, they had added other language
optional shift-intended and actual classification were examined. Coding, a subtest of WISC was also administered. The results supported Leopold's finding that bilingual children learnt to separate the qualities of the objects from their names. The bilingual's awareness that names are attached arbitrarily to objects, influenced their better performance in task requiring interchange of names. There was no difference on optional shift, classification and coding aspects.

Ianco-Worrall (1972) tested Leopold's observation of early separation of sound and meaning of words by bilingual children. They were matched with monolingual children and the semantic and phonetic preference test was administered to them. Bilingual children, brought up in a one person-one language environment from infancy, learned the arbitrary nature of name-object relationship that was tested with the questioning technique described by Vygotsky. The results confirmed Leopold's findings. Bilingual children were more advanced in semantic development than monolingual peers.

Studying cognitive and attitudinal consequences of a bilingual programme, Lambert, Tucker and d'Anglejan (1977) reported comparable performance of fifth grade bilingual children on all measures of skills in English, French, mathematics, science and superior performance on creativity and intelligence. Bilingual group had self concept as favourable and optimistic as the control group.

Collison (1974) reported higher conceptual level in the vernacular language than in English from the results of his studies on concept formation of bilingual adolescents.

Cummins and Kulutsan (1974) replicated Peal and Lambert study on balanced bilingual children of sixth grade drawn from French-English bilingual programme. Bilingual children matched for age, sex and socioeconomic status were compared with monolingual children. Bilingual subjects were found to perform at a significantly higher level on several measures of reasoning and divergent thinking. Performances of children in the bilingual programme with homes where French are spoken,
where English is spoken and where both English and French spoken were compared. The French group, despite being most balanced in French and English, performed at a significantly lower level than the other two bilingual groups (but not the monolinguals) on the measure of verbal reasoning.

Barik and Swain (1976) conducted a longitudinal study over a period of five years on pupils enrolled in a French immersion programme (anglophone pupils receiving all instruction in French except arts subject in English language) and those enrolled in an English programme. Although periodical assessment failed to show differences in intelligent quotient between the two groups, repeated measure analysis indicated higher intelligent quotient of the immersion group over the period of five years. In the grades one to three, when the two linguistic groups were adjusted for initial IQ and age differences, they did not score differently to either overall intelligent quotient or in subtests-classification/categorisation, analogies and the ability to follow verbal directions. This failed initially to support the positive relationship between bilingualism and cognition. Further analysis on the data classified as "high and low French achievers" revealed that high French achievers obtain significantly higher IQ measure and scored higher on the subtests than the low French achievers when scores were adjusted for initial IQ and age differences. The findings supported Cummins' contention that attainment of "high threshold of second language" is associated with greater cognitive development. As the intelligence of the low French achievers remained unchanged over the three year period, the contention that low threshold level of second language retards cognition was not supported.

Kakkar (1976) compared the monolingual and bilingual children in the Indian environment on intelligence. He administered the tests of verbal ability and Lorge-Thorndike Intelligence test the Nonverbal Form A, Level 3. Results showed that bilingual children were superior in intelligence. However, no difference was found between the groups with respect to verbal ability in the native language (Hindi).
Ben-zeev (1977) hypothesised that mutual interference between the bilingual child's two languages forces the child to develop particular coping strategies that accelerates cognitive development. The sample consisted of ninety six, five to eight year old children. The IQ of monolingual and bilingual children were estimated from four subtests of WISC-Similarities, Digit-Span, Picture completion and Picture arrangement and was controlled statistically. In spite of the low level of vocabulary, bilingual children showed more advanced processing of verbal material, more discriminating perceptual distinction, more propensity to search for structure in perceptual situation and more capacity to reorganise their perception in response to feedback.

2.1b Studies revealing negative effect of bilingualism:

Pintner and Keller (1922) compared monolingual and bilingual children who were administered Stanford Binet scale and Pitner Nonlanguage group test. The results showed that monolingual children excelled the bilingual children as the latter were handicapped in tests which were loaded with English language.

Colvin and Allen (1923) administered National Intelligence test and Stanford Binet scale to children of American parents and of Italian parentage. Both the groups of children scored lower in National Intelligence test than in Stanford Binet scale. He suggested that individual test constitute a more accurate measure of intelligence than a group test and that linguistic factor is less likely to be of importance in Stanford Binet scale than in National Intelligence test.

Pintner (1923) questioned the validity of administering verbal group test to foreign children. Monolingual and bilingual children were administered National Intelligence test-Scale A, Form I and Pitner Non language test. There was no significant difference between the groups on the performance in nonverbal test but in the National Intelligence, bilingual children were more retarded than the monolingual children. He concluded that the reservations should be exercised in drawing
conclusions concerning the intelligence of bilingual children based on verbal test used as a sole criterion of measurement.

Darcy (1946) compared the performance of bilingual children on verbal and nonverbal test by administering revised edition of the Stanford Binet scale and Atkins Object fitting test. Subjects were controlled for number, sex and socioeconomic status. Bilingual children scored significantly higher than the monolingual children on the Atkins Object fitting test. They suffered from a linguistic handicap that was reflected in their performance on the Stanford Binet scale.

Jones (1952, 1960) attributed the inferior performance of Welsh bilingual children to the type of test material used. In nonverbal test of intelligence, no difference between monolingual and bilingual children was found whereas in verbal test particularly in power test monolinguals excelled the bilingual children. The disadvantage of bilingual children was due to their inadequate reading ability and inability to deal conceptually in the second language in comparison with the degree of fluency and accuracy possessed by monolingual and bilingual children.

Keats, Keats and Raffaei (1976) pretested the five year old English-Malay and English-Chinese bilingual children in both the languages. They were trained in one language on the conservation of weight and were tested after two months in both languages. Results suggest that language plays a minor part in the acquisition of concepts and the younger children perform better when tested in their native language.

Studies reporting insignificant effect of bilingualism:

Hill (1936) matched first, third and sixth grade, monolingual and bilingual children on factors such as age, sex and socioeconomic status. There was insignificant difference between the groups on verbal and performance tests.
2.2 **Bilingualism and Creativity:**

The relationship between bilingualism and creativity has attracted the attention of the researchers to correlate mode of thinking to flexible manipulation of linguistic symbols.

2.2a **Studies reporting positive effect of bilingualism:**

Gowan and Torrance (1965) studied the performance of Chinese, Malayan and Tamil children who were studying in the grades three to five. Children who received instruction through their native language performed significantly better on nonverbal measure of ideational fluency than children who received instruction through the second language. At grade six, the difference disappeared which may be attributed to the fact that subjects attained a greater mastery of English than pupils in the earlier grades.

Landry (1970) conducted a study on the elementary school children of FLES program using Torrance Test of creativity. Significant difference between children of FLES and non FLES programme indicated that learning two languages during elementary school years exposed them to enriched experiences facilitating diversified thinking.

Balkan (1970) matched the balanced bilingual and monolingual children on nonverbal intelligence and administered tests involving ability to restructure a perceptual situation and tasks requiring sensitivity to the different meanings of words. Bilingual children performed better than the monolingual children indicating positive influence of bilingualism. The attainment of balanced bilingualism influenced cognitive flexibility.

Scott (1973) conducted a longitudinal study on bilingual and monolingual children over a period of seven years on creativity. The subjects were
matched on IQ and social class. The results revealed that monolingual group performed at a similar level to the balanced bilingual group on verbal fluency and flexibility but substantially higher than the nonbalanced bilingual group. In verbal originality, monolingual group performed at a similar level to the nonbalanced bilingual group but substantially lower than the balanced bilingual group. These differences failed to reach statistical significance. She suggested that higher levels of creativity may be either an effect or a causal element in the attainment of functional bilingualism. Scott's finding is pertained to small sample that limits generalisation of results.

Cummins and Culutsan (1974) matched a group of balanced bilingual children with a group of monolinguals on similar socioeconomic status, sex and age backgrounds. The bilingual children excelled the monolingual children on verbal and nonverbal ability as well as on verbal originality.

Landry (1974) studied the sixth grade children of a bilingual programme. They performed significantly better on tasks involving fluency, flexibility and originality. However, Landry found insignificant difference between the groups of lower age. This is due to the inclusion of younger children who had not begun to read and write in their second language.

Cummins (1975) compared the cognitive characteristic of balanced and nonbalanced bilingual groups. An analysis of covariance with socioeconomic status as covariate showed a significant difference that favoured the balanced group on fluency and flexibility measure of verbal divergence. Since the balance score for children from English speaking homes is an index of French competence, it may be that verbal divergence is a correlate of the ability to learn a second language in a bilingual programme.

2.2b Research revealing negative effect of bilingualism:
Torrance, Gowen, Wu and Aliotti (1970) using Torrance creativity thinking reported that children in grades three, four and five attending bilingual schools performed at a significantly lower level on subtests of creativity namely fluency and flexibility but the trend was reversed for subtests of originality and elaboration. The poor performance of the bilingual group in fluency and flexibility was attributed to the influence of interference of association in bilingualism.

2.3 Bilingualism and Academic Achievement:

Educational Psychologists have probed the issue whether exposure to two languages handicaps the child academically or is it beneficial to educational progress? The various research studies reveal inconsistent results.

1.3a Research reporting positive effect of bilingualism:

Hates (1970) explored the relationship between degrees of bilingualism of Mexican American pupils and their school achievement. Results suggested that lack of English is not an important barrier to school success.

Morgan (1971) inferred that bilingual children develop a greater consistency in analysing words without the aid of context that enables them to excel their counterpart in the monolingual group. The positive result was also reported by Olesini (1971).

Tucker (1975), Cziko (1976) and Greaney (1977) revealed a high correlation between reading scores of first and second language. Swain (1978) reported that children in immersion programme achieve levels of reading skills in second language equivalent to native speakers by the end of elementary school. Cummins (1979) suggested from these results that: (1) the prerequisite for acquiring literary skills are instilled in most middle class children by their linguistic experiences at home, (2) the ability to extract meaning which can be transferred from one language to another.
Paulston (1976) and Fishman (1977) emphasised that the outcome of bilingual education should be considered as the result of a constellation of societal factors rather than as an independent variable.

Tucker (1975) rejected the generality of "vernacular advantage theory" on the basis of high levels of academic and linguistic skills attained by children in immersion programmes. According to Tucker, the choice of a medium of instruction should be determined by social conditions and not by a preconceived notion that the mothertongue should per se be used. Tucker emphasises social rather than the pedagogical factor which conditions the optimal sequencing of languages. Schooling in vernacular language is used where the home language is denigrated by the community, where teachers do not belong to the ethnic group and are insensitive to their values and traditions and where there is lack of pressure within the home to encourage literacy and language maintenance. In contrast, the second language as medium of school education is encouraged in "additive setting" (Lambert, 1975) where the home language is highly valued, parents actively encourage literacy and where it is "known" that the children will succeed.

Evaluating the achievement of bilingual children in partial and total immersion programmes, Swain (1975) suggested that intensive exposure of French (L2) in kindergarten and in grades one and two and in the total immersion programme facilitated the attainment of level of functional competence in second language. This optimally influenced interaction with French school environment and the school programme promoted the development of skills in the first language. Conversely, partial immersion students took considerably longer period to attain a high level of proficiency in French skills and this decreased the likelihood of enhanced cognitive or academic skills and presented greater difficulty in mastering the subjects taught through French. Bilingual children in immersion programmes achieved levels of reading skills in second language equivalent to native speakers by the end of elementary school.
According to Cummins (1979) a prerequisite for attaining a higher threshold level of bilingual competency in a minority linguistic situation is maintenance of skills in the first language which leads to cognitive advantages. Research studies by Ben-Zeev (1977) and Cummins and Mulcahy (1978) consistently supported the contention. Ben-Zeev reported that response strategies of bilingual children were characterised by attention to structure and readiness to reorganise cognitive schemata. Cummins and Mulcahy compared the two groups of bilingual children, attending a bilingual programme, with a monolingual control group matched for IQ, socioeconomic status, age and school at grades one and three. One group of bilingual children had first language at home intensively and their teachers had rated their fluency as relatively fluent while the second group did not speak their first language at home and their fluency was rated as poor by their teachers. Results indicated that the bilingual group, which had fluency in the first language as compared to non-fluent bilingual or monolingual children showed better ability in analysing ambiguities in sentence structure.

Designing a model for bilingual education within which the apparent findings can be resolved, Cummins (1979) emphasised the interaction between educational treatments and characteristic of the linguistic group. For planning a programme, it implies that educators should take into account characteristics of students that are divergent and adopt a differentiated approach to bilingual education. Cummins concludes that for optimal development of cognitive and academic achievement of bilingual children belonging to minority linguistic group, the school programmes must aim to promote additive form of bilingualism involving literacy in both first and second language.

2.3b Studies reporting negative effect of bilingualism:

Carrow (1957) administered to a controlled sample of monolingual and bilingual children, California Achievement Test involving arithmetic problems. Monolingual children performed significantly better than the
bilingual children. The author attributed the reason to the superior command in the language of the test English.

Jensen (1962) cited studies in which bilingual children are handicapped in reading which retarded the achievement generally and in specific areas such as spelling, history and geography. He indicated that this would be reflected in decline of interest, initiativeness and responsiveness in classroom leading to inadequate adjustment to school and education, with a consequence of premature dropouts.

Macnamara (1966) argued that learning through the medium of a weaker language results in the retardation of learning the subject matters. His study promoting a negative theory of bilingualism (Stern, 1973) reported no difference between monolingual and bilingual children involving mechanical arithmetic problems, but hindered problem solving ability in arithmetic when both are taught through the childrens weaker language. He also reported that English children, who learned through the medium of Irish, were eleven months behind in their ability to solve arithmetic problems relative to other Irish children taught through the medium of English. The rationale advanced was that difficulties experienced in the classroom is due to ignorance of certain words, idioms and syntactic structures and longer time required for comprehension. bilingual college students had more difficulty in determining the semantic content in their second language even when individual differences in perceptual thresholds for the same words and sentence were controlled. Semantic decoding plays a vital role in solving problems in the second language more than articulation of the differential use of sequential probabilities between words in the two languages. The relationship between the negative influence of instruction through a weaker language and cognitive and academic difficulties as found by Macnamara could be interpreted in terms of lower threshold hypothesis as proposed by Cummins (1976). Cummins attributes the failure of the bilingual children, not so much to instruction through the less dominant language, but to the inability of bilingual children to attain the threshold level of second language necessary to benefit from such instructions.
Kellaghan and Macnamara (1967) attributed the poor performance of bilingual children to the difficulty in processing the input in second language relative to their first language, both at the perceptual and at the syntactic and semantic levels.

Scandinavian researchers (Hansegard, 1968; Skutnabb-Kangas, 1975) related the negative influence of bilingualism on emotional, cognitive, linguistic and scholastic consequences to "semilingualism or double semilingualism" which is similar to the concept of subtractive bilingualism (Lambert, 1975) and Macnamara's 'balance effect' (1966). It refers to lack of linguistic competence of those who had contact with two languages since childhood, but without stimulation or training in either which results in poor mastery of both the languages. The 'balance effect' hypothesis states that as a bilingual develops skills in one of his two languages, he pays for it by a decrease in the other. St.Lambert project (1975) has rejected such experiences under elitist or additive bilingual learning situations but accepted its relevance for the minority linguistic group.

Trevino (1970) cognizant of the poor scholastic achievement of Mexican American children, discussed a programme to compensate the deficiency. The project encouraging a self-help programme suggested Spanish as medium of education in the primary grades and proposed teaching of the second language in primary grades without hampering the normal achievement.

Cummins and Gulutsan (1974) conducted a study on children who had home background in French and attended a bilingual programme. French was gradually replaced by the majority language—English and by sixth grade, English became the dominant language and they rated their proficiency in both English and French lower than the other children who had English and French-English home background and who were studying in the programme. The French group scored significantly lower than the other two groups on a measure of verbal ability administered in English.
Tsushima and Hogan (1975) investigated the verbal ability and school achievement of third, fourth and fifth grade, bilingual children of American origin and monolingual children attending a school in Japan. The linguistic groups divided based on the information provided by the parents. Children were classified as being high, middle or low on nonverbal ability in terms of nonverbal score measured from Lorge-Thorndike verbal scale and Iowa Tests of Basic skills. Though at grade three, the two groups performed similarly, at grade four and five monolinguals performed significantly better than their bilingual counterparts on measures of verbal and academic skills.

Skutnabb-Kangas and Teukomaa (1976) in an UNESCO project investigated the interdependence hypothesis, assessing whether those who preserved their mother tongue were also superior in their second language. The hypothesis was strongly supported by the results. They reported that development of first language is especially important in academic achievement which require abstract modes of thought, specifically for mastering the conceptual operations connected with mathematics, even when subjects are taught in their second language. In subjects such as biology, chemistry and physics which require conceptual thinking, immigrant children with a good mastery of their first language succeeded significantly better than those who had poor proficiency.

2.3c Research revealing insignificant effect of bilingualism

Ivey (1968) determined whether bilingual Indian children are educationally penalised in the United States as a result of lack of fluency in English. Based on concurrence on positive relationship among speech, vocabulary and reading ability, it was hypothesised that non-English environment of Indian residential schools would affect speech competence, vocabulary and reading ability. Results indicated insignificant difference in deficiency in reading and vocabulary.

Studying the linguistic pattern and their school achievement, Durfey (1971) found no significant difference between monolingual and bilingual
groups. Results of insignificant difference was attributable to the unharmful effect of bilingual education.

2.4 **Bilingualism and Adjustment problems of children:**

As language plays a harmonising role in social interactions, its proficiency and fluency are essential for self expression and for social acceptance, especially when the child explores his social environment and when peers are significantly important in his world. Successive learning of second language and interaction with the environment through that language in the initial stages may subject the bilingual children to turmoil and on persistence it may lead to traumatic experiences. This might leave a mark on the personality. Since language is intertwined with culture, bilingual children along with their bicultural experiences may encounter cultural, religious and moral differences leading to strain and identity conflict (Speerl, 1944).

From the psychosocial perspective, bilingual children are expected to resolve major conflicts of values and allegiances involving various types of adjustment to the environment.

2.4a **Research reporting positive effect of bilingualism:**

The influence of bilingual proficiency on adjustment was analysed by Martinez (1974). Bicultural individuals with high bilingual proficiency tend to have adequate adjustment profile more than the subjects whose competency was within the mediocre or in the lower range. This is in line with Cummins' threshold hypothesis of bilingualism that has been delineated with reference to cognition.

2.4b **Studies reporting negative effect of bilingualism:**

Child (1943) and Ulibarri (1972) reported that, to be socially accepted in two communities, the bilingual child shifts back and forth in languages, behaviour and attitude. The extra linguistic baggage and the enormous burden on the individual child may drain him emotionally and he
may opt for one of the worlds and take the risk of being rejected by the other. According to Christophersen (1973) the conflicts of behaviour may develop undesirable personality traits.

Sanders as cited by Weinreich (1953) reported that availing two linguistic systems caused tension and emotional liability as well as psychological disorders like stuttering.

Patel (1965) found English speaking nursery school children to be better adjusted than the non-English speaking children studying in the same type of school. This study was conducted in India.

2.4c Research revealing insignificant effect of bilingualism:

Rao (1963) investigated the adjustment difficulties of Indian monolingual and bilingual children in the monocultural background. The sample comprised of six to twelve year old children with Telugu or Kannada as their first language who were matched on nonverbal intelligence. Although bilingual girls were superior to bilingual boys in second language proficiency, the adjustment problems were unrelated to second language learning. This implied that bilingualism in Indian context does not impart harmful effect on children.

2.5 Bilingualism and Cheating tendency:

Eysenck (1965) refers to personality as behaviour habits and tendencies that are developed and set by heredity and in response to the rewards and punishments received by an individual from the environment. Cheating, a deceptive means might be adopted by school children to avoid punishment or because of his inability to achieve the developmental task which the society expects from him. As a social problem, the underlying mechanism that motivate the antisocial behaviour needs investigation. If such behaviours escape the notice of the concerned authority in early stages, the child would develop an inclination or tendency to adopt the same means to meet his needs.
2.5a **Research revealing negative effect of bilingualism:**

According to Gali (1953) bilinguals tend to be morally depraved due to ineffective religious instruction (Gali cited by Weinreich, 1953). Sander (1953) associated linguistic switch with lack of development in the internal principles. Bilinguals are considered as mercenary relativists who switch principles according to the exigencies of the situations, just as they switch languages (Sanders cited by Weinreich, 1953).

Investigating the adjustment difficulties of bilingual children, Rao (1963) found monolingual and bilingual children to differ in antisocial tendencies.

2.6 **Bilingualism and Personality:**

Perspectives of different theories differ markedly in their concept of personality. The association learning theory accords the objective-stimulus situation a very central position. Accordingly, personality in essence, is a learned habit of response that an individual makes to the stimulus condition of his internal and external environment (Lazarus, 1961).

The importance of childhood has been realised in early identification of the development of serious emotional conflict and associations of fear and anxiety that might develop defense mechanisms like avoidance and withdrawal. The anticipated social anxiety and fear of being ridiculed and rejected by the peer group due to linguistic deficiency may affect socialization. Children during the childhood period crave for social acceptance. Freud (1924, 1936) emphasised that emotional conflict during childhood is the basis for neurotic behaviour.

2.6a **Research reporting positive influence of Bilingualism:**

Influence of bilingual-bicultural programme on non-cognitive attributes like self-concept, self-descriptions and stimulus seeking activity were
studied by Fisher (1974). Comparing the performance of experimental group in the first grade with nonparticipant control group, he inferred the positive effect of the programme. The programme enhanced the self concept of the girls but not of boys and a similar trend was observed in both boys and girls.

Rossier (1975) interrelated extroversion-intraversion personality factor of adolescents to the learning ability of speech in English as a second language in the special classes. He predicted that the outgoing extroverted students would become more proficient than the intraverted peers because they would take greater advantage of the environment dominated by English language. Spanish version Eysenck Personality Inventory was administered and oral responses to pictorial stimuli were taped. Though no significant correlation existed between the personality traits and total oral language production, the controlling of global measure and period of stay in United States revealed high significant correlation between personality and oral fluency, a component of total oral production. Oral and written language measure were significantly related in the positive direction. He concluded that extroversion-intraversion appeared to be an important variable in the learning of oral English as a second language.

Administering Junior-Senior High School Personality Questionnaire, personality traits were investigated by Tucker, Ramayan and Genesee (1976). Three types of bilingual groups were matched - group one had French immersion programme since kindergarten, the second group was in a regular programme with French as subject of instruction for one period per day but had received all their instruction in the grade seven in French except arts instructed in English and the last group was in a regular programme with French as a second language from kindergarten through grade seven. Measures on attitude and French language achievement were obtained from the three groups. The effects of interaction between group membership and personality traits for the two expressive interpersonal skills namely listening comprehension and oral production were found. The success for students in the immersion programme was associated with adventurousness which is important to the
development of speaking and listening skills at a later age than at an earlier one.

Swain and Burnaby (1976) collected data from the children in kindergarten in order to determine if initial differences existed in personality traits between pupils in the French immersion programme and in the regular English programme. Existed differences were interpreted as indication that parents perceived them to be important for success in the French immersion programme. The tendency to be perfect and the trait of quickness in grasping new concepts were found to be correlated significantly with second language performance. The trait of quickness in grasping new concepts correlated positively with the second language learning but negatively with pronunciation suggesting that these traits may be helpful in some aspects of language learning while being a hindrance to others. He suggested that the two traits could be construed as support for the speculation that some personality traits are vital in second language learning among the young learners of second language in a formal educational setting. However, the researchers were aware that the results do not warrant any strong conclusions.

2.6b Studies revealing negative effect of bilingualism:

Shanmugam (1963) found bilingual girls to be more neurotic than monolingual girls. Sex difference was found in the effects of bilingual position on personality traits.

Bert (1971) cognisant of problems of Indian immigrant children advocated provision of experience to the Indian students to promote positive development of their self concept. According to Prawer (1971), enhanced self concept could be achieved by increased achievement in the second language proficiency.

2.6c Research reporting insignificant effect of bilingualism:

Efforts to learn a second language might accompany emotional reactions in early stages of learning. Westcott (1973) exploring the emotional
experiences of high school students learning a second language determined to what extent personality factors contributed to such experiences. Reports collected from before and after the semester course of language learning were subjected to analysis for identification of children who experienced emotional satisfaction and turmoil. Results revealed significant personality differences between the groups, but the cluster of variables designated as personality did not contribute significantly to the total variance.

Edwards and Casserly (1976) examined the association between personality traits and high or low achievement in second language. Personality characteristics of early grade students of French immersion programme and regular English programme were assessed by Early School Personality Questionnaire. Differences were found between the groups in aspects such as the tendency to be more assertive, independent, critical and in abstract thinking. Authors were cognisant that the differences would probably be, not due to the programme, but to the preselection factors affecting the parent's choice of medium of instruction in school for their child.

EVALUATION

The majority of research studies have considered bilingualism as a global phenomenon which fails to consider the degree of proficiency in two languages. This has been pointed out by Lambert (1975) and Cummins (1976). In addition to low and high threshold levels of second language which are pointed out by Cummins (1976), average proficiency in second language can be included that may yield additional information on bilingualism.

The effect of threshold levels of second language needs to be compared with similar levels of proficiency of the same language possessed by the monolingual group. This would isolate the effect of bilingualism.
The context in which two languages are learned contributes variations in bilingual environment. Ronjat (1913) and Leopold (1949) have followed one person one-language principle. Ramsey and Wright (1974) have related age on arrival in a foreign country and their achievement in second language. To verify the effect of bilingual environment that is common in India, one language at home and another language at school can be studied.

Biological evidences have shown that the number of years of exposure to second language influences the ability to learn (Penfield and Roberts, 1958; Lenneberg, 1967). This suggests a need to control the number of years of exposure to languages for studying the repercussions of bilingualism.

Different studies have utilised various intelligence tests that measure different intellectual abilities. The multifactor theory of intelligence followed by WTSc measures both verbal and nonverbal intellectual abilities. Fottner (1923) has recommended both verbal and nonverbal intelligence tests in drawing inferences on the intelligence of bilingual children. Many studies have not analysed the contribution of each component to global intelligence in different bilingual environments. Such information will help researchers to understand the causal factor that affects or influences specific intellectual components in bilingual environment.

Researchers have focused their attention mainly on cognitive variables and there is a dearth of studies investigating the effect of bilingualism on personality variables. Moreover, research works have related one variable in a single study. Research involving both cognitive and personality variables in the same study would yield a global picture on the effect of bilingualism.