Chapter 2

REVIEW OF LITERATURE
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2.1 Introduction

In the present study, by searching through relevant research works, accessing the books, journals, digital and on-line databases, the researcher has compiled the reviews that are presented here. Most of the studies given here are carried out on adolescents and focused on the problem behaviours, and the positive aspect of the youth development. This chapter deals with a detailed review of literature and studies relating to the three dependent variables value preference, social competence, and leadership skills and holistic education as the independent variable under study. The studies reviewed here, are from India and abroad and range from 1977 to 2016. To carry out the review for the present study, some key concepts from the problem have been extracted and classified, dependent and independent variable-wise and presented in a reverse chronological order and categorised into four sections. These are studies related to Holistic Education, Value Preference, Social Competence and Leadership Skills among adolescents.

2.2 Studies on Value Preference

Review of related literature on value preference highlights attempts made to establish a relation between value preference and its several correlates. A meta-analysis of personality traits, analysis on the extent of intergenerational values, leadership effectiveness, developing caring value orientation, gender differences in value systems pro-social development choices, sex role orientation, differential value preference and achievement have been studied as correlates. The studies emphasising foreign literature examined existing literature for meta-analysis, nursing, physiotherapy, social work and executives. Studies on adolescents, later adolescents, of universities have been attempted. A systematic review of the studies shows that there were gaps in value preference as a correlate of holistic education. In a study by
Parks-Leduc, Feldman, and Bardi (2015) titled a meta-analysis to find the relationships between personality traits and personal values, the analysis was done within the context of the most researched models of traits and values, the Big Five (Five Factor) model and Schwartz’s (1992) Value Theory. For this meta-analytic method, 60 studies were used. Out of these studies, 29 were published articles, one book chapter, 25 unpublished data sets, 2 data sets from conference presentations and three samples from dissertations. Meta-analytic procedures were based on Hunter and Schmidt (2004). The result of this meta-analysis established the relationships between personality traits and personal values. It also established a conceptual underpinning for understanding these relationships, as more cognitively based traits demonstrate stronger relationships with values, and more emotionally based traits exhibit weaker relationships with values. It was found that openness to experience and agreeableness are the most strongly and coherently related values; emotional stability is unrelated to values; traits and values are distinct constructs, and their relationships show little variation cross-culturally. This study has given ground for developing models for understanding a whole person.

Jimenez-Lopez, Segura-Sanchez, Pedro, and Lorente-Molina (2012) conducted a study on the personal values of students of nursing, physiotherapy and social work. They made an analysis on what extent the theory of intergenerational value change truly with respect to the predicted post-materialist values in youth. The theory of value change predicts that the younger generations would show preference to post-materialist values and the older generations would prefer materialist values. The sample consisted of 450 students of which 150 each belong to nursing, physiotherapy and social work groups. The tool used for the value assessment was Report of Personal Values (Roales-Nieto & Segura, 2010). The results showed that there were similarities with respect to the value preferences among the different groups of the value categories of social relationships, familism and ethical values. There were significant differences between the groups too. The nursing students showed the highest frequency of social relations and familism values. There were significant differences with regards to health, job and money values found between groups. Social work and physiotherapy students showed post-materialist profiles. However, nursing students showed a materialist profile. Thus, it contradicts the
prediction regarding the shift of values in younger generations about nursing students. This study recommends a review of the intergenerational social change theory.

Michelle and Nisha (2008) undertook a study to find out the role of home environment in forming personal values of an adolescent. The study used the Home Environment Inventory Scale by Karuna Shankar Misra and the Personal Value Questionnaire by Sherry and Verma on a sample of 160 adolescents. The study was conducted in Goa. The findings showed a significant difference in the home environment for the adolescent who had lost one parent and whose one parent worked abroad.

Bruno and Lay (2006) studied on personal values and leadership effectiveness. The study tried to find the executives’ personal values profile of Manaus Industrial Cluster, the predominant leadership style, the leadership effectiveness, the relation between the executive’s personal values balance and their leadership effectiveness, and the relation between executive’s personal values and organisational effectiveness. The study was conducted in Manaus Industrial Cluster in Brazil. The sample consisted of 400 executives from 48 organisations. A personal value questionnaire was developed to measure the relative importance of each value. To measure the aspects of leader behaviour the LEAD instrument, developed at the centre for leadership studies (Hersey and Blanchard, 1965), was used. The results indicated that the executives from Brazilian cluster had an unbalance in their personal values profile. It was found that the political value orientation of the leaders was the lowest average score among other values. To have good leaders who could show responsible influence, people-centered attitude and actions; one needs to develop knowledge for understanding and influencing leaders’ personal values. The results on leadership styles flexibility and effectiveness gave a conclusion that the leaders need to go for skill training. Results revealed that there was a high positive relation between executives’ personal value balance and leadership effectiveness. It was uncovered that there was a positive relation between executives’ personal value balance and organisation effectiveness. It was recommended that in leadership development efforts one has to consider a critical analysis on personal values’ balance.
Badger, Craft and Jensen (1998) attempted to study the development of a caring value orientation among students in grades 6, 8, 10, and 12. The Worldview Questionnaire was administered to 1247 adolescents representing four states of the USA. The questionnaire contained 14 items to measure preference for more caring, personal values. The SASS Catmod statistical program was used in the data analysis. A significant gender effect was found for 12 out of the 14 items. It was concluded that gender differences in value orientation do exist irrespective of culture. The gender difference for value preference exists till late childhood. Some values become more intense by late adolescence. It was also concluded that gender differences exist in all the states of the USA. It was found that the differences in value orientation intensified through adolescence for two variables namely forgiveness and friends. Male adolescents appear to develop a more gender-specific orientation as they get older. The study recommends the researchers to analyse the differences in values on societal norms which shape moral development, keeping in mind that gender is always a key factor.

Ann and Margret (1995) found out the gender differences among US adolescents on their value system. The study revealed a significant gender difference on three measures which they developed namely compassion, materialism, and meaning in life. Compassion is the concern for the welfare of the other and the responsibility involved in that. Materialism includes the material benefit and competition. Meaning is more of philosophical in nature, discussing more about purpose in life. Females in the sample expressed more compassion than the male adolescents. Males accept materialism and competition more than females. Compared to males they gave more emphasis in finding purpose and meaning in life.

Nancy, Gustavo, Bridget and Patricia (1995) made a longitudinal study on the pro-social development in late adolescence. They examined adolescents between the age of 17 and 20 on the change in prosocial moral reasoning and the gender differences in prosocial reasoning. Also, they examined the relationships among moral reasoning, pro-social behaviour, and empathy-related emotional responses. It is found that hedonistic reasoning reduced until adolescence, and then in adulthood, it increased. The overall reasoning of females was higher than males. Scores on the
interview and objective measures of prosocial moral reasoning were positively correlated.

Lau (1992) conducted a study to find whether the value choices of Chinese in Mainland China, Hong Kong, and Singapore would show a collectivistic pattern. This study examined the collectivistic-individualistic orientation of Chinese people by studying their value preference. The subjects contained 346 Chinese students selected from universities in Mainland China, Hong Kong, and Singapore. Another group of 105 students from the USA was also included in the study. All subjects were similar in age and year of study. The Rokeach Value Survey (Rokeach, 1973) was the major tool used for the study. The results showed that there was a heavy emphasis on individualistic values among Mainland Chinese. Significant differences were found among the various groups. Mainland Chinese had diverse orientations. They preferred the personal-extrinsic and competency values along with some social values. Whereas, Hong Kong and Singapore Chinese showed more preference for the personal-intrinsic and moral values. After the comparison between the Chinese and U.S students, it was found that the differences did not show any distinct individualistic or collectivistic pattern. Both Chinese and US students showed a similar ranking of freedom, equality, clean, independent, obedient, and self-controlled. The findings from this study indicated that the conceptualization of individualism-collectivism and its usage in differentiating cultures and societies need to be reconsidered.

Lau and Wong (1992) in a study titled Value and Sex-Role Orientation of Chinese Adolescents found the value preferences of Chinese students. The sample consisted of 428 tenth and eleventh-grade high school students from Hong Kong. Rokeach Value Survey was the major tool used for the study. It was found that adolescents preferred more personal and competency-oriented values to favour a joyous, comfortable, free and enjoyable lifestyle. Out of the 18 terminal values, the most important were freedom, true friendship, happiness, and a comfortable life. The least important terminal values were mature love, national security, an exciting life, and salvation. Out of the 18 instrumental values, the most important were capable, cheerful, broadminded, and intellectual. The least important instrumental values were logical, imaginative, clean, and obedient. This study showed the clearer relationship
between value preference and sex role orientation with adolescents. It was found that masculine adolescents were more agentic and personal whereas feminine adolescents were more expressive and communal in their value preference. Androgynous adolescents were more like the masculine adolescents on the agentic-personal values and more like feminine adolescents on the expressive-communal values. Further, the regression analysis showed that masculinity had more pervasive effects than femininity on adolescents’ value preference. It is observed that adolescents are preoccupied with a joyful life, freedom and competency. This kind of a life orientation may influence their psychological development. It could be a matter of concern for the future researchers.

Sharma (1977) conducted a study on differential values of teachers and students. The main hypotheses were based on the educational standard as a determinant of various values of students as related to their teachers. It was found that the moral values and ethical standards were more preferred by teachers compared to students. However, teachers were more aesthetic and money minded than students. There were differences concerning various value preferences between students and teachers based on gender. For this study, a sample of 280 subjects was randomly selected from a high school and a university. It was found that mean difference between the male and the female high school students was significant in the case of theoretical values and not significant in all other values like political, social, economic, religious and aesthetic.

Kingsley and Sanni investigated the impact of value preferences on achievement orientation of adolescents. The study was conducted in Ankpa education zone of Kogi state, Nigeria. It was a descriptive survey research. The sample consisted of 280 senior secondary students. The tool developed by the researchers namely Value Preference and Achievement Orientation Questionnaire was used for the study. It was found that both male and female adolescents had almost the same value preferences. Location did not largely influence adolescent value preference. However, it was found that there was value diffusion among adolescents of both urban and rural locations. This research recommends that teaching of core values should be a part of any school curriculum. That would result in reorganising values in
the life of adolescents. Also, constant campaign on undisputable core values could be carried out in our schools and cities.

From the above-mentioned research studies on values it is clear that gender has an influence on value preference, home environment, especially parents have a role in their children’s values formation, teacher-student relation can have an impact on value preference, one’s culture and other demographic features can influence the value preference, personality traits and leadership styles also could affect the values, and the program one enrolled for studies also can influence value preference. This study takes inspiration from all the previous researches and tries to extend the research on engineering students in the Indian context.

2.3 Studies on Social Competence

Studies reviewed on social competence range from developing a scale exploring different dimensions of social competence in adolescents to empirical investigations on major constructs of social and emotional effectiveness. The dimensions of the social-emotional effectiveness constructs and the ability and trait emotional intelligence, the relationship between personality and these dimensions were studied. The relation between adolescent social competence and young adult delinquency and educational attainment among at-risk youth, intervention program known as Social Competence Training for Adolescents with Borderline Intelligence, impact of fathers’ attachment and parenting behaviour on their children’s social competence, students with Autism Spectrum Disorders (ASD) to find the impact of a social competence and social skills training intervention program have been examined. Further changes in social competence in young children who exhibit conduct problems, the effects of ethnic and gender differences in the social competence of students, an adolescent social initiative which is a form of adolescent social competence, adolescents to find peer interaction difficulties have been studied. The studies cut across Young children, adolescent students employing methods to identify constructs, intervention programmes, longitudinal study and impact study experimentally were undertaken. The survey of research studies undertaken on social competence looked at various aspects related to holistic education.
Shujja, Malik, and Khan (2015) developed a social competence scale for adolescents (SCSA). This study explored different dimensions of social competence in adolescents within the context of Pakistani culture. The method adopted consisted of construct identification, item generation and formulation, and finally empirical evaluation of items. The sample size was 398 drawn from adolescents belonging to various schools and colleges in Pakistan. Their age ranged from 14 to 18. Finally, the social competence scale for adolescents was developed with 53 items. The key dimensions derived were self-efficacy, sociability, adaptability, self-confidence, social initiative, and leadership. These findings would help the educationalists to develop training programs to improve the social competence of adolescents.

Schlegal, Grandjean and Scherer (2013) investigated the major constructs of social and emotional effectiveness. This study focused on the dimensions of the social-emotional effectiveness constructs (SEEC), and the ability and trait emotional intelligence about SEECs, and the relationship between personality and these dimensions. The sample consisted of 147 students of different disciplines with an average age of 25. The data analysis was done based on 32 scales from five self-report and three performance-based instruments. The parallel analysis brought in four components of social-emotional effectiveness constructs’ domain labelled expressivity, sensitivity, emotional abilities, and self-control. It was found that emotional abilities component was related to sensitivity. The results also show that SEECs could be considered the interpersonal and emotional part of personality.

Nestler and Goldbeck (2011) developed the intervention program known as Social Competence Training for Adolescents with Borderline Intelligence. The study tested the impact of the program on a sample of 77 adolescents with a sample of 40 in experiment group and 37 in control group. The study was designed as a randomised controlled trial (RCT). It was conducted in two phases. In the first phase pre-test, intervention and post-test assessment were done on the social competence. In the second phase, there was a follow-up. The results measured after the post intervention and follow up phase showed a significant improvement in the social competence specifically on social problem-solving skills and achievement in behavioural goals.

Stepp, Pardini, Loeber, and Morris (2011) investigated the relation between adolescent social competence and young adult delinquency and educational
attainment among at-risk youth. The mediating role of peer delinquency was tested. The sample consisted of 257 participants from a longitudinal study of the development of delinquent behaviour among inner-city boys of a Pittsburgh Youth Study. The sample had 16 total assessment periods, and the age ranged from 13 to 25.5 years. After the data analysis, it was found that at-risk boys with high social competence decreased their contact with deviant peers. That helped them to keep away from various types of delinquency in early adulthood. The result indicated that social competence had a direct impact on educational success in early adulthood. Thus, this study explains the importance of intervention programs to improve the social competence of youth at risk to reduce their antisocial behaviour and improve their educational success.

Chae and Lee (2011) examined the impact of fathers’ attachment and parenting behaviour on their children’s social competence. The sample consisted of 85 boys and 75 girls from eight preschools and their fathers. The fathers were given a questionnaire related to their parenting behaviour and their childhood memories of their parents’ attachment representations. The structural equation modelling (SEM) results showed that the fathers’ childhood attachment representations had a significant indirect influence on boys’ social competence through their parenting behaviour. However, the SEM results for girls’ fathers showed that fathers’ childhood attachment representations of their parents had no direct or indirect influence on girls’ social competence. Thus, this study concluded that fathers’ childhood attachment representations had an impact on their parenting behaviours toward their male children and not to their female children.

Cotugno (2009) conducted a study on students with Autism Spectrum Disorders (ASD) to find the impact of a social competence and social skills training intervention program. The sample included 18 children diagnosed with ASD, and the intervention program was for 30 weeks. The measures used to collect data were the Walker-McConnell Scale of Social Competence and Social Adjustment and the Massachusetts General Hospital Social Skill Development Scale. These instruments were used in both pre-treatment and post-treatment phases. The main focus of this study was on three major issues. They were the experience and management of stress and anxiety, joint attention, and flexibility. The results showed that the intervention
program had a significant impact on the children with ASD on social competence and skills. It was found that the treatment reduced anxiety in social situations, increased positive peer social interactions, and improved the flexibility and willingness to change. According to this study, this impact could improve the teacher and peer preferred social behaviour and school adjustment.

Raju and Rahamtulla (2007) examined the adjustment problems of school students. They selected the sample from urban and rural schools of Visakhapatnam district. Apart from the variable adjustment, the study included age, gender, class, type of school and so on. The sample consisted of 461 students (197 boys, 264 girls) randomly selected from the various type of schools. The major findings showed that the class, the medium of instruction, the kind of management, and parental background influence the adjustment problems of school children.

Drugli, Larsson, and Clifford (2007) attempted to find the changes in social competence in young children who exhibit conduct problems. The study examined 127 children aged 4 to 8 from two child psychiatric clinics. Pre-test, post-test and delayed post-test were conducted on the data collected from mothers, fathers and teachers. The delayed post-test was conducted after the duration of one year from the treatment period. 47 children underwent parent training, and 52 children underwent a combined treatment of parent training and child therapy. 28 families were in the waiting-list group (control group) status, and they were not given any treatment for six months. After the data analysis, it was found that parent training combined with child therapy showed significant improvement in child social competence based on the reports of the mother, father and child.

Mpofu, Thomas, and Chan (2004) investigated the effects of ethnic and gender differences in the social competence of students. The sample consisted of 371 students and 13 teachers from Zimbabwe of which 42% were black, and 58% were white. The data was collected from peer group and teachers. Social behaviour, social responsibility, and friendliness were the components of the social competence measures. It was found that teachers rated white students higher on social responsibility and social behaviour whereas students rated white only on social responsibility. In terms of ethnicity and gender, white and female students were higher on social behaviour and social responsibility than their black and male friends.
Female students showed better social competence and school adjustments compared to males. There was a significant difference in social competence of students with ethnic and gender differences perceived by teachers and peers.

Barber and Erickson (2001) reported on a study of adolescent social initiative which is a form of adolescent social competence. This study showed the extent to which variations in the social initiative can be understood with respect to the interpersonal relationships among the adolescents. This research investigated initiative in interpersonal relationships with peers and adults outside of their homes, and their degree of participation in school-based team activities. The sample consisted of 750 students of two age groups, 11 – 13 and 14 -17. The assessments were done for three consecutive years by surveys using mail reports. Various measures were used for the data collection and analysis for the variables social initiative, parental support, behavioural control, psychological control, parent-adolescent conflict, peer relationship quality, community interpersonal relationship, school interpersonal relationship, self-esteem, and antisocial behaviour. It was found that in the bivariate correlations all the above variables in the model were prominent in predicting social initiative.

Ralph, Hogan, Hill, Perkins, Ryan and Strong (1998) conducted a study on adolescents to find peer interaction difficulties. This study was designed to improve social competence skills, especially concerning peer group interactions. Comparison with 18 socially competent adolescents found substantial differences between groups at pre-test and significant improvements on different measures across different adolescents.

The literature review on social competence reveals the various dimensions of the concept social competence. They include social-emotional effectiveness constructs, adjustment problems of the adolescents, peer interaction difficulties, interpersonal relationships, the at-risk youth, and students with conduct problems, autism spectrum disorders, the influence of gender, parenting behaviour on social competence are discussed. However, in general, the review indicates that direct relationship of social competence to holistic education is hardly explored and therefore this gap justifies the need to analyse social competence as an important correlate of holistic education. In this study, the impact of holistic education on
various dimensions of social competence among engineering students is discussed in the Indian context.

2.4 Studies on Leadership Skills

The literature reviewed on leadership skills are oriented to investigate the impact of various programmes specifically designed such as Long Beach YMCA, CLTP, meta-analysis of leadership training to identify and define leadership among youth in career and technology education programme. Besides, empirical studies have been undertaken to study the development and effects of transformational leadership among adolescents. Leadership among adolescents of engineering colleges forms an essential dimension of holistic education as perceived by educators, universities and programme providers. The study by O’Donnell and Coe-Regan (2006) found the impact of the Long Beach YMCA CORAL Youth Institute program on the technology and leadership skills of the participants from 2003 Intensive Summer Program. 37 participants with age ranged from 13 to 17 attended the program. Self-report survey data was collected from the participants on their first and last day of the program. The tools used to collect the data were the Leadership Skills Inventory (Karnes & Chauvin, 2000), and the Technology Use and Competencies Inventory developed by the researchers. It was observed that participants showed significant improvement in all the nine types of leadership skills namely, fundamentals of leadership, written communication, speech communication, character building, decision making, group dynamics, problem-solving, personal and planning after attending the program. Fundamentals of leadership, problem-solving and planning skills had the highest impact among the nine types of skills. Thus, this study could come out with a premise that technology, combined with positive youth development, can develop various skills among the youth.

A Creative Leadership Training Programme (CLTP) designed for gifted and talented students showed significant impact on leadership characteristics of students after the intervention study (Chan, 2003). The sample consisted of 60 students who attended CLPT (experiment group) and 56 students who attended a non-CLPT program (control group). Their age ranged 15-18 and belonged to Chinese University of Hong Kong. The tools used for the data collection were Wallach-Kogan divergent thinking tests (Wallach & Kogan, 1965), Roets Rating Scale for Leadership (Roets,
Interpersonal Communication Competence Scale (Rubin & Martin, 1994), Self-Perceived Public Speaking Competency Scale (Ellis, 1995), and Social Problem Solving Inventory (D'Zurilla & Nezu, 1990). Comparing CLPT participants with non-participants on pre-intervention period showed no significant difference on general measures of divergent thinking and self-report leadership qualities. The comparison of pre-intervention and post-intervention assessment measures of CLPT participants showed significant improvement in leadership qualities namely, communication skills and public speaking skills, and in emotional competence and social problem-solving skills.

Ricketts and Rudd (2002) conducted a meta-analysis of the leadership training literature for youths. This study was intended to identify the main constructs that define leadership among youth in career and technical education programs and thereby constructing a model for youth training curriculum. This study proposed a curriculum framework for teaching leadership. This model has five dimensions. They are leadership information and knowledge; leadership attitude, will and desire; decision making, reasoning and critical thinking; oral and written communication skills; and Intra and interpersonal relations. Instruction based on this model would benefit adolescents to improve their leadership skills.

In the study of Mumford, Zaccaro, Connelly, and Marks (2000), a review was conducted to find the central implications of the skills-based model of performance. According to the skills-based model, the leader performance is based on three skills namely, problem-solving skills, solution construction skills and social judgment skills. It is found that all these three skills are indeed the key factors for leader performance. However, these are not the only factors affecting leader performance. Variables such as leaders’ beliefs and values, meta-cognitive skills like time sensitivity and prioritising, situational variables like stress and inadequate resources could also be studied. The strengths and weakness of the previous researches were analysed and given potential direction to prepare leaders for the twenty-first century and the ever-changing world.

Mumford, Zaccaro, Harding, Jacobs, and Fleishman (2000) proposed a leadership theory in their study which stated that effective leadership behaviour depends on the ability to solve different types of complex social problems. This study
discusses various skills required for solving complex problems. According to this study career experience is also a key factor which influences the leadership skills development. It is found that effective leaders always exercise influence judiciously. Thus, the major factors influencing the leaders’ performance are cognitive abilities, motivation, personality, career experiences, problem-solving skills, social skills, and knowledge.

Zacharatos, Barling, and Kelloway (2000) studied on the development and effects of transformational leadership in adolescents. The sample of this study consisted of 112 students and 12 coaches from 13 Canadian high school sports teams. The tool used to collect the data was the Multifactor Leadership Questionnaire (Bass & Avolio, 1995). It is found that transformational leadership behaviours are not only shown by adults but also by adolescents. Adolescents who exhibited transformational leadership behaviours appeared to be able to evoke effort from their peers and were perceived to be successful leaders. Thus, the adolescents with transformational leadership style could have critical implications for later leadership. The findings from this study helped the understanding of adolescents’ leadership formation.

Sogunro (1997) examined the impact of a 19-year-old leadership training program on participants’ leadership behaviour. Combined approaches of both qualitative and quantitative approaches were used. The sample consisted of four types of stakeholders. Namely, the participants, the organisations, the trainers, and the administers of the program. The sample size was 234. The criteria used for finding the impact consisted of, an increase in participants’ leadership knowledge, an increase in participants’ leadership skills and changes in attitudes of the participants. After the data analysis, it was found that there was a significant increase in the leadership knowledge and skills of the participants. There was a significant change in the attitudes of the participants from pre-training to post-training. It was observed that there was a significant difference in the leadership behaviour of the participants on the job after the intervention program. The study recommends that each organisation shall train all its members in leadership rather than a few selected ones. The current leaders should be trained in new ways of leading differently to face the challenges of today and tomorrow. Thus, this study concludes that training can improve a participant’s leadership competency on the life situation or workplace.
The literature review on leadership skills portrays the main constructs of leadership, a skill-based model of leadership performance, different kinds of leadership training programs, various theories on leadership, kinds of leadership skills, and the stages of adolescent leadership formation. Leadership as a correlate to holistic education is not adequately addressed in empirical research. Hence leadership skills need to be explored and justified as an important variable that impacts holistic education. This study explores various dimensions of leadership skills and how it could be developed among engineering students in the Indian scenario.

2.5 Studies on Holistic Education

In recent years, there has been a spurt in the promotion of holistic education and core values in institutions and context such as conflict affected areas assessment on holistic engineering education as a model for holistic development emphasizing human values and professional ethics. Further ethical and moral development, students’ adjustment, whole student development, school-based programmes to develop emotional social skills have been carried out. Interest to study institutional efforts for the formation of good citizens, a meta-analysis of programmes based on the heart instead of the brain as related to academic performance of students have been explored. In line with holistic education as a key variable, Kureethara and Thomas (2016) conducted a study to find the impact of the core values on the students of a University in Bangalore. Data required for this research was collected from the student satisfaction survey of the university. The sample size was 1530 students. There were 111 questions to find the satisfaction level of the students. Six questions were only on the core values of the university. They were on sensing the goodness of God, developing moral uprightness, developing ethical standards, loving fellow beings, respect for alternative viewpoints, and sense of civic responsibility and community involvement. The data was analysed using ANOVA, F-Test and Welch’s t-Test. It was found that there was a significant impact on the acceptance of the core values of the University among the undergraduate students who had their schooling in the same type of institution. The study indicated the importance of having core values for the holistic development of an individual in an education institution which would mould the individual with mental, social, physical, and emotional efficiency and responsible citizenship.
Kaigama and Audu (2014) examined in their paper the relationship between holistic education and learners in conflict-affected areas in Nigeria. This study suggested that education could play a central role in informing good attitudes and social connectedness and thereby it could result in the solution of a conflict. Through holistic education, one could be trained in how to care for the communities around and the world in general. Education should focus on peace and diversity in addition to reading, writing and arithmetic. This paper considered holistic education as an epistemological revolution against the capitalist culture namely, technological fundamentalism, and worship of money. Through holistic education students should be prepared to meet the challenges of life as well as academics. The paper concluded by stating that holistic education should blend the local wisdom and global knowledge, values and skills so that a student would develop as a good citizen of his/her country as well as a citizen of the global village.

Hussain and Kumar (2014) conducted an assessment study on the methods developed by the engineering institutions in India for the future engineering education. This study gave suggestions and plans for the holistic engineering education development in India. The quality of the engineering graduates does not fulfill the requirement of the global market. The paper insists that engineering students must be educated by an engineering education development model for holistic development. This model would bring a solution to problems of human values, attitudes, behaviour, and dynamics of social, political, environmental and economic systems. Also, this model makes sure the qualities such as an ability to work in teams, awareness of professional ethics, communication skills, global understanding of engineering requirements, a desire for lifelong learning, and good general knowledge on contemporary issues. Thus, the paper submits at the end that engineering education should provide holistic quality education as per the holistic quality management model.

A survey was conducted among 538 students from Bengaluru in India by Devassy (2012). The sample consisted of 208 male and 330 female students of various undergraduate programs. The randomly selected students were asked to rank the 12 objectives of Christian higher education; specifically, career development, imparting civic sense, knowledge creation, knowledge dissemination, ethical or moral
development, spread of the Gospel values, developing social skills, developing personal skills, academic excellence, developing interpersonal skills, developing professional skills, and imparting social sensitivity. There were five top perceived priorities for higher education as suggested by the students who responded to the survey. They are ethical and moral development, social skills, personal skills, academic excellence and career development.

Al-khatib, Awamleh, and Samawi (2012) investigated on the level of student’s adjustment to college life in a technical university. The sample consisted of 334 students. The tool used was Adjustment to college scale (ATCS) (Baker & Sirk, 1984). The scale measured mainly four domains under University adjustment: academic adjustment, social adjustment, emotional adjustment and commitment to goals. It was found that the degree of students’ adjustment to university life was only moderate. The study recommended the need for some comprehensive educating programs at the beginning of university life to face the challenges of their life within the university as well as in their future endeavours.

A stimulus paper by Quinlan (2011) investigates through various literature to answer some key questions on developing the whole student in higher education institutions, especially in the UK context. The first question was about the meaning of the concept ‘developing the whole student’. The holistic student development includes not only academic knowledge and skills but also emotional, spiritual, and moral dimensions, and the relationship between thinking, feeling and action. The second question under discussion was to find the impact of university experience on students’ holistic development. The paper submits that in the USA several researches showed that there was a significant impact on university experience on the holistic development of students with respect to attitudes, values, civic involvement, cultural diversity and moral reasoning. More research is required to come to conclusions on UK students. The third question was on the activities for holistic development. The paper suggested educational programmes develop values, sense of self, purpose in life, service learning, peer interaction, field trips, and study abroad, women’s studies and so on. Finally, this paper discussed the leadership challenges and proposed various spheres of leadership. Leaders should create a conducive environment for the holistic growth of students; leaders need to be role models for their students, and
leaders should include curricular and non-curricular strategies to promote holistic development.

Durlak, Weissberg, Dymnicki, Taylor, and Schellinger (2011) conducted a meta-analysis on a sample of 213 studies with the involvement of 270,034 students. The study was one of the large-scale meta-analysis to evaluate the school-based programs to develop the emotional and social skills of students. This study was based on the interventions for the entire student body rather than on problem students. It was found that Social and Emotional programs had a significant impact on the students’ skills, attitudes and behaviours. The study gave an observation that the teachers of the same school could conduct these programs without affecting the quality of the intervention. The study also concluded that these interventions enhanced the academic achievement and classroom behaviour of the students.

Shek (2010) explored the question how holistic development could be promoted among university students in Hong Kong. His study was based on the positive youth development model. He recommended seminar courses with emphasis on intrapersonal competencies, interpersonal relationship skills, civic responsibilities, and sense of citizenship to be conducted for the freshmen university students. This study gave observations based on research findings on the developmental issues of young people in Hong Kong such as growing substance abuse, psychosocial and adjustment problems, ignorance about the society, poor mental health, anxiety problems, and no awareness of purpose in life. The study gave the arguments for making holistic education a mandatory course for university students in Hong Kong. The main arguments based on surveys and previous studies were: lack of intra and interpersonal skills among the young people, lack of knowledge of Hong Kong and China and citizenship, unhappiness of employers about the maturity of the young graduates, lack of other personal, interpersonal and societal skills among students, and the governments’ expectation on the future citizens of the country.

Star and Hammer (2008) explored the opportunities and challenges of the concept of graduate skills in Australian universities. They discussed the dichotomy between the idea of universities as institutions of vocational education and the traditional view of institutions for the formation of reflective practitioners, social critics and good citizens. In the first phase, this study gave us the background of
changes in higher education especially in the context of Australian universities for the past twenty years. There was a shift from traditional expectation of universities as research centred institutions to the formation of white collar employees with some professional skills. Students were considered as paying customers, and the focus was shifted to mass education and teaching. Through a meta-analysis of various studies, it was found that students’ major objective was to get a good placement rather than passion for knowledge. The second phase of this study discussed the link between graduate skills and the role of the university. Employers, in general, are not satisfied with the various skills of the university graduates. Universities should be concerned about this and make changes in their pedagogy. Unskilled graduates are failures with respect to employability and traditional role of being good citizens. This study concluded with an indication that the higher purpose of higher education should be the creation of reflective professionals, social critics and good citizens.

Arguelles, McCraty, and Rees (2003) through a meta-analysis study on several researches concluded that educational programs based on the heart instead of the brain could improve the emotional, cognitive and academic performance of students. This study established the importance of heart-mind dynamic in the holistic training of the students. Heart-based tools and technologies called HeartMath system developed for teaching and learning shifted the focus of attention to the area of the heart. These tools have been introduced in US schools and colleges which demonstrated an improvement in emotional competence, classroom behaviours, and academic achievement. The meta-analysis results of the various studies confirmed the success of HeartMath system, and it proposed the integration of heart-based tools and technologies in the curriculum to facilitate the overall development of students and teachers.

The literature review presented under holistic education gives the various factors affecting the holistic growth of an individual. Graduate skills expected from university students in Australia, conflict resolution skills through holistic education in the context of Nigeria, the activities for whole person education in UK situation, how to shape the future citizens in a holistic manner in the Hong Kong context, Academic achievement through social-emotional learning in the context of the USA, unemployability of the graduates globally, the importance of imbibing the core values
of the Institute for the overall development, importance of intervention programs in the beginning of college life, various methods used in Indian engineering institutes, and the heart-based education instead of brain-based for the whole person development form the basis for current understanding of holistic education programmes in the above research findings. However, Holistic Education programme designed and tested in professional Engineering context is lacking, and therefore the present study comes out with a holistic education intervention program for the integral development of engineering students in the Indian context.

2.6 Overview

The reviews presented in this chapter focused on the previous studies on value preference, social competence, leadership skills, and holistic education of students from a positive psychological perspective. These studies clearly indicate that a programme like Holistic Education could give an impact on the value preference, social competence, and leadership skills of students. It is also observed that the integral development of a student is the desirable outcome of any education system. Thus, through this study, the researcher developed a training program in the name of Holistic Education to enhance various skills for the whole person education. However, it is found that most of the studies have been reported are from foreign literature and Western countries and include a range of meta-analyses, reviews, programme design and very few empirical based investigations. Studies conducted in India are very few, and there is an urgent need to undertake studies in the area of holistic education. Besides an increase in imparting holistic education in general, investigation on the importance of holistic education among professional and engineering students in specific is lacking. There was hardly any intervention based studies that impact the academic performance and campus experience of engineering students which has enabled the researcher to identify the gap in the area of holistic education and to decide on the correlates: value preference, social competence and leadership skills for undertaking the present empirical study, through a carefully designed intervention based experimental study on engineering students. Thus, after reviewing several studies and finding the gap, the researcher felt the imperative need to undertake the present study. The methodology of the present study is presented in the next chapter.