

**Chapter - II**  
**Review of Related Literature**

## CHAPTER-II

### REVIEW OF RELATED LITERATURE

#### 2.1 Introduction

“Practically all human knowledge can be found in books and literature unlike other animals that must start a new with each generation, man build up an accumulated and recorded knowledge of the past” (**Best and Khan, 2005**). All the time we come to know about the knowledge of facts and theories thru reviewing the previous literature that acquaints us with already known and provides an evidence about what is unknown and untested.

**Borg (1965)** had realized the remarkable consequence of review of related literature in these words “Comprehensively literature forms the foundation upon which all the future work is built”. The process of reviewing the related literature always make cognizant about what has already been done and what is the need to be done further. Even though except reviewing the literature in a systematic way the process of research would lead to vague and imprecise results and cannot eliminate the duplication of previous studies. Meanwhile no research process can run via proper methodology without surveying the related literature, as it is the only central mode to lead your project in planned, systematic and appropriate way. Initially we locate the authentic sources of literature related to the concerned project and even research problem cannot be find-out until we locate, read and evaluate the related literature.

**Good** states, “The key to the vast store house of published literature may open doors to sources of significant problems and explanatory hypotheses and provide 29 helpful orientation for definition of the problem, background for selection of procedure and comparative data for interpretation of results and in order to be truly creative and original, one must read extensively and critically as a stimulus to reflective thinking”. The basic and fundamental pre-requisite for

doing any successful research project is the deep analysis of related literature at initial moments.

The basics of conducting research just like what is the problem, what should be the objectives/hypotheses, what should be the population and sample, what should be the data collection, tools and what should be the statistical techniques for analyzing the data are illuminated and determined during the review of literature. These preliminary reviews penetrate us with the whole process of research and its national and international significance in different perspectives. Hence, a comprehensive survey of literature increases the knowledge, understanding and apprehension about the research and it delivers ideas and theories supportive to the research problem to be identified. In other words, the review of relevant literature represents a significant step in the whole research process. Exploring the related literature in research process is a flexible, precise and systematic task to enlighten the past, present and future perspectives of the research problem to be taken out. The base for carrying out any research whether it is for short term or long term is literature available in that area. It helps in designing the whole picture of research at the initial and provides the clear definition of the identified problem. Various sources of doing literature review just like, reputed journals of national and international level, books, e-books, magazines, conference proceedings, research studies, dissertations, theses, essays, handbooks, internet and abstracts etc. assists in preparing the research plan at par. Doing plan for every new research or any project, it is mandatory to summarize, explore, recognize, intricate and evaluate the previous studies conducted and existing trends in the same area. No research study can proceed in a successful way if thorough literature review could not be done and the research gaps cannot be find out appropriately. Review of related literature plays a gigantic role in guiding and directing the whole process of research. Literature review forms the total map in the cognition of researcher and builds up the total structure of his/her research plan. It develops the insight and perception of researcher

about the depth, scope and application of research in real life. It makes the researcher able to delimit his study from the view point of time, money and area of study etc.

Generally, there are two sources (primary & secondary) to consult the relevant literature. Primary source is the first hand information collected from the original participants or the person who actually conducted the research and secondary source refers to the report of one's research represented by someone else who is not the owner of that source of information. As **Best and Khan (2005)** observes, "Since the effective research is based upon past knowledge, this steps helps to eliminate the duplication of what has been done provides useful hypothesis and helpful suggestions for significant investigation". Literature review has a remarkable significance in planning and executing any research work. Literature is a thrown light on the specific aspects of a research problem to be selected and analyze the existing knowledge by deep scanning. Literally the meaning of the term "review" is to know what previously has been written about the topic. According to **Lawerence & McEvoy (2008)**, literature means "It is an evidence based review of relevant reference material".

The previous chapter discussed the background of the problem and the present chapter deals with an in-depth review of related literature of the major variables of study are- cognitive styles, emotional intelligence, academic achievement and socio-demography variables in the following sequence:

## **2.2 Research Studies Related to Cognitive Styles, Academic Achievement and Socio-Demographic Variables**

**Agboghoroma & Tim (2015)** identified in this study was to "examine the interactional effect of cognitive style and instructional mode on students' knowledge of integrated science". Existing study had taken JSS III students of secondary schools in Delta State as target population. In order to achieve the objectives of study, a sample of 360 JSS III students who were field-dependent and independent have been selected from six secondary schools. They

were randomly selected through the balloting technique. The sample was comprising of 180 rural and 180 urban students. In the current investigation, a 2x 2 factorial design with three experimental and three control groups was used in a quasi-experimental, non-equivalent pretest-posttest control group design. For collecting data the instruments employed were cognitive style test (CST) developed by Siegal (1967) and the researcher-designed knowledge assessment in integrated science (TKIS). The statistical measure of ANCOVA was used to analyze the collected data. The results of the study demonstrated that there was a significant interaction effect of cognitive style and instructional mode on student's knowledge of integrated science. The study recommends that the teachers of integrated science should have the knowledge of different cognitive styles of their students prior to teach them.

**Ahmadzade & Shojae (2013)** the investigation was conducted to know the “Association of cognitive style (field dependence/independence) and academic achievement of both male and female students of Behbahan Islamic Azad University”. The study was applied cum correlational, and in order to fulfill the objectives of study, the population of 7500 were chosen and among them 1009 has been selected as sample size. The sample consisted of both the gender of male and female and among them 604 were male university students (59.9%) and 405 (40.1%) were female participants. In order to get research data from participants the latent patterns test developed by Vikin et al. was employed for measuring the cognitive style (field dependence/independence). To ensure the reliability and validity of the test to determine the validity of the latent patterns test, the test-retest approach was used. Additionally, it was discovered that the criteria validity coefficient for men was 82% while for women it was 63%. Regression analysis, the Scheffe post hoc test, the one-way ANOVA, the independent samples t-test, and the Pearson correlation coefficient were all used as statistical measures for analyzing the data. The main results of the study illumined that correlation coefficient between field dependence in women, field independence in women and field independence in men and

academic achievement is 0.52 ( $p < .01$ ), 0.56 ( $p < 0.01$ ) and 0.67 ( $p < 0.01$ ) which depicts that the correlation between two variables is statistically significant in both women and men. The study also indicates that correlation coefficient between cognitive style and academic achievement was 0.31 and it implies that thirty one percent of variance in academic achievement is determined by cognitive style and hence  $\beta$  and constant value was 0.31 and 1.94 respectively. Moreover, the study also portrayed that regression analysis was significant and the results are valid and dependable.

**Asikhia (2019)** concluded that Nigeria was suffering from poor performance in secondary education at the times and had experienced so many challenging issues and problems. The investigation as a supporting evidence conducted by Owoyele (2012) showed a poor performance at secondary level of schooling which put managers and stakeholders in misery. World Bank report (2004) mentioned that Nigerian students were not only performing poor in English but their performance was also below than other 26 African countries. From the above observations and reports, the goal of the current study was to examine the cognitive preferences and academic performance of senior secondary school pupils in Ogun State, Nigeria's. In this study, the combined influence of four predictive variables on secondary school students' academic performance was examined. 200 SS2 pupils from five secondary schools in Ogun State's Ijebu-Ode Local Government Area were purposefully have been chosen for this descriptive research study. The 'Converger Cognitive Style Questionnaire' and the 'Accommodator Cognitive Style Questionnaire' were employed as research tools for data collection. The results of the data analysis indicated that the four predictors might be utilized to forecast students' academic achievement because the F value was 4.34 at a significant level of 0.05. Value of beta coefficients for converger, accommodator, gender and area of specialization were 0.014, 0.028, -0.045, and 0.279 respectively.

**Babayemi (2019)** conducted study to investigate the “Influence of cognitive styles and gender on students’ academic performance in basic science and technology in Mkpato Enin Local Government Area”. The study prepared the research questions and hypotheses as a pathway to come at the results of investigation. The study was aimed to know whether any difference exists in the performance mean score of both gender with respect to impulsive and reflective cognitive styles. The total population of study was comprised of 1679 among them 786 were male and 893 were female junior secondary one students during 2017/2018 academic session in 16 secondary schools. Selection of the sample was done by adopting random cum convenience sampling procedure in the current study by using Taro Yamane’s rule. In this research, survey was conducted with two instruments for data collection. Cognitive Style Test (CST) of 15-items with the dimensions of reflective and impulsive cognitive styles developed by the researcher and Matching Familiar Figures Test developed in 1966 by the US psychologist, Jerome Kagan were used. The measured reliability of both the tests was 0.82 for former and 0.89 for latter. The procedures for administering the test was followed on ethical and legal grounds by forming a positive interaction with the participants during field survey. The gathered data was analyzed by employing various statistical measures like, mean, Independent t-test and Analysis of variance (ANOVA) were employed to test the hypotheses at 0.05 level of significance. According to the findings of study, students’ academic performance in basic science and technology is significantly impacted by cognitive style. The analysis also depicted that male students hold impulsive style while female students retained with having reflective style. Therefore, the study emphasizes that students’ thinking and understanding should be kept on top while preparing them for learning. Different students have different cognitive style, learning styles, difference in the power of decision making and judgment, difference in speed while doing the same task etc. The above study recommends that teachers of science and technology should focus on the student’s level of cognitive

development and their understanding of particular field. The teachers should always use the tools and techniques in the field of science and technology to improve their thinking and understanding of both the theory and practice at higher levels.

**Backhaus (2007)** conducted that there are different indicators or parameters of cognitive styles which influence the life of an individual from home to school altogether. This study was conducted to “Examine the intuition and/or analysis indicators of cognitive styles of students studying in business education of comprehensive college in the Northeast”. To achieve the objectives of study, a sample was selected and survey was conducted to obtain relevant data for accomplishing the study. The “Cognitive Style Index (CSI) developed by CSI (Allinson & Hayes, 1996)” was administered on 222 American undergraduate business students among them keeping in view the procedure of administering the test. The test was comprising of 38 items scored on a trichotomous scale and was envisioned to measure cognitive style. The internal reliability of test was measured was 0.86 to 0.92 on Cronbach’s alpha coefficients “(Doucette, Kelleher, Murphy, & Young, 1998; Mac Gillivray, 1999; Murphy et al., 1998; Sadler-Smith et al., 2000)”. The results of the study depicted that there was a significant association between analytic orientation and grade point average of students. Furthermore, the analysis also revealed a significant correlation between academic performance and higher RASI scores on the Deep, Strategic, Metacognitive Awareness, and Academic Self-Confidence Scales. On the RASI's Surface and Strategic Scales, women were shown to be more analytical and high scorers. According to this study, faculty need to be conscious of their cognitive preferences and take into account how they may affect the curriculum, presentations, and evaluation of student work.

**Balasubramaniam & Sivakumar (2018)** conducted a study on “difference between male and female with respect to cognitive styles and academic achievement and the correlation between cognitive styles and academic achievement”. The investigation considered 300 higher



secondary students of Karur district as participants of study through simple random sampling technique. The study followed survey method for data collection. Data was gathered by using the Cognitive Style Inventory (CSI), of Praveen Kumar Jha developed and standardized 2001. The acquired data was analyzed by employing appropriate statistical techniques like percentage analysis, mean, SD, t-test, and Pearson Product Moment Correlation. The study's findings showed that there was no discernible difference between men and women in terms of cognitive style, and the analysis also showed that academic accomplishment was significantly different between men and women. The investigation also showed a link between higher secondary students' overall academic performance and cognitive styles.

**Bassey, Umoren & Udida** (2018) cognition is an important part of psychology of an individual and puts effect on every aspect of life. The present study also laid emphasis on “Influence of cognitive styles and an attitude on the academic performance of students in chemistry of Akwa Ibom State”. Cognitive styles and attitude were thought out as independent variables whereas academic achievement in chemistry was declared as dependent variable. The study was conducted by adopting Ex post facto research design and hypotheses were formulated to light up the path way of achieving the objectives of study. Senior secondary pupils of Nigeria's Akwa Ibom State's Ibesikpo Asutan Local Government Area had been considered as the study's population. Among them 400 senior secondary students were selected randomly from 4 schools and one hundred (100) were selected from each school. A research tool (questionnaire) having three sections viz. “Siegel's Cognitive Style Test, Chemistry Students Attitude Test and Chemistry Achievement Test” were employed for the collection of data. Exact and appropriate procedures and research ethics were followed at the time of instrument administration. A statistical treatments of ANOVA, Fishers LSD Multiple Comparison Test and Pearson Product Moment Correlational Analysis were used to analyze the data. After employing the above treatments, the results of the study demonstrated that there

was a significant difference between the academic performance of students and it was also revealed from the results that analytic cognitive styles performed significantly higher than relational and inferential. Further findings of the investigation also depicts that students' attitudes about chemistry and their academic achievement were significantly correlated.

**Devi & Raja (2016)** investigated “cognitive style and academic achievement of higher secondary students”. The researcher employed descriptive survey design for achieving the objectives of study. During field survey data was gathered by using cognitive style inventory of Praveen Kumar Jha 2011. Under investigation 221 students of Standard XI in Science and Arts groups in Tirunelveli District of both gender were taken as sample of the study through random sampling technique. A statistical measure of arithmetic mean, standard deviation and t-test for large samples were selected for analyzing the data. The findings of the study demonstrated that systematic cognitive style is prevailing among 60.6% and intuitive style among 39.4 % of standard XI students. It has also been proven that the maximum number of students possess systematic style instead of intuitive style. So, it is to be concluded from the study that teachers and students should adopt a logical, sequential, step-by-step approach to learning, problem-solving, and decision-making that helps in attaining good academic scores.

**Ellah & Achor (2015)** present study laid emphasis to investigate the “cognitive styles and attitude of senior secondary school science students of high cognitive ability level towards science”. The goal of the study was to identify the mean of cognitive styles of high-ability students in science, the mean of attitude of high-ability students toward science, the mean of attitude towards science, the mean of cognitive styles of high-ability male and female students in science, and the mean of attitude of high-cognitive ability male and female students towards science. In order to accomplish the study correlational survey research design was adopted and 1875 students in senior secondary school two (SSS II), which offers biology, chemistry, and physics at all the public senior secondary schools in education zone C of Benue

state for the 2014–2015 academic session, made up the study's total population. A sample size of 553 students from 35 entire classes with high ability levels were chosen. Various research questions and hypotheses were framed in order to achieve the purpose of study. “Science Students Attitude Scale (SSAS) and Group Embedded Figure Test (GEFT)” were employed as a research tool for data collection. The SSS1 successful results in physics, chemistry and biology had been selected as the indicators of cognitive ability levels. The measurement scales of GEFT had the face validity and SSAS had the both face and construct validity. For SSAS and GEFT, the internal consistency of the two scales were determined by using the Kuder-Richardson (K-R20) method. The internal consistency estimate was found to be 0.882 for SSAS and 0.779 for GEFT. The mean, standard deviation, correlation coefficient and t-test were employed as statistical measures to analyze the data. The results of the study illuminated that the variation in student’s attitude was due to the variation in their cognitive styles. The analysis of the data revealed a significant difference between the cognitive styles of male and female high-ability science students. Additionally, it was also discovered that there were significant differences between the attitudes of male and female high cognitive ability science students at the 0.05 level of significance.

**Farooq (2015)** the study was conducted to “cognitive styles and quality of learning: a case of language learners”. Descriptive survey was conducted for data collection and cognitive style questionnaire was employed to identify the student’s different cognitive styles. Among the factors included in the demographic profile questionnaire to gather demographic data are gender, age, family size, educational background, field of expertise, residential area, and marital status. In this study, both objectives and research questions were framed to find out the correlation of cognitive styles and quality of learning in terms of their academic performance and to explore the association of cognitive styles and academic performance of students. In the present study sample size was 218 and the data was collected from metropolitan university of

Punjab, Pakistan. The collected data were arranged and analyzed by employing SPSS 16, Excel 2007, and CHIC were used for gathered data by using descriptive and inferential statistical methods (Cohesive Hierarchical Implicative Classification). The main findings of the study exhibited that the prevalent cognitive styles of student's from "French Language, English Language, Arabic Language, and Persian Language was Focusing; for Urdu language was Reflexive and for Punjabi Language was Auditory/Visual mixed". The general overview of the study indicated that the student's having Auditory/Visual mixed cognitive styles differ in their performance. The data analysis also demonstrated that, in comparison to the other three cognitive styles, student performance on all levels did not differ significantly.

**Hooda & Devi (2017)** explored cognitive styles through its dimensions and demonstrated how it effects our day to day activities. Two hemispheres of the brain indicated by cognitive styles consists of left hemisphere and right hemisphere. Both the hemispheres of brain have their unique roles in unveiling the personality of an individual. Sequence, time analysis, abstraction, causation, uniformity, and reason are all parts of the left brain hemisphere, whereas simultaneous, space, synthesis, concrete, and various ways are parts of the right brain hemisphere. Having a great scope and influence in the psychological world cognitive style has been divided into five dimension which are- "Integrated style, Intuitive Style, Split Style, Systematic Style and Undifferentiated style". These dimensions are the ways to strengthen and improve your learning and working. The present study also explained that the teachers of mathematics must take in to the consideration the cognitive styles of learners while preparing the lesson or teaching equipment.

**Jantan (2014)** explored the problem of "student's cognitive style, their mean score in mathematics, significant difference between the cognitive styles among girl and boys and significant correlation between students' cognitive style and their Mathematic achievement". The study was aimed to examine the correlation of cognitive styles of 6 year students of primary

schools in Selangor (Malaysia) with their achievement in mathematics. For achieving the objectives of study, field survey was done with group embedded figures test (GEFT) to identify student's field dependent (FD) or field-independent (FI). From the whole population a sample of 150 students were selected as participants of study. The procedures of administering the test was followed on ethical grounds and the data was successfully achieved. The present data was analyzed by using SPSS version 17.0 with descriptive and inferential statistical measures of analysis. The findings showed that there was little association between students' mathematical achievement and their cognitive styles. It was also depicted from the statistical analysis that there was a significant difference in cognitive styles among gender. Further, the study suggests that math teachers should also emphasis on the cognition and intelligence of students while teaching.

**Jain, Verma & Jain (2017)** designed to study the “cognitive styles of adolescents in relation to their stress level”. Adolescence is a period of stress and strain and there is ever fluctuation of tension during this period. Stress is a concept emerged from the world of psychology and was firstly introduced in 1950 having its origin in physics where it implies amount of tension upon an object. Cognition which is not lagging behind in psychology differentiates all humans in their thinking, judgment, decision making, learning style, perceiving information and in organizing it. Cognition is the process of learning, which calls for a variety of mental abilities. It also refers to the process of developing a creative mindset and an intellectual culture. The current study was aimed to know the significant effect of stress on adolescent's cognitive styles. In order to achieve the objectives, a sample of 200 undergraduates of Bhilai (Chhattisgarh) were selected, among them 100 were male and 100 were female students. The stress level of students was measured by employing ‘Students Stress Scale’ developed by Dr. Zaki Akhtar and Cognitive Style Inventory constructed by Praveen Kumar Jha was used to measure the cognitive styles of students respectively. After successful

data collection, a statistical techniques of Mean, Standard Deviation and t-test were employed to analyze the data. The findings conclusively showed that there was no discernible difference between the systematic cognitive styles of male adolescents who experience high and low levels of stress. According to the current study, stress had little to no effect on a college-going male student's cognitive style. However, a study also found that stress had a considerable impact on female undergraduate students' cognitive processes.

**Katoch & Thakur (2016)** teachers in classroom always emphasis on to follow unique styles of teaching so that learning should be more by utilizing minimum time and resources. The present study was conducted to know the “cognitive styles of teachers in Kullu district of Himachal Pradesh”. The study explored that cognitive styles include a dynamic path of perception, thinking, remembering, problem solving, memory, reasoning and intelligence etc. which influence the teaching learning and teacher’s behavior. To accomplish the study a sample of 200 secondary school teachers from the government schools of Kullu district were selected a participants of study. For the data collection a descriptive cum survey method was employed to reach to the participants of study and all the teachers of secondary schools of Kullu district were constituted as the population for study. Among the sample of 200 teachers 100 male and 100 female were randomly selected. “Cognitive Style Inventory (CSI)” developed by Dr. Praveen Kumar Jha was employed as research instrument and the administration of test was according to the norms and procedure mentioned in the manual of tool. To know the statistically significant difference between male and female in the cognitive styles of systematic, intuitive, integrated, undifferentiated, and split styles, the t-test was used. The findings also revealed no difference between male and female teachers in these styles.

**Kumar & Munichandra (2017)** in the year 2013 with the goal of creating centers of excellence, Andhra Pradesh Model Schools (APMS) was established with a focus on providing talented rural children with high-quality education at the rate of one school per block. The

principal, who serves as both the school's academic and administrative leader, is directly answerable to those in charge of its administration. The goal of the current study was to create a profile of the principals of the Andhra Pradesh Model Schools, which are found in the Indian state of Andhra Pradesh. An effective survey strategy was used for this study. In this study, a sample of 77 principals were chosen at random from among 155 Andhra Pradesh Model Schools spread throughout 13 districts. The CSI developed by Praveen Kumar Jha (2001), was used for data collection. The analysis of data revealed that 37 principals possess split cognitive style, systematic style obtained by 28, while rests have other three cognitive styles.

**Minchekar (2017)** conducted a study to explore the “role of cognitive styles in creative thinking among college students”. The study also prepared the alternative hypothesis that “systematic and intuitive cognitive style will positively related to fluency, flexibility, & originality among college students”. In this study a sample of 120 students from various colleges of Sanglicity were randomly selected as participants of study and sample was comprising of 60 male and 60 females. All the students participated in study were studying in agriculture, ITI, commerce, and medical faculty and the age range of sample was 18 to 22 years. “Cognitive Style Inventory for College Students (CSI)”, developed by Dr. Pravin Kumar Jha was used to measure the cognitive styles of students and it contains five sub-test including 40 items. “Creative Thinking Scale for College Students (TCW)” was also used to calculate creativity positional of students for their proper education and training. The Pearson product moment correlation was used as statistical technique to analyze the collected data. The results of the study revealed that systematic and intuitive styles were positively correlated with originality, whereas cognitive style and creativity were poorly related with each other.

**Mughal, Busari, Qasim, Nizamani, Rasool, Jalil & Ahmad (2016)** the purpose of present study was to “explain the distinctive role of cognitive style by tunneling knowledge from different theories and models developed by authors”. In order to construct meaningful

comprehension of cognitive styles number of disciplines were thoroughly reviewed and combined to made critical overview. Various dimensional and evolving approaches of cognition were employed to analyze the literature so that at first conceptualization of cognitive style, decision making, secondly, the foundational pieces of literature were reviewed to composite a theory, and at the third very emerging and existing literature were systematically reviewed to explain the cognitive style in a better way. The theories and models of cognitive style mentioned in the study were behavioral decision theory, classic dual process theory of human cognition, Kirton adaptation innovation theory, prospect theory, cognitive style index Allinson & Hayes (1996), adaptive control of thought model and so on. The results of the paper indicated that both literature and organizational literature laid their implication that existing cognitive style could be evaluated through distinctive aspects of the theories of cognitive style. Findings also showed that long-drawn-out analysis was done to be acquainted about how employees think, organize, process information, and make decisions by reviewing relevant literature of cognitive style. This conceptual literature combined different theories and models of cognitive style and also opened the doors for researchers to move on for further investigation by following mixed method approaches.

**Neto & Miranda (2009)** primarily the current study was conducted to evaluate the “correlation between cognitive styles and academic achievement of undergraduate accounting students”. In order to achieve the goals of study a sample size of 240 undergraduate students were selected, which was 82% of the total population. A non-probabilistic intentional technique was employed for selecting a sample who were enrolled in accounting course from 1<sup>st</sup> to 7<sup>th</sup> semester of both the gender. Keeping in consideration the objectives, current study was descriptive cum exploratory so that it could provide familiarity with the problem, made it more obvious, build hypothesis and to describe the characteristics of given population. GEFT was employed as a research tool for identifying cognitive styles, perceptual processes and



particularly field-dependence and field-independence of undergraduate accounting students. The major findings showed that factors like age, course grades, number of hours spent studying outside of class, and salary were shown to be strongly associated to their cognitive styles. Although it was also discovered that students who were older, received poorer marks in their courses, dedicated more time to their studies outside of the classroom, and had lower incomes on the job market were more likely to be field-dependent. From the above results, it would be recommended that in teaching and learning new pedagogies and strategies of higher quality with greater effectiveness should be implemented.

**Nozari & Siamian (2015)** the study was piloted to examine various research questions and also emphasized that “there was a relationship between field dependence –independence cognitive style and English text reading comprehension, learning English as a foreign language, academic achievement and the choice of academic courses”. From the total population of 1476, a sample of 305 students of both gender were selected through multistage sampling procedure of probability sampling studying at the junior level at high school in Sari. To achieve the purpose of study Group Embedded Figures Test (GEFT) was employed as a research tool for getting information data from respondents. The test reliability was calculated by Oltman and colleagues for men and women as 0.82 & 0.79 and the criterion validity for men and women was 0.82 & 0.63 respectively. Last semester marks in English of the academic year 2010-2011 were considered their progress in learning English. A statistical treatment of regression was used to analyze the compiled data. The analysis of the compiled data depicted that the change or variance in in dependent variables of reading comprehension score was determined by FDI cognitive styles. The studies also showed that a field independent cognitive approach produces positive outcomes such as improved reading comprehension, English learning, and academic success. Conclusively the above mentioned results of the study recommends that the selection

of students for different courses should be based on their cognitive development so that they can be directed to improve their learning in better ways.

**Oh & Lim (2005)** the investigation was carried out in order to examine “how cognitive styles of students are correlated with their attitudes towards online education and learning behaviors in online learning environments”. The current investigation was conducted in the University of Tennessee. For achieving the purpose of study, several research questions were framed. The participants of the study were undergraduate and graduate students of the University of Tennessee who were taking online classes in the spring semester of 2003. A sample of 104 participants were selected for the study and for data collection five instructors were asked to deliver online instructions to students in different subject disciplines at the university to allow them for participating in the study. To accomplish the investigation, Group Embedded Figures Test (GEFT) developed by Witkin, et al. (1971) and an attitude survey developed by the researcher were administered to determine how students think and what they think about online learning. The self-made attitude survey instrument was consisting of 25 questions having four subsections- “technology competency, attitude toward online instruction, learning preference, and demographic information”, with five-point Likert scale varying from 5-1 or Strongly Agree to Strongly Disagree (5=Strongly Agree, 4=Agree, 3=Not Sure, 2=Disagree, 1=Strongly Disagree). Using Cronbach's alpha tests in SPSS, the responses to Section I (Technology Competencies) and Section II (Attitude toward Online Education) of the survey were analyzed. The results produced a reliability estimate of 0.72 for the Section-I (Technology Competencies) and 0.86 for Section-II (Attitude toward Online Education), respectively. The research ethics were taken confidential and student’s participation was voluntary, the anonymity of students’ and their responses were clearly explained before distributing the instruments. In order to ascertain the relationship between the variables,

Pearson's correlation analysis was utilized. Hence, the data was further thoroughly examined by using the Independent t-test, ANOVA, and Chi-square test.

**Olagbaju (2020)** heighted that English language is the international, official as well as the language of education at all stages from primary to higher education institutions. The same case was investigated in Nigeria where English is the dominating language as medium of instruction. Earlier it was found that English language and comprehension in Nigeria was very poor and had not capable of summary writing, which was identified as one of the dreaded aspects of the subject. This ongoing study was done to study the “cognitive styles and gender as predictors of students’ achievement in summary writing in selected secondary schools in Ibadan, Nigeria”. Cognitive style makes a person unique from others in way of thinking, remembering, understanding, analyzing, synthesizing, comprehending, receiving information and to process and organize it, and decision making etc. Gender which is always considered as backbone in conducting research has the magic role in teaching learning process. The study had involved 350 participants of four senior secondary schools in Ibadan. The goal of the current study was to examine how well cognitive style and gender might predict students' success in summary writing by measuring its global and analytical dimensions. A statistical measure of regression analysis was employed to analyze the collected data. The results of the study depicted that cognitive style and gender are the predictors of students’ achievement in summary writing. The study recommends that cognitive style should be cared on before teaching and there should not have any mismatch between the teaching style of teachers and the learning style of learners. The study also suggest teachers that positive mind set up should be built in the learners and teaching should be according to their cognitive power. The study also laid emphasis that gender should be taken into consideration in teaching learning process because it has been found that gender has a great contribution in students’ achievement and attitude.

**Oludipe & Dupe (2014)** the motive of present study was to analyze the “cognitive styles and achievement in physics of higher secondary students”. The study involved 107 senior secondary III students from four co-educational secondary schools in Ogun State.as the sample of study. Seigle’s Cognitive Style Test (SICOST) was used to categorize the students into analytic and nonanalytic learners and data was collected. The results of the analysis depicted that 69% of students were possess analytic style and boys have been found significantly differ in their achievement in physics with respect to analytic and nonanalytic. The findings also bared that there was no discernible difference between analytical and nonanalytic girls' in physics achievement.

**Pencheva & Papazova (2015)** Carl Gustav Jung, a great psychologist, owner of psychological type and its shortened version had emerged a term cognitive style in the American literature. Cognitive style is a characteristic variable which differentiates one from another and helps in developing the personality in unique ways. A logical and rational characteristics of an individual to develop human values were set by the parameters of cognitive style. The differences among individual in the covert are due the differences in their cognitive way of sensing or intuiting and in organizing and processing information modes and subsequent decision making. “An aspect of cognitive style that is less investigated is its immediate and stable influence on human values and value systems” (Mcintyre, Claxton, & Jones, 1994).

**Sagiv, Amit, Ein-Gar & Arieli (2013)** researches have depicted that some people plan and execute in systematic and orderly manner whereas others adopt and follow sentiments, instincts and what they feel right. Keeping in view the above characteristics the present study was aimed to thoroughly comprehend the meanings of systematic and intuitive cognitive styles. Various studies were conducted to compare the gender on the basis of systematic and intuitive styles. In order to achieve the objectives of study 130 undergraduates of Caucasian Israeli students have been selected as participants of study among the whole population. The

participation of sample was anonymous and voluntary. The General Decision Making Style instrument (GDMS; Scott & Bruce, 1995), Thinking and Working Style, The Rational-Experiential Inventory and The Portrait Cognitive Style were employed to investigate the cognitive styles of students. According to the findings of study accountants and artists were those who used systematic and intuitive styles respectively and which his supports the styles' intended meaning. The results also showed a significant correlation between systematic style and conscientiousness and security values, but a negative correlation with stimulation levels.

The results of study revealed that systematic style was found most frequent in accountants and intuitive style was most frequently found in artists. Which validates the meaning of the styles. The findings also demonstrated that systematic style and conscientiousness was positively correlated and security values whereas negatively correlated with stimulation values. The intuitive style had positive correlation with extraversion and rule-based performance of individuals having systematic style have been improved by experience and did not have effect on intuitive ones.

**Saraswathi (2020)** the variables included in the study were cognitive styles (Independent variable), modernization (dependent variable) and professional qualification (demographic variable). The present study was conducted to know the “patterns of cognitive styles and level of modernization among school teachers belonging to tribal community”. All the teachers of tribal community of Ranga Reddy district of Telangana was the population and in this study the sample of 310 was drawn from these tribal teachers through random technique. The research tool of Cognitive Style Inventory (CSI) developed by Praveen Kumar Jha was used for data collection. A statistical measure of Chi square was employed for analyzing the gathered data. According to the existing study there was no discernible difference between the patterns of cognitive style of tribal teachers with respect to their professional qualification. The above investigation recommends that teachers should be given specific training regarding the

psychology of mind and cognition. The teachers must have knowledge about the cognitive development of their own and the students as well. Unless the teachers do not have the specific knowledge about different cognitive levels or styles, their teaching will not give satisfactory results.

**Sellah (2018)** conducted a study on “predictive power of different cognitive styles of student’s on their academic performance”. The most recent research involved secondary schools in Kenya that were upgraded to national status in 2011 and 2012. Four students of chemistry, all teachers of chemistry and academic masters of the study from new 60 elevated National schools in Kenya have been taken as the population. Probably three counties were selected such as; Trans-Nzoia, Bungoma and Kwale and among each of them two schools were selected randomly for sampling. The sample size of this research study was 342 and among them (330 students, 6 chemistry teachers and 6 academic masters) were selected. Gender was also taken into account, and the sample came from three boys' schools and three girls' schools that were single-gender institutions. The percentage of responses of the participants were also calculated on gender basis and among them 52% of respondents were male and 48% respondents were female. By choosing only national schools, which limited the architectural and programmatic disparities between the schools, the extraneous factors that could affect the study's culture were also taken into account. Cognitive styles of the respondents were measured on four dimensions “concrete–abstract, active–reflective, verbal–visual and sequential–global”. Relevant data was gathered by employing cognitive style inventory and interview guide for academic masters. Statistical measures of ANOVA and regression analysis were used for data analysis. Findings of the study demonstrated that three schools were found to have very high levels of student-teacher cognitive style congruence, while the other schools had low levels of congruence. Out of the four cognitive style dimensions, only the sequential-global

dimension was found to be a significant predictor in KCSE chemistry, according to the analysis.

**Sharma & Pooja (2018)** study was conducted to “analyze the association between cognitive styles (field independent/dependent) and academic achievement of 9<sup>th</sup> class students in English subject”. The research was done following applied research and from the view point of data collection and analysis the study was correlational. The study was examined to find out the correlation between cognitive styles and academic achievement, field independent cognitive style and academic achievement, field dependent cognitive style and academic achievement of students in multimedia instructional environment and the emphasis was also laid on the correlation between cognitive styles and academic achievement, field independent cognitive style and academic achievement and field dependent cognitive style and academic achievement in traditional instructional environment of 9<sup>th</sup> grade students. Under investigation the sample size was taken 64 from Om Public School of Gohana (District Sonapat). The investigation used an experimental methodology with a factorial design, and the material covered some English grammatical principles that were taught through multimedia and more conventional methods. For the purpose of collecting data, the Group Embedded Figure Test (GEFT) created by Witkin et al. and the achievement test created by the researcher were used. Statistical measure of Pearson’s Product Moment Correlation was used to analyze the data. The results of the study revealed a significant positive relationship between the academic accomplishment of 9<sup>th</sup> grade pupils at Om Public School in Sonapat's Gohana District and their cognitive styles (Field Independent & Field Dependent).

**Shi (2011)** study was conducted to investigate the “correlation between cognitive styles and learning strategies of second-year English majors from the Foreign Language School of a university in Wuhan”. To fulfill the objectives of study 178 second-year undergraduates were selected as participants of study. The approach of study was totally quantitative to get overall

scenario about the participants learning style and learning strategies and to investigate the relationship of cognitive styles with learning strategies. During the research process preferred learning strategies were regarded as the dependent variables under inquiry whereas whilst cognitive style was declared as independent variable. A survey was conducted with “Learning Style inventory to measure learning styles of participants and the Chinese version of Oxford’s Strategy Inventory for Language Learning (SILL) to know their learning strategies. Learning Style Survey (constructed by Cohen, with Rebecca Oxford and Julie Chi)” was employed to scrutinize the learning styles of the subjects and to evaluate the subjects' language-learning methods, the Chinese version of Oxford's Strategy Inventory for Language Learning (SILL) was used. The focus of the current study was on several cognitive learning styles, including global and particular, synthesizing and analytical, sharper and leveler, deductive and inductive, field-independent and field-dependent, and impulsive and reflective style. Before collecting data a good rapport was established with the respondents and all the procedures and ethical grounds were followed to abolish biasness in the study. A statistical treatment of multiple regression has been utilized to analyze the data which was compiled in excel. The results of the study found a significant influence of every technique of cognitive styles on learners' choice of learning and synthesizing style, sharpener style, field-independent style, and impulsive style and reflecting a great effect of cognitive styles on learners’ learning strategy choices.

A study was conducted on “education and training an important aspect of the design, development and delivery of learning is the selection of instructional methods and media and assessment strategies” (Gagne & Briggs, 1979; Rowntree, 1982; Reigeluth, 1983; Riding, 1994; Gough, 1996; Hayes & Allinson, 1996). **Smith & Riding (1999)** conducted the present study aimed to search the relationship of learner’s cognitive styles with their instructional preferences. The study was done at a university business school in the U.K and to achieve the objectives of study. Participants in the study have been chosen from a sample of 240



undergraduate business studies, marketing, personnel management, computing and informatics for business, finance, and accounting students. A sample was comprising of 125 males and 115 females of the age range of 18-58, whose mean age and standard deviation was calculated 23.81 and 8.07 respectively. Cognitive Styles Analysis (CSA) developed by (Riding, 1991) was used as a research tool to assess the holistic-analytical and verbalizer-imager dimensions. In addition to that a paper-and-pencil questionnaire with three sub-inventories (instructional method preference, instructional media preference and assessment methods preference), and the Instructional Preferences Inventory were used in the study. The appropriate usage of research tools was done and good rapport had been established with the participants in order to follow the research ethics. After all the data analysis showed a substantial relationship between the choice for collaborative methods (role playing, group debates, and business games) and non-print based media (overhead transparencies, slides and videos). The study also depicted that style and gender have a great interactional effect on informal evaluation technique preferences (individual and group assignments and multiple choice and short answer type questions). This experimental study suggest the teachers to ensure the usage of instructional material as per the interests and preferences of students which has a great impact on their success.

**Simuth & Schuller (2015)** diverse modes of thinking, perception, and grasping information and to use it in problem solving, decision making comes under the term cognitive styles. After analyzing the above terms and conditions, the present study was done to examine the “cognitive style preference differences among students from universities focused on various fields of study”. The study included 366 students as the participants of study. Among these 366 university students, 137 were psychology student’s (116 women and 21 men) 115 students from engineering (46 women and 69 men), and 115 were from management (62 women and 53 men) respectively. To get the data for this successful research “Cognitive Style Indicator (CoSI) developed by Cools and Van Den Broeck 2007” was used. The findings of the current

study showed that there was a notable difference in the preferred cognitive style between engineering students and psychology students. The results also revealed that engineering students and managements students were also significantly differ with respect to the preference of cognitive style.

**Singh (2017)** emphasized to explore “How learning styles and cognitive styles affect the learning and how they in blend affect the achievement of elementary learners”. Previous researches also depicted that elementary students are moving on through adolescence and they always want to be independent and become heroes at this stage. In this study, elementary school learners from VIIIth standard from public schools of Delhi were selected as a population of study. For selected a sample from population two stage sampling procedure was used; first stage involved selection of classes in which learners of each section of standard VIII were selected for the study and in the second stage Identification of Field Independent and Field Dependent was done. A sample of 160 learners (80 field independents and 80 field dependents) were selected as participants. Group Embedded Figure Test (GEFT) was employed for collecting relevant data. In (GEFT) a reliability estimate of 0.80 for both males and females was found by the Spearman -Brown prophecy. The raw score of GEFT was converted into z-score and then had been distributed on a stained scale. Two learning styles inventories developed by Dunn, Dunn and Price was also used for assessing learning style and this inventory consisted of 100 items that were categorized as aspects and elements. The research's findings revealed a significant association between cognitive styles and learning styles which in turn affects students' academic success. The results also portrayed that two categories of cognitive styles FDI prevalent in learners explained their different learning styles. So the study suggests that attempts should be made by curriculum designers and teachers to identify the current trends in education and to know the mental behaviour of learners. Every learner is

unique and different in their cognitive capacity and the teachers must help learners according to their needs and capacity.

**Sudarman, Setyosar, Kuswandi & Dwiyo** (2016) reveals that learning is primarily depending on the sources and type of instruction used, but even today we often see the lecturing method particularly at the primary level. The learning of single direction diminishes the cognitive power and decreases the student's creative thinking. To highlight the problem, the present study was conducted to know the "Effect of learning strategies and cognitive styles on mathematical problem solving learning outcomes". To arrive this study at destiny, 141 elementary schools were considered as the total population and the participants of study were selected through cluster sampling or multistage procedure from state elementary school of V grade in Grading I Surabaya, east java. Instead of taking a sample from both the public and private elementary schools, the study selected a sample for study from public schools only because of their homogeneity. In order to fulfill the aim of study, the interaction effect of independent factors on the dependent variable was examined by using the quasi-experimental design with nonequivalent control group designs and statistical measures of (ANOVA) covariance two lanes with a 2x2 factorial design. For accomplishing this study, data or evidences were collected through problem-solving ability test (pretest and posttest) and Students' cognitive styles instruments obtained by using the Group embedded figures test (GEFT), developed by Witkin, et al (1971). The results of the above research depicted that the students taught through PBL and direct learning were significantly differ in their achievement and there was also found difference in achieving learning outcomes toward students' group and different cognitive styles and the findings showed that learning outcomes for solving mathematical problems were significantly impacted by the interactional effect of learning strategy and cognitive style characteristics.

**Susandi, Sa'dijah, As'ari & Susiswo (2018)** studied "Students' critical ability of mathematics based on cognitive styles". The cognitive style has a massive role in decision making, problem solving and in other areas as well. This study was qualitative cum descriptive in nature and the investigation's goal was to describe junior high school students' abilities in mathematical critical thinking based on their use of the cognitive styles Dependent Field and Field Independent when completing SPLDV questions. In this research two participants were selected through purposive sampling and among them one was belonging to field dependent category while other was belonging to field independent category of cognitive style. To fulfill the objectives of study, Embedded Figure Test Group, mathematical problem-solving tests, interview guidelines, and documentation were employed as the sources for collecting relevant data. The gathered data was analyzed through the FRISCO critical thinking category indicators which was consisted of (Focus, Reason, Inference, Situation, Clarity, and Overview). According to Polya, the research's findings showed that pupils with a field-dependent and field-independent cognitive style were shown to have strong critical thinking abilities at every stage of problem-solving. The above conducted study suggests that teachers should emphasis on critical thinking of students and to infiltrate their cognition. Students of junior high school level are the bright future of nation and their areas of interest must be kept into consideration.

**Teng, Cai & Fan (2009)** investigated "Relationship between design thinking and design performance in different types of cognition". For the successful accomplishment of study, a sample of 134 design-majored students (57 male, 77 female) were selected as participants of study. The current study employed experience method and also used questionnaire of Cognitive style index (CSI) developed by Allinson and Hayes (1996). Students were divided into two groups with distinct cognitive styles to measure how well each group performed in terms of thinking and sketching while carrying out the identical task. The study's findings indicated that those in the intuition group favour image thinking while those in the

analysis group prefer word thinking. Additionally, those in the intuition group performed better than those in the analysis group.

**Udiyono & Yuwono (2018)** searched out “Whether positive correlation exists between cognitive style and students’ learning achievement in geometry subject”. All students enrolled in Widya Dharma University's mathematics education programme during the academic year 2015–2016 were considered the population for this quantitative cum correlational investigation. From the mentioned population a sample of semester IV B students was selected through cluster sampling technique. GEFT and learning achievement test were employed as a research tool for collecting the data. The instrument used to measure student’s cognitive style was psychiatry, developed by Witkin, Moore, Goodenough, & Cox (1977) and the reliability of the test was measured through Alpha Cornbach which was 0.84. A simple linear regression analysis was used as a statistical technique to analyze the achieved data. A statistical analysis revealed a correlation between cognitive style and students' learning success in geometry, with a correlation coefficient of  $r^2 = 0.6209$ . It is stated here that differences in students' cognitive styles are to blame for variations in learning outcomes in geometry classes. Cognitive style can explain 62.09 percent of changes in learning outcomes using the linear correlation equation  $y = -2.9650 + 4.6513X$ . The other factors have 37.91% influence on learning results. So the findings of the study indicates that the success or failure mostly depend on the nature of cognition. Cognitive style has a marvelous role in the learning style and in all-round performance of an individual. It is the supreme duty of curriculum framers and teachers to make a pilot study for knowing the cognitive level of students before teaching them theoretical as well as practical.

### **2.3 Research Studies Related to Emotional Intelligence, Academic Achievement and Socio-Demographic Variables**

**Akduman, Yuksekbiljili & Hatipoglu (2015)** stated that the concept of emotional intelligence gave birth to the sentiments, empathy, feelings and the values of own and others

and has a more gigantic role in the academic field of students than IQ. Existing research was also carried out to look into the "Role of emotional intelligence on generations". One of the study's main goals was to look into the significant differences in emotional intelligence between baby boomers, the x generation, and the y generation. To achieve the study's goal, a null hypothesis was prepared for testing, and the scale used to measure emotional maturity was Chains EI12. (2006). The face-to-face survey was conducted to fill out questionnaires from respondents, which captured general information about the employer's emotional intelligence level on a five-point Likert Scale ranging from 1 to 5, with 1 being "Not Important" and 5 being "Most Important." The respondents were also acquainted to mention their generation depending on their birth rates and different birth dates were selected to identify the generations of the respondents. Respondents born between 1946 through 1964 were named as Baby Boomers, those who born through 1965 and 1979 were called as x, generation and those who born from 1980 to 1999 were named as Y generation. The collected data was analyzed by employing Kruskal-Wallis H test through statistical software of SPSS 20.0 version. The data analysis revealed that there were no statistically significant differences in emotional intelligence between generations.  $\chi^2(2) = 4.031$ ,  $p = 0.133$ , with baby boomers having a mean rank emotional intelligence level of 135.56, x generation 106.98, and y generation 105.74. The present study conclusively asserted that values change through generations and study also demonstrated that emotional intelligence does not differ in X and Y generations which depicted that many changes exist in human life from generation to generation but emotional intelligence does not differ according to the results of study.

**Akyol & Akdemir (2019)** found that all the dimensions of emotional intelligence are of paramount importance in one's life and they have a gigantic effect on the academic carrier of students. Emotional intelligence also assists in developing the good personality improve the sense of humor among individuals. The current study used a cross-sectional survey design to

"Examine prospective teachers' levels of emotional intelligence and problem-solving skills". In this study, 1033 prospective teachers from a public university in Turkey's Black Sea region were chosen as a sample, with 813 of them being women and 220 being men. To achieve the study's objectives, relevant data was collected using a bar on the emotional intelligence scale and a problem solving scale, and statistical measures were used to analyze the collected data. The results of the study demonstrated that there was no significant difference between the problem solving skills of prospective teachers with reference to gender and class level but results depicted that prospective teachers were found significantly different in terms of age and department variables. According to the findings of the current study, prospective teachers should pay special attention to developing emotional intelligence traits and problem-solving skills.

**Alam (2018)** in this study emotional intelligence of students was comprehensively explored. The study took 200 adolescent students of East Singhbhum, Jharkhand as the sample. The sample comprised of 100 boys and 100 girls of the age group of 16-20 years from different geographical background. An emotional Intelligence scale developed by Mangal and Mangal (2004) was used to collect primary data. The t-test statistical measure was used to analyze the data. The study's findings revealed a significant difference in emotional intelligence among secondary school students based on school type and gender. The analysis of the data also confirmed that there was no significant difference in EI of students with reference to their locality. The study suggests that adolescents should be given full consideration in controlling and coordinating their emotions, decision making and behavioural control. They need guidance and counselling at different occasions to improve their performance and values. They are the reservoir of nation and hence they must be trained in well-designed programs.

**Alexander, Bartrum & Hicks (2014)** stated that emotional intelligence and cognitive style lead in all the aspects of human life and without both of them human life is static. This

study was framed to know the “Role of trait emotional intelligence and optimistic cognitive style in career decision making of university students”. Numerous studies had been done to know the impact of diverse variables on career choice but no study has been conducted on the combination of both optimism and trait emotional intelligence on carrier choice. A sample size of 150 university students were selected through convenience sampling technique related to the age unit of 18 years and above. The sample was comprised of 99 females and 51 males of first year psychology students for achieving the objectives of study. For the collection of data Career Decision Scale and Life Orientation Test was used and the inner consistencies of the subscales were ranged from .64 to .86 respectively. During the survey participants were acquainted with norms and procedures of writing their responses and even the purpose of the study was also cleared before students through verbal mode as well as through explanatory statement. The results of the study depicted that the domains of optimism (wellbeing, self-control, emotionality, and sociability) and subscales of TEIQue have significant relationship with career certainty. The study also demonstrated that significant predictors of Career Certainty was found to be Stability-Impulsivity, but positivity was not an element in forecasting career inevitability when the stability impulsiveness factor was accounted for career commitment always needs aptitude, self-understanding. Creative thinking and ideology, steadiness in making proper choice and the knowledge of own values. Building carrier is thoroughly associated with flexibility, elasticity, resilience and originality of resources. This study examined the factors like optimism and trait emotional intelligence which are the great inputs of career certainty. This study discovered that fifteen emotional intelligence traits and an optimistic life orientation were directly related to career choice. The study recommended career advisers and career counsellors to identify the diverse aspects of emotional intelligence when they are advising or counselling the clients in making their career decisions. The present research also emphasized on establishing such type of training programs that could train the



students in selecting the appropriate ways for career making. The present investigation also indicated that cognitive style of students also does not lag behind in the decision making skills related to career development.

**Al-Qadri & Hasan (2021)** highlighted that each individual differ in their attributes and all the individuals perform according to their capability and intelligence. People also differ in the levels of emotional intelligence which put them in different heights of learning and performances. Existing study also focused on “Studying the emotional intelligence and academic achievement of students of Arabic basic school students in China”. In this research the investigation of the connection between emotional maturity and academic performance of pupils was done and various dimensions of EI have been analyzed as significant contributors of their academic achievement. In this study 303 students were randomly selected for the study from the age group of 12-16 years. The researcher prepared a self-made emotional intelligence scale for the data collection. Before collecting the data a good bond was established with participants and then questionnaire was distributed among them. Product moment correlation method was used to find out the relationship. The results of the study specified that emotional intelligence was significantly correlated with academic achievement of students. But the analysis of the data also depicted a noteworthy variance in the stages of emotional maturity with reference to gender variable. Study also showed no significant difference with reference to grades among students.

**Antony & Kumar (2019)** stated that every moment of life is surrounded by emotions and even we cannot think off for satisfied and rich life at any cost. We enjoy because we have emotions and we try to utilize these emotions for personality development also. Authors studied the “Impact of emotional intelligence on job performance of teachers in the education sector of Pakistan”. To achieve the targeted objectives of study 166 teachers were selected from the whole population as the participants of study. In this study a synthesis technique was employed

to examine the effect of various factors on the teacher's instruction performance. The research instruments employed for collecting the relevant data were Emotional maturity Scale by Anukool Hyde Sanjyota Pethe & Upindher Dhar, Kulsum Teachers Effectiveness Scale by Dr. Umme Kulsum, Scale of self-evaluation of Pratibha Deo and Test the motivation for success (based on the sentence termination method) of VP Bhargava respectively. Primary as well as secondary sources of data were used for the successful accomplishment of research study. The results of the study depicted that emotional maturity has an important influence on teacher's job achievements. Emotional self-awareness, self-confidence, achievement, developing others, and conflict management are all dimensions that have a significant and positive relationship with teacher job performance. This study suggests that prospective teachers should be nurtured emotionally which lead them toward good academic success and make them dominant on teaching professionalism. Emotional maturity improves the essential qualities which the teacher needs for good teaching.

**Awai & Akosubo (2016)** concluded that emotional intelligence is considered as the ability to monitor one's own feelings and set of learned skills, abilities and competencies. Hence current investigation was piloted to know "How far the emotional intelligence and self-concept is a predictor of school student's academic achievement in mathematics in Rivers state". The primary goal of the study was to determine whether emotional maturity and self-concept are predictors of students' academic achievement. In this study two research questions and hypotheses were prepared to arrive at the conclusion of study. To achieve the objectives of study correlational design was applied and all the schools of Rivers state were considered as population of the study and after following multistage sampling technique a sample of 400 senior secondary students were selected. A research instrument of Psychological Assessment Scale (PAS) for gathering information on emotional intelligence and self-concept and Mathematics Academic Achievement Test (MAAT) developed by the researcher were used to

collect data. By applying Pearson Product Moment correlation method, the reliability coefficient of emotional intelligence was 0.89, for self-concept and for mathematics academic achievement it was 0.89. The statistical technique of Stepwise multiple regression analysis was employed for the analysis of collected data and the prepared null hypotheses were tested at .05 level of significance. The nature of the relationship between the independent variables of the study and the dependent variable was determined using ANOVA and standardized beta values. The findings of the above study demonstrated that emotional intelligence can predict students' academic achievement in mathematics. Furthermore, the study found that self-concept has no significant relationship with academic achievement in mathematics. As a result, self-concept cannot predict students' academic achievement in mathematics. The study concluded that emotional intelligence plays a significant role in influencing students' academic achievement in mathematics. This research study also thrown light on emotionally intelligent people who would display better and quality students in the Nigerian society.

**Biswas & Rahman (2017)** opined that emotional intelligence has its grace in diverse fields of individual's life and hence changed the life scenario at all levels. Today educational leaders must be emotionally competent in order to deal with others in different situations. The present study was conducted to see the "Role of emotional intelligence in transformational leadership and leadership outcomes at the private commercial banks of Chittagong in Bangladesh". In this research a sample of 356 employees of private commercial banks of Chittagong were included in the study as participants. The Instruments used in the study were Emotional Quotient Index and Multifactor Leadership Questionnaire. Both the tools were administered properly and good rapport was established with the participants. For selecting the participants of study a convenience sampling method was employed. Regression analysis and descriptive statistical measures of bivariate correlation were employed to examine the gathered data. The study's key findings demonstrated a strong relationship between emotional

intelligence and transformational leadership of employees and the results also depicted that there was also found strong association between emotional intelligence and leadership outcomes, such as the extra effort, efficacy, and contentment felt by the staff at Chittagong's private commercial banks. The present study, thoroughly and methodically analyzed the correlation of emotional intelligence and leadership among bank employees of Chittagong in Bangladesh. This study has an enormous role in the promotion of literature. This study suggests that various leadership qualities should be developed among the bank employees. The appointed personnel in the banks have a public deal at all costs and these employs must have tolerance, emotional competence, leadership qualities to deal with others in right manner, passions and humble attitude. Piercing these diverse perspectives the highest authorities of bank employees should initiate such programs and courses where the employees could be made emotionally competent and inculcate such leadership qualities among them. The above study also recommended that all the employees would be trained in the manner that they should be the prospective leaders of their organizations.

**Chapagain (2020)** investigated the significance of emotional intelligence in the context of teaching with the objective to identify the status of EI of university level teachers with reference to diverse demography's and job satisfaction. In the existing study a sample size of 156 teachers were selected from 4 universities of Nepal. An organized questionnaire was employed to collect the relevant data. Following data collection, descriptive and inferential statistical methods were used to gather and analyze the data. The analysis of the research described that EI of female students was significantly influenced by the status of EI. The findings revealed moderate level of EI among the university level teachers of Nepal. Although findings of the study also depicted that females were more emotionally mature than their counterparts. Current investigation also evoked positive relationship between EI and job contentment. This study first time scrutinized emotional intelligence and job satisfaction in

terms of socio-demography's among university level teachers of Nepal and unfold the ways of doing researches in the area.

**Chis & Rusu (2016)** revealed that numerous studies that had been done on the relationship between students' academic achievement and emotional intelligence, and the findings recommended for developing a good EQ. The present study also focused on the "Relationship between emotional intelligence (EI) and academic performance in compulsory education". The main goal of this study was to increase our understanding of the relationship between adolescent academic accomplishment and the many facets of emotional intelligence (EI), particularly in nations where teenage school dropout rates are known to be high. The objectives prepared in the study were to summarize knowledge on emotional intelligence and academic achievement of adolescents and to know the factors already researched in this connection. The steps of the current systematic analysis of the literature were designed, carried out, and reported by using the procedural recommendations of Judi & Sahari (2013) and Petticrew & Roberts (2008). The study also explored to find out the gaps to construct research questions for further research and hence the findings of the study could be designed as a platform for boosting emotional Intelligence programs in relation to adolescent's academic achievement. The above study was conducted after following the systematic review protocol to analyze the researchers conducted on emotional intelligence and academic performance of students from 2000 and 2016. The studies demonstrated that models and dimensions of emotional intelligence has a prodigious bearing on the academic achievement of students at all levels and hence improves the chances of success in other field as well. High level of emotionally intelligent have more self-awareness and the potential of managing emotions of own as well as of others in all respects. The previous literature review showed that people having low emotional intelligence have low academic performance, scare school or social adjustment, weak relationships with teachers and peers etc. Conclusively this study

recommends that teachers should nurture the emotions of students and become their friends to help them during their difficult phases. This research also suggests that we cannot be a successful beings in school or out of school unless we take our emotional intelligence at the top. Schools must also initiate the counselling programs to counsel the adolescents at right intervals to foster their emotions.

**Festus & Seraphina (2015)** stated that in our educational system mathematics is one among the top subjects which needs prior importance at primary and secondary levels of education. The subject of mathematics or geometry has a gigantic role in the development of nation as whole and gives the birth to different sciences. Throwing light on the importance of geometry in education the present study was considered for. This study was conceded to realize the “Effect of emotional intelligence skills acquisition on student’s achievements in geometry in senior secondary school of Keffi education zone, Nasarawa State, Nigeria”. To acquire some scientific results from investigation the objectives, research questions and hypotheses for testing were prepared after the review of related literature. The quasi-experimental design (non-equivalent pre-test, post-test, and control group design) was used in this study. The target population was all SS2 students enrolled in different schools in the Keffi Education Zone of Nasarawa State, Nigeria, and only 132 SS2 students from two intact classes were chosen as study participants using the multi-stage cluster sampling technique. During the thorough experiment of research two instruments were used for the collection of relevant data which were included Geometry Achievement Test (GAT) published by the Nigerian Educational Research and Development Council (NERDC) and in the Nasarawa State Scheme of Work for SS2. Geometry Achievement Test was used to assess SS2 students' academic achievement in geometry (GAT). The second research tool was the Emotional Intelligence Inventory (EII), which was created by Farn-Shing, Ying-Ming, Ching-Yuan, and Chia- An (2007). To answer the framed research questions descriptive statistical techniques of mean and standard deviation

were used in this study. Analysis of covariance (ANCOVA) was used as a statistical measure to test the hypotheses for the analysis of pre-test and post-test scores. Using the SPSS package version 21, the prepared hypotheses were statistically tested at the  $\alpha = 0.05$  level of significance or 0.95 level of confidence. The study found a significant difference in the mean emotional intelligence scores of students in the experimental group and those in the control group in favor of the students in the experimental group who were exposed to emotional intelligence skills; the study also found a significant difference in the mean achievement scores in Geometry between students in the experimental group and those in the control group in favor of the students in the experimental group who were exposed to emotional intelligence skills; Despite these findings, the study found no significant difference in mean Geometry achievement scores between male and female students exposed to emotional intelligence skills, and no significant interaction effect of emotional intelligence and gender on mean Geometry achievement scores of students.

**Fteiha & Awwad (2020)** emotional intelligence deals in all the domains of human life. Psychological stress is also of significant consideration in the current researches. Different challenges, issues and hurdles of life playing a great role to hamper the human development and EI cope and guide us to deal in these circumstances. The current study additionally looked on the association between students' coping mechanisms for stress and emotional intelligence. In this study a sample of 265 students were taken and Goleman's theory of Emotional Intelligence was employed. The findings of the study exhibited that the majority of students possess active problem and emotional coping behavior. The analysis of the study also represented a significant correlation between EI and stress coping style of students. This study suggests and recommends that full consideration must be given to the psychological world of students and their strength and weaknesses should be identified at the earlier.

**Gupta (2014)** studied “Emotional intelligence of 400 prospective teachers from selected colleges of education of Himachal Pradesh”. For ensuring the successful research the sample was categorized and among four hundred students, 200 were males and 200 were females of different streams from various social categories. The Roqan Emotional Intelligence Test, created by Professor Roquiya Zainuddin and Anjum Ahmed was employed to collect the relevant data. The statistical measure of "Analysis of Variance" ( $2 \times 2 \times 2$ ) was used to analyze the data. According to the findings of study, there was no discernible difference between emotional intelligence and their socio-demographic characteristics of prospective teachers. The findings also exhibited that there is a significant interaction between prospective teachers' emotional intelligence and their gender, stream, and social category. According to the study's descriptive analysis, students who were exposed to emotional intelligence skills improved more than their peers who weren't exposed to emotional intelligence skills. Keeping in consideration the findings Gi, Goleman (1995) asserted that emotional intelligence skills are acquired abilities rather than natural talents. The attributes of emotional intelligence makes one competent to know the emotions of own as well as of others. The results of the present study also supported the findings of Malek et al. (2011) who found “Significant difference between university students of emotional intelligence skills of exposed and non-exposed”. Emotional Intelligence of students has a marvelous role in determining and impacting the academic career of students from primary to university levels. Acquisition of the attributes of emotional intelligence leads on in more professional, civilized, matured and acceptable ways that would determine the best qualities of successful life. After piercing the various dimensions of emotional intelligence it can be right to say that emotional intelligence has its significant impact on all the aspects of life. Above study revealed that EI significantly improves the academic achievement of students in geometry.



**Hans, Mubeen & Rabani (2013)** carried out this study to identify the “Levels of emotional intelligence among the teachers of private institutions in Muscat, Sultanate of Oman”. The purpose of this study was to demonstrate the significance of emotional intelligence in personal, academic, and professional success. Participants (sample) were chosen using the proportionate stratified sampling technique in accordance with the descriptive research design. A 25% sampling fraction was used to divide the population into homogeneous subgroups. The teachers of management and engineering were selected for study as the participants. To achieve the targeted objectives of study a questionnaire of emotional intelligence developed by Dhar U., Pethe S., & Hyde A. (2005) was employed for collecting the relevant data. The 100 questionnaires was distributed among the participants after given important instructions regarding the legal and ethical procedures of the instrument. Descriptive statistics were used to compile and analyze the collected data. In this study demographic variables were also identified and reported by statistical techniques employed. The study's findings revealed that teachers in private educational institutions in Muscat, Sultanate of Oman, have a relatively high level of Emotional Intelligence.

Emotional intelligence is crucial in determining the goals of teaching, academic success, and career development. It has a great deal in the teaching aptitude and teaching behavior which in turn mold their sense of manner and life style. Emotional intelligence prompts one to indulge in right behavior to improve his professionalism, nature of good conduct, sympathetic attitude, sense of humor and feelings and managing the power of motivating others. This great pillar of psychology and human life is involved positively from infancy to death, and this moderator can be transferred from teachers to students who are the true representatives of society. This attribute of emotional intelligence is very essential for the successful and effective teaching and recommends the higher authorities of education and teacher training personnel's to conduct programs on the theme of emotional intelligence during

both pre-service and in-service teaching. Now a day's teachers and students must possess the high levels of emotional intelligence.

**Jain (2015)** now a day's emotional intelligence has diverted the attention of great academicians, professionals and researchers for glorious impact on the total life of humans. This psychological area of humans became the great area of interest in conducting researches with respect to numerous variables. This research work also laid emphasis on finding out the "Relationship of emotional intelligence and life satisfaction among females of the western suburbs of Mumbai". Females are considered more prone to stress and overload of domestic works and today they are not lagging behind in any field against men. The goal of the current study was to determine whether female satisfaction levels are affected in any way by High/Low EQ. The study employed practical EQ test based on the five – competency model of Daniel Goleman for measuring the female's levels of emotional intelligence. Satisfaction with Life Scale was also administered to measure the life satisfaction of females. Convenience sampling was used to choose the study participants, and descriptive statistical methods including mean, standard deviation, and product moment correlation were used to analyze the collected data. The results of the analysis demonstrated that there was a positive relationship between emotional intelligence and life satisfaction of females of moderate level. It had also been showed from the results that age does not have any impact on emotional intelligence but results also depicted that Occupation has a high tendency to affect EI of females.

From the above investigation relationship of emotional intelligence and life satisfaction of females were found significantly positive. Number of factors are responsible in keeping our life vulnerable, dissatisfied, disturbed, and in frustrated conditions. Today escaping self from these injurious psychological hazards one engages most probably in social media sites to entertain and go far from these unacceptable situations. Keeping in view these circumstances the present study called upon that EI and life satisfaction of female are two crucial components

that can accrue and develop the curiosity among them for achieving personal and professional goals. The study suggested that EI has a significant effect on various demographic groups and on the conditions of females who were working in diverse situations.

**Jaleel & Ghoti (2021)** existing study investigated the “Emotional intelligence and its influence on academic achievement of students of education faculty Dr. Babasaheb Ambedkar Marathwada University, Aurangabad”. In order to research up on the prepared objectives and research questions quantitative design methodology was employed. The purpose of this correlational study was to discover the relationship between students' emotional intelligence and academic achievement. Emotional Intelligence was an independent variable whereas academic achievement was a dependent variable under study. The total population of pre-service teachers was 1214, with 278 randomly selected for the study. Before collecting final data participants of the study were acquainted, approached and informed about the purpose of collection data from them and a good rapport was established with them in a friendly environment. The study's final data was collected using a questionnaire. The study's findings revealed that students have a high level of emotional intelligence. The study also discovered a significant correlation between (Self Emotion Appraisal and Understanding of Emotion) of Emotional Intelligence and academic achievement of teacher trainees. The study recommends that pre-service teachers must be matured in terms of emotional intelligence and they should be trained in different lineups about the psychological attributes of student.

**Joibari & Mohammadtaheri (2011)** assessed the “relationship of emotional intelligence and academic achievement of students of Tehran city”. The various dimensions of EI were thoroughly analyzed to predict the academic achievement of students. This study was purely descriptive and out of the total number of students (355800) enrolled in the schools a sample of 380 students were selected randomly on the gender basis. 180 girls and 200 boys were taken as the participants of study. Standard Cyber Sharing Emotional Intelligence

questionnaire was used to collect the data. Statistical methods of T-test and Pearson Correlation were employed to analyze the data. The findings of the current study showed a strong correlation between academic success and emotional intelligence. Moreover, a significant difference in emotional intelligence has also been depicted between boys' and girls' by employing the t-test.

**Kaur & Singh (2018)** emotional intelligence variable is dominant at every aspect of life and its attributes lead to the all-round development of an individual. The concept of EI gained priority in the psychology of humans and widely assists to adjust in different environments. The current study also emphasized the importance of assessing prospective teachers' emotional intelligence. The methodology applied in the study was descriptive in nature and the sample size of 400 teacher trainees were selected for the investigation. The data was collected using the survey method and the Emotional Intelligence Inventory developed by Dr. S. K. Mangal and Mrs. Subhra Mangal (2009). The data was analyzed using statistical measures such as means, standard deviations, and standard errors. The data analysis revealed that there was no significant difference in three aspects of EI, but males had a higher mean score than females in the dimension of interpersonal awareness. The findings also exposed that there was no significant difference between male and female humanities student teachers.

**Khan (2019)** psychology is the fundamental and root cause for every success in human life. In the present research two essential variables (IQ & EQ) were explored to find-out their contribution in the academic performance of students. The study was conducted in business colleges of Saudi central province universities. 416 students from both private and public colleges were chosen as the participants of study in order to achieve the objectives of study. For the purpose of data collection a survey method was employed to collect the relevant data by using a questionnaire. A technique of Structural equation modeling analysis using SPSS AMOS was employed to evaluate the collected and compiled data. The analysis of the study

described that students of private colleges showed a significant level of IQ and EQ which resulted in their good academic performance. The results of the study also illustrated that business students of public colleges possessed low level of IQ and EQ due to that they demonstrated average academic performance. The variance in academic performance lead by EQ and IQ scores were 43.6% among public college students and 56.3% was among private college students. The findings of the study depicted that IQ and EQ both are equally of marvelous importance in determining the academic performance of students. The study suggests that students IQ and EQ should be enriched, nurtured and improved through discussions, debates, seminars, workshops, experiments and other training schemas. The students in the class must be given moderate to difficult tasks to solve, so that they can utilize their sense organ's deeply through which their cognition would be overhauled and improvised.

**Kumar (2020)** emotional intelligence is now a days in significant consent among the research scholars to explore its scope and consequences in the education as well as in other aspects of life. In the Pattukkottai educational district, research has been done to examine the emotional intelligence of students in the eleventh grade. The study was normative in nature and evaluated the existing position of students in terms of EI. A survey method was used to gather data from 300 higher secondary students who were chosen at random as part of the study. Dr. Reuven Baron's tool for measuring emotional intelligence was used to obtain the data. Even if the generated data were analyzed using statistical approaches including mean, SD, and t-values. The study's findings showed that emotional intelligence had an independent relationship to gender, location, father's job, and family income. The results of the present research also demonstrated an average score of EI among higher secondary students, whereas analysis of the data also described that females were better in emotional maturity than males. The results of the study suggests that emotional intelligence and maturity is of paramount importance among adolescent students. In our schools special teachers should be appointed who would guide and

counsel them at intervals to develop sensibility and versatility among them. The need of making children emotionally mature and intellectual was also stressed in the new education policy.

**Lawrence & Deepa (2013)** tried to know the “Relationship of emotional intelligence and academic achievement of high school students with respect to their background variables. In order to accomplish the goals of current study a descriptive survey method was employed and self-made tool of trait emotional intelligence was employed for the collection of relevant data. The study also took out the achievement of students through Achievement Test questions. The gathered data was collected and compiled in the excel sheet sequentially for the SPSS software analysis. The gathered data was analyzed by employing the statistical methods of t-test, ANOVA, and Pearson's Coefficient Correlation. According to the statistical analysis of the data, there was no correlation between emotional intelligence and academic achievement of high school students in the Kanyakumari district. In the present century, various factors affected the psychological world of students and it became very difficult to manage emotions of oneself as well as of others. Now a day’s stress and strain is dominant in all aspects of life which disable the students to control their emotions and fulfill the demands of world. Emotional Intelligence has a marvelous role in deciding the carrier objectives and for being a responsible personnel in the society. The above research indicated that the level of emotional intelligence and academic achievement of high school students were found average. These students were belonging to different socio-economic and educational backgrounds and in that perspective they were oriented through guest lectures, workshops and seminars. Emotions affect the student’s performance in many ways and enrich their learning proficiency and make them competent and high achievers.

**Mohamad & Jais (2016)** endeavored to search out the “Relation of emotional intelligence and job performance of Malaysian teachers”. Teacher’s performance is widely considered as the performance of whole society. In this investigation a literature gap was

addressed by representing the influence of EI on job performance of teachers. The four components of emotional intelligence—self-regulation, self-awareness, self-motivation, social skill, and job performance—were examined in the study. To achieve the successful results of the study proper methodology was applied and 212 teachers were selected from 6 secondary schools of Kedah. During the survey questionnaire was employed to collect the data from participants. Data of the research study revealed a considerable relationship between instructors' job effectiveness and emotional intelligence. This study suggested that teachers should be given more consideration in terms of training, management, patterns of behavior etc. Research studies have also highlighted that higher education sector must be emphasized because it placed as a center for educational excellence in Malaysia.

**Mohzan, Hassan & Halil (2013)** illuminated that academic performance of students enlighten the whole nation and number of factors are responsible for the low or high academic performance. “Influence of emotional intelligence on students’ academic achievement in University Teknologi Mara (UiTM)’ was analyzed in this study. For a long time researches illuminated that academic performance of students enlighten the whole nation and number of factors are responsible for the low or high academic performance. The goal of the current study was to determine how students' academic success at University Teknologi Mara was impacted by their emotional intelligence (UiTM). In order to explore the association between students' academic achievement and emotional intelligence, a quantitative-cum correlational technique was used in the study. Variables were also categorized with independent variable (Levels of emotional intelligence) and dependent variable (Academic achievement) respectively. For achieving the objectives of study a satisfactory size of population of 1214 bachelor degree students were selected and among them a sample size of 278 students were randomly nominated. These students were enrolled in a variety of programmes, including TESL (teaching English as a second language), art and design, physical education, and health, as well as a

bachelor's degree in science with a focus in biology, physics, chemistry, and mathematics. The selected sample was pertaining to all the courses offered in the university. In order to collect data for the study's quantitative methodology, a research tool or questionnaire was used. Self-Emotion Appraisal, Other's Emotion Appraisal, Use of Emotion, and Regulation of Emotion were the four dimensions of the scale. This scale was 7 point likert scale and the respondent's level of emotional intelligence were measured according to their valuable responses. The academic achievement of students were converted into CGPA to highlight their academic performance. During survey the data was collected by establishing a good rapport with the participants and they were fully acquainted prior to the test about the purpose of study and their participation. After the instructions given to the sample a test was administered by following all the rules and ethics. Excel was used to score the data after it had been collected and compiled, and percentages, averages, and standard deviations were employed as statistical metrics to examine the data. Referential analysis was also carried out on the correlation coefficient to see how closely the independent and dependent variables were related. According to the findings, students' academic success was significantly and favourably correlated with the two emotional intelligence categories (Self-Emotion Appraisal and Understanding of Emotion).

The above research suggests that emotional intelligence of students at all the levels (Pre-primary to Higher education) should be cared, nurtured, protected and developed. Emotional intelligence on ground levels must be given first preferences along with intelligence and other physical, social and psychological disciplines. Various programs and workshops in the institutions should be initiated where both the students and teachers could be accustomed about the consequences and implications of emotional intelligence in 24\*7. However it must be a major concern of ministries of education that students should be reared and cared psychologically and also both pre-service and in-service teachers should be enlightened with



the impact of emotional intelligence on whole education system. The present study demonstrated that respondents are prospective teachers having high level of emotional intelligence and must be capable to take challenges to educate young generation in stressful situations. The students might also be developed by equipping among them emotional intelligence skills and attributes so that they could come out as effective educators. This study also emphasized that emotional intelligence level of students should be developed to the reach where they will find themselves the nation builders and the responsible personnel in prospering the education system. Young generation must also be inculcated the consequences of emotions in life so that they can become able, competent and prospective leaders.

**Naqvi, Iqbal & Akhtar (2016)** conducted study to determine the “Relationship between emotional intelligence and teaching performance of secondary school teachers”. To achieve the objectives of study a proper methodology was used to process the study. The total population of secondary teachers were 3168 in the respective region and among them 950 male and female teachers were selected at proportionate from rural and urban areas. The relevant data was gathered by using Emotional Intelligence Questionnaire Short Form (TEIQue-SF). The performance of teachers was observed and judged from the final exams of their students which was conducted by Board of Intermediate and Secondary Education Lahore (BISE). Statistical means of mean, SD and Product moment correlation method was employed to analyze the collected data. According to the data analysis, there is a sizeable relationship between instructors' performance and emotional intelligence of teachers.

**Naz & Khan (2018)** the current study was conducted to examine the moderating effects of emotional stability and openness to experience on cognitive and EI styles. Three tests were used to gather information from 3500 students by using “Ten Item Personality Inventory” (TIPI; Gosling, Rentfrow, & Swann, 2003), the “Self-Report Measure of Emotional Intelligence” (SRMEI; Khan & Kamal, 2008), and the “Object-Spatial Imagery and Verbal

Questionnaire” (OSIVQ; Blazhenkova & Kozhevnikov, 2009). The association between EI and cognitive styles is moderated by emotional stability. Conversely, openness to experience significantly moderates the relationship between verbal cognitive style and emotional self-awareness and the relationship between spatial cognitive style and interpersonal skills. A study also discovered that the association between object cognitive style and emotional self-regulation is negatively moderated by openness to experience.

**Özlü, AvGar, Gökalp, Apay, Altun & Yurtta (2016)** highlighted that emotional intelligence has a great utility in developing sensibility and right conduct of behavior. We acquire skill enhancement and tight bond of relationships because we emotional intelligence. Ongoing study “Compared the levels of emotional intelligence of senior students of different fields of Ataturk University”. Researcher has followed a descriptive research methods and sample size of 305 senior students enrolled were randomly selected. The researcher's self-prepared Emotional Intelligence Evaluation Scale was used to acquire the data, and mean, SD, and t-test were utilized to analyze it. The results of the study confirmed that students of natural science did possess lower mean of EI and social science students exposed highest mean of emotional intelligence. The results of the analysis also showed that the mean of EI scores for the three groups were statistically different from one another. Hence study also explained that levels of EI were found lower among natural science students where as it was found moderate among social science students.

**Pachaiyappan (2017)** in this study “Emotional intelligence of B.Ed. student teachers were assessed with reference to their demographic variables”. The investigation used the best approach possible to support the study's goals. The 360 B.Ed. sample subjects were chosen at random from a variety of colleges in the Tamil Nadu districts of Tiruvallur and Chennai. Anukool Hyde and Sanjyot Pethe's standardized emotional intelligence scale was used to collect the data. The T-test and F-test statistical tests were applied. The analysis of the data

described that maximum number of B.Ed. teachers possess moderate level of EI and it has also been realized that females are good in emotional intelligence than males. The study's results also showed that there was no discernible difference between Tamil and English-medium B.Ed. student teachers in terms of English proficiency. Additionally, the study showed no discernible differences in the emotional intelligence of B.Ed. students according to location, and it was also discovered that students attending government-sponsored colleges exhibited higher emotional intelligence than their counterparts.

**Podile (2016)** carried out investigation to see the “Impact of emotional intelligence on performance of engineering college employees of Krishna district, Andhra Pradesh”. The study laid emphasized on to what extent job performance of employees were impacted by emotional intelligence and examined how job happiness affected workers' output and the study also analyzed and interpreted the impact of organizational culture on employee’s job performance and the effects of employees' job performance on communication with the leader of organizations. All assistant professors, associate professors, and professors employed in engineering colleges in Krishna district were included in the study. A sample size of 160 was chosen by the stratified random sampling method to meet the objectives of study. The collection of data was done by following the legal and ethical procedures of research tool and the compiled data was analyzed through the statistical techniques of percentage and Chi2 test. The above study explored that engineering college employees of Krishna district of Andhra Pradesh were thoroughly impacted by emotional intelligence with respect to their job satisfaction, job performance and organizational culture on job performance. The college employees must be trained and matured in the field of psychology through various agendas and awareness camps should be organized in the educational institutions. The study indicated that the performance of employees mostly effected by emotional intelligence and their job satisfaction leads them to better performance in the organization. The study also recommended

that the employees of any organization should work cooperatively and must have direct interaction with their higher authorities as one team.

**Preeti (2013)** today students are expected to play multiple roles effectively in order to develop their right attitude and emotional intelligence for the right manner. Nowadays, anxiety and complexities are prevalent in all individuals, which has become the most significant impediment to the holistic development of life. The quality of life is entirely determined by the quality of emotions and education. Emotional Intelligence is a vital factor which has a great impact of the student's academic life and present research also determines the role of emotional intelligence for academic achievement of students. In this research, secondary data was collected from different sources so that objectives of study can be fulfilled. According to the study's findings, emotional intelligence plays a significant role in students' academic performance. The findings also demonstrated that academic achievement without emotional intelligence has a short future. The study also depicted that emotional intelligence has a great deal with personality development and building relations at diverse work places.

**Qasim (2017)** stated that emotional intelligence became a key factor behind all the contributions of an individual and it makes on self-matured about the feelings, relationships, confidence, passions and motivation. It is a leading edge in the current literature that incited researchers to investigate its consequences all around. Moreover, the emotional intelligence of secondary level teachers from CBSC and UP Board in Allahabad city was investigated in the current study. Through random sampling technique 200 teachers were selected from different schools as the participants of study. Teachers' Emotional Intelligence Inventory constructed and standardized by S. Mangal was employed to collect the primary data. The results showed a significant difference between emotional intelligence of males and females. The data analysis also showed that teachers from two separate boards had significantly varied in emotional intelligence.

**Ramana & Devi (2018)** conducted a study to investigate the “Levels of emotional intelligence and the relationship of emotional intelligence and academic performance of intermediate students”. In this study objectives and hypotheses were prepared to direct the study for statistical testing. The descriptive cum survey method was used to collect specific data based on the study's objectives. A total of 300 intermediate girls from Krishna District in Andhra Pradesh were chosen at random for the study. The investigation used the Emotional Intelligence Inventory developed by S. K. Mangal (2004) to successfully collect data, and students' academic performance over the previous three years was considered their Academic Achievement. The Emotional Intelligence Inventory had 100 items that were answered with 'yes' or 'no' options. The test's reliability was assessed using the Split half method, the Spearman-Brown prophecy formula, the K-R formula (20), and the Test-retest method. The inventory's reliability coefficients were found to be .89, .90, and .92, respectively. Hence the validity of the test was acquired through factorial and criterion related approaches. The test was administered by following the procedure mentioned on the manual of the test and a well rapport with the participants was established. For data analysis, statistical measures such as mean, standard deviation, coefficient of variation, ANOVA, and correlation were used. The study's findings revealed a positive relationship between intermediate students' Emotional Intelligence and Academic Performance. The above study demonstrated that 42.33% students showed average emotional intelligence and students from science were testified better in emotional intelligence abilities than students from mathematics. High emotional intelligence has a gigantic role in determining the personality and the objectives of life and makes an individual aware about emotions of their own and that of others. Emotionally intelligent people can regulate their feelings and perceive the empathy of others, which helps them grow and develop as individuals. The current study focused on students' emotional intelligence and academic performance, which helped to illuminate EI skills in academic settings in today's education

system. The students with high EQ are more competent to face the challenging tasks and are very forward in problem solving skills to develop their cognitive power. The study recommended that emotional intelligence must be incorporated as the subject in academics and it should be the part of education curriculum. Emotional Intelligence also aids in the development of relationships with peers, teachers, and parents, and students with a mathematical background must concentrate on logical reasoning to improve their performance. The positive correlation revealed in the investigation suggests that emotional intelligence must be integrated at all stages of education.

**Rema & Gupta (2021)** highlighted that work is worship but it does need some psychological attributes to do in clear picture. Woman's work is of equal importance as men in any organization or industry. Present study emphasized on the "Relationship of emotional intelligence and subjective well-being among working women". In this study, 104 working women from various job levels, including upper, middle, and lower, have been selected by using the purposive sample method. For collecting the primary data various dimensions of emotional intelligence and subjective well-being were analyzed and evaluated. Statistical measure of product-moment correlation and descriptive analysis were employed. The results of the study demonstrated that a significant correlation between emotional intelligence and subjective wellbeing at 0.05 level of significance. The study recommends that in working organization employees should be emotionally intelligent and mellowed. Hence study also suggest that employees must be psychologically well-being and should modify their behavior according to the situations. The findings of the study also describes that women employees should be appointed in every organization to conform the equality of opportunity.

**Sahinidis, Kallivokas, Markantonatou & Sdrolias (2014)** the primary goal of the current investigation was to "Irradiate the link between EI and student scholastic achievements, closing the gap in the extant literature". Moreover, the gender difference was also taken into

consideration with respect of emotional intelligence and their scholastic achievement. The TEIQue (Trait Emotional Intelligence Questionnaire), developed and standardized and tested widely by Petrides & Furnham, (2001), and Petrides, Pita, and Kokkinaki (2007) 30-item Likert scale questionnaire were used to collect pertinent data for attaining the objectives of study. In this research study students were indulged from various schools and departments. From the period of October 2016 and February 2017 the students were being invited to participate in the study through online mode. In this present study 648 students participated belonged to the age group of 18-36 and good rapport with the participants was established. The statistical analysis of the study showed a significant correlation between academic achievement and emotional intelligence and results also depicted the gender differences in self-control and emotionality.

**Sharma & Bindal (2012)** found that the ability of teachers to influence students' educational performance is enormous. Teaching is a profession that involves all the senses in deep while interacting with students and there must be a coordination of mind and feelings to enhance the word of sympathy. Teacher is the role model who only can guide in a matured version to make students self-reliant. In the current study, emotional intelligence skills of teachers comprehensively explored and evaluated the utility of emotional intelligence behind their success. For the illumined perspectives of tomorrow highest goals should be established to meet the objectives of teacher's profession in 21<sup>st</sup> century by the employment and inclusion of teacher preparation programs. Eventually, this study suggests that teacher's should be prepared in a manner that they must become psychologically competent being.

**Shaukat & Zai (2015)** the present study was conducted to "Study the relationship between emotional intelligence and self-esteem among prospective teachers during a pre-service teacher education program". In this research study, an alternative hypothesis was developed that EI is a strong predictor of prospective teachers' self-esteem. To achieve the study's goal, a sample of 253 prospective teachers from one public university were chosen as

participants, with 176 females and 77 males among them. This study was a descriptive cum cross sectional in nature and survey was conducted for collecting the relevant data. During the field research for data collection from respondents, the Rosenberg Self Esteem (RSE) scale revised edition established by Rosenberg (1989) and the Bar-On Emotional Quotient (EQ) inventory revised version established by Reuven Bar-On (2002) were used. The reliability coefficient of both the scales were .82 and .73 to .82 respectively. Before meeting the participants with relevant scales the researchers granted permission from the head of education department to initiate data collection. A good rapport was established, instructions were carefully delivered and confidential procedures were verbally cleared to participants, and consent forms were also collected from the respondents. The questionnaire took fifteen minutes to complete. The collected data was compiled and analyzed using statistical measures of Pearson product moment correlation to determine the relationship between emotional intelligence and self-esteem of prospective teachers and linear regression to predict self-esteem of prospective teachers using emotional intelligence sub-scales. According to the study's findings, there is a positive relationship between prospective teachers' emotional intelligence and self-esteem. The data analysis also revealed that interpersonal and general mode were significant predictors of self-esteem. Emotional intelligence and self-esteem have significant impact on the teaching profession at both pre service and in-service levels. The current study focused on prospective teachers' emotional intelligence and self-esteem, yielding significant results and contributing significantly to the field of educational research and literature. The present study also suggests that prospective teachers' emotional maturity and self-esteem are heavily influenced by their ability to teach children effectively while avoiding all other intervening factors. It is the supreme duty of prospective teachers to build and nurture the emotions of self and of their children to ensure the marvelous output.



**Shipley, Jackson, & Segrest (2010)** analyzed the emotional intelligence as the predictor of school performance. Hence, this study was empirical and emphasized to test this assertion. Undoubtedly, leadership potential and job success can both be predicted well by emotional intelligence. Using the Trait Emotional Intelligence Questionnaire Short Form (TEIQue SF), necessary information from a sample of 193 undergraduate business students was gathered in order to meet the goals of study. The results of the data analysis also exhibited that there was no significant correlation between academic achievement and emotional intelligence, however students with mid-range GPAs had considerably higher mean "well-being" component scores than those with lower and higher GPAs. Formerly emotional intelligence became a great variable of interest which molded the attention of all the researchers to itself. The success of schools or colleges is checked from the output or achievement of students and the weightage is given by the higher authorities to these learning centers or teachers on the basis of student's achievement. Not only business undergraduate students but the students from the other courses must be emotionally nurtured so that they would not be mentally harassed and would not feel any kind of frustration during their studies. It is the supreme duty of teachers, school authorities, boards of district and state level and ministry of education to run such type of programs where the minds of students could be overhauled and their emotions would be respected, nurtured and matured from all the angles. The school bodies must also instruct their students about the advantages and benefits of good emotions.

**Tevdovska (2017)** found that various studies on the effects of emotional intelligence on learning and teaching have been done but the present study is very different and unique from these and explored the "Definition of emotional intelligence and the impact that emotional intelligence and affective factors have on foreign language learning and teaching". A group of 23 students was selected for the study, and self-assessments of emotional intelligence and their perspectives were studied and explored to learn how emotional intelligence affects learning a

foreign language. The results of the analysis clearly demonstrated that the majority of students, who scored between 4 and 6, had low levels of emotional intelligence across a range of domains, including self-awareness, self-regulation, empathy, and social skills. This result of the investigation highlights the need of improvement in these areas of emotional intelligence. The study in terms of motivation displayed somewhat a different result from the above and 12 participants scored 4-5 and however the participants who scored average (3) in motivation were found significant. The analysis of the data demonstrated that a significant number of participants got higher scores which is the indication of lower emotional intelligence in many areas. The study showed that 13 participants scored low in self-awareness (6, 5, and 4) the average score of (3) were reported by 4 participants and out of the total 23 participants the rest one scored (1&2) which exhibited high aptitude. According to the self-awareness scores, 19 out of 23 participants executed their strengths and shortcomings, and it is beneficial to foster a deeper understanding among them. In the domain of self-regulation, 20 out of 23 participants think that developing their ability to comprehend, control, and handle anger, criticism, or accountability will benefit them as learners and future professionals. In the area of motivation the participants who scored average believed to benefit from motivational strategies. In the area of empathy the average score was performed by 15 participants who scored 4-6, 3 & 1-2. At last in the social skills area it is illumined that the leadership skills and the capability to communicate effectively with others and to understand them in honey ways are important.

**Trivedi & Shakya (2014)** conducted a study to investigate the emotional intelligence of prospective teachers in relation to their socio demography like, gender, caste and socio-economic-status. To make the study more precise, null hypotheses were also prepared, and the descriptive survey method was used. In this study, 300 prospective teachers from B.Ed. colleges affiliated with Bundelkhand University, Jhansi were chosen as participants, 150 of whom were male and 150 of whom were female. The Emotional maturity test developed by

K.S. Mishra and the General Information Sheet developed by the researcher were used to collect relevant data to test the hypotheses. The compiled data was analyzed using statistical measures such as mean, Standard deviations, and CR. The study's findings revealed that the mean scores of male and female prospective teachers were significantly different. The data analysis also revealed that prospective teachers of the general category scored higher on emotional intelligence than other castes; however, the study also revealed that there was no significant variation among prospective teachers in terms of socioeconomic status.

Occasionally, it is evident from the researches that our youth is suffering due to the lack of emotional intelligence. Human life is controlled by the emotions at all levels and hence it is the ability to utilize power, human energy and the root cause of life achievements. These researches conducted in the field of EI creates and develops the mind, power, information, knowledge, sense of humor, sympathetic attitude and great honor among prospective teachers. According to the findings of this study, people with high emotional intelligence should be prioritized in the hiring of teachers. Emotionally intelligent teachers would increase the feeling of oneness among students and enable them for positive changes in the society. Our nation is developed by the young generation and this generation is wholly molded and shaped in these classrooms. Therefore, emotionally intelligent beings should become our great and sincere teachers at all the levels. This study suggests a psychologically well-being for the teaching profession so that effective patterns of social interaction create and the feeling of threat will be removed among students. This study also recommended the higher authorities or educational boards to review the standards of teacher education on intervals and bring the flexible and quality changes in the system. The current study also advocates that caste system and other traditional dogmas should be eliminated as soon as possible and the students of every caste should be treated in equal manner to abort the concept of discrimination. The teacher training institutes should also provide the guidance and counselling programs for prospective teachers

so that they would fully prepare for the teaching profession. These teachers must also be trained in the field of psychology because to become a successful teacher with great output first of all you must know the psychology of your student. Teachers must be emotionally competent and have the ability to manage and understand the feelings of own as well as of their students.

## **2.4 Research Gap**

To represent a clear picture of the whole research process various national and abroad related studies have been reviewed. There were an indefinite number of studies related to the current research problem under study but the most germane and significant studies have been considered. Although many of the studies conducted on cognitive styles, emotional intelligence and academic achievement with reference to different socio-demography at different levels had been given comprehensive pondering. One of the research study demonstrated a significant effect of cognitive style on students' academic performance in basic science and technology. The current study's examination also revealed that female students have reflective styles while male students have impulsive styles. Some other factors are also accountable to influence the academic performance of students but as per the reports of latest researches cognitive styles has a noteworthy role in shaping the academic performance of students at all junctures. Existing research study was conducted to "Know the difference in cognitive styles and academic achievement of higher secondary students of Karur district". The study also laid emphasis on searching out the correlation of cognitive styles and academic achievement of students. For 300 higher secondary students "Cognitive Style Inventory (CSI)" developed by Praveen Kumar Jha (2001) was employed for collecting the primary data. In terms of cognitive styles and academic achievement statistical tests such as percentage analysis, mean, sd., t-test, and Pearson product moment correlation did not find any differences between boys and girls. However, the study also revealed a strong association between cognitive styles and senior secondary student's academic success. Researcher becomes competent to conduct a research

in smooth way only after experiencing the review of relevant literature. Neither the objectives of research can be accomplished nor can any theory be developed unless there should have theoretical and empirical support for conducting research study.

Emotional intelligence became a sound and vastly explored variable in the field of educational psychology that has a prodigious move in theoretical as well as practical concepts. Systematic review of literature surfaced that the key behind each success is emotional maturity and emotional competency. EI is the contributor in all the achievements of life. Studies have also shown a significant relationship between students' academic success across all grade levels and their emotional intelligence, however many of the studies did not depict results that could highlight the need for additional research. The study conducted by Özlü, et al. (2016) depicted that that students of natural science did possess lower mean of EI and social science students showed highest mean of emotional intelligence. This investigation also described that levels of EI were found lower among natural science students where as it was found moderate among social science students. According to the research studies, cognitive styles and emotional intelligence of students should be given full consideration as they both lead to psychological well-being and predict future analysis of one's life. Even though Teng, et al. (2009) in his research found that that people in the intuition group prefer image thinking whereas those in the analysis group prefer word thinking; as a result, the intuition group performs better than the analysis group. **Jain (2015)** strived to disclose whether High/Low EQ has any contribution in impacting the satisfaction level of females. For measuring the female's levels of emotional intelligence five- competency model of Daniel Goleman's Satisfaction Life Scale was administered to measure the life satisfaction of females. Results of the analysis conformed a positive correlation of emotional intelligence and life satisfaction of females of moderate level. Present research also explained that age does not have any impact on emotional intelligence but study showed that occupation has a high tendency to impact EI of females. **Sharma &**

**Pooja (2018)** looked into how the cognitive styles (field independent/dependent) of ninth-grade students studying English correlated with one another. The analysis of the research illustrated a positive relationship of cognitive styles (field Independent & field dependent) with academic achievement of students. Critical analysis of the related literature exhibited a large number of factors that can be great contributors in improving and effecting the cognitive styles, emotional intelligence and academic performance of students at all levels. So good number of researches have been found supportive to the present study and highlighted the implication of educational psychology in the academic life of students. Naqvi and his team in 2016 conducted an investigation to find relationship of EI and teaching performance of secondary teachers. Emotional Intelligence Questionnaire Short Form (TEIQue-SF) was used for collecting the primary data. Statistical means of mean, SD and Product moment correlation methods were used for analysis. The result portrayed a clear picture of significant relationship of emotional intelligence and performance of teachers. Therefore, cognitive styles and emotional intelligence variables are of paramount significance in the field of educational psychology and their attributes are evergreen with the harmonious development of personality. Cognition and emotions guide and direct our total individuality from birth till death.

The current study has also incorporated the necessary criteria to carefully examine the results of earlier investigations related to the variables under study. During the process of review different aspects of cognitive styles and emotional intelligence have been explored at different levels of age and schooling. Even though by reviewing the literature relating to the cognitive styles and emotional intelligence various ideas had created in mind that assisted in preparing objectives, hypotheses, research design, procedure for selecting the population and sample, tools appropriate for collecting the relevant data and appropriate statistical measures for analyzing the data. Some research studies help in selecting the smooth, systematic and flexible way to achieve the objectives of study without much hindrances. Despite being aware

about conducting research we also come to know about the applications of research findings in real life by reading the literature. By the comprehensive infiltration of past literature researcher has become acquainted about his research and its scope in different perspectives of life. Researcher has also been conversant about the national importance of study and its significance for human life by deeply analyzing related literature. Researcher has found various studies associated with cognitive styles and emotional intelligence but has never found any research study on “Cognitive Styles of Prospective Teachers in relation to their Socio-Demographic Variables, Emotional Intelligence and Academic Achievement”. After analyzing different sources like dissertations, theses, conference proceedings and journals of national and international level associated with my topic, it is now clear that the researcher by his genuine endeavors did not find any study which has been done either in the country or abroad earlier on the present topic. Since the novelty was one of the great reason for selecting this topic and its scope and predictable applications in reality also compelled me for selecting the said topic. Despite having the large number of factors determining the levels of emotional intelligence and academic achievement of students, but this inclusive and succinct research study lays emphasis on studying the correlated variables of cognitive styles, emotional intelligence and academic achievement of prospective teachers in context of their different socio-demography variables. Keep in view the foresaid research gap, the researcher took up the present study on the title “Cognitive Styles of Prospective Teachers in Relation to their Socio-Demographic Variables, Emotional Intelligence and Academic Achievement” for investigation.