CHAPTER-II

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

Once a topic has been decided upon, a researcher has to be up-to-date his information about studies related to his own problem already made by others. The survey of the related literature is a crucial aspect of the planning of the study and the time spend on such a survey fetches the research a rich dividend. For any worthwhile study the researcher needs an adequate familiarity with the library and its many resources.

A careful review of the research journals, books, dissertations, theses and other sources of information on the problem to be investigated is one of the important steps in the planning of any research study.

A survey of related literature not only forms one of the early chapters of the dissertation, but also serves other useful purposes. According to Best (1995), “A brief summary of the previous research and the writings of recognized experts provide evidence that the researcher is familiar with already known and with what is still unknown and untested. Since upon past knowledge these steps help to eliminate the duplication of what has been done and provide useful hypothesis and helpful suggestions for significant investigation”. The Literature in any field form the foundation upon which all future works will be built.

According to Cater V. Good “The keys to the vast store house of published literature may open doors to sources of significant problem and explanatory hypotheses and provide helpful orientation for definition of the problem background for selection of the procedure and comparative data for interpretation of results”. (J. C. Aggarwal, 1966, p.88)

All available literature concerning the problem at hand must necessarily be surveyed and examined before a definition of the research problem is given. The researcher must be well conversant with relevant theories in the field, reports and records and also all other relevant literature. He must spend sufficient time in
reviewing of research already undertaken on related problem. The investigator has classified studies conducted in India and in Abroad.

2.2 STUDIES IN INDIA

Dorothy Chin and Velma Kameoka (2002) conducted a study on the Psychosocial and Contextual Predictors of Educational and Occupational Self-Efficacy among Hispanic Inner-City Adolescents.

This study investigated psychosocial and contextual predictors of self-efficacy beliefs about educational and occupational attainment among Hispanic adolescents living in the inner city. Participants were 107 adolescents ages 10 to 13 (mean=11.3 years) recruited from two inner-city elementary schools in Los Angeles via active parental and student consent. Three psychosocial predictors (previous performance; vicarious experience; social persuasion), based on Bandura’s theory of self-efficacy, and two contextual predictors (neighborhood resources and neighborhood safety) were hypothesized to predict self-efficacy beliefs. Results showed that social persuasion most strongly predicted both educational and occupational expectations. Previous academic performance, represented by reading score, was related to educational but not occupational expectations. Vicarious experience in the form of family attainment did not predict educational nor occupational expectations. Contextual predictors were also unrelated to both domains of expectations. Results suggest that self-efficacy beliefs of adolescents growing up in inner-city environments can be influenced by the messages they receive from significant others as well as by their prior experiences.

Jane Shore (2002) conducted a study on the Dissertation Summary: An Investigation of Multiple Intelligences and Self-Efficacy in the University English as a Foreign Language Classroom.

This study examined the influence of multiple intelligences in the University English as a Foreign Language (EFL) classroom on self-efficacy in reading, writing, and speaking. The study’s aim was to (1) describe the university EFL classroom through the eyes of the teacher and the eyes of the student, (2) find correlations between student multiple intelligence strengths and self-efficacy, (3) investigate the
correlation between the use of intelligences in lessons, student strength in the corresponding intelligence and self-efficacy in reading, writing or speaking and finally, (4) investigate the relationship between student culture and intelligences. Findings indicate that 90% of the teachers who participated in the study tend to include mathematical logical, linguistic and interpersonal intelligences in their lessons more than others in these university classrooms. Students reported the greatest strengths in and preferences for mathematical-logical, visual-spatial, intrapersonal and interpersonal intelligences. Correlation analysis revealed that highly significant positive correlations were found between reading self-efficacy and mathematical-logical and interpersonal intelligences. In addition, strong positive correlations were found between writing self-efficacy and interpersonal, intrapersonal, bodily-kinesthetic and linguistic intelligences. Finally, speaking self-efficacy was found to be positively correlated with interpersonal and visual-spatial intelligence.

Kallenbach, Silja, Viens and Julie (2002) conducted a study on the Open to Interpretation: Multiple Intelligences Theory in Adult Literacy Education.

The Adult Multiple Intelligences Study was the first systematic effort related to multiple intelligences (MI) theory in adult literacy education. The study's findings regarding MI theory served as the foundation for a study of MI theory's implications for adult literacy practice, policy, and research. The study was conducted across 10 different adult literacy contexts with different teacher and learner populations. Data were collected through on-site observations, qualitative interviews, and teacher journals. Key findings were as follows: (1) MI efforts can result in high levels of adult learner engagement; (2) choice-based activities increased students' confidence about learning; and (3) connecting MI reflections activities to broader learning goals is important. The following were among the study's implications: (1) teachers must understand MI theory, be able to access it, and be willing to implement diverse learning activities based on it; (2) programs must express institutional support for teachers to engage in and sustain MI-based practices; (3) to reflect MI theory, a policy and accountability system would move beyond current federal funding criteria; (4) the outcome of improved self-efficacy or met cognitive skills could be considered a secondary criterion of an accountability system; and (5) the impact of MI-based interventions on students' self-efficacy and teacher change merit further study.
Ajith Raj and Sebastian (2005) conducted a study on the Learning Styles and Multiple Intelligence of B.Ed students.

The purpose of the study was to assess the learning styles and Multiple Intelligence of B.Ed students. The investigator used the tools viz., general data sheet, learning styles Inventory and Multiple Intelligence Inventory. It was administered through the survey method to the population sample of 300 students from six colleges out of 23 B.Ed colleges including one university B. Ed centre at Thiruvananthapuram district. It is inferred from the study that there is significant difference in linguistic and musical learning styles of B.Ed students in terms of age. They also found that there is significant difference in terms of social status with respect to linguistic, logical and total learning of B.Ed students.

Abilash and Annaraja (2006) conducted a study on the Awareness on Biotechnology and Multiple Intelligence of the college students.

The purpose of the study was to find out relationship between awareness on biotechnology and Multiple Intelligence of the college students. Survey method of research was conducted with a stratified random sampling technique for the samples of 300 college students from 3 colleges among them 103 are males and 197 are females. The survey found that there was no significant difference between awareness on biotechnology and Multiple Intelligence of the college students.

Brand, Susan Trostle (2006) conducted a study on the Facilitating emergent literacy skills: a literature-based, multiple intelligence approach. (Dynamic Indicators of Basic Early Literacy Skills)

Educators have continually sought to achieve a balance between a phonics-based, code-emphasis program and a more holistic, meaning-based approach to emergent literacy instruction. This article describes an integrated phonics and literature-based approach to developing children's emergent literacy skills. These skills included alphabet knowledge, phonemic awareness, phonics and nonsense word competence, and language usage. Using Howard Gardner's (1983) theory of multiple intelligence, the program's literacy activities addressed children's interpersonal, intrapersonal, logical-mathematical, bodily-kinesthetic, linguistic,
musical, naturalistic, and visual-spatial abilities and interests. Stories from children's trade books were told in a variety of storytelling methods, such as draw talk, character imagery, felt board, group role-play, and chant. These approaches were matched to children's interests and multiple intelligence areas. All of the storytelling sessions were followed by related activities that incorporated the children's emergent literacy skills. Results from this study of 13 inner-city children indicated that this integrated; seven-week program resulted in significant gains in phonemic awareness, nonsense word competence, and word usage fluency. The Dynamic Indicators of Basic Early Literacy Skills (DIBELS) was used as a pretest and a posttest to assess children's initial and later competence on the basic emergent literacy skills.

Brian Hoffman and Brian Frost (2006) conducted a study on the multiple intelligences of transformational leaders: an empirical examination.

To examine the impact of emotional, social, and cognitive intelligences on the dimensions of transformational leadership using both paper-and-pencil measures and assessment center dimensions. Multiple measurement methodologies were used to conceptualize emotional, cognitive, and social intelligence. Subordinate ratings of three dimensions of transformational leadership were used as the criteria. Correlation analysis and a series of multiple hierarchical regressions were used to determine the relationship between the multiple intelligences and three dimensions of transformational leadership. Results indicate that a multiple intelligences framework is a useful approach to predict transformational leadership. Correlation analyses and multiple regression results indicated that the multiple intelligence frameworks explained between 10 and 25 percent of the variance in perceptions of transformational leadership and that assessment center dimensions explained additional variance beyond paper-and-pencil measures in transformational leadership. This paper extends previous research by examining the impact of cognitive, emotional, and social intelligences on transformational leadership using multiple measurement methodologies. The results of this study provide a useful framework for practitioners interested in assessing precursors to transformational leadership, with a focus on assessment centers as a useful tool for predicting transformational leadership.
Thomas Alexander and Annaraja (2006) conducted a study on the role of Multiple Intelligence on learning of problem students.

The purpose of the study was to find out the role of Multiple Intelligence on learning of problem students. It studied who are problem students, what are the causes of problem behaviour, what are Multiple Intelligence and its types and Impact of MI on learning. It also dealt with brain based learning, problem students and student-centered approach in learning. This study gave the following suggestions such as student-active learning can be conducted to improve their understanding of contents. Brain based learning must be given importance to the problem students. They also suggested that Multiple Intelligence based pedagogy might be followed.


This study provides a viewpoint of applying Dr. Howard Gardner’s Theory of Multiple Intelligences namely, verbal/linguistic, logico-mathematical, musical, body/kinesthetic, visual/spatial, interpersonal, intrapersonal and naturalist intelligence in evaluating a resource by a student. This process can help a great deal in overall development of a child’s/students personality. The approach used here is the practical application of Multiple Intelligence Theory in evaluating a resource by students of K-2 students. The student selects a particular resource and checks whether all the above-mentioned intelligences developing activities are available in the resource. If at least 4-5 such activities are available, the student can take home the resource and share it with his/her parents. Then an effort is made to collect the feedback from parents as to how the child and the parent utilized the resources effectively and what was the learning outcome. Based on the feedback, the child can be reinforced to choose the right resources.

Since this exercise involves both children and parents and is structured in approach, there has been an observation that they look forward for the library periods in the school quite enthusiastically. The author is of the opinion that Multiple Intelligence Theory helps in developing skills to analyze a resource logically & use it effectively to increase the success level of the students.
Gurpreet Kaur and Sudha Chhikara (2008) conducted a study on the Assessment of Multiple Intelligence among Young Adolescents (12-14 Years).

The present study was conducted with the aim of assessing the multiple intelligence levels among young adolescents and to study the sex differences in the levels. For this, respondents from rural area of Hisar district of Haryana state were selected. The total sample consisted of 200 respondents, in the age group of 12-14 years. The results of the investigation revealed that majority of the respondents were found to be having average levels of intelligence for all the nine components of multiple intelligence. Significant differences were observed in the mean scores of boys and girls for linguistic (z=2.44), logical (5.22), musical (4.45) and bodily kinesthetic (3.03) intelligences. It was found that in case of linguistic and musical intelligence girls took slight lead whereas boys were ahead of girls in logical and bodily kinesthetic intelligence.


A sample of 648 Lebanese and 252 Indian students estimated their multiple intelligences based on Gardner’s conceptualization. Males rated the body kinesthetic component higher than females while females estimated their verbal and intrapersonal intelligence higher than males. Differences appeared between Indian and Lebanese samples on the cognitive components, namely, verbal, spatial and logical abilities. Using the educational level of the parent as a covariate, significant differences were found between the Indian and Lebanese sample on verbal, spatial, and logical abilities. Interaction effects of gender and nationality were observed on the logical component. While Lebanese males rated the logical component higher than the Lebanese females, Indian females rated the logical component higher than their male counterparts but lower than the male and female Lebanese Students.

This research aimed at fusing the multiple intelligences theories with the teaching of one chosen Course: color theory. Two groups of students from a polytechnic university in central Taiwan were chosen as research subjects, and an experiment was designed and performed to explore the effects of Multiple Intelligences teaching on the experimental group, versus that of traditional teaching on the Control group. Students from the experimental group performed significantly better than students in the Control group on an actual hands-on design project assignment.


This literature review will investigate the instructional strategy of differentiated instruction and how Howard Gardner's theory of multiple intelligences (MI) can be used as a method to differentiate instruction. The MI theory explains how every person perceives the world through each of their intelligences. Specifically, this review will draw upon the research from 1983-2011 regarding using the MI theory as a way to differentiate instruction, resulting in greater student achievement in the elementary grades K-6. In the end, using multiple intelligences to differentiate instruction will assist teachers to accommodate the learning needs of all students.


The study of individual and group behavior within the sporting context has been a varied and helpful attempt. In studying behavior, the sport context allows for a somewhat structured and controlled setting without the need of a laboratory. In attempts to explain and predict phenomena in sport, a popular area of research for the study of both athletes and coaches has been focused on various personal attributes. One attribute that has been found in many settings to influence behavior is self-efficacy. It will be helpful to understand for coaches the importance of sport coaching and self-efficacy in sport. This empirical review literature argue self-efficacy theory,
measurement of self-efficacy, research on athletes, teams and coaches and collective efficacy research on sport.

**Shashi Shukla (2014) Teaching Competency, Professional Commitment and Job Satisfaction-A Study of Primary School Teachers.**

Education leads to change...a change towards growth, a change in thinking and a change in positive direction. It’s the key to human progress and teacher plays the most crucial role in the system of education. The teacher is regarded as the foundation on which the stability of the educational system as well the nation rests. The commitment and competency of teacher is considered to be associated with his satisfaction with the job, attitude towards the profession etc.

**2.3 STUDIES IN ABROAD**

**Kito (1999) conducted a study on teacher self-efficacy in new nurse educators at the Medical College of Georgia.**

The purpose of this study was to determine the variables that influenced teacher self-efficacy in faculty with five or fewer years of teaching experience. Specifically, the relationship between formal educational courses and teacher self-efficacy in the teaching domains of course preparation, instructor behavior, evaluation and examination, and clinical teaching were examined. Three Hundred and forty-six new nurse educators took part in the research. Findings showed that the new nurse educators in this study had a strong sense of teacher self-efficacy. Analyses indicated that formal education courses, teaching experience in nursing, and other teaching experience influenced the level of teacher self-efficacy. This study has implications for the mentoring of new faculty in the teaching role.

**Adamus and Gregory Stanley (2000) conducted a case study on the effects of exposure to Multiple Intelligence theory on high school students.**

This qualitative case study describes how high school students exposed to the Multiple Intelligence theory altered their perceptions of reality as a result. Six II graders, 3 boys and 3 girls, were randomly selected to serve as participants in 3 weeklong studies. The participants first received instruction in the Multiple
Intelligence strengths and weaknesses. They were asked how their exposure to theory affected them and changed their perceptions. The results showed that the theory made sense to the participants, they were able to recognize and tolerate others Multiple Intelligence profiles, they were able to evaluate their teachers’ and school accommodation of the theory, they used the theory to heighten relations with friends and family and to evaluate their chosen career pathways, and they saw no differences in how each gender interpreted the theory.

**Dinter, Lynda (2000) conducted a study on the relationship between self-efficacy and lifestyle patterns at the University of Texas.**

The author examined lifestyle patterns that related to the feeling of self-efficacy. One hundred and eighty-five college students completed the Basic Adlerian Scales for Interpersonal Success-Adult Inventory (Kern et.al., 1993) and the General Self-Efficacy subscale of the Self-Efficacy Scale (Sherer et.al., 1982)

Students with senses of belonging and social interest and strong desires to strive for perfection exhibited higher general self-efficacy than those without those characteristics. Students with strong senses of belonging and social interest and weak to moderate desires for recognition also exhibited higher self-efficacy than those not described by those characteristics. This study provided further construct validation of lifestyle personality traits based on the theory of individual psychology and an examination of how social interest could positively influence perfectionism.

**Malm and Nelda Weaver (2001) conducted a study on the distribution of Gardner’s Multiple Intelligence among students and faculty in associate degree career programmes (Howard Gardner).**

The purpose of this study was to assess the distribution of Gardner’s Multiple Intelligence among students and faculty in associate degree, college credit career / occupations programmes at a community college; to determine the difference between the Multiple Intelligence profile of the students and faculty in various career programmes; and to assess and compare the distribution of Multiple Intelligence among college credit students not enrolled in the selected programmes with those enrolled in the programmes. The sample consisted of 246 students and faculty
selected from classes enrolled in each of the identified college credit, career / occupational programmes at Seminole community college in the Fall term, 2000. Additionally, 126 students in general psychology classes provide a comparison group. The participants completed the Multiple Intelligence Development Assessment Scale (MIDAS). This self-reported, 119 questions, Likert-scale instrument provided data for statistical analysis. The data revealed that the subjects rated themselves highest in interpersonal intelligence and in intrapersonal intelligence and lowest in musical and naturalistic intelligence. The data indicated patterns within each of the 14 students study groups, the presence of all the intelligences in every group, and even distribution of the development of the Multiple Intelligence in this population. The faculty in each of the groups generally shared the high and low group scores with their students. The data indicated that there are statistically significant differences between the Multiple Intelligence of the groups. The comparison group reported higher scores in interpersonal intelligence and in intrapersonal intelligence and lower scores in naturalistic intelligence and kinesthetic intelligence.

Arnold and Emory Dwain (2002) conducted a study on the relationship between implementing the theory of Multiple Intelligence and fifth graders attitudes toward school. (Howard Gardner)

The purpose of this study was to determine if a relationship exists between implementing the theory of Multiple Intelligence and the attitudes of fifth graders towards school. Surveys were administered to students at 15 elementary schools. Data were collected from five schools identified as implementing Multiple Intelligence theory, five schools identified as partially implementing Multiple Intelligence theory and five schools identified as non-implementing Multiple Intelligence theory in education planning. The study employed quantitative data, and descriptive analysis was performed. Findings indicated that there were no significant differences in student attitudes towards school among fifth graders attending schools implementing Multiple Intelligence theory, fifth graders attending schools partially implementing Multiple Intelligence theory, and fifth graders attending schools not implementing Multiple Intelligence theory. There were no gender related differences found. All 15 schools participating in the study could be characterized as institutions having good academic records, community support and a dedicated faculty.
Harsfied, Michael Kirk (2003) conducted a study on the internal dynamics of transformational leadership: effects of spirituality, emotional intelligence, and self-efficacy at the Regent University.

Transformational leadership had emerged as one of the dominant leadership paradigms. Transformational leadership is operationalized through the four 'I's - idealized influence, inspirational motivation, intellectual stimulation and individualized consideration. This research widened the study of transformational leadership beyond the four ‘I’s to determine the underlying internal driving forces at work in the transformational leader. The effect that three predictor variables—spirituality, emotional-intelligence, and self-efficacy—had on transformational leadership, was measured using empirical data gathered from one hundred and twenty-four leaders in a large U.S. corporation.

Analyses of the data showed emotional intelligence to be the strongest predictor variable followed by self-efficacy and then spirituality. The praxis of leadership was also discussed.

Bish, Marion Ruth (2004) conducted a study on the impact of teacher pupil control ideology on the development of middle school student self-efficacy at the University of North Carolina.

The researcher examined teacher pupil control ideology on a humanistic to custodial continuum and student self-efficacy in middle grades language arts classrooms. Twenty-seven middle grades language arts teachers completed the pupil Control Ideology Form. Using the child Self-Efficacy Scale, the researcher then surveyed twice over a twelve-week span, eight hundred middle grades students drawn from the classrooms of participating teachers. The findings indicated no statistically significant difference in student self-efficacy in classrooms of custodial versus humanistic teachers. The students showed no significant difference in change in self-efficacy at the end of the twelve weeks with regard to teacher preferred pupil control ideology. The researcher did find, however, that students showed a drop in self-efficacy scores between the first and second administration of the survey, regardless of the teacher preference for pupil control.

The author’s interest in learning styles and multiple intelligences was sparked by a course she recently took on the subject. She says that, although her program already tracks learners’ learning styles, they do not really do much with multiple intelligences. After taking the course, she developed a better understanding of multiple intelligences, and is interested in developing more of a process for using this information in her ABE/GED and literacy tutoring programs.

Maria Gardine, Mary A. Luszcz and Janet Bryan (2007) conducted a study on The Manipulation and Measurement of Task-specific Memory Self-Efficacy in Younger and Older Adults.

Task-specific memory self-efficacy (TSMSE) was experimentally manipulated through provision of information about task difficulty, to determine its effect on free recall for 56 older (age 63-86) and 56 younger (age 16-25) adults. The implications of using prediction-based measures of TSMSE were addressed. After completing one recall trial of a list of 20 words, half the participants were told a second list comprised more difficult words; the others were told the second list would be similar to the first they had received. Free recall and TSMSE were measured before and after this manipulation. The manipulation reduced TSMSE for participants expecting a harder list of words, but not differently for younger compared with older adults. Younger and older adults’ recall declined at the second recall trial, but there was no difference between those expecting a harder list and those expecting a similar list. Recall was predicted by domain-specific memory self-efficacy as well as a traditional measure of TSMSE. The study demonstrated the malleability of memory self-efficacy, but called into question assertions about its salience as a mediator of older adults’ poorer memory performance.

Gunst and Gary (2004) conducted a study of Multiple Intelligence among teachers in Catholic elementary schools in the Archdiocese of Detroit. (Michigan)

A non-experimental, descriptive research design was used to determine teachers’ perception and use of Multiple Intelligence. The population defined for this
study was school teachers (n = 622). Three surveys were used in this study: the intelligence survey, teaching strategies survey, and a short demographic survey. Catholic elementary school teachers in this study tended to exhibit logical-mathematical, interpersonal, intrapersonal and naturalistic intelligences, while not using verbal-linguistic, visual-spatial, bodily-kinesthetic and musical intelligences. Teachers’ self-reported strongest intelligences differed significantly from the mean scores for the eight Multiple Intelligences. Teachers self-report of their strongest intelligences were most likely to have the highest mean scores for the associated intelligence. These findings may reflect that teachers were aware of their strongest intelligence and may be providing instruction using that type of intelligence. Teachers tend to use teaching strategies that are aligned with their self-reported Multiple Intelligence. Teaching strategies are intended to foster student learning and help them develop their different intelligences.


This study compared American pre-service teachers’ teaching self-efficacy beliefs with those of their Chinese counterparts. Specifically three areas were explored: participants’ motivations to become teaching self-efficacy beliefs about content knowledge, pedagogical knowledge and classroom management. The study was conducted in two comprehensive universities—one each in United States and China. One hundred and ninety-one American and one hundred and twenty-five Chinese pre-service teachers participated in the surveys. Surveys had resulted in three types concerning motives for becoming teachers; (i) Chinese pre-service teachers preferred social position and financial compensation, (ii) American pre-service teachers emphasized more about personal interest and self-growth, and (iii) both American and Chinese pre-service teachers perceived job security, family influence and summer/winter vacations as similarly important to their choices. In-depth interviews had revealed two patterns: (i) teachers were perceived were perceived or are beginning to be perceived highly in both cultures, (ii) there still existed some bias against primary teachers.
Stark and Deborah (2004) conducted a study of comparison of Multiple Intelligence profiles in college singers and non-singers with implications for teachers of singing.

The purpose of the study was to compare the Multiple Intelligence profiles of college undergraduate singers and non-singers in an effort to define patterns attributed to singing involvement, age, gender and ethnicity and to determine if these patterns hold significance for teachers of singing. This study consists of subjects (n = 233) from three mid-west colleges. The MIDAS (Multiple Intelligence Development Assessment Scale) instrument was used to determine the profiles of the eight specific areas of intelligence. Results of the study reveal that singers scored significantly higher than non-singer in musical intelligence and linguistic intelligence. The difference in linguistic-verbal intelligence was attributable to make subjects only. Males scored significantly higher in areas of logical-mathematical intelligence and intrapersonal intelligence than females. The mean scores indicate that female spatial mean scores are higher with age and male spatial mean scores are lower with age. Mean scores revealed that non-singers intrapersonal mean scores were higher with age while singers’ scores were lower with age.

Wisner, Kristine (2004) conducted a study on the relationship among self-efficacy, perceived school climate, and stress in middle school teacher at Wayne State University.

The purpose of this study was to investigate the relationship among self-efficacy, perceptions of school climate and levels of stress in middle school teachers. There were three instruments used in this research: The Teacher Sense of Efficacy Scale (Moran & Hoy, 2000), The Organisational Description Questionnaire for Middle Schools (Hoy & Sabo, 1998), and Teacher Stress Inventory (Fimian, 1988). These instruments were distributed to two hundred and forty-nine teachers in a public school. The data revealed that there were weak but significant findings in predicting teacher stress with self-efficacy and perceptions of school climate. Self-efficacy was inversely related to teachers stress levels. The perception of openness, a factor of the school climate index was the strongest overall predictor of teacher stress in this study.
Parrington, Caorl (2005) conducted a study of Multiple Intelligence and leadership: A theoretical perspective.

This study examined Multiple Intelligence profiles of students in the University of Denver principal preparation program. The study investigated whether principal candidates had dominant intelligences in their Multiple Intelligence profiles, and whether or not there were significant differences and relationships between candidates’ profiles and leadership. The quantitative method employed a convenient sampling of the population of candidates from the principal preparation program at the University of Denver during the 2004-2005 school years. Seventy students comprising four groups from the program were given the self-administered Multiple Intelligence Developmental Assessment Scales (MIDAS) assessment.

The assessment consisted of a 119-item questionnaire in the eight Multiple Intelligence and three intellectual style scales. Percentage scores were calculated from participants’ responses for each intelligence, which produced a Multiple Intelligence profile, rating subjects from very low to very high in each Intelligence and leadership area. A follow-up questionnaire surveyed the population for perceptions of their profiles. Responses indicated that candidates agreed with their profile and had increased awareness of their leadership strengths.

There were significant differences between candidates’ profiles. Principal candidates had greater development in Linguistic, Interpersonal and Intrapersonal Intelligences. These three dominant intelligences also significantly correlated with all three leadership variables. Out of the three leadership variables, principal candidates had the highest development in leadership; followed by moderate development in general logic and innovation. Leadership had high correlations with linguistic and interpersonal intelligences. General logic had high correlations with intrapersonal intelligence. Innovation was moderately correlated to linguistic intelligence and weakly correlated with intrapersonal intelligence.

It was clear from the study that the Multiple Intelligence, particularly social and emotional, contributed to the frequency with which principal candidates were seen as transformational leaders. Increased awareness of their leadership strengths
should help prepares candidates for their new roles as principals, but also gives them a new lens from which to view their leadership capacities.

This study makes recommendations for further researcher in Multiple Intelligence and leadership, and applications to educational leadership standards. The standards present a common core of knowledge, dispositions, and performances that help link transformational leadership more forcefully to productive schools and enhanced educational outcomes.

Rondinaro and Peter Dominick (2005) conducted a study on the role of Interpersonal Multiple Intelligence on the usage of co-operative learning teaching methods.

The purpose of this study was to determine the relationship between interpersonal Multiple Intelligence and the usage of co-operative learning teaching methods. Participants consisted of 103 teachers from two Pennsylvania school districts and one Pennsylvania private catholic high school. Data were collected from the co-operative learning survey and the MIDAS (Multiple Intelligence Developmental Assessment Scale).

A Pearson’s Product Moment correlation co-efficient revealed that there was no significant relationship between interpersonal Multiple Intelligence and the usage of co-operative learning teaching methods. Relationships between demographic data and use of co-operative learning were also examined. An analysis of variance (ANOVA) showed that there was a significant mean difference of the attitude of teachers toward co-operative learning among elementary, middle and high school instructors. A Bonferroni post hoc investigation revealed that elementary teachers had a significantly more positive attitude toward co-operative learning than high school teachers.

Two studies addressed the psychometric properties of the Self-Efficacy Questionnaire for Children (SEQ-C) when used in studies with American youths. A sample of 697 middle and high school students completed the SEQ-C along with measures of life satisfaction and psychopathology. Exploratory factor analysis procedures supported the existence of three factors representing emotional, social, and academic self-efficacy. Criterion-related validity was established through correlations, in the expected directions, between the domains of self-efficacy and psychological functioning. The study was repeated with a sample of 318 high school students. Both studies provide support for use of the SEQ-C with early and late American adolescents from the Southeast.

Hamilton, Giovanna (2006) conducted a study an ethnography exploring the Multiple Intelligence theory and its effect on the academic motivation of at-risk children.

The purpose of this study was to discover the relationship that existed between motivation and intelligence. The researcher wanted to determine if children may have learned best when their entire range of capabilities was addressed and when multiple connections were encouraged in a balanced way. As research is increasingly demonstrating that the definition of intelligence is too narrow to describe most students, researchers in various disciplines have challenged the established notion of intelligence by offering substantial evidence that demonstrates how schools limit intellectual growth mostly through their limiting focus on a fixed model of the learner. This study explored the relationship between current knowledge of the human mind and the process of instruction as it refers to the education of at-risk children.

Joy (2006) conducted a study of a cross-cultural investigation of Multiple Intelligence in university level nutrition students.

Effective strategies for the recruitment and retention of a diverse student body in undergraduate nutrition and dietetics programmes are needed in order for graduates
to effectively meet the health and nutrition needs of a diverse clientele. One way to promote diversity and improve teaching methods in dietetics education is through a framework based on Howard Gardner’s theory of Multiple Intelligence (MI). The theory suggests that individuals possess varying degrees of eight different intelligences that are shaped by genetics and cultural context.

Relatively little research has been conducted to investigate MI approaches in the areas of higher education, cross-cultural education, or dietetics education. Therefore, this study investigated the MI profiles of students within undergraduate nutrition programmes at universal intelligence, with significant differences occurring between scores for the eight intelligences measured by the MIDAS. Not only were there significant differences between scale scores when analyzing the population as a whole, there were also significant differences in scale scores when comparing American and Mexican students. This phenomenon was also true when scores were grouped into five ordinal categories. In addition the findings suggest that differences exist among the particular skills associated with the intelligences for the students at each university. Results indicate that skills related to social sensitivity and persuasions are significantly higher than many other skills for dietetics students. Further, when comparing the American and Mexican students, significant differences were found between the two populations with regard to skills associated with the eight intelligences. With the exception of the Instrumental subscale, findings for the subscale scores were similar to those for the main scales, in that Mexican students’ averaged higher scores. Recommendations related to dietetics education and suggestions for future research are provided.

**Tae-Hee Jung and Myung-Hee Kim (2006) conducted a study on The Application of Multiple Intelligences Theory in South Korea.**

This study sought to determine whether Korean young children exhibit distinct profiles of intellectual strengths and weaknesses based on Project Spectrum, and to find the working style differences of children among strength, no strength / weakness and weakness domains. Project Spectrum helped to find in which domains each child had strength and/or weakness. Most children had some strength or weakness and showed relative strong and weak domains on a personal level. The study also showed that performances of children in domains of strength compared with domains of no
strength/weakness and weakness were characterized by ‘easy to engage’, ‘confident’, ‘focused’, ‘persistent’ and ‘reflective on own work’. It was concluded that identification and development of children’s strengths is one of the most effective and desirable ways to get children to have positive working styles. The educational implications of multiple intelligences theory pertaining to the South Korean educational system are considered further.

**Mahendrenath Motah (2007) conducted a Study of the Influence of Multiple Intelligences and the use of Soft Skills in Project Write-up among IT and Non-IT Students.**

The present work is a follow-up of the papers presented at the Northern Arizona University, USA—“Accommodating soft skills in Software project Management” and the one presented at Salford University, Manchester, UK – “The ontogeny of memory of learning: Natural Intelligence versus Artificial Intelligence in Information Technology Education”. Several interrogations cropped up during and after the presentation of the second paper, particularly on the conclusions, if any, that could have been drawn on the effects of soft skills, intelligence and intelligences; and if the next step would be to further investigate the impact of these on Information Technology Education. The impression that there was an urgent need to delve deeper into these factors and to find out their importance from the point of view of information technology education and other non IT fields lingered on for an appreciable length of time. In order to reply to the various unavoidable questions that arose from an analysis of the hypothetical aspects introduced in the above mentioned papers, we have tried to look into the influence of the factors related to the concepts of soft skills and intelligence in educational endeavours. In order to have an in-depth appreciation of the importance of these factors, we have solicited the involvement of both IT and Non-IT students reading in the fields of Administration and Management and Information Technology. Finding out the importance and the influence of soft skills and intelligence or intelligences became an obsession, which resulted in an interesting and passionate exercise with the involvement of nearly two hundred students. We believe that, sharing the results of our findings with other colleagues would arouse further interests and trigger other more interesting research in the field.
2.4 CRITICAL SUMMARY OF THE REVIEW

The investigator has reviewed research studies related to the present problem in this chapter. Most of the research reports are international studies. Only a few researches have been done in India. The research reports surveyed contain survey researches and case studies. The above review of related studies enabled the investigator to develop a wide perspective of the nature of interaction of the variables concerned by the present investigation. It also helped in determining the objectives, for making hypotheses and also in selecting appropriate research method and statistical technique for the collection and interpretation of the data. The sampling techniques followed were random sampling and stratified random sampling. The population taken in these studies included elementary school students, middle school students, college students, teachers, youth, undergraduates, agricultural teachers and general public. Questionnaire was mostly used as tool for the studies and some other tools used were observation, interview, document analysis, Multiple Intelligence Development Assessment Scale (MIDAS) and Likert-Scale. For analyzing data, statistics adopted weren’t’ test, Product Moment Correlation and ANOVA.

The literature is collected from books, journals, thesis and internet. From this the researcher is to understand the different aspects of the variables included in this study. This studies conducted in the various parts of the world has convinced the researcher that studies which highlight the importance of multiple intelligence, self-efficacy and teacher’s teaching competency have been promoted and hence the relevance of taking up such a study may help in improvement of the present study.

From the studies reviewed, it is evident that no study has been conducted among the B.Ed trainees on the influence of multiple intelligence and self-efficacy on their teaching competency in the area where the investigator is working. They were conducted on multiple intelligence and self-efficacy but less studies on teacher’s teaching competency. Hence the present study differs from the studies discussed above in terms of population, area and sample.