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CHAPTER – II

REVIEW OF LITERATURE

2.1 Introduction: -

This chapter represents review of background literature related to the present study. Relationships between the language (medium) on one hand and creativity, adjustment and anxiety (academic) taken one by one on the other hand have been examined. Research studies pertaining to language, creativity, adjustment and anxiety (academic) with other variables, have also been discussed.

In order to understand the relationships of the present study with other variables, it was thought essential to classify the buck of studies into suitable categories so that intensive and exhaustive scrutiny of the relationships among the variables is made.

2.2 CLASSIFICATION OF REVIEW

The appropriate categories of the variables are: -

2.2.1 Review related to Creativity
2.2.2 Review related to Language
2.2.3 Review related to Anxiety
2.2.4 Review related to Adjustment

2.2.1 Review related to Creativity:

2.2.1.1 International:
Title: Creativity in the classroom: An examination of student teacher personality and perceptions of the classroom setting.


Objective: The purpose of this study was to identify the positive and negative relationships between creativity and personality, as well as the direction and degree of association among creativity, personality, and the student teacher’s classroom emphasis and orientation. An additional purpose was the development and testing of a path model to determine whether causal linkages can be established among these same sets of variables. Specifically examined were the direct effects of personality and creativity, as well as the significance of creativity as an intervening variable with indirect effect on perceptions of the classroom setting.

Sample: Seventy-eight student teachers enrolled in the teacher certification program at Fordham University completed three measures of personality, creativity, and classroom perceptions.

Results: Results indicated that student teachers who maintained a student-centered classroom focus tended to have high needs for affiliation and endurance, with low needs for cognitive structure, aggression, and harm avoidance. These same individuals also evidenced high scores on measures of creativity. More creative student teachers tended to have low needs for social recognition and cognitive structure. Five path models were generated based upon the pattern of intercorrelations obtained. Although personality and
creativity were found to have some significant direct effects on classroom focus, personality was not found to have an indirect effect mediated by any of the creativity variables. The independent variables accounted for between 10% and 22% of the variance in classroom focus, indicating the need to consider additional variables for inclusion in future studies in order to improve the predictive power of the model.

Title: Zvladadanie skolských problemov z pohl'adu tvorivosti. / Coping with school problems from the aspect of creativity.

Kovac, -Tomas, (2000). studied the relationship between the creativity of adolescents and their coping techniques used to manage school problems.

Sample: 73 male adolescents (aged 15-17 yrs) from a sports high school in the Slovak Republic

Tools use: administered the Creativity Test for Children (J. P. Guilford et al), a test of creativity as an assurance (K. K. Urban and H. G. Jellen, 1993), a divergent and innovative thinking subtext (M. Jurcova, 1984), and the Multidimensional Sense of Humor Scale (J. A. Thorson and F. C. Powell, 1993).

Results: The results indicate that creativity and a sense of humor may alleviate stressful problems within school and study activities.

Title: Figural creativity and cognitive preference among Malaysian undergraduate students.

Palaniappan,-Ananda-Kumar,(1998), The relationships between figural creativity and cognitive preference were examined among undergraduates in Malaysia.
**Tools use:** Measures of figural creativity, figural originality, figural elaboration, figural fluency, and figural flexibility were obtained via E. P. Torrance's (1974) Torrance Tests of Creative Thinking, and measures of recall, questioning, principle, and application modes were obtained via P. Tamir's (1988) Combined Cognitive Preference Inventory.

**Results:** Figural creativity and its components were not significantly related to the students' modes of cognitive preferences or their factor scores.

**Title:** Academic performance of high school students as a function of mental capacity, cognitive style, mobility-fixity dimension, and creativity.

**Niaz,-Mansoor; et al; (2000).** Explored how creativity and cognitive variables (mental capacity, cognitive style and mobility-fixity dimension) can explain academic performance among 141 11th grade Venezuelan high school students.

**Tools use:** Torrance Tests were used to determine creativity.

**Results:** Results based on multiple regression analyses showed that the mobility-fixity dimension was the most consistent predictor of academic performance, by explaining a significant amount of the variance in Spanish, English, Geography, Biology, Chemistry, Earth Science, Mathematics, Physics and the Mean score. Creativity scores explained a significant amount of the variance in Spanish, Geography, Earth Science and the Mean score. It appears that the mobility-fixity dimension and creativity, although related, perhaps represent different aspects of academic performance.
Title: Teacher and student perceptions of creativity in the classroom environment.

de-Souza-Fleith,-Denise, (2000). Investigated teachers and students perceptions about characteristics which either stimulate or inhibit the development of creativity in the classroom environment.

Sample: Interviews were conducted with 7 female public school teachers (aged 34-52 yrs), 15 3rd grade students (mean age 8.13 yrs), and 16 4th grade students (mean age 9.38 yrs).

Results: The findings suggest that both teachers and students believe that a classroom environment, which enhances creativity, provides students with choices, acceptance of different ideas, boosts self-confidence, and focuses on students' strengths and interests. On the other hand, in an environment, which inhibits creativity, ideas are ignored, teachers are controlling, and excessive structure exists.

Title: Relationship between creativity, tolerance of ambiguity, and critical thinking among undergraduate nursing students.


Sample: The convenience sample consisted of 147 volunteer undergraduate nursing student, all subjects were in their first semester of NLN accredited Associate Degree Nursing programs.
**Tools use:** The California Critical Thinking Skills Test, the Torrance Test of Creative Thinking and the MacDonald Ambiguity Tolerance Test were used to test critical thinking, creativity, and ambiguity tolerance.

**Results:** A significant negative correlation was found between age and critical thinking, and between age and creativity. A significant positive correlation was found between grade point average and critical thinking. Native English speaking subjects obtained significantly higher scores on critical thinking and creativity than non-native English speaking subjects. Subjects in this study scored low on critical thinking, creativity, and tolerance of ambiguity. Recommendations for nursing education include fostering and creating an environment to promote critical thinking, creativity, and tolerance of ambiguity.

**Title:** Creativity in students and its relation to intelligence and peer perception.

**Aranha,-Maria-Amalia-Rangel-de-Carvalho,(1997),** A relationship between creativity and misbehavior in the classroom has often been presumed by educators, and some studies have assumed a positive correlation between some personality characteristics of creative people and sociometric choice (popularity).

**Objective:** The present study attempted to clarify these relationships among intelligence, creativity, and peer perception.
Sample: 345 3rd-4th graders from either a high middle class or low socioeconomic status elementary school were assessed for intelligence, creative thinking abilities, and sociometric choice of peers.

Results: Results show that children from middle-high socioeconomic status had higher scores on intelligence and creativity tests, and that students who were viewed as creative by their peers (except for high-middle-class males) were the most popular in the group. The only correlation between popularity and actual creative ability was found for low sociometric status boys who were also the most original students. Girls of higher socioeconomic status viewed their creative peers as the most misbehaving.

Title: “The relationship of creativity measures to school achievement and to preferred learning and thinking style in a sample of Korean high school students.”

Kim, -Junghee; Michael,-William-B, (1995) studied The relationship of creativity measures to school achievement and to preferred learning and thinking style in a sample of Korean high school students.

Objective: Determined the extent to which performance on measures of creativity involving verbal and visual tasks was related to (1) school achievement, as revealed by a quantitative indicator (percentage score), and (2) expressed preference for a given learning and thinking style, as revealed in the Style of Learning and Thinking, intended to portray left- (LB), right- (RB), or an integrated left-right brain (LRB) function. Possible gender differences were also identified.
**Sample:** Ss were 193 11th-grade Korean high school students (92 males and 101 females).

**Results:** Measures of creativity showed little relationship to school performance. Females exhibited higher average levels of performance on creativity tests than did males. Ss classified as showing an RB-dominated learning and thinking style preference earned higher scores on creativity measures than did Ss classified as LB or LRB dominant.

**Title:** *Personality type, creativity, and classroom teaching style in student teachers.*

**Houtz,-John-C; et al; (1994)** examine the personality, creativity, and classroom behavior of student teachers (STs).

**Sample:** Ss were 46 STs (mean age 26 yrs) in the Graduate School of Education at Fordham University.

**Tools use:** The Myers-Briggs Type Indicator, the Torrance Test of Creative Thinking, and the Classroom Creativity Observation Scale were used.

**Results:** STs typed as feelers rather than thinkers achieved higher ratings on motivational climate and divergences. Creativity scores did not relate to any of the classroom behavior categories. While the evidence that personality affects actual classroom behavior is not overwhelming, there is enough to indicate that this research should be continued.

**Title:** “The relationship between creativity and school achievement and other social, economical, and cultural variables or tenth-grade students in Ahman city.”
Kattami, Haifa; et al; (1995) studied the relationship between creativity and school achievement and other social, economical, and cultural variables or tenth-grade students in Ahman city.

Objective: The goals of the study were to determine the social, economical and educational variables, which distinguish between creative and non-creative students; and to investigate the differences between their scores in academic achievement, related to creativity

Hypotheses: (1) There are no significant differences among creative and non-creative students, economically, socially or educationally. (2) There are no significant differences between creative and non-creative students in terms of their academic scores.

Sample: The population of the study was composed of the students in the tenth basic grade during the academic year 1990-1991, in the public schools of the City of Amman, Jordan. Of the sample of 569 students, 294 were male and 274 were female. The sample was selected by using the cluster method, according to gender.

Tools use: Two scales were used for testing the hypotheses of the study, as follows: (1) A situational Survey Scale of social, economic, and educational factors. This scale was developed to fit the Jordanian environment. (2) Torrance’s scale for creative thinking, which was developed and translated to suit Jordan’s environment.

Results: The findings of the study showed that: There were significant differences at (alpha<0.05) between scores of creative and non-creative
students related to some social, economical, and cultural factors. There were significant differences between mean scores of the creative and non-creative students in the academic achievement in.

**Title**: *A causal model of the way emotions intervenes between creative intelligence and conventional skills.*

*Dixon,-John-P; et al; (1992)* explored the enabling and the emotionally distractive sides of creativity in 243 professionally educated women (aged 50-70 yrs).

**Sample**: Explored the enabling and the emotionally distractive sides of creativity in 243 professionally educated women (aged 50-70 yrs).

**Results**: Data indicate that creative intelligence increases both conventional skills and problem sensitivity. However, problem sensitivity has the effect of undermining conventional skills. This incompatibility in the 2 consequences of creative intelligence suggests a natural tension in thought/emotion patterns. The solution to this tension requires a careful balancing of the emotional reactive and the skill enhancement consequences of creativity.

**Title**: *“Relationship of scores on two personality measures: Creativity and self-image.”*

*Smith,-Delores-E; Tegano,-Deborah-W, (1992)*, studied the Relationship of scores on two personality measures: Creativity and self-image.

**Sample**: 134 female undergraduates completed

**Results:** The 65 Ss who scored higher in creativity exhibited better psychosocial functioning on 6 of the 11 self-image dimensions measured than did the 69 Ss who scored lower in creativity. Concomitant with their more heightened self-assurance was Ss’ expressed greater confidence in social competence. Findings are contrary to the profile that depicts creative individuals as socially and emotionally deficient.

**Title:** Study on the creativity attitude development of middle school students.

**Wang, Huiping; et al; (1998).** Studied the development of creativity in middle school students with a mental measurement method.

**Sample:** Ss were 742 middle school students from Yantai and Zibo, China.

**Tools use:** Ss were assessed with the Chinese version of Schaefer's Creativity Attitude Survey (L. Zhou, 1996) which consisted of 5 subtests: "the confidence on self-ideas", "joy for the new", "theoretic and aesthetic tendency", "yearn for something novel and miraculous", and "acceptance of stimulation expression".

**Results:** The results found grade differences in the first 4 subtests, but not in "acceptance of simulation expression". It is reported that Ss' development of creativity was in a fluctuating state, but there was no gender differences.

**Title:** Creativity styles of university women students.

**Verma, B-P,** (1993) deliberate the Creativity styles of university women students.

**Sample:** 121 university female students, drawn randomly from 3 different faculties: science, social sciences, and humanities.
Tools use: Creativity styles were measured through the Creativity Styles Questionnaire.

Results: Ss belonging to a faculty of science were found to differ significantly from Ss of the other 2 faculties in the case of only 1 creativity style: environmental/behavioral control.

2.2.1.2 National

Title: “Creativity and its relation to some Personality variables in high school students: An empirical investigation.”

Kundu, (1987) investigated the interrelationship between various personality traits, gender and several components of creativity in 252 Indian high school students.

Tools: Ss were administered the Torrance Tests of Creative Thinking, the Eysenck Personality Questionnaire and the Bender Gestalt Test.

Results: Results indicate that creativity was positively related to ego-strength and introversion and negatively related to psychoticism, while the relationship between creativity and extraversion was curvilinear. Dysthymics were found to be more creative than hysterics. Implications for developing curricula that enhance creative potential are discussed. It is suggested that educational policy should reflect individual creativity differences.

Title: “Creativity and Academic group difference among high school students.”

Srivastava and Jha, (1977) investigated academic- group difference in creativity score of 10th grade males studying science, arts and commerce.
**Tools:** All Ss were administered the Baqer Mehdi’s Verbal Test of Creative Thinking.

**Results:** Findings show that the science group scored significantly higher than the arts and commerce groups, which did not differ from each other.

**Title:** “A study of creativity in Relation to sex of high school students.”

Pandey, and Pandey (1984) studied the relationship between creativity and sex in high school students in India.

**Results:** On the whole, there were no sex differences for creativity factors. Only for elaboration were female scores significantly higher than those of males.

**Title:** “A study of creativity and level of aspiration of high school students.”

Rawat and Garg. (1977) explored the possible relationship between level of aspiration and individual creativity.

**Sample:** 200 male and female Indian 9th graders (12-20 yrs old) in arts and sciences courses.

**Tools:** Administering the Mehdi’s Verbal Test of Creative Thinking and a standard test of level of aspiration.

**Results:** results show that (a) no significant difference were found in mean creativity score of either over or under- aspiring Ss in high and low creative groups; (b) arts Ss did not differ significantly from science Ss, suggesting that school subjects had no influence on Ss’ creative ability; and (c) girls were creative than boys in the age group studied.
Title: “A study of relationship between creativity, Adjustment, Neuroticism and extraversion.”

Bimla Parimu, (1986) attempted to study of relationship between creativity, Adjustment, Neuroticism and extraversion.

Hypotheses: Following hypotheses were formulated.

1) Adjustment and creativity should be highly correlated.
2) Home Adjustment and creativity should be highly correlated.
3) Health Adjustment and creativity may not be correlated.
4) Social Adjustment and creativity should be negatively correlated.
5) Emotional Adjustment and creativity should be positively correlated.
6) Extraversion and creativity should be negatively correlated.
7) Neuroticism and creativity should be negatively correlated.

Sample: Data was collected from ninth and tenth standards boys and girls chosen from Shreus School and M.K. School and Experimental school in Baroda. A random sampling was done choosing every fifth boy and fifth girl from each class. 12 groups of 10 students each.

Tools used: The following tools were used in the present study: 1)’Kauls Creativity test’ in verbal form; 2) ‘Bell’s Adjustment Inventory adapted by Mohsin and Shamshad and 3) Neuroticism and Extraversion, Maudsley Personality Inventory adapted by Jalota and Kapoor.

Conclusions: A negative but significant correlation was found between creativity and adjustment. This proves hypotheses 1 that creative individuals
are better-adjusted persons. Negative sign on Bell’s Inventory reflects positive accadianship.

The correlation between emotional adjustment and creativity is not significant. The correlation between creativity and extraversion is positive but not significant. Creativity and neuroticism are contrary to each other. The relationship is negative and significant this proves hypotheses 7. On the whole, it seems that creative individuals are a well-adjusted lot, certainly not neurotic and have in them it extraversion although of non-significant level.

**Title: The Influence of social class and sex on primary school children’s creative thinking.**

**P.K.Dhillon and Deepa Mehra, (1990)** studied the Influence of social class and sex on primary school children’s creative thinking.

**Objective:** An attempt was made to study the Influence of social class and sex on the development of creative thinking in primary school children.

**Sample:** The sample consisted of 160 children 80 (40 boys and 40 girls) from of the two social classes. The age range of the children was 9-11 years.

**Tools used:** 1) Non-verbal and verbal tests of creative thinking (Baqer Mehdi, 1973)

2) Socio-economic status scale (form-A) (Kulshrestha, 1975)

**Results:** The ANOVA results indicate that there is a significant difference between children of the social classes on all factors of creativity. There are significant differences between the sexes and interaction effects on most of the
factors of creativity. There is a positive significant relationship between SES and creativity and its factors.

**Title:** “The effect of birth order and sex on the creative ability of children.”

**E. Geeta and Sushila Srivastava (1983)** were studied to investigate the effect of birth order and sex on the creative ability of children.

**Sample:** The present study has as its sample a group of 141 eighth grade children taken from five different schools in the city of Madras. The sample comprised of 63 boys and 78 girls.

**Instrument used:** The Wallach and Kogan’s (1965) battery of creativity instruments as adopted by Parmesh (1969) to the Indian conditions was used to test creativity.

**Results:** The study indicate that boys are more creative than girls and birth order does not have any bearing on creative ability of children.

**Title:** “Creativity in Relation to Risk taking attitude.”

**Km. Beena Thandani (1983)** studied in order to the creativity in relation to risk taking attitude.

**Sample:** The study is conducted on the 126 students of ix grade in the secondary and higher secondary schools of 13 districts of Rajasthan.

**Tools used:** 1) Creativity test (verbal and Non-verbal) by Baquer Mehdi were administered to them to measure creativity. 2) Risk taking attitude test by Raizada, (1969) was used to measure risk-taking attitude.
**Results:** The results of this analysis show that there are no significant relationship of Fluency, Flexibility and Originality of verbal measures and collaboration of non-verbal measure of creativity with Risk-taking attitude while originality verbal measure as creativity is significantly related with risk taking attitude.

**Title:** “Verbal-Creativity in Relation to Sex-difference among High-school Pupils at different levels of Intelligence.”

R.K. Srivastava (1988), studied was designed to measure the sex-difference in fluency, flexibility, originality and composite verbal creativity among high-school pupils.

**Objectives:** The specific objective for the present study were as follows-

1) To assess the adolescent high school pupils in terms of scores on fluency, flexibility, originality and composite creativity.

2) To measure the I.Q. of adolescent high school pupils selected for the present study and divide them among high, average and low levels of intelligence.

3) To find out the sex-difference on fluency, flexibility, originality and composite creativity among adolescent high school pupils at all the three levels of intelligence.

**Hypotheses:** The following null-hypotheses were formulated and tested in the present investigation-

1) There exists no significant sex-difference on fluency, flexibility, originality and composite creativity (verbal) among high school
pupils belonging to urban locality at high, average and low levels of intelligence.

2) There is no significant sex-difference on fluency, flexibility, originality and composite verbal creativity among high school pupils belonging to rural locality at high, average and low levels of intelligence.

**Sample:** The sample constituted of 540 high school pupils studying in class x with the age group of 14-15 years (mean age 14.6 years).

**Tools used:** Baquer Mehdi’s test of verbal creative thinking and P.N.Mehrotra’s test of group intelligence were employed to assess the creative abilities and intelligence of the subjects.

**Results:** The results showed that (i) urban boys scored slightly more than urban girls on verbal creativity possessing high and average levels of intelligence except for the pupils at low level of intelligence where urban girls scored more than urban boys. (ii) The rural girls scored more than boys on verbal creativity at high level of intelligence, where at average and low level of intelligence the rural boys scored more than rural girls on verbal creativity.

**2.2.2 Review related to Language (Medium of instruction):**

**Title:** “Second language learning and academic achievement revisited: A connectionist deconstruction of the consequences of bilingualism”.

**Hawson,-Anne,(1996),** An examination of the critiques of the hypothesis cognitive as well as the responses invoked by these critiques reveals that much of the criticism is well-founded. Given that the Threshold Hypothesis proposes
that 'cognitive' benefits or deficits can accrue through the learning of a second language, the conceptualization of cognition underpinning the hypothesis is important in understanding its inadequacies. Upon examination of Cummins' work, it is concluded that cognitive processing is considered by Cummins to be a discrete category of brain processing operating at the conceptual level. A fundamental premise of this thesis is that connectionism, which proposes that cognition is more appropriately described as operating on a sub-conceptual level, and as being intimately intertwined and dependent upon what have been regarded as 'non-cognitive' aspects of brain functioning such as emotion, attention, and sensory processing, provides a new and potentially enlightening perspective on cognitive issues. A critique of connectionism as a valid model of learning in the brain suggests that it has considerable validity, but cannot yet describe all types and/or all processes involved in learning. Nevertheless, it is concluded that a model of second language learning built upon the conjectures of connectionism could bring new insights into how second language learning in immersion situations affects brain processing, and thereby provide clues which might explain perceived cognitive benefits and deficits. The model developed proposes that, under immersion conditions, second language learners may be undergoing an attentional shift in information processing.

**Title: “Modeling relationships between the use of English as a second language learning strategies and the test performance of Asian students.”**

**Objective:** The objectives of the present study were to model the relationships between language learning strategy use and language proficiency, to compare those relationships between Asian and Western cultural groups, and to examine how those relationships would change as learners proficiency improved. However, the two cultural groups could not be compared due to the limited availability of Western subjects. Analyses were done only with Asian learners.

**Sample:** Subjects were 598 Asian students studying English at English language institutes around U.S. and Canada.

**Tool use:** A questionnaire was used to gather information about their language learning strategy use. Their language proficiency was measured with the Institutional Testing Program Test of English as a Foreign Language (ITP TOEFL). According to scores on the ITP TOEFL, the subjects were grouped into low and high level groups. Structural equation modeling was utilized to model the relationships between language learning strategies and language proficiency. Four language learning strategy factors were hypothesized: metacognitive, cognitive, social, and affective strategies.

**Results:** The present study found only weak relationships between language learning strategies and language proficiency. The language teaming strategies explained only 13% and 15% of variance of the listening and grammar/reading
factor. The model for the relationships among the metacognitive, cognitive, and language proficiency factors appeared not to vary across the different proficient level groups. The social and affective strategies were found not to be included in the model for the high level group

**Title: “Personality and second language learning”**.

Robinson,-David;Gabriel,Norman;Katchan,Olga,(1994), studied the relationships between personality differences and differences in language learning ability.

**Tools used:** Eysenck Personality Questionnaire (EPQ) to 41 tertiary level university students learning French as a 2nd language. The personality dimension of Neuroticism accounted for 23% of the variance of French oral examination marks.

**Results:** Ss with high neuroticism and high extraversion scores did better on the oral test than on the written test when compared with Ss having high neuroticism and low extraversion scores who did better on the written test than on the oral test. A 2-factor model is necessary to explain observed relationships. One factor is attributed to differences in cerebral arousal that cause differences in neuroticism as well as determining differences in general learning ability. A 2nd factor is attributed to differences in cerebral arousability that cause the psychological contrast between melancholic and choleric personality types.

**Title:** “How does anxiety affect second language learning? A reply to Sparks and Ganschow”.
MacIntyre, Peter-D, (1995), Discusses R. L. Sparks and L. Ganschow’s (1991, 1993) linguistic coding deficit hypothesis, which postulates that language aptitude is the primary source of individual differences in language achievement. Sparks and Ganschow view affective variables, such as language anxiety, as mere side effects of difficulties in coding the native language. However, research on anxiety and on the processes believed to underlie language anxiety’s effects suggest that its effects on language learning are more complex than implied by Sparks and Ganschow. Language learning relies on encoding, storage, and retrieval processes, and anxiety can interfere with each by creating a divided attention scenario for anxious students. The linguistic coding deficit hypothesis makes an omission by assigning only epiphenomenal status to affective variables in general and language anxiety in particular.

Title: “Biases in self-ratings of second language proficiency: The role of language test performance”.

MacIntyre, Peter-D.; et al; (1997), Examined perceived competence in a second (L2) language as a function of actual competence and language anxiety. 37 young adult Anglophone students, with widely varied competence in French, participated. They completed scales of language anxiety and a modified version of the ‘can-do’ test, which assessed their self-perceptions of competence on 26 French tasks. They then attempted each of those tasks.

Results: Results found that L2 language anxiety, perceived L2 competence, and actual L2 competence intercorrelated. However, regression analysis with actual proficiency level controlled showed that anxious students tended to
underestimate their competence relative to less anxious students, who tended to overestimate their competence. Theoretical and practical implications are discussed.

**Title: “Testing for the effects of language on science achievement of four primary pupils in Nigeria”**.

**Qjerinde, A. (1982)**, Investigated the effect of the medium of instruction and examination on the achievement of 597 Nigerian primary school pupils.

**Results**: Ss instructed in their mother tongue performed better than the remaining three groups.

**Title: “Attainment in English in the schools of Wales”**.

**Wijnstra, (1980)**. Conducted a study in Wales, to examine the effects of bilingualism on academic achievement.

**Result**: In general, results were the same as with the Frisian children. Attainment in a 2nd (national) language was only slightly affected by the Ss home language and by the language used in the school.

**Title: “English as a medium of instruction in post Hong Kong: What students, teachers and parents think”**.

**Tung et al., (1997)**. Reported on the results of large scale survey of the attitudes of students, teachers and parents towards the use of English as a medium of instruction in Hong Kong Secondary Schools, where Chinese is the native language of the great majority of the students.
Result: The findings indicate that while Hong Kong is to revert to Chinese rule in the middle of 1997, students and their parents consistently value English over Chinese as a teaching medium for pragmatic reasons, although they agree with the teachers that instruction in Chinese is educationally more effective.

Title: “Home background characteristics and second language learning”.

Gardner,-R-C; et al; (1999), Investigated the role of sociocultural milieu and attitudes in early life on second language acquisition by assessing the linguistic nature of the home community, respondents’ recollections of early experiences in second language learning, and their current attitudes and beliefs about language learning and bilingualism.

Sample: The sample consisted of 109 1st-year university students enrolled in an introductory psychology course.

Results: Support was found for a causal model that indicated that early sociocultural experiences, as reflected in respondents' recollections, influence their current cultural attitudes, motivation to learn a second language, and self-perceptions of second language proficiency.

Title: ”Interaction and second language learning: Two adolescent French immersion students working together”.

Swain,-Merrill; Lapkin,-Sharon, (1998), article provides support for a theoretical orientation toward viewing dialogue as both a means of communication and a cognitive tool. Data to support this position come from an analysis of the language-related episodes isolated in the dialogue of two grade 8 French immersion students as they carry out a jigsaw task. During the
task, the students worked out a story line and wrote it out. As they did so, they encountered linguistic problems. To solve them, the students use their first language (L1) and second language (L2) in order to communicate to each other and as tools to aid their L2 learning. The language-related episodes discussed provide evidence of language use as both an enactment of mental processes and as an occasion for L2 learning. Variation in how other pairs of students in the class perform the task supports existing evidence that the same task does not provide similar occasions for L2 learning to all student dyads.

**Title:** “Models of bilingual memory of primary pupils in Hong Kong (China)”.

**Ho (2001).** Submitted a dissertation on models of bilingual memory of primary pupils in Hong Kong. The study attempts to provide a theoretical framework for the planning and implementation of bilingual education. Cognitive, psychologists have four basic models in describing the semantic network of bilinguals they are namely separate store model, common store model, verbal imaginary dual code model and overlapping distribution model.

**Sample:** The subjects were 235 students Chinese.

**Tools use:** English and Mathematics attainment test computer administered bilingual language test bilingual word association test and bilingual study questionnaire were administered to all students.

**Result:** The findings revealed that Hong Kong primary school subjects stored and retrieved the vocabularies in most school subjects mainly as Chinese
terms. The extent of vocabularies storage in a single language versus a bilingual one was a continuum.

**Title:** “Towards a full model of second language learning: An empirical investigation”.

Gardner, R. C.; et al, (1997), Investigated 34 individual difference measures used to assess attitudes, motivation, anxiety, self-confidence, aptitude, learning strategies, field independence, and achievement in second language acquisition (SLA) in order to determine the factorial composition underlying the relationships among them, to contrast their predictive validities, and to evaluate their contributions in a causal model of SLA modified from the socioeducational model described by R. C. Gardner (1985) and Gardner and P. D. MacIntyre (1993).

**Sample and tools use:** 102 university students enrolled in introductory French completed (1) a questionnaire containing measures of attitudes, motivation, achievement, and self-rating scales of French proficiency, and (2) a short language history questionnaire.

**Results:** Analysis revealed that despite the different theoretical models represented, the various measures group together into 5 clusters: self-confidence, learning strategies, motivation, aptitude, and orientation to learn French. Results indicate substantial links among the affective measures and achievement, and support was found for these connections in the proposed causal mode. Descriptive statistics and attitude/motivation test battery items are appended.
Title: “Reading-based exercises in second language vocabulary learning: An introspective study.”

Wesche, Marjorie-Bingham; et al, (2000), Examined the introspective reflections made by university English as a Second Language (ESL) students while carrying out text-based exercises. 10 intermediate level ESL students, predominately from French language backgrounds, completed exercises concerning a read text, making concurrent and retrospective verbal comments during the task and at the end of each exercise and session.

Results: Results indicate that the nature and extent of mental energy displayed by Ss largely depended on their perception of the required outcome, relevant prior knowledge, and problem-solving skills. Findings suggest that vocabulary acquisition is an elaborative and iterative process, and that there are complex links between instructional tasks and learning outcomes. Findings also provide insight into the nature of the advantages of using text-based vocabulary exercises together with a reading text as opposed to using multiple reading texts for the learning of particular words and their lexical features.

Title: “Non-native speakers' production of modified comprehensible output and second language learning”.

Shehadeh, Ali, (1999), Investigated the ability of nonnative speakers (NNSs) to modify their output toward comprehensibility in the contexts of native speaker (NS)-NNS and NNS-NNS interactions and the degree to which such modified comprehensible output (MCO) was other- or self-initiated. Picture-dictation and opinion-exchange tasks were used to collect data from 8 NSs and 24 NNSs of
English representing 13 different L1 backgrounds. The 2 tasks were performed in pairs (NS-NNS and NNS-NNS) and were audio taped.

**Results:** The results showed that most repairs were self-initiated and that NNS-NNS interactions produced more other-initiations and other-initiated MCOs on the picture-dictation task. The frequencies of these MCOs support the importance of modification toward comprehensible output as a process of 2nd language acquisition.

**Title:** “Attitudes in second language learning: A social psychological perspective.”

**Ganguly, S-R (1994),** Examined self perceptions regarding the use of English by 463 Asian adolescents in England, using the Linguistic Self Concept Inventory (S. R. Ganguly and Ormerod, 1980). Ss indicated, on a 5-point scale ranging from "completely true" to "completely false," their perceptions regarding the following domains of social behavior: self (language learner's estimation of self in using the language with others), society (language learner's appreciation of the value of language in the wider society), praying (language learner's ease in using another language in prayer), home (parental liking for use of the target language at home), and own language (language learner's liking for his own language). Data were submitted to multiple regression analysis to make an estimation of the predictive values of the attitudes toward language learning for oral competence. Home encouragement as a social reinforcer seemed to have a psychosocial impact on verbal behavior in the target language.
Title: “Personality factors in second language learning: A psycho-social perspective”.

Ganguly, S.-R, (1996), studied the Personality factors in second language learning: A psycho-social perspective. A battery of tests (e.g., Extraversion, Neuroticism, and Lie scales for personality types, the Linguistic Self-Concept Inventory, and the Linguistic Motivation Scale) from previous experiments (S. R. Ganguly and M. B. Ormerod, 1979, 1980; S. R. Ganguly, 1980) was submitted to factor analysis by the SPSS 6600 computer package for multivariate analysis to study the personality and behavioral correlates of second language learning (English) as sources of variation in language performance. A 5-factor solution was obtained and used to examine the distribution of loadings of the variables under the factors. It is stated that the objective methods in the experiment provide the means for conceptualizing personality as a psychological construct, and that the study of human behavior is incomplete without taking into account the specific behavior, that is, language, in which behavior is expressed or occurs. It is also stated that research apparatus should account for attitudinal, motivational, and personality variables as mediating factors in language learning.

Title: “Acoustic and Semantic Coding in LTM for native and non-native language”.

Narayanan et al., (1986). Tested 60 undergraduates, using a cued recall approach to ascertain the effect of language of instruction on acoustic and semantic coding in long term memory.
**Result:** Results indicated that the language of greatest exposure prompted the use of semantic coding, whereas the language of least exposure prompted the use of acoustic coding.

**Title:** “The language of science and the high school student. The recognition of concept definitions: A comparison between Hindi speaking students in India and English speaking students in Australia”.

**Lynch et al., (1985).** Examined the language of science and the high school student. The recognition of concept definitions: A comparison between Hindi speaking students in India and English speaking students in Australia. English and Hindi speaking data were compared from the point of view of development performance for individual items and overall performance at grade 10. Although the overall score at grade 10 was identical for both groups.

**Result:** Result indicated there were differences in development overall and for individual items.

**Title:** “Children’s written language awareness and its relation to reading acquisition”.

**Martha et al., (1979),** describes the development of an instrument that identifies what children who are just beginning 1st grade reading instruction know about the written language code and relates this knowledge to beginning reading achievement.

**Results:** Results findings indicate that linguistic awareness tasks do predict reading achievement, particularly those tasks that stress the interrelationship
between oral and written codes rather than those that top characteristics specific to the writing system

2.2.3 Review related to Anxiety

2.2.3.1 International

Title: A study of the relationship between academic anxiety and adjustment among high school students.

Kochgaway, -Vinitha, (1993) investigated the relationship between academic anxiety and adjustment among 200 female high school students (aged 14-27 yrs). Ss were categorized into 2 groups (high anxiety group [A1] and low academic anxiety group [A2]).

Hypothesis: It was hypothesized that the greater the academic anxiety, the greater the maladjustment.

Tools use: using the Bell Adjustment Inventory and the Academic Anxiety Scale for Children.

Results: The mean values of different areas of adjustment (home, health, social, emotional) and overall adjustment were higher in-group A1 as compared with group A2. Significant correlations were observed between academic anxiety and emotional adjustment.

Title: test anxiety and academic achievement among South African University students.

Mwamwenda Ts. (1994) studied the test anxiety and academic achievement among South African University students.

Sample: 338 students of South African university.
**Results:** Although studies in Western and a few developing countries have indicated students with low scores on test anxiety tend to perform better on academic tasks than those who score higher on test anxiety; at this South African University no statistically significant mean difference on a test in educational psychology was noted for 121 students who scored high on the anxiety, achievement test and those 117 who scored low.

**Title:** Test anxiety and its relation to achievement motivation: A cross-cultural study between high school students in Egypt and Arab Emirates.

**El-Safty, Mostafa-Mohamed,** (1995): Investigated the importance of the effectiveness of test anxiety on achievement motivation for secondary school students, cross-culturally between Egypt and the United Arab Emirates (UAE).

**Objective:** The 2 samples were intended to study the differences between students of both sexes in high and low levels of anxiety in achievement motivation, as well as the differences in achievement motivation.

**Sample:** The sample was composed of 349 students from Egypt and 320 students from UAE.

**Tools use:** An anxiety test and achievement motivation test were used after they were verified to suit Middle Eastern cultures.

**Results:** There was a negative correlation between anxiety and achievement motivation for students in Egypt and the UAE. Significant differences were found comprising anxiety, sex, and nationality. Interaction between anxiety and sex relevant to achievement motivation was significant at 0.05. Also,
interaction between anxiety and nationality was significant at 0.05. Interaction between sex and nationality was significant at 0.01.

**Title:** Test anxiety in elementary school and junior high school students in Japan.  
*Araki,-Noriyuki,* (1992) Examined to Test anxiety in elementary school and junior high school students in Japan.  
**Sample:** A total of 5,937 Japanese 2nd-6th graders and 1,331 7th-9th graders.  
**Tools use:** were assessed using a Japanese version of the Test Anxiety Scale for Children.  
**Results:** Girls scored higher than boys in all grades. Anxiety scores followed an inverse V curve for elementary school students, which peaked at the 4th grade. For junior high school students, anxiety scores followed a V curve that had its lowest point at the 8th grade. Test anxiety was negatively correlated with academic achievement for both elementary and junior high school students.  

**Title:** Test anxiety, intelligence, university level and academic achievement of college students.  
**Tools use:** An Arab version of the Test Anxiety Inventory was used.  
**Results:** Female Ss scored higher than male Ss in all grades. Anxiety scores followed a curvilinear relationship for male and linear relationship for female Ss. Test anxiety was negatively correlated with academic achievement for both
genders. Treatment of test anxiety, especially with regard to improvement of academic achievement and intellectual performance, is discussed.

**Title:** Predicting children mathematics anxiety from other psychological variables.

**Ya'-coub, I-M, (1995)** Studied to Predicting children mathematics anxiety from other psychological variables.

**Aims:** This study aimed to discuss the relationship between mathematics anxiety and other variables (anxiety, test anxiety, academic self concept, and attitudes towards mathematics). Also, this study aimed to determine the effects of these variables on math anxiety.

**Sample:** The sample consisted of 106 male and 80 female students (grades 7 and 8).

**Results:** The results indicated statistically significant correlations between math anxiety and these variables. Multiple regression analysis was used to determine math anxiety in relation to class and sex. According to class, test anxiety and self concept accounted for the explained variance on math anxiety. According to sex, test anxiety, anxiety, and academic self-concept accounted for the explained variance in math anxiety for females, and academic self-concept accounted for the explained variance in math anxiety for males.

**Title:** Student anxiety and educative influences in family and school.

**Raszkiewicz, Henryk, (1999).** Studied to social indicators of anxiety in school-age children.

**Sample:** 24 male and 19 female 10-yr-old 3rd graders in Poland
**Tools use:** were administered the State-Trait Anxiety Inventory for Children. Ss' parents were administered the Questionnaire on Family Educational Practices (J. Lautrey, 1980), and 2 of Ss' teachers were administered the Questionnaire on Teacher Self-Perception (A. Gurycka, 1990) and the Questionnaire on School Anxiety.

**Results:** The results show that children in families that are better educated and that favor flexible educational methods experience much less anxiety in school situations and are protected vs increased anxiety caused by teachers with inappropriate behaviors. Boys showed higher anxiety levels than girls did regardless of family variables.

**Title:** A comparative study of anxiety among Chinese and Japanese college students.


**Sample:** 125 male and 158 female college students from China, and 167 male and 173 female college students from Japan participated.

**Tools use:** Ss' state and trait anxiety were assessed with a Chinese and a Japanese version of Charles' State Trait Anxiety Inventory.

**Results:** Ss' degrees of state and trait anxiety were rated and compared between Chinese and Japanese Ss by gender. Higher degrees of state and trait anxiety of Japanese Ss were reported. Ss' state and trait anxiety were studied and discussed with relation to social, cultural, and family status in China and Japan in recent years.
Title: “Academic anxieties: a Gestalt approach.”

Garcia, - Cara; et al; (1999), Shows Gestaltists how to use their Gestalt orientation to address academic anxieties in situations such as teaching, supervising, and presenting workshops. Academic anxieties manifest as test anxiety, writer's block, stage fright, and so on. The dialectic of concentration--interruption--recovery is used to analyze the structure of academic anxieties and show how they occur throughout the Gestalt Cycle of Learning. Psychological safety is suggested as the underlying function of academic anxiety. An extended example of a 2-chair experiment is used to illustrate a protocol for intervention. Suggestions for additional preventions and interventions are provided.

Title: Academic anxiety, academic procrastination, and parental involvement in students and their parents.

Milgram, - Norman-(Noach); Toubiana, - Yosef, (1999) Investigated the relationship between academic anxiety and procrastination in children and parents and parents' direct involvement in their children's schoolwork.

Sample: Self-report measures were administered to 354 Israelis ages 13, 14, and 16 and their parents.

Results: Older adolescents were less anxious about their schoolwork overall and procrastinated more than younger on homework. Parents of late adolescents were less involved in their children's schoolwork than parents of younger adolescents. Parents participated equally in school-related interactions that demanded high investment of time and effort, but mothers engaged more
than fathers in low investment activities. The more students were anxious about preparing for examinations and writing papers, the more they procrastinated on these assignments, confirming the appraisal-anxiety avoidance model. The inverse relationship of anxiety and procrastination with regard to homework led to our making a post hoc distinction between task-centered and consequence-centered anxiety.

**Title: Relation of depression and anxiety to personal and academic problems among Iranian college students.**

**Makaremi, Azar, (2000)** Investigated the role of anxiety and depression in students' adjustment to family and campus life.

**Sample:** 1,452 college students (998 Man and 454 Woman, aged 18-45 yrs) of Shiraz University, Iran.

**Tools use:** The Cognition Checklist and a problem questionnaire were given.

**Results:** Analysis showed that off-campus students were significantly less depressed and anxious. These college students worried about jobs and marriage. Feelings of anxiousness and worry were reported; sex differences on depression scores were not significant.

**Title: Sex, ethnic, and social differences in test anxiety among Israeli adolescents.**

**ZeidnerM, Safir MP. (1989).** Examined the effects of sex, ethnicity, and social class on levels of test anxiety among a sample of 416 adolescent students in Israel.
**Results:** Result indicate that significant sex differences in mean levels of test anxiety were found, with girls scoring consistently higher than boys across ethnic, social, and grade categories. Pupils of low socioeconomic status (SES) also scored consistently higher than pupils of high SES across grades. Nevertheless, this study provides little support for the commonly held view that sociocultural or sex group differences in school achievement are due, in any meaningful way, to differences in test anxiety. The group differences, though significant for SES and sex, were of negligible magnitude, and the correlation between test anxiety scores and grade point average was minimal for the group as a whole and nonsignificant for students of Eastern background, who have been purported to be particularly affected by high levels of test anxiety. It is concluded that test anxiety is not a particularly valid predictor of achievement or ability.

**Title:** “Gender differences in test anxiety among South African university students”. Mwamwenda TS, (1993).

Studied the Gender differences in test anxiety among South African university students.

**Result:** Prior research has shown a sex difference in scores on test anxiety, with men having a lower mean score than women. The present study was undertaken to confirm such a difference among African university students, but the t ratio was nonsignificant for means of 28.4 for men and 28.0 for women (SDs of 5.3 and 5.0).
Title: “Anxiety and classroom examination performance”.

**Daniels B, Hewitt J. (1978)** Studied classroom examination performance over the course of an entire semester as a function of (a) students’ anxiety level (high, medium, low); (b) difficulty level of exam question (more vs. less difficult); (c) type of exam question (rote memory vs. generalization); (d) sex of S; and (e) intelligence level of S. As expected, there was a strong main effect of anxiety and a significant interaction between anxiety and item difficulty. The latter was consistent with the Hull-Spence formulation of learning and performance--as the habit strength of incorrect responses increases (i.e., as the items become more difficult), the superiority of low over high anxious Ss also should increase. When item difficulty was held constant, anxiety did not interact with type of exam question.

Title: “Statistics and mathematics anxiety in social science students: some interesting parallels”.

**Zeidner M. (1991)** This study illuminates some interesting parallels between statistics anxiety and mathematics anxiety in social science students. Parallel to what is confirmed for mathematics anxiety, two factors were observed to underly statistics anxiety scores, namely, statistics test anxiety and content anxiety. The study revealed modest though significant correlations between student attributes and the two confirmed dimensions of statistics anxiety. Furthermore, parallel to the inverse correlation reported for mathematics anxiety and math’s course performance, statistics anxiety correlated negatively with high school matriculation scores in math’s as well as self-perceptions of
math’s abilities. These data lend support to the hypothesis that aversive prior experiences with mathematics, prior poor achievement in math’s, and a low sense of math’s self-efficacy are meaningful antecedent correlates of statistics anxiety and thus lend some credence to the "deficit" interpretation of statistics anxiety.

**Title: “Too Scared to learn over coming the academic anxiety”**.

**Garcia and Barker (1998).** Conducted an education therapy for reducing academic anxieties and found that academic anxiety embraced test anxiety writers block, stage fright, math anxiety. Artifacts and video clips of academic anxiety work with children, adolescents and adult in school and clinic settings. Gestalt therapy and practices reduced the academic anxiety and discussed the dialectic, which occurs between concentration and interruption through out the phase of Gestalt cycle of experience.

**Title: “Test Anxiety and its Relation to Academic Performance Anxiety”**.

**Mair and Morris (2001).** In their study on “test anxiety and relation to academic performance anxiety” found that students experiencing test anxiety is disadvantaged in a university or college setting where test measures their knowledge of class material. Students exhibit higher levels of test anxiety when assessed related to grade related testing, situations. A sample of 80 college students was taken performance anxiety level before a grade related test and subsequently before a simple non-grade related test of no value to the students over all grades in their class, interestingly.
**Result:** The findings of that study revealed no significant difference between test anxiety levels prior to academic performance anxiety versus the non-grade related test. The researcher suggests that some student may exhibit test anxiety simply due to the effect of the school environment.

**Title:** Test anxiety in adolescents with learning disabilities and behavior disorders.

**Swanson,-Sue; Howell,-Carol, (1996)** Investigated the relative influence on test anxiety (TA) of academic self-concept, cognitive interference, academic achievement, and study skills.

**Sample:** Ss were 82 8th-12th graders (aged 13-18 yrs) with learning disabilities and behavior disorders who were enrolled in a small private special education day school.

**Tools use:** Ss completed the Test Anxiety Inventory and measures of internal dialog, cognitive structures, and behavioral acts and outcomes.

**Results:** Results show a significant positive relationship between TA and cognitive interference and a significant negative relationship between TA and study habits. Cognitive interference was the most powerful predictor of TA, but was not significantly related to academic performance.

**Title:** Male and female differences in anxiety about statistics are not reflected in performance.

Hypothesis: Tested the hypothesis that the stereotypical belief that females possess less mathematical ability than males might lead women to experience more anxiety than men when taking a required course in statistics.

Sample: an overall sample of 70 women and 28 men.

Results: Results show that while women did indicate significantly more anxiety about taking the course than men, women performed as well as the men in both courses.

2.2.3.2 National

Title: “A Study of the effect of Anxiety on the Academic Achievement of high and low intelligence groups.”

Rajni Rudra (1976) studied of the effect of Anxiety on the Academic Achievement of high and low intelligent groups.

Sample: 200 Subjects by x & xi grads (Girls)

Results: Anxiety does not have any effect on academic achievement on the subject of high intelligence group. High level of anxiety group of x & xi grads a little effect was found in low intelligence and high anxiety level of xi grade subjects.

Title: “A study of cognitive process and motivational patterns of deprive students in relation their achievement”.

Pandey (1984). Refers in her study “A study of cognitive process and motivational patterns of deprive students in relation their achievement” find out that, regarding the academic anxiety,
**Result:** The finding indicates that high and low deprived boys do not differ significantly in this motivation aspect. On the other hand, high-deprived girls excel low deprived ones in academic anxiety. The mean difference between the high and low deprived boys is less and it shows low academic anxiety among them, probably the high-deprived boys feel that their school education will not be given them the failure security. Their failure orientation might not have enabled them to be used brotherhood about their academic anxiety of a level different from that of the low deprived boys. The low deprived boys on the other hand, having high cognitive abilities and sufficient encouragement, can adjust themselves according to the situation and this adjustment with high aspiration level may low the academic anxiety. Among high deprived girls may be that in the deficient families, women education is not being given very much importance, parents thinking about women education is no much encourage in the deficient families due to the economic constraints and social norms.

**Title:** “Academic Anxiety among Rural and Urban Children and its implications”.

**Yagnic and Gunthey (1999).** Studied “Academic Anxiety among Rural and Urban Children and its implications” and showed that Indian culture was paying more attention to child’s academic achievement. Child as an academic pressure perceived this tension. The multi-dimensional growth of the child’s brain was restricted due to this pressure only few of the dimensions are properly canalized and rest of the dimension is left intact. In the present investigation an attempt was made to compare the academic anxiety level of
rural and urban children. The group of Govt. school (urban), private school (urban) and Govt. school (rural) were taken. 65 male students of class V and VI standard were taken in each group. Academic anxiety scale (Singh & Gupta, 1971) and anxiety scale (Sinha, 1974) were used to measure anxiety level of children and parents respectively. Significant difference was reported among all the groups except Government and private schools of urban set up. Similarly parents of the group differ significantly from each other.

**Title:** “A Study of relation among Anxiety and Neuroticism in college student.”

**Mrs. Minaxi Jaiswal (1974)** find out the relation among Anxiety and Neuroticism in college students of Arts, commerce and science faculties.

**Sample:** A sample of 300 boys and girls was from five college of Ahmedabad city. 100 students from each of the three faculties were selected viz; Arts, commerce and science.

**Tools used:** Taylor’s Manifest Anxiety scale and Eysenck’s Personality Inventory were administered.

**Results:** The results obtained in the present study show-

1) There is no relationship between Anxiety and Neuroticism.

2) There is no significant difference between Anxiety and Neuroticism among female and male students of Arts, Commerce and Science faculties.

**Title:** “The Impact of college hostel environment on Adjustment and Test Anxiety.”
**H.C. Suman (1999)** investigation attempted to compare the college hostel and non-college hostel students on adjustment and test anxiety.

**Sample and Tools used:** The Adjustment Inventory and Test Anxiety scale were administered to 100 hostel students and 103 non-hostellers.

**Results:** The main findings of the study reveals that hostellers exhibited home, emotional and overall adjustments significantly better than those non-hostellers whereas the latter showed them better socially adjusted than the former. However, test anxiety level of hostellers was found to be higher than that of non-hostellers. It has been observed that hostel girls showed them as less socially adjusted than non-hostellers, but surprisingly overall adjustment was down better in hosteller's boys than non-hostellers. Hostel girls perceived their home adjustment better than hostel boys. It is further observed that non-hosteller boys and girls differences in some of their adjustment are better.

**2.2.4 Review related to adjustment:**

**2.2.4.1 International**

**Title:** “Relations between academic aptitude and psychosocial adjustment in gifted program students.”

**Oram, Guy-D; et al, (1995)** Investigated the effect of high academic aptitude on psychosocial adjustment among 151 2nd graders participating in public school gifted programs, 264 5th-11th graders attending a university summer enrichment program, and 60 girls aged 12-27 yrs old.
**Tools use:** Ss completed the Self-Perception Profile, Child Behavior Checklist, Wechsler Intelligence Scale for Children--Revised (WISC--R), Reynolds Anxiety Scale, and/or the California Personality Inventory.

**Results:** Results of hierarchical multiple regression analyses provided little evidence for a relation between aptitude scores and adjustment within this restricted range.

**Title:** “Psycho-social and cultural adjustment among international students at the University of Wollongong.”

Sadrossadat,-Seyed-Jalal, (1995) investigates psycho-social and cultural adjustment of 384 international students who have been randomly selected from 10 nationality groups at Wollongong University in the second session, 1993.

**Tools use:** using a questionnaire as a self-report instrument. The survey instrument includes 49 items thought to be important in the adjustment process.

**Results:** Analysis of variance revealed that the adjustment of students is significantly different on a number of variables including religion, nationality, gender, language, age, marital status, having children, duration in Australia, having opportunity to choose the host country, field of study, level of study, having a spouse who is a student, prior place of living, completed a course in the host country and whether the home country has been visited during study. Using multiple regression analysis, the following variables were found to
account for most variation in measured adjustment, religion (37%), nationality (29%), gender (11%) and native language (10%)

**Title:** “Psychological maladjustment and academic achievement: A cross-cultural study of Japanese, Chinese, and American high school students.”

**Crystal,-David-S; et-al, (1994)** Studied psychological maladjustment and its relation to academic achievement, parental expectations, and parental satisfaction in a cross-national sample of 1,386 American, 1,633 Chinese, and 1,247 Japanese 11th-grade students. Five indices of maladjustment included measures of stress, depressed mood, academic anxiety, aggression, and somatic complaints.

**Results:** Asian Ss reported higher levels of parental expectation and lower levels of parental satisfaction concerning academic achievement than their American peers. Nevertheless, Japanese Ss reported less stress, depressed mood, aggression, academic anxiety, and fewer somatic complaints than did American Ss. Chinese Ss reported less stress, academic anxiety, and aggressive feelings than Americans, but did report higher frequencies of depressed mood and somatic complaints. In the US, high achievers indicated more frequent feelings of stress than did low achievers.

**Title:** Making the transition to college: A multivariate model of student adjustment. (Social adjustment, stress, anxiety, emotional adjustment).

Sample: a sample of 118 incoming first year students.

Results: Results indicated that the data represented two distinct and unrelated latent constructs of social-emotional and academic adjustment, the former predicted by state anxiety and social integration, and the latter by enthusiastic commitment. The model predicted adjustment across gender, race, and level of pre-college social-emotional adjustment. Pre-college social-emotional adjustment predicted social-emotional adjustment measured subsequently during the first year of college, and fourth year social-emotional, global, and academic adjustment were predicted by latent first year adjustment factors. Implications for enhancing the college transition process are discussed.

Title: Relationship between levels of giftedness and psychosocial adjustment.

Norman,-Antony-D; et al, (1999) Examined the Relationship between levels of giftedness and psychosocial adjustment.

Sample: two groups of gifted students, highly (N = 74) and moderately (N = 163) gifted

Tools use: a number of scales including self-concept, emotional autonomy, and anxiety.

Results: the results did not support the hypotheses that highly gifted students would be more likely to display lower self-concepts and more adjustment problems than the moderately gifted group. These findings are examined in light of past research on differences in highly and moderately gifted students.
Title: “The adjustment of overseas students at a tertiary institution in New Zealand.”

Beaver, Bob; Tuck, Bryan, (1998) Examined the levels of anxiety, academic self-efficacy, and preferred learning strategies of overseas students enrolled in tertiary institutions in New Zealand.

Sample: A questionnaire administered to 205 students (aged 16-53 yrs): 104 Pakeha (New Zealanders of European descent) students with English as a 1st language, and 37 Asian and 13 Polynesian students with English as a 2nd or other language.

Results: Data indicate that the Asian students had more frequent concerns with interactions with lecturers and making friends than the Pakeha students, and rated themselves as less competent in a number of study skills. The Pakeha students favored being taught within streamed groups and classes more than the other 2 ethnic groups. The differences between the responses of males and females were of a lesser magnitude than the differences between the ethnic groups; however females were more reticent than males about approaching lecturers for help and asking questions of them in class. The patterns of differences between the ethnic groups were interpreted as a function of technical competency in English and cultures of learning. The implications of the findings for instruction and the marketing of education as an export commodity are discussed
Title: “Behavioral, emotional, and academic adjustment in a national probability sample of African American children: Effects of age, gender, and family structure.”

Barbarin, Oscar-A; Soler, Robin-E, (1993) Surveyed the parents of 734 African-American (AFA) boys and 724 AFA girls (aged 4-17 yrs) regarding their children’s academic, behavioral, and socio-emotional adjustment.

Results: Symptoms comprising an agitation syndrome (restlessness, anxiety, and poor concentration) were most frequently reported. Boys were more likely than girls to exhibit adjustment difficulties; boys aged 5-21 yrs were at greatest risk for socio-emotional problems. Children living in single-adult households were less well adjusted than children living with both biological parents, but this effect depended on the child’s age. The beneficial effect of living in a 2-adult household was not found for most family structures that did not include both biological parents. The agitation syndrome attributed to living in a chronically stressful environment could be easily mistaken for and be the reason why AFA boys are so frequently diagnosed with attention deficit hyperactivity disorder (ADHD).

Title: “Gender differences in the relation between stressful life events and adjustment among school-aged children.”

**Results:** In Study 1, anxiety, aggression, submissive withdrawal, and life event questionnaires were completed by 32 female and 31 male Israeli children (aged 9-12.5 yrs). The frequency of life events was associated with increased anxiety and trends toward heightened withdrawal and aggression among boys, but not girls. In Study 2, 80 Israeli mothers of elementary school children (41 girls and 39 boys; aged 6-11 yrs) completed parallel questionnaires regarding their child. As in Study 1, life events were associated among boys, but not girls, with increased anxiety and a trend toward heightened withdrawal. No gender differences arose in the association for aggression.

**Title:** “Differences in the social, emotional, and behavioral adjustment of gifted and regular students in eighth grade.”

**Sayler,-Micheal-F; Brookshire,-William-K,** (1993)

Investigated differences in the social, emotional, and behavioral adjustment of gifted and regular 8th-grade students.

**Sample:** Three groups were identified: (1) 365 gifted students who entered school early or skipped at least one grade K-7, (2) 334 students enrolled in 8th-grade gifted classes, and (3) 323 regular 8th-grade students.

**Results:** Results indicate that accelerated Ss and Ss in gifted classes had better perceptions of their social relationships and emotional development and tended to have fewer serious school behavior problems than regular Ss. Contrary to commonly held beliefs, most Ss who entered school early or skipped elementary grades did not report unusual social isolation or
experienced profound emotional difficulties. They had serious behavioral
problems less frequently than regular Ss.

**Title:** “Attachment to parents, social support expectations, and
socioemotional adjustment during the high school-college transition.”

**Larose,-Simon; Boivin,-Michel,** (1998) Examined individual variations in
adolescents' perceived security to parents, social support expectations, and
socioemotional adjustment during the high school college transition, and
tested whether perceived security to parents predicts changes in support
expectations and socioemotional adjustment across the transition.

**Sample:** 298 Ss (aged 15-20 yrs)

**Results:** Result show that during the transition, the adolescents who had left
their families to attend college experienced improved means of perceived
security, decreased perceptions of social support, and increased feelings of
loneliness and social anxiety. Finally, perceived security to parents at the end
of high school predicts positive changes in expectations of support and
socioemotional adjustment across the transition.

**Title:** “Adjustment of mainland Chinese academics and students to
Singapore.”

**Tsang,-Eric-W-K,** (2001) Studied the adjustment of mainland Chinese
academics and students to life in Singapore.

**Sample:** A survey was conducted on Mainland Chinese academics and 18-33
yr old students in 1 of the 2 universities of Singapore.

**Tools use:**
Results: There were 91 valid responses from the former group and 210 valid responses from the latter. With the exception of prior international experience, the other 6 personal characteristics significantly affected general and/or interaction adjustment for at least 1 of the 2 groups. The results generally confirm the relevance of these factors studied in previous adjustment research. Some contrasts also emerge from comparing the findings of the 2 samples. These contrasts suggest that the role assumed by the sojourner may influence how certain personal characteristics affect adjustment and how adjustment affects performance. A list of questions associated with some of the measured constructs is appended.

Title: “Longitudinal examination of school adjustment for students attending sixth grade in elementary versus middle school settings.”

Underwood,-Stefanie-Staff, (1997) Studied the Longitudinal examination of school adjustment for students attending sixth grade in elementary versus middle school settings.”

Objective: This study attempted to measure the differences in school adjustment for male and female students attending sixth grade in an elementary setting as compared to sixth grade in a middle school setting.


Results: Grade point average was found to significantly decline across Grades 4 through 9 and setting (elementary versus middle). Grade point average was
also found to be significantly higher for females than males. Stanford Achievement Test normal curve equivalent scores were found to be significantly lower for males in the ninth grade than compared to males in the fifth, seventh, and eighth grade. A linear increase across grades in unexcused absences, regardless of the setting, was also found to be significant. Females were found to have significantly higher Self-Report School Adjustment Scale scores at Grade 7, and males were found to have significantly higher Behavior Assessment Scale for Children T-scores on the School Maladjustment Composite at Grade 7. The findings indicated academic and behavioral adjustment decreased over time, especially for males. Females were found to be better adjusted on academic, social-emotional, and behavioral measures of adjustment. It was concluded that students' academic, behavioral, and affective adjustment did not differ significantly when attending sixth grade in an elementary setting as opposed to a middle school setting. Suggestions were made that future school adjustment research focus on variables other than elementary versus middle school setting. Efforts should be made to identify variables that might explain the decrease in school adjustment associated with an increase in grade level.

**Title: “Transition into high school: Psychosocial correlates of adjustment.”**

**Halstead, Mary-Kay,** (1996) Adolescents' academic and personal adjustment to the transition into high school was examined in a sample of 384 ninth graders.
**Results:** Findings suggested that coping style is a significant predictor of adjustment during the transition into high school. Avoidance coping predicted decline in GPA, decline in academic/social self-concept, and increased absenteeism. Problem-focused coping was associated with decreased anxiety. However, coping strategies involving social support were unrelated to academic or personal adjustment. Racial differences also emerged. Compared to white students, black students appraised stressors associated with the transition into high school as more 'changeable' and they employed a greater number of coping strategies. However, black students' academic adjustment (GPA and Absenteeism) was adversely affected by increased peer support. Classroom setting also had an impact on adolescents' adjustment. Compared to other students, those enrolled in honors classes had the highest GPAs and the highest academic self-concept. However, honors students also manifested t

**Title:** “Stressful life events and psychological adjustment among female college students.”

**Frazier, -Patricia-A; Schauben,-Laura-J, (1994)** Investigated the kind of stressors experienced by female college students and the relationship between stress and adjustment. 282 female Ss (aged 17-56 yrs)

**Tools use:** 282 female Ss (aged 17-56 yrs) were administered the Psychological Distress Inventory (P. J. Lustman et al, 1984), the Sexual Experiences Survey (M. Koss, 1982), and the Brief Symptom Inventory (L. R. Derogatis and M. S. Spence, 1977).
**Results:** The 5 most frequently named stressors were test pressure, financial problems, being rejected by someone, relationship breakups, and failing a test. 27% of Ss had experienced rape or attempted rape. 20% of Ss had experienced the death of a significant other (e.g., parent, sibling, or friend). Higher amounts of stress were associated with more psychological symptoms and more disrupted beliefs. Asian-American Ss reported higher levels of psychological symptoms and stress compared with European-American Ss.

**Title:** “Zonguldak merkez cocuk yuvasinda bir calisma: Ruhsal uyum olcegi uygulamasi ve personel egitimi. / A study on the psychological adjustment of children and personnel training in an orphanage.”

Zafer,-Atasoy, (1992) Examined the psychological adjustment levels of 149 children (aged 1-4 yrs, 60& male) in 1989 and 171 children (aged 4-14 yrs, 61% male) in 1990 in a new orphanage in Zonguldak, Turkey.

**Tools use:** The Psychological Adjustment Scale asked caregivers to rate the presence of behavioral problems such as inattention, obsessive cleanliness, stuttering, nail biting, euresis, school problems, as well as neurotic symptoms such as timidity, jealousy, temper, anxiety, and lack of self-confidence.

**Results:** The proportion of children who exhibited at least 1 adjustment problem was 80% and 67%, in 1989 and 1990 groups, respectively. During the testing, educational sessions were conducted with the orphanage personnel addressing their concerns on the children:s behavior problems and low academic achievement. Personnel reported fewer behavioral problems and
better coping strategies after the sessions. Social, emotional, and behavioral adjustment of accelerated students, students in gifted classes, and

**Title:** “The academic, social and emotional adjustment of African-American students at a predominantly Black and three predominantly White universities.”

**Mosley,-Deborah-Lynn,** (1998) studied the academic, social and emotional adjustment of African-American students at a predominantly Black and three predominantly White universities.

**Purpose of the study:** The purpose was to determine the nature of the adjustment African-American students made to either college setting based on the racial makeup of the high school from which they graduated. The effects self-concept and achievement motivation have on adjustment were also explored.

**Sample:** A total of 300 students, 150 from each college setting, were divided into three groups. They included: (1) students who graduated from predominately Black high schools; (2) students who graduated from integrated high schools and; (3) students who graduated from predominately White high schools.

**Tools use:** The subjects were asked to complete three questionnaires. Measures included: (1) Student Adaptation to College Questionnaire; (2) Tennessee Self Concept Scale and; (3) Mehrabian Achievement Scale.

**Results:** The results of this study did not confirm the overall adjustment hypothesis that prior racial experience is directly related to adjustment to
college. The findings did confirm, however, that self-concept and achievement motivation have varying effects on students' adjustment, specifically for the emotional and academic adjustment. The findings raise questions about the extent to which prior racial experience, self-concept, and achievement motivation might account for the effects of adjustment to college. Placement issues and recruitment practices are also of concern.

2.2.4.2 National

Title: “Intelligence and Adjustment in relation to academic achievement of high school students.”

Anju Chopra, (1986) studied the Intelligence and Adjustment in relation to academic achievement of high school students.

Objective: The main objective of the study was (1) To study relationship between the intelligence and academic achievement; (2) To study the relationship between the adjustment and academic achievement; (3) To compare the level of adjustment of high low intelligence.

Sample: The sample consisted of 100 girls of different public schools of Chandigarh studying in 9th class.

Results: The main conclusions are: (1) the student of government and private school do not differ significantly on variable adjustment, academic achievement and intelligence. (2) Boys and girls going to government school as well as private school do not differ significantly on the variable adjustment, academic achievement and intelligence. (3) The children who are well adjustment in home and health areas are also found to be well adjustment in
social and emotional areas; (4) Intelligence to a large extent determines the academic achievement of the students; (5) In the present investigation academic achievement and intelligence does not seem to be having any positive bearing on adjustment of the students; (6) High achievers have shown better adjustment; (7) Less intelligent students are found to be better adjusted as compared to more intelligent students.

**Title:** “Some Correlates of Adjustment Among Adolescents.”

**Rita Agrawal and Ranjit Powar, (1983)** were examined several variables to determine their relationship to adjustment.

**Sample:** 183 school students comprised the sample (mean Age = 15.14 years).

**Tools used:** The Adjustment Inventory (Mittal, 1974), Standard Progressive Matrices (Raven, 1960), Test of Creativity-Figural Form (Torrance, 1974) and Self Analysis Form (Sinha, 1966).

**Results:** Adjustment score were found to correlate significantly with intelligence ($r=.22,p<.01$), creativity ($r=.24,p<.01$), socio-economic status ($r=.17,p<.05$) and anxiety ($r=-.44,p<.01$). These correlations suggest that the high scorer on adjustment tends to be creative and intelligent, characterized by a high positive weight for social status to be relaxed, composed and satisfied. The zero order matrix was further summarized by multiple regression analysis. Creativity, intelligence and anxiety are able to account for 21% of the total variance. The addition of SES leads to only a marginal increase in the percentage of variance accounted for, despite the fact that the weight assigned to SES is the largest. It may therefore be concluded that a low score on
adjustment is not related to SES per se. Rather it is the anxiety generated by low SES, which accounts for the maladjustment. Of the two cognitive variables intelligence and creativity, the former appears to be a more important predictor with creativity playing a very minor role.

**Title: “Certain psychological factors of adjustment influencing achievement among school children.”**


**Aims:** The present study aims to investigate whether the high and low achievers differ on the following psychological factors of adjustment like (a) Neuroticism; (b) Guilt feelings; (c) Inferiority feelings; (d) Personal worth; (e) Attitude to life and (f) Order of birth.

**Hypotheses:**
1) The high achievers tend to score low on neuroticism, guilt feelings, inferiority feelings, that the low-achievers.

2) The high achievers would exhibit a high personal worth and positive attitude towards life more than the low achievers.

3) The high and low achievers tend to differ with respect to their order of birth.

**Sample:** the sample consisted of 35 high achievers and 40 low achievers of the different sections of class viii of the Hyderabad public school.

**Scale used:** The adjustment of the high and low achievers was measured by the psychological adjustment inventory developed and standardized by prof. N.Y.Reddy (1966) with certain modifications.
**Results:** The results obtained suggest that high achievers are better adjusted. They are low on neuroticism, guilt and inferiority feelings, and moderate in evaluation of their personal worth. The low achievers are low on psychological adjustment. They have higher scores on neuroticism, guilt and inferiority feelings. They over estimated their personal worth. In spite of that, their low performance indicates that they have problems of adjustment both psychological and social.

**Title:** “Adjustment level among graduate and post-graduate student of different faculties: A comparative study.”

**Arvind Dungrani and N.H.Kamdar, (2000)** studied the Adjustment level among graduate and post-graduate student of different faculties: A comparative study.

**Sample:** A sample of 240 college students studying in the various Arts, Science and commerce colleges of Bhavnagar city.

**Tools used:** Adjustment Inventory by Tiwari, (1985).

**Results:** The results suggest that there is a significant means difference between the sex and level of study. None other variable found significant.

**Title:** “Adjustment problems of female Adolescents belonging to realistic and Non-realistic zone of aspiration level.”

**Anjum Naseer Quereshi and Mahesh Bhargava, (1989)** investigation tries to study the Adjustment problems of adolescent girls belonging to realistic and non-realistic zones of aspiration level.
Hypotheses: Both the groups belonging to the realistic and non-realistic zones of aspiration level differ on various adjustment problems.

Sample: The sample of the present study consisted of 100 undergraduate adolescent girls of Firozabad city belonging to the age group from 17 to 22 years. In the realistic group 56 and non-realistic group 44 adolescent girls were included in the study.

Tools used: 1) Level of Aspiration measure by Shah and Bhargava (1987)

   2) Adjustment Inventory for college students by Sinha and Singh (1971)

Results: Significant differences were found in four-adjustment area – health, emotional, social, and educational between both groups under study.

Title: “A study of parent child relationship of the Adolescent in relation to Adjustment and Intelligence.”

Smt. Sharda Bhushan, (1976-77)

Objective: The objective were (1) To study the parent child relationship; (2) to study adjustment in different areas at different levels; (3) to study interrelationship between parent child relationship, adjustment and intelligence; and (4) to study intelligence at different levels.

Sample: The sample consisted of 150 students from three different intermediate colleges of Agra, Comparison 50 student each of Arts, science and commerce faculties.

Results: The main conclusion are majority of the students perceive their parents as accepting to them. They are well adjusted students do not differ on
different adjustment areas whereas they considerably differ at different intellectual levels. Average intelligent group perceive his parents as highly accepting and least rejecting. The worst effected group having low intelligence level expressing unsatisfactory family relationship. Students high on the areas of emotional, educational adjustment seem to perceive their parents as accepting.

**Title:** “The psychological needs of adolescent Girls and their bearing on Individual Adjustment.”

A.Nanda, *(1974)* studied the psychological needs of adolescent Girls and their bearing on Individual Adjustment.

**Results:** The study revealed that a great deal of insecurity among the girls prevailed as a results of worry and anxiety about future and success both in the academic and social life of the school. He found that these girls who were not able to get the affection on their parents and who did not get recognition from any quarter experienced feelings of insecurity. The study also revealed that the intellectual awaking in girls made them have a philosophy of life. Most of the girls were not given any scientific information about sex which resulted in worry and emotion stress. He further concluded that a number of girls had difficulties in adjustment due to inferiority feelings and wrong attitudes of their parents about their success and failure in school.

**Title:** “Study of Intelligence, Adjustment and Values of High and Low Achievers.”
Rekha Agarwal, (1973) Studied of Intelligence, Adjustment and Values of High and Low Achievers.

**Objective:** The main objective were: (1) To find out the difference in intelligence of high and low achievers; (2) To find out the differences in adjustment of high and low achievers; (3) to find out the differences in values of high and low achievers; (4) To find out the relation between intelligence, adjustment and values of high and low achievers.

**Results:** It has been found that high achievers are better adjusted than the low achievers. It has been found that the both high achievers as well as low achievers are better adjusted in social situation and high achievers as well as low achievers are equally adjusted as far as health and emotional adjustment is concerned.

**Title:** “The Adjustment problems of Adolescents”

A.Kakkar, (1964) studied the Adjustment problems of Adolescent boys and girls of xi class.

**Results:** The results showed that 43 percent cases had serious adjustment problems; the school areas posses the greatest number of problems, while in home area the adolescents were over dependent on parents, girls accepted parental control, but boys grumbled about it, a feeling of insecurity in the home mirrored in their attitude towards school situations. Adolescents were deeply concerned about their health,. In social areas problems like how to be popular how to get along with others, worried adolescents. He further concluded the adjustment and personality problems increased with an
increase in the level of intelligence. Adjustment problems were seemed to have adversely affected the learning efficiency.

Title: “A Study on Adjustment problems and their relationship of socio-economic status and Academic Achievement.”


Objective: 1) To identify the adjustment problems of boy students; 2) To study out relationship between socio-economic status and adjustment; 3) To find out relationship between academic achievement and adjustment problems.

Sample: The sample consisted of 209 boy students in the age groups 17-22 years studying in degree classes in R.E.I. and R.B.S. College Agra.

Results; on the basis of the finding discussed previously it may be concluded there is no significant relationship between adjustment and socio-economic status and the academic achievement of the boys.

Title: “A study of the problems of school adjustment and developing an adjustment inventory”

N.M.Bhagia, (1966)

Results: The results found that the girls exceed boys significantly in their adjustment to general environment and organizational aspect of the school. Another finding of study was that rural school pupils exceed urban school pupils significantly in adjustment to their teacher, mates and self. He also concluded that private school pupil is significantly better than government school pupils in their adjustment to the teachers.