Review of Related Literature

Career choice is a critical decision every individual makes as it impacts all aspects of his life in the future. Research done in this area was reviewed using the main key words career decision making, career choice, career maturity, career expectations, adolescent, personality, family, parenting style, decision making, metacognition, and factors influencing career decisions. Electronic databases like Proquest, Ebsco Host, and Google Scholar were used for the literature review. Print editions of books that were available were also used.

A number of factors influence career choices in people, and this is documented in literature. Both personal and external factors have been seen to play a role. The complex interplay of intrinsic and extrinsic factors and their influence on career decision making has been stressed by theorists and researchers (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001; Borchert, 2002; Sands, 2011). Several studies have focused on specific aspects of career decision making and various combinations of factors that influence career decision making.

Specifically, the research done on psychosocial correlates of career decision making and career maturity is discussed in this chapter. The chapter is organized in the following manner.

- Career decision making- career expectations, career planning.
- Factors influencing career decision making.
- Individual factors- age, gender, personality, and cognitive variables like metacognition, personal interest.
- Contextual factors- socio-economic status, school type, family variables.
Career Decision Making

Decisions regarding careers and career choices require significant thought and preparation. Career maturity, career decidedness, decision status, career planning and career expectations have been explored as different aspects of career decision making. Research in the area of career planning, career expectations and decision status in adolescence is discussed in this section.

**Career planning and information seeking about careers.** An individual’s exposure to the world of work begins in childhood. Preparing for a career is an important task in adolescence when career exploration is a key developmental task. Exploration involves active seeking of information about careers. Therefore it has been of interest to researchers to explore the various avenues from which adolescents seek career information. Parents have consistently been reported as the main source of information by students (Levine & Hoffner, 2006; Millward, Houston, Brown, & Barrett, 2006). In addition, educational institutions, part-time work, peers, mass media, have been identified as sources of information about careers for adolescents (Levine & Hoffner, 2006). 64 students took part in a survey using a questionnaire to study the role of these five aspects on career information. Data from all open-ended questions was coded and validated. Parents were reported to be the most significant source of positive and negative information about careers followed by part time jobs, peers, and others.

Julien (1999) using a mixed methods design explored the information seeking behavior, sources of information seeking and barriers to information seeking regarding careers in 399 adolescents in Canada. Quantitative data was collected using a questionnaire, and qualitative data was collected from 30 students through interviews. Analysis revealed that nearly half the sample was not aware of where they
could get help and about the importance of trustworthiness of the source of information. The need for more organized information regarding careers and need for easy availability of the same has been brought out in this study.

Career planning though important is seen to be lacking in adolescents. This was reported by Millward et al. (2006). The career planning needs of senior high school students in Canada was explored by Witko, Bernes, Magnusson, and Bardick (2005). They surveyed 2941 students from 52 schools. Quantitative and qualitative analyses were done. The results reveal that majority of the participants viewed career planning as an important task for them. They also reported that they would approach parents mostly for help in this regard followed by relatives, friends, counselors, and then teachers. The participants stressed the need for better career counseling services. The researchers have suggested exploration of the influence of cultural and psychosocial factors on career planning in adolescents.

The studies suggest the need to develop more organized access to career information and more importantly educate students about the need for information seeking and availability of information and career options within their socio-cultural context.

**Career expectations.** Expectations from a career and vocational aspirations guide the choices of individuals and aids in the identification of educational choices, future goals, and career options. Hence researchers have explored career aspirations. Vocational aspirations can be influenced by gender (Agarwala, 2008; Millward et al., 2006), socio-economic status and academic performance (Patton & Creed, 2007).

Patton and Creed (2007) found a relationship between career maturity attitude and knowledge components and occupational aspirations in 333 high school students.
These students were assessed on measures of career maturity, career indecision, career goals, self-esteem, and school achievement. They reported gender differences in occupational aspirations and expectations.

Using a developmental contextual framework Ma and Yeh (2010) studied the educational and career plans of 265 Chinese immigrant youth. They explored how perceived environmental barriers, fluency in English, parental support for career-related variables and parents’ value on achievement predicts career and educational plans and expectations. Analysis of data revealed that English language fluency and parental support was related to higher career aspirations while perceived educational barriers led to negative attitudes.

Chandna (2014) studied the career maturity levels and level of aspiration and the relationship between them in 120 adolescents in India. Gender differences, differences based on place of residence (rural, urban), and type of school were also investigated. Majority of the sample had an average level of career maturity. They, however, did not find significant differences in career maturity and level of aspiration based on the type of school, gender, and rural and urban participants.

A survey was conducted in India by the Ph.D. Research Bureau (2014) to understand student perceptions and career expectations, finance management, income sources, and expenditures. The participants were 3000 students studying in under-graduation and post-graduation courses in Delhi-NCR region, India. Financial stability was one of the main expectation of the student’s. 44% of the students preferred private sector jobs while 36% preferred government jobs.

A longitudinal mixed methods research was conducted on 918 secondary school students in the Pacific Islands. The aim of the research was to understand
career pathway development and factors influencing subject choices and career choices of these students. They explored career aspirations and expectations of these students and found that two-thirds of the sample were undecided about their career choice, and 33% had no career aspirations. Professional, community or personal service careers were preferred more than trade careers. Structured career planning was seen to be absent. Students reported of relying on family for advice regarding careers (Ministry of Pacific Island Affairs, 2014). Thus it can be seen that career aspirations and expectations can influence future career choices.

Career preferences. Career preferences depends on career expectations and other factors like occupational stereotypes. In the Indian society, a preference for careers related to engineering and medicine has been reported. This is illustrated by the findings of the following studies. Janetius, Mini, and Chellaturai (2011) reported that 36% of students preferred engineering as a career choice while 20% preferred medicine. Agriculture was the least preferred occupation of the participants. Similarly, science and technology and education were most preferred careers while agriculture was the least preferred career as seen in a study conducted on 300 Indian adolescents studying in graduate colleges in Kanpur, India (Shakya & Singh, 2013). No significant gender differences were seen in assessment at six months. The reasons for career preferences ranged from prestige attributions to occupations to job opportunities.

Decision status. Adolescents are expected to have made a tentative career choice, and a body of literature has emerged to explore the correlates of decidedness and indecision related to career choices. Career indecision refers to “the individual’s decisional or behavioral actions pertaining to difficulty and avoidance in making decisions and commitments” (Cheung, Cheung, & Wu, 2014). Osipow and Gati (as
cited in Cheung et al., 2014) define career unreadiness as “a difficulty in forming
decisions about and beliefs in an enduring vocational commitment”. While earlier
research focused more on career indecision, recent research also focuses on studying
characteristics of individuals who have made a decision about their future. Career
decidedness and indecision has been examined in relation to various variables.

Rani, Gupta, and Sharma (2013) studied the relationship between career
maturity and decision status, academic performance, and locus of control using an ex-
post facto 2X2 factorial design. The sample consisted of 600 students studying in XI
standard. Statistical analysis using t-tests and analysis of variance revealed that career
maturity was significantly higher in students who are decided about their careers, high
academic performers, and participants with an internal locus of control. However, no
interaction effects were seen. This study brings out the links between individual
factors and career maturity.

The adverse effects of career indecision is highlighted in the following studies.
The link between career unreadiness, authoritarian parenting, and anxiety was
investigated by Cheung et al. (2014). It was hypothesized that career unreadiness
mediates the effect of authoritarian parenting style on anxiety. 229 undergraduates
from a University in Hong Kong participated in the study. Results obtained by
structural equation modeling reveal that career unreadiness mediated the effect of
authoritarian parenting style on anxiety.

When compared to decided students, undecided students had greater negative
career thoughts and career decision-making difficulties while they had lower career
decision-making self-efficacy. These findings were reported in a study by Bullock-
Yowell, McConnell, and Schedin (2014) where they studied decision status and
administered Career Decision Self-Efficacy Scale- Short form, Occupational Alternatives Questionnaire, Career Thoughts Inventory, and Career Decision Difficulties Questionnaire. Gender differences were seen in career decision-making self-efficacy. Lack of information was associated with career indecision as undecided students did not differ from decided students on readiness to make a decision. The exact nature of the relationship between these variables cannot, however, be known.

The studies reveal that career indecision is linked to career decision-making difficulties. More studies can focus on the causes of career indecision and suggest ways to improve career decidedness in adolescence to promote effective career decision making.

**Factors influencing Career Decision Making**

Individual and contextual factors are known to influence career choice and career development. Research related to individual and contextual factors is outlined in this section.

**Individual characteristics.** Factors intrinsic to the person and their relationship with various aspects of career decision making is illustrated in literature. Personality, self-esteem, interests, aptitudes and cognitive factors have been implicated to influence career development.

A mixed methods study surveyed the career choices and career shifts of youth in Mumbai and also influences on their career choices as perceived by youth and their satisfaction with their career. In the 68 youth that they surveyed, they found career choices to be specific for class and gender. The ratings of the importance of influence were highest for self, followed by family and least influence was seen by career guidance services. The combination of the importance of self and family was high in
comparison to only self individually (Bakshi et al., 2012). Similarly, personal and family factors influencing career choices in management students in Sri Lanka was investigated by Anojan and Nimalathasan (2013). The sample consisted of 103 management students and data was collected using a survey. Personal factors were seen to be the most influential factor in comparison to family, occupational, market-related factors and university related factors. Research related to gender, age, personality traits, and cognitive factors has been reviewed in the following section.

**Gender.** The influence of gender on career development is significant as individuals internalize gender roles propagated by their culture. Socialization, child rearing practices, and career expectations vary with gender. Career genderization starts in middle school or early in high school (Adya & Kaiser, 2005). Earlier, careers were seen to be a journey that only men embarked upon while women were more inclined towards the management of the family and home. However, this has changed with changes in social structures all over the world. Today women are also career-oriented and pursue careers just like their male counterparts. In such times gender role stereotyping may limit opportunities for both sexes.

Links have been found between gender and career development (Arulmani & Nag-Arulmani, 2006). The need to investigate if career related decisions are gender-free or influenced by gender has been advocated in literature (Koumoundourou, Tsaousis, & Kounenou, 2011).

Several studies have found gender differences in several aspects of career development like career maturity, career decision making self-efficacy, and career decision-making difficulties. Gender differences in career maturity have also been seen in several studies. In some studies, female participants were seen to have higher
career maturity scores, while in others male participants were seen to have higher scores.

In one of the early studies, Luzzo (1995) studied gender differences in career maturity using a mixed method research design. Quantitative data was collected using the Career Maturity Inventory, Career Development Inventory, and Vocational Preference Inventory. Individual interviews were used to collect qualitative data. Statistical analysis revealed that female participants scored significantly higher scores on measures of career maturity. Interview data brings out the role conflicts and barriers that female participants faced. Both sexes expressed financial concerns.

In a study conducted on 367 school students across grade levels 8-12, career maturity attitude and knowledge, career decidedness, career decision-making self-efficacy, self-esteem and demographic variables were assessed. Multiple regression analysis revealed age, gender, decidedness level and work commitment to be significant predictors of career maturity knowledge (Creed & Patton, 2003).

Hasan (2006) explored the contribution of self-concept, vocational aspirations and gender on career maturity in 480 Indian adolescents in the age range of 14-16 years using a 2x2x2 factorial ‘ex-post-facto’ non-experimental design. The independent variables were seen to predict variance in career maturity. Contrary to other findings male subjects were seen to have higher career maturity than female subjects.

Gender differences in career decision-making difficulties using the Career Decision Difficulties Questionnaire was investigated in a sample of 347 Australian high school students (Albion, 2000). Career decidedness was comparable between boys and girls in the sample. Career knowledge was higher in boys, while flexibility
regarding careers and motivation was seen to be higher in girls in this sample.

Millward et al. (2006) attempted to understand perceptions of 2447 youth aged between 14 and 19 years in the UK regarding preferences for work and jobs and the role of gender in the same. In a mixed methods research project they used surveys, interviews document analysis and intervention to collect data. They found the presence of strong gender stereotypes that influenced career choices. They also reported the presence of differences in career expectations with boys placing higher importance on financial aspects while girls placed more importance on work-life balance and job attributes. In-depth knowledge about jobs was seen to be absent. Most participants placed high importance on parental advice. However, participants also depended on their personal instincts when making career choices.

A paucity of research on factors influencing career choices of students in India was highlighted by Agarwala (2008). In a study on factors that affect career choices in MBA students in India, she explored the importance of relationships and their influence on career choices of 93 students. Father was seen to have a significant influence on career choice for both male and female students. Gender differences were seen with financial rewards being the most important determinant for a career choice in males while for female participant’s skills, competencies and abilities were more important.

Career maturity was assessed in relation to the level of aspiration and gender in adolescents (Lal, 2013-14). 120 students in the senior secondary class were evaluated using the Vocational Attitude Maturity Scale and Level of Aspiration measure. The results revealed that female adolescents had higher vocational maturity than male adolescents.
A qualitative study conducted on 23 Indian undergraduate students from Arts, Science and Commerce streams explored career decision making and associated difficulties. Using content analysis, they found the presence of gender differences in decision status and confidence, nature of difficulties in the career decision-making process, thought process for decision making, and measures that were undertaken to smoothen the career decision-making process. For the same themes, differences were observed between the streams for decision status and nature of difficulties. Input from participants regarding the need for and suggestions for the development of career guidance programs was discussed in this study (Monteiro, 2015).

Ansari (2016) explored the level of career maturity and level of occupational aspiration in 100 students in Delhi, India. Quantitative analysis of the data revealed significant gender differences in career maturity with female students having higher career maturity scores than male students. However, there were no differences in occupational aspirations based on gender.

Momin and Chetry (2016) explored self-knowledge in relation to career choices in 237 students in standalone institutions. The self-appraisal scale of the Career Maturity Inventory was administered. Significant differences in scores were seen between male and female participants with male participants having higher career maturity. The results are in line with other research in this area. However, it should be noted that only a sub-scale of the Career Maturity Inventory was used to understand career maturity.

Research on career maturity and age is inconclusive as some studies find that career maturity increases with age while some do not. In a study by Patton and Creed (2001) on 1971 students in the age range of 12-17 years, a developmental progression
was seen in career maturity though gender did not show a very uniform pattern. Career maturity was more linked to grade than age maybe because of academic decisions that students are expected to make at certain grades. Many interventions have been developed in the area of career counseling to help students overcome career related indecision and make appropriate choices. It has been suggested that these interventions are more helpful when conducted in high school (age >15) as compared to middle school (Pond, 2010).

The review suggests mixed support for gender differences on various aspects of career decision making. The results vary with some studies showing gender differences on aspects of career development like career development and career decision self- efficacy while others did not show similar results. Most of the research in this area are quantitative in nature. Qualitative data might bring out the subtle role that gender socialization plays in influencing career choices.

**Personality.** The relationship between personality and career decision making is important as developmentally personality precedes other vocational and career-related variables (Lounsbury, Hutchens, & Loveland, 2005). The five factor model of personality emerged from both lexical study, and study of questionnaires used in personality research. This model of personality has been widely studied across cultures and has been found to remain stable across cultures. Adya and Kaiser (2005) in their model for research in career choices in adolescence advocate the use of the big five personality traits framework to study the role of personality in the career decision-making process. Barrick, Mount, and Gupta (2003, pp.46-47) define the five traits of the five-factor model of personality and their prototypical characteristics as follows: Extraversion (sociable, active, energetic), agreeableness (cooperative, considerate, trusting), conscientiousness (dependable, organized, persistent),
emotional stability (calm, secure, unemotional), and openness to experience (imaginative, intellectual, artistically sensitive).

Research exploring the relationship between personality and aspects of career development is reviewed here. Lounsbury et al. (1999) examined the relationship between career decidedness and the big five personality constructs. Data was collected from 249 students using the Career Decidedness Inventory, Neo Five Factor Inventory, Personal Style Inventory and Life Satisfaction Scale. They found that, as expected, the level of career decidedness was negatively correlated with neuroticism and positively correlated with conscientiousness and agreeableness.

Borchert (2002) explored the role of personality and opportunity in career choices. Data was collected from 325 students using an anonymous survey. Personality was seen to have a significant influence on career choice of the students. However, environment and opportunity were not perceived by the participants as having a substantial influence on the same.

Personality and cognitive correlates of career maturity were explored by Coertse and Schepers (2004). 1476 first year students of a South African University participated in the study. Aspects of career development, personality, level of adjustment, learning strategies, locus of control, scholastic aptitude and academic performance were assessed. They found a strong link between personality and career maturity and emphasize the need for assessment of personality in the career guidance process. Career mature students were seen to have a more stable personality, better adjustment, internal locus of control, and academic performance in this study.

The relationship between career decidedness and personality in early and middle adolescence was investigated by Lounsbury et al. (2005). Using the
Adolescent Personal Style Inventory and Career Decidedness Scale they found an association between conscientiousness and career decidedness. Openness and agreeableness were positively associated with career decidedness for early and middle adolescents.

A study using a factorial design was conducted on 320 adolescents studying in the tenth standard in India to find out the role of personality factors extraversion and neuroticism and gender in the career decision-making process. The personality framework proposed by Eysenck was used. Analysis by 2x2x2 ANOVA revealed that both factors and sex predicted significant variance in career decision-making. Male participants had higher career decision making scores than female participants (Kushwaha & Hasan, 2005).

Examining the differences in big five personality traits, motivational factors and career decision-making difficulties between career decided, and undecided students, Pečjak and Košir (2007) conducted a survey with 641 students. Significant differences were seen in personality dimensions between decided and undecided students. They showed higher levels of extraversion, conscientiousness, openness and emotional stability. They were also reported to have significantly lower levels of career decision-making difficulties.

Rogers, Creed, and Glendon (2008) studied the role of personality, social support, self–efficacy, outcome expectations, and goals in career planning in 414 Australian high school students. In support of the social cognitive career theory they found an association between career exploration and goals and social support; and between career planning and goals, self-efficacy and personality.

Feldt and Woelfel (2009) attempted to study the incremental validity of self-
efficacy expectations and anticipated career outcomes, gender and personality on career decision making. The study was based on the social cognitive theory framework. Career Decision Scale and Neo Five Factor Inventory was administered to 179 undergraduate students. Analysis revealed that neuroticism, agreeableness, and conscientiousness were predictive of career indecision. Neuroticism, agreeableness, conscientiousness, self-efficacy beliefs and job outcome expectations were all seen to influence career decisions.

Significant relationships between career decision-making constructs and big five personality traits have been reported in a study conducted on 230 high school students. Correlation analysis revealed the presence of an inverse relationship between neuroticism and career decidedness while a significant positive relationship between conscientiousness, agreeableness, openness and extraversion with career decidedness was reported (Al-Kalbani, Salleh, & Mastor, 2011).

Bethencourt and Cabrera (2011) studied the relationship between career decision-making and personality in Spanish undergraduate students. They hypothesized efficient personality to be associated with mature career decision making. The results obtained by factorial analysis and analysis of variance supported the hypothesis establishing the link between efficient personality and career decision-making process.

Bullock-Yowell, Andrews, and Buzzetta (2011) explored the effect of big five personality traits, career thoughts and cultural mistrust on career decision-making self-efficacy in 322 undergraduate African American and Caucasian students. Positive correlations were seen between career decision-making self-efficacy and all five of the big five personality traits. Regression analysis revealed that a significant variance
(45%) in career decision-making self-efficacy could be attributed to career thoughts, openness, and conscientiousness.

Datu (2012), studied the relationship between career preferences and big five personality factors and paternal parenting style in 200 Filipino College Freshman. They used a descriptive-predictive research design. The Big Five Inventory and Parental Authority Questionnaire were used to collect data. They found significant relationships between gender, neuroticism, and authoritarian parenting style. Neuroticism and authoritarian parenting style were also found to have a significant predictive role in career selection. This research also confirms the cross-cultural validity of the big five factors proposed by Costa and McCrae.

The relationship between career indecisiveness and personality factors in 200 Greek high school students was explored by Kounenou (2014). The students were assessed using Emotional and Personality Career Difficulties Scale and Core Self-Evaluation Scale. Analysis using correlation revealed that certain personality characteristics like locus of control, self-esteem, self-efficacy and anxiety were related to career decision-making difficulties.

Career indecision and its relationship with big five personality traits were studied in a sample consisting of 248 high school students in Italy (Di Fabio, Palazzeschi, Levin, & Gati, 2014). They found that extraversion and neuroticism were significantly linked to career indecision in these students and therefore highlighted the role of personality factors in career indecision in adolescents.

Jenkins and Jeske (2015) investigated the role of personality, parental support, and role models on career decision making and career exploration in 218 high school students from Northern England and American Mid-West. They reported that
proactive individuals were more likely to engage in information seeking than indecisive individuals who need additional support. Online role models and home environment and support were seen to aid information seeking and help develop career-related skills.

The research on the relationship between career indecision and career decision-making difficulties and the five-factor model of personality was reviewed in a meta-analysis of 21 studies published between 1996 and 2012 (Martincin & Stead, 2015). A significant positive relationship was seen between neuroticism and difficulties in career decision making while significant negative relationships were seen between agreeableness, conscientiousness, openness and extraversion with career decision-making difficulties.

Career choice was studied in connection with personality factors, parental and social influences and monthly income of families in students aspiring to pursue a career in Engineering (Ghosh, 2016). 120 students from XI and XII grades aspiring to become engineers from Kolkata, India, and 30 engineers participated in the study. Sixteen Personality Factor Inventory, Perceived Impact of Parental Influence Questionnaire and Perceived Impact of Social Influence Questionnaire was administered to collect data. Analysis revealed that students aspiring to be engineers were found to score high on warmth, conscientiousness, and were trustful and self-sufficient. These traits were also found to be present in professional engineers. Parental influence on career choice was higher for boys and also in higher income groups.

Research related to personality and various aspects of career decision making has been reviewed in this section. The findings reveal a considerably strong link
between personality and career decision making. Most studies have used the big five theory of personality to define personality. However, research in the Indian context is limited. Studies have mostly used a correlational approach and taken their sample from undergraduate courses. Research can also focus on younger students to see if evolving personality traits have an association with career decision making. Specific personality traits have been associated with aspects of career development. Research has mainly focused on the relationship between career decidedness/ indecision and personality. Neuroticism is seen to be strongly related to career indecision. Research can also concentrate on the interaction of personality factors with other family and personal factors and its influence on career decisions. The review suggests the need to include personality assessment in career guidance programs.

**Metacognition.** Several theories of career development suggest the role of metacognition in career decision making. The research into this aspect of career development is very limited. Individuals who display higher levels of metacognitive activity have been seen to have a higher level of career decidedness (Kosine, Steger, & Duncan, 2008). In a study on the relationship between metacognition and vocational indecision on 100 students, metacognition was positively correlated with vocational decidedness. Deduction component of metacognition was seen to predict the level of decidedness (Symes & Stewart, 1999).

The need for career counselors to understand and acknowledge the role of metacognition in career decision making has been highlighted by Kosine et al. (2008). In their purpose centered approach to career counseling, they advocate focus on areas of identity, self- efficacy, metacognition, culture, and service. Specifically, in the metacognition domain, they advise reflection on their cognitive processes and development of effective strategies for career decision making by students. Integration
of metacognition is expected to increase the benefits of career counseling (Lemeni, 2005). Byars-Winston and Fouad (2006) propose a culturally appropriate career counseling model where they include metacognitive processes to be followed by counselors to promote culturally sensitive counseling.

Though the role of metacognition in career development has been accepted, very few studies have addressed this component of decision making related to career development and career counseling. This proposes the need to explore the role of metacognition in career decision making.

This section has outlined the research related to individual factors in career development. Gender, age, personality, and metacognition and their role in career decision making have been outlined. Other individual factors like locus of control (Coertse & Schepers, 2004; Dhillon & Kaur, 2005), academic achievement (Kumar, 2014), self-esteem (Creed & Patton, 2003; Kounenou, 2014) have been studied in relation to career development. Research in the Indian context and studies in the area of metacognition is limited suggesting the need for research in this area. Further, the interaction of personality and other contextual factors need to be addressed in research as career decision making is a complex phenomenon influenced by multiple factors. The next section discusses the role of contextual factors in career decision making.

**Contextual Factors.** Contextual factors play a major role in career development. This has been highlighted by Hill, Ramirez, and Dumka (2003). As recent theories place importance on the role of contextual factors in shaping the career development process of an individual, research in now focusing on these factors. The relationship between contextual factors like socio-economic status, school type, school environment, and family has been discussed in this section.
Studies have looked at the influence of multiple factors influencing career choices. Olamide & Olawaiye (2013) studied the factors that affect career choices of adolescents in Ogun state, Nigeria. Using a quantitative research design 100 students were recruited as participants. They explored the role of environment (family, friends, teachers, counselors), opportunity and personality in career and academic choices of students. They reported that environment, opportunity, and personality all influenced career choices in varying degrees.

Sivakumar and Sridhar (2016) investigated differences in career maturity based on gender, place of residence (rural/urban), type of school, type of family and religion. The sample consisted of 200 students studying in XI standard. Below average career maturity was seen in the sample. Statistical analysis revealed no significant differences in career maturity attitude based on gender, locality, type of school, religion, and type of family. However significant differences were seen on career maturity competence between students of government and private schools. The researchers highlight the need to develop career counseling models to increase career maturity in students.

*Socio-economic status (SES).* The socio-economic status of the family is known to influence career development (Hughes, 2011). Socio-economic status can influence career choices directly and indirectly. The relationship between family socio-economic status and career development variables has been demonstrated in past research. The financial condition of the family can facilitate or inhibit students from making specific career choices. Socio-economic status influences the career development needs of individuals especially in the complex Indian society (Arulmani & Nag-Arulmani, 2004). It has also been said that career preparation and planning vary between different socio-economic groups (Arulmani & Nag-Arulmani, 2006).
Bandura et al. (2001) in a prospective study examined a structural model of socio-cognitive influences that influence parental aspirations related to careers. Self-efficacy beliefs were seen to play a major role in giving direction to career pursuits, and socio-economic status was seen to be indirectly linked to career trajectories by influencing parent’s perceived efficacy and aspirations.

The influence of socio-economic status on career development in Indian students was demonstrated by Arulmani, Van Laar, and Easton (2003). Arulmani and Nag-Arulmani (2006) reported that parental approval for certain professions and perceptions and importance placed on attributions of prestige was higher in parents from upper-middle socio-economic status in comparison to lower socio-economic status. Ferry (2006) in a qualitative study explored the factors influencing career choices in adolescents in Pennsylvania using focus group interviews. Interdependence of family, school and community culture, different social and economic contextual factors, “ideal career,” barriers, and out-migration were themes that emerged in the thematic analyses. The critical role of parents was emphasized in the study. Students from affluent families were seen to have higher family support in career exploration and wider career options. Parents were also perceived to be role models by many participants.

The relationships between family socio-economic status, subjective social status, perceived and enacted family support, self-efficacy beliefs and outcome expectations was explored in a study with non-experimental survey design with a sample size of 279 students. Path analysis revealed that family socio-economic status, and perceived and enacted family support had an indirect effect on career related outcome variables while social status had a moderately direct effect on career related self-efficacy beliefs and outcome expectations (Metheny, 2009). Sands (2011) states
that evidence shows increased likelihood of students from families that fall in the lower socio-economic category to enter lower income jobs because of restricted access to opportunities.

Socio-economic status is seen to have direct and indirect influences. It influences opportunities, aspirations, and support by parents. However, the exact ways in which socio-economic status can directly and indirectly influence career decisions can be explored further.

School type. The type of school attended by the adolescent can have a significant impact on the career development of the individual. A progressive school environment can help students from disadvantaged families by giving them access to learning facilities and opportunities. School environments can also shape attitudes of individuals towards career options. Hence research has focused on the influence of the type of school on career maturity and career choices.

Students from government schools were seen to have significantly lower career awareness than students from private schools. Career awareness levels were considerably lower in the students from state board syllabus in comparison to students from schools that followed a CBSE syllabus (Arulmani & Nag-Arulmani, 2006). Career maturity, locus of control, self-concept, and achievement motivation was explored in a sample of 500 high school students in India. Higher career maturity attitude and competence were seen in students from public schools in comparison to private schools. Internal locus of control was significantly associated with career maturity attitude and competence in students from private schools (Dhillon & Kaur, 2005). Similarly, Kaur (2012) studied differences in career maturity based on school climate in 800 students studying in 11th standard. The Indian adaptation of the Career
Maturity Inventory and the School Climate Scale was used for data collection. The results of the statistical analysis using analysis of variance showed no differences in career maturity attitude in students from high, average, and low school climate. However, self-appraisal, occupational information and problem solving were seen to be significantly different. This shows that school climate plays a role in career maturity.

Career maturity was studied in relation to gender, school type and vocational guidance provisions (Sirohi, 2013). Student’s views about vocational guidance services were also explored using focus group interviews. Quantitative and qualitative analysis revealed that female subjects, students from private schools, and students from schools with vocational guidance facilities were found to have higher career maturity. In a survey conducted in Meghalaya, India which explored the career preparation status, career belief patterns and academic achievement motivation of high school students from rural and urban settings they found low levels of readiness for optimal career decision making and negative career beliefs. Differences were seen in gender patterns between rural and urban areas (Sangma & Arulmani, 2013).

Roy (2015) studied the association between type of school (government or private) and career maturity in 120 secondary school students from four schools in Eastern India. Using the Indian adaptation of the Career Maturity Inventory they found significant differences in career maturity attitude between students from government and private schools. However, both the groups were comparable on career maturity competence. This is in contrast to studies where significant differences have been found in all aspects of career maturity between private and government school students.
Parental acceptance/rejection was studied in relation to career maturity in 400 high school students in India. In this study, Oberai (2016) used Mohsin Parent-Child Inventory and Career Maturity Inventory. Gender differences were seen for all participants from private schools with girls who were parentally accepted having higher career maturity than boys. In government schools, gender differences were seen only for participants in the parentally accepted category.

The review of these studies indicates that the type of school has a role to play in career maturity and career choices of students. There is a need to explore what aspects of schooling leads to this difference in career maturity. The links between school type and socio-economic status has also not been explored.

**Stream of study.** At some point in their academic life students are required to choose the broad stream of study they wish to pursue. In India, this choice is determined by many factors like academic performance, family attitude. Hence some studies have studied aspects of career development in relation to stream of study. Dahiya (2014) explored the differences in career maturity based on gender and stream of study in 120 students studying in secondary schools in Rohtak, India. Career Maturity Inventory was used to collect data. Descriptive statistics revealed differences between the groups. Female students and students from Science stream were found to have higher career maturity. Students from Commerce stream were found to have higher career maturity than those from the Arts stream but had lower career maturity than students from the Science stream. Inferential statistical techniques were not used for analysis. Therefore the results need to be interpreted keeping this limitation in mind.

**Family and career development.** The role of the family in career development
has been proposed by many theorists (Fan, Cheung, Leong, & Cheung, 2014; Hartung, Lewis, May, & Niles, 2002; Palos & Drobot, 2010). The family, especially parents are known to implicitly and explicitly influence the decision making of an adolescent. Arulmani (2012) in the cultural accommodation model also highlighted the importance of family in the career decision-making process in collectivist societies. There is a body of research which explores the role of the family in career choice process of individuals.

Several family process variables like parenting style, parental attachment, family support, and communication have been studied in relation to various aspects of career decision making (Koumoundourou et al., 2011). Other variables like parental aspirations, roles played by family members, family training and modeling experiences have been studied. Research is now also focusing on the role of positive family variables like family support (Metheny, 2009). Research has shown that students rely on parents for guidance and input regarding career decisions (Joseph, 2012; Simmons, 2008) and students who reported a lack of involvement may be undecided and made poor choices.

Jacobs and Eccles (as cited in Messersmith, Garrett, Davis-Kean, Malanchuk, & Eccles, 2008) have proposed four types of parental influences on career aspirations of children. They are, development of a socio-emotional climate, provision of experiences, acting as role models and communication of parental expectations. The role of parental influences on career development has been supported by the studies outlined below.

With an objective to understand career development in African American students, Hairston (2000) explored parental influences on preparation and selection of
vocational teaching as a career. Using a qualitative research design 12 students were interviewed using a semi-structured interview schedule. High academic and career expectations of parents, parental support in academic and occupational endeavors, exposure to vocational subject matter by parents, and parental aid in the discovery of aptitudes and interests related to vocational subject matter were the themes that emerged. Parent’s career aspirations were seen to help their children in the selection of vocational goals, the level of information about careers, occupational roles and their access to occupations.

Creamer and Laughlin (2005) conducted a study using mixed methods design to study the link between self-authorship and career decision making. Interviews were used to collect data from 40 college women, and the data was analyzed qualitatively. The study results showed that nearly all the participants considered one or both parents to be influential in their career decision making followed by siblings. Their influence was higher than that of formal sources of career guidance and teachers.

Family influences are proposed to play a significant role in career decisions of adolescents in collectivist societies. With this in mind, Salami and Aremu (2007) explored the role of parental attachment and separation with career indecision, career information seeking behavior, prediction of satisfaction with career exploration experience of adolescents in 242 senior secondary school students in Nigeria. Statistical analysis using MANOVA showed no gender differences. Regression analyses showed that the combination of parental attachment and psychological separation did not predict career development variables. This is in contrast to the findings of studies that show a significant association between attachment patterns and career development variables.
Messersmith et al. (2008) conducted a longitudinal study to examine the effect of external influences on choosing a career in information technology in emerging adults. Socialization processes and specifically role of family, educational experiences, and influence of gender on participants choosing or not choosing information technology as a career was explored in a mixed methods study. They examined individuals from the time they were in seventh grade till they were 25 years old. Semi-structured interviews were conducted with 28 participants and data was analyzed using interpretive phenomenological analysis. The analysis revealed the substantial role of parents in determining career choice of participants. Parental support, parents as role models and means of exposure to careers in the field of information technology emerged as themes in the study. This study restricted its scope to careers in one field. Further research can extend this investigation to understand influences on other career avenues.

Simmons (2008) conducted a qualitative study with 17 participants and investigated the role of parents in guidance regarding career choices. Perceptions of students about their relationship with their parents and interactions about decision making and problem solving were explored in a semi-structured interview. Using a grounded theory approach he found that parental approval was desired by students and was highest for careers that were clear and had lucrative financial prospects. Participants expressed the presence of stereotypes attached to careers.

The mechanisms of parent-adolescent relationship which influence career development of adolescents was studied in a sample of 359 German students (Dietrich & Kracke, 2009). Perceived parental career related behaviors, career exploration, and decision-making difficulties were assessed. Structural equation modeling was done. Parental support was positively linked to career exploration. Parental interference and
lack of engagement were related to decision-making difficulties. The moderating role of interference and lack of engagement on the relationship between support and career exploration was also reported.

Mohd, Salleh, and Mustapha (2010) examined the role of contextual factors on career development and planning of 1436 students pursuing technical education in Malaysia. Student goals, role models, and career information were assessed through a questionnaire. Father was identified as the most influential person in their career planning by 77% while 14% reported influences by non-family members.

Stressing the need to explore the role of family in the career decision making of an adolescent, Palos and Drobot (2010) studied parental support for career choice and family environment variables like parental attachment and parents’ level of training. The results of the research conducted on 60 students studying in 12th grade showed that families were seen to provide more psychosocial support in the form of encouragement and discussion in comparison to concrete action regarding career choice.

Khamadi, Bowen, and Oladipo (2011) using a mixed methods design studied factors influencing career choices of students in Kenya. Using surveys, focus group discussions and in-depth interviews they collected data from 295 students. 42% of the participants identified family as the most significant influence followed by teachers, counselors, and peers. Income and grades were also reported as significant influences by the participants. Results also revealed career decision-making difficulties in the form of lack of career information and guidance, parental force and pressure, and economic slowdown. This study brings out the practical challenges faced by students and also the importance of taking external barriers into consideration when
understanding career development.

Sands (2011) conducted a qualitative study on three generations of people exploring factors that influenced career development. Using a case study approach data was collected using semi-structured interviews and analyzed using thematic analysis. The results revealed family to be the most significant influence among other factors. The family influences were categorized as follows, family as a role model, family pressure, family as a source of increasing confidence and as motivation, and directly steering people to a career.

Investigating the role of family involvement in the career decision-making process of university students in the United States of America, Joseph (2012) used a mixed methods research design to study the nature of parental involvement in activities, academic achievement, choice of a major and career choice. He found no significant relationships between caregiver’s involvement in career decisions and level of career decidedness. However, he found a significant correlation between caregiver’s involvement and future influences. Qualitative analysis of the data revealed that students welcome parental involvement and support, while they reported of a decrease in parental involvement from high school to college, thus putting the onus of making career decisions on the student.

Njeri (2013) in a research project explored factors influencing career choices of 293 undergraduate students sponsored by Compassion International in Kenya. Two staff members were also included as participants. They aimed to study the role of family, peers, role models and gender. They used surveys and an interview schedule for data collection. The influence of role models was seen to be significant followed by gender and peers. However, contradictory to most research, family factors were
seen to be relatively less significant in this sample. Only 25% of the sample reported that parental advice was seen to influence career choice. The presence of gender and occupational stereotypes was seen where male-dominated occupations were considered superior to female dominated occupations. The need to extend career guidance services and the need to work through gender and occupational stereotypes was observed in this study.

Wan (2013) investigated the role of parental influences, personality, and gender in career-related self-concept development. Social cognitive career theory framework (SCCT) was used. The study sample included 1382 adolescents in secondary school in Hong Kong and 114 parent-child dyads. Structural equation modeling revealed the applicability of SCCT in this sample. Perceived parental influences were associated directly with career decision-making self-efficacy and indirectly with aspirations and expectations.

Fan et al. (2014) in a cross-cultural study explored the role of perceived family intrusion and the mediating role of personality dimension of family orientation on career decision-making difficulties and career readiness in Hong Kong and America. Family intrusiveness was seen to predict career readiness, and family orientation was found to play a mediating role influencing the effect of family intrusiveness on career decision-making difficulties. But this mediation was not seen in the sample from America. However, the influence of family intrusiveness was also seen in the western context. This study brings out the relevance of developing culturally sensitive theories for career development as also suggested by Arulmani et al. (2014).

The effects of parental influence on career choice of adolescents in Nigeria was studied by Olaosebikan and Olusakin (2014). Data was collected from 300
students through a questionnaire. They studied the effect of parental influence, type of school/college, parental attitude and perceptions of parental occupational satisfaction. Analysis revealed the presence of influence of parents on career choice by 46% of the respondents. However, this influence was not significant. Parental attitude to work was seen to influence career choice. Parental influence did not vary significantly between students from private and government colleges.

Liu, McMahon, and Watson (2015) in a qualitative study explored the influence Chinese parents had on career development of children in grade five using semi-structured interviews. Using interpretive phenomenological analysis, they reported that parents had a direct and indirect influence on imparting career information to their children, and had high educational and career expectations. They also highlighted the role of gender stereotypes and prominent role of mother as a career role model. The mixed influence of Western and Confucian ideologies has been discussed.

In a study on 210 undergraduate students in Kenya the influence of family factors, peers, gender, job opportunities, personal interest and role models on career choices was studied (Koech et al., 2016). A questionnaire was used to collect data about these variables. The majority of the students’ preferred career choice was medicine or engineering. Parental advice, peers and role models were seen to influence career selection of the participants. The highest influence was reported by career benefits like financial stability, opportunities for growth job satisfaction by the participants. This brings out the practical aspects of career decision making. However, not many studies have focused on the role of career related factors and their influence on career decision making.
This section has given an overview of the influence of family on various aspects of career development. Many studies have used a qualitative design to bring out the aspects of family relevant to career development. Parents are seen to be the most influential family factor in relation to career decision making. The following section outlines the research findings related to parenting style, parental support, and career development.

**Parenting style.** Parenting styles are the combination of parental attitudes, practices and nonverbal expressions that characterize the nature of parent-child interactions across diverse situations (Glasgow, Dombusch, Troyer, Steinberg, & Ritter, 1997). Schulenberg, Vondracek, & Crouter (as cited in Hughes, 2011) propose that parenting style influences the career development process. According to Super, Crites, Hummel, Overstreet, & Warnath (as cited in Hughes 2011) parental warmth/hostility is said to play a role in various aspects of career development. Similarly, three kinds of parental influences on career development were proposed by Middleton and Loughead (as cited in Njeri, 2013). They are positively involved parents, negatively involved parents, and non-involved parents. Negatively involved parents were seen to have a detrimental effect on their children’s career decision-making process. The following section outlines the research done in the area of parenting style and its relationship to career decision making.

The impact of parenting style varies from culture to culture, and culture is also known to mediate the role of parenting style in career development. Authoritative parenting style is seen to have a positive impact on several variables in Caucasian students. However, collectivist cultures stress the importance of parental authority and interdependence. In the non-Western cultures authoritarian parenting style is reported to be the most widely used parenting style (Wu, 2009). Hence, Wu (2009) aimed to
study the relationship between parenting style and acculturation on career decision making self-efficacy and career maturity of Asian American college students. Using simultaneous regression technique in her study the researcher found that permissive parenting style was associated with lower levels of career maturity while authoritarian parenting was found to have a positive influence on self-appraisal and occupational information domains of career decision-making self-efficacy.

Cenkseven-Onder, Kirdok, and Isik, (2010) studied the relationship between parenting style and parental attachment to career indecision in 382 Turkish high school students aged 14-18 years. Career decidedness was seen to be higher in students whose parents adopted an authoritative or authoritarian style and in students with a medium degree of attachment.

Koumoundourou et al. (2011) examined the mediating role of core self-evaluations on the relationship between parenting styles and adolescents’ career decision-making difficulties. The sample consisted of 289 Greek students. With hierarchical regression, they found that in male students permissive and authoritarian parenting styles significantly predicted career decision-making difficulties, while for female students only authoritarian parenting increased career decision-making difficulties. For female students core self-evaluations mediated the role of family and parenting characteristics.

Parental modeling and its impact on vocational maturity were studied by Sharma and Gaur (2012). Parental modeling and vocational maturity were assessed in 60 students in XI standard. Analysis revealed no significant correlation between parental modeling and vocational maturity.

Chen and Liew (2015) explored the factors influencing career decision-making
difficulties of graduating students in Malaysia. They hypothesized that personality (big five traits) and perceived parenting style (authoritative, authoritarian and permissive styles) influenced career decision-making difficulties in the sample (n=100). Parental authority was found to influence career decision-making difficulties significantly. A negative relationship was seen between career decision-making difficulties and effective personality which is a combination of traits of extraversion, agreeableness, conscientiousness and intellect.

Studies are indecisive about the positive influence of authoritative parenting style and the detrimental effect of authoritarian parenting styles on career decision making. Though parenting style is seen to be associated with career development, many studies have not focused on this aspect and its influence. Parenting needs to be understood in the context of the individual and hence the need for more context-specific research is emerging in the review of literature.

*Parental support.* Parental support has been linked to higher career expectations, aspirations, and career decidedness while perceived lack of support restricts access to opportunities (Metheny, 2009).

The relationship between identity formation status and students perception of parental acceptance and encouragement was investigated by Guerra and Braungart-Rieker (1999) in a sample of 169 undergraduate students with a mean age of 19 years. Career Decision Scale, Mother-Father-Peer Scale and Extended Objective Measure of Ego Identity Status Scale was administered to collect data. Statistical analysis using multiple regression analysis revealed that parental variables like maternal encouragement of independence were negatively linked to career indecision. Ego identity status was also seen to predict career indecision. The results reveal the
importance of exploring family dynamics in the process of career counseling.

The role of gender, career gender typing, and perceptions of parental support in relation to career decision self-efficacy and career interests was examined in 139 adolescents from a multi-ethnic sample (Turner & Lapan, 2002). Multiple regression analyses revealed that career self-efficacy and career planning directly predicted adolescents’ career interests for Holland’s themes. Perceived parental support was seen to predict career self-efficacy.

Hill et al. (2003) explored the career aspirations, perceived barriers and family support of 31 early adolescents in a qualitative study. The sample consisted of participants from African American, Euro-American, Mexican American and Mexican immigrants from low-income families. Narrative analysis revealed gender differences in career goals and ethnic differences in perceived barriers and support from family. The importance of family support was brought out in this study. Greater maturity in relation to career decisions was seen in female participants. Perceived barriers were also seen to influence career aspirations negatively.

Keller (2004) conducted a study on 300 middle school students in rural and urban areas to explore the interaction between family and career factors. Using the Career Maturity Inventory, Middle School Career Decision Making Self-Efficacy Scale and a Parent Career Behaviour Checklist they found that perceived parent behaviors were related to career maturity and career decision-making self-efficacy. Psychosocial support behaviours were seen to be more important than career related action behaviours. Perceived parental support was also seen to aid career certainty in a study on 151 African American students in the United States of America. The role of cultural factors was also considered in the study (Constantine, Wallace, & Kindaichi,
In the Indian context, parents have a significant role in career choice of adolescents (Janetius et al., 2011). Based on survey data obtained from 524 secondary school students and 148 parents it was reported that parents inspired 68% of students in their career choice process.

The relationship between adolescents’ and parents’ perceptions of parental support with career choices and career self-efficacy was explored in a study conducted on 94 Italian adolescents and their parents by Ginevra, Nota, and Ferrari (2015). Adolescents’ perceptions of parental support were seen to mediate the influence of the perceptions of both parents on adolescent career choices. This study highlights the positive influence of parental support on career development.

Using the social cognitive theory framework Sawitri, Creed, and Zimmer-Gembeck (2014) explored the relationship between parental career expectations, adolescent-parent career congruence with adolescent career aspirations and career actions of planning and exploration in Indonesia which is a collectivist society. Participants were 351 grade ten students. Through structural modeling, they found a direct and indirect association between parental and child career aspirations through self-efficacy and outcome expectations.

This section brought out the role of parenting style and parental support in career decision making of adolescents. It also highlights the importance of parents in this process. However in-depth studies in the Indian context are limited to few.

*Social influences.* Several aspects related to societal factors like gender stereotyping, media, role models, peers, teachers, counselors, and institutions can have a positive or negative impact on career choices. Perceptions of young
adolescents are also influenced more by the social factors (Adya & Kaiser, 2005). Thus several contextual factors are seen to play a role in career development.

**Summary of the Review of Literature**

The review of literature shows that career decision making has been studied from various perspectives. Aspects of career decision making like career choice, career maturity career decidedness, career indecision, career decision making- self-efficacy, and career aspirations have been researched. Researchers have attempted to study various personal, contextual and career-related variables that may have an influence on career decision making and career maturity.

Broadly individual and external factors are seen to play a role in career decision making of adolescents. Personality, personal interest, family influences, peers influences, gender, socio-economic background, and school type are some of the factors that are found to influence career decisions. Several aspects of family like parental attachment patterns, parenting style, parental attitudes, parental support, parental education, and occupation are seen to have an impact on career choices. However, the exact way in which these factors play a role is not clearly known.

Several studies have focused on investigating multiple influences on career choices of individuals. However, no specific combination of factors has consistently been seen to have utmost influence. Therefore there is a need to study the combined influence of personal and environmental factors, and this has also been stressed by researchers (Palos & Drobot, 2010).

The review of literature necessitates the need for theoretical convergence. The need for integration of conceptually related constructs and exploration of relationships between diverse concepts has been advocated (Paivandy, 2008). Further, most of the
studies in this area are quantitative in nature. Studies especially conducted in the Indian context are limited to quantitative analysis of data. Career decision-making is a complex process, and an in-depth understanding of various factors can be achieved by adopting a qualitative approach. This signals the need for more research using qualitative methodology or mixed methods designs to enhance our understanding of the interplay of several influences in this regard. Thus the review brings out the complex nature of career decision making necessitating further research as a career choice is an individual’s stepping stone to determining his career trajectory and thereby largely his life.

In the light of these gaps in research on the career development process, the current study seeks to explore potential links between some of the individual and contextual factors that contribute to career decision making of adolescents in the Indian context. The rationale for the current study is outlined in the next section.

**Rationale for the Study**

Career choice is one of the most important decisions an individual makes in his life, and this process begins in adolescence or even earlier, much before a person enters the actual world of work. Career decision making is hence an important developmental task in adolescence. Selection of subjects is a critical component of career planning. Subject combinations and career choices made at this stage will determine their satisfaction or dissatisfaction with their career in their future. Poor uninformed choices and poor career maturity at this juncture will have an enormous impact on various aspects of the person’s future. In the Indian education system students are required to make goals regarding qualifications and career path choices at the end of high school i.e. tenth grade and narrow down their choice by the twelfth standard. They are also expected to be aware of career options at this stage. This is a
period of transition and stress for most students as they are supposed to choose and make tentative decisions regarding their future career. This sets the tone for their future path and decisions once made cannot be changed easily. To ensure effective decision making it is important to understand the interplay of factors that influence career choices that adolescents make. Therefore this study aims to contribute to existing knowledge about career development in adolescence in the urban Indian context.

Every important decision in an individual’s life is influenced and guided by internal and external factors. However, our socio-cultural milieu is currently in a state of flux. Globalization has resulted in a transition from the traditional mode of functioning. With changes in the structure of society and patterns of family relationships, understanding the role and influence of both individual and extrinsic factors in the career path of a person becomes relevant.

Recent theories of career development are placing importance on the interaction of individual and environmental factors in the career decision-making process. Individual factors like personality traits, aptitude, and interest have been researched. Similarly, demographic factors like race, socio-economic status, gender, parental occupation are found to play a role in the career trajectory of an individual. The family is increasingly seen to play a major role in this aspect of a person's life.

However, most proposed theoretical models and career counseling interventions are based on Western cultural settings. According to Leong (2002), Asian researchers and career counselors tend to borrow theoretical and practical western models of science in the field of career guidance due to the availability bias, as information is readily available. Further, he explains that a training bias exists
where the training in western models and in western institutions received by Asian counselors increases the tendency to import these western models into the Asian context. This may lead to ineffective career-related decisions and hence reduced productivity in later work years. This necessitates that theoretical models be developed indigenously to understand the factors influencing career decision making in a specific context. This can help design career counseling interventions.

Considering this current scenario, there appears to be a dearth of studies in the Indian context. The relationship between personality and several aspects of career development has been highlighted in literature. The big five traits taxonomy of personality is proposed to be valid cross-culturally. Similarly, good decision-making skills are essential for making effective career decisions. Metacognition is one aspect of decision making though suggested in career and decision making theories has not been studied extensively in relation to career development. The role of family and demographic variables in career development is being studied extensively. Parental variables like parenting style are known to facilitate or be detrimental for effective career decision making. This has a special relevance to the Indian context as family involvement is known to be very high in all aspects of an individual’s life. An investigation into the relationship of these factors with career maturity and decision making of an adolescent can facilitate a better understanding of career decision making in Indian adolescents in Pre-University.

Few empirical studies have been found that examined the predictive relationship between the combined effect of predictor variables personality, parenting styles, metacognition, gender and socio-economic status on career maturity. Hence the aim of the current study is to examine the relationship of personality, perceived parenting style, and metacognition with career maturity of an adolescent. This study
will also explore specific demographic characteristics of gender, socioeconomic status, type of college and stream of study and how they relate to career maturity. An in-depth exploration into the role of various other factors may help us understand the inter-play of each of these factors in influencing career choices. Therefore this study further aims to explore the role of other personal and family factors influencing career decision making in adolescents.

It is important to understand various aspects and the process of career choices of adolescents and the factors influencing their decisions in this regard. The purpose of this study was also to add to existing literature the role of personal and family factors in career decision making in adolescents in an urban Indian setting. Understanding of these aspects can aid in the early identification of students who have difficulties in career-related decision making and throw light on some of the reasons that may be contributing to the same. Arulmani and Nag-Arulmani (2004) have stressed the need for the development of career counseling interventions based on theoretical models that have been validated for the Indian context. The results of the study can be used for the development of theoretical models and an effective career counseling program for this cultural group. It can also be used to educate teachers, counselors, parents, and professionals in this regard.