Chapter 1

Introduction

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Education is a process which imparts, improves, or changes the knowledge, understanding, skills, and attitudes of the people which enable an individual to transform as a good citizen and to become a successful member in the society, nation, and the world. It must enable an individual to develop creative power to the ultimate so that intellectually, morally, physically, and spiritually the individual is in a position to enrich his personality. Education is the medium through which an individual acquires the abilities to fight with the increasing challenges of the personal, social, and national life. It plays a vital role in the entire life of an individual by helping them to develop those capabilities, potentials, skills, attitudes, and personality which are essential to live successfully in specific culture and society. In today’s world, among all the resources, human capital is considered as the greatest national resource and educated individual as an asset for the country. On one hand an educated person can explore better opportunities for their own development and on the other hand, the person can work for the development as well for the benefit of the entire nation.

Education has formal stages which start from pre-school education or kindergarten and progresses through primary school, secondary school, and then to tertiary or university education. While considering the broad objectives of education, it comprises of liberal education which intends at
fostering an attitude of objective enquiry and understanding the needs of the society and social change among the students which in turn develops a capacity to appreciate the finer values of life. Even though each stages of education has specific objectives, in sum total the education at all stages aims at the development of the individual by progressing their intellectual, emotional, and physical abilities through gaining knowledge and skills to produce creative human beings who can understand the meaning of life and what the society demands. The policy makers and curriculum planners are trying to incorporate a large number of practices under the general curriculum to prepare students for their life. The curricular aim emphasizes rigorous changes at all levels of education and acquiring applied knowledge to cope up with the rapid changes in the world by meeting the demands of the individual and demands of the society.

In this 21st century, education system is now being reoriented and recast in terms of learner centered education principles by giving importance to continuous urge for change and quality. Education must enable the individual to develop the skill to earn and thereby increasing the standard of living. Commerce education is that part of general education which focuses on direct and practical training for specific trade, industry, or business by taking into account the broad aims of education and enables individuals to earn for a livelihood. Commerce education is that area of education which develops the required knowledge, skills, and attitudes for the successful
handling of trade, commerce, and industry. In Indian context, commerce education can be described as that broad area of knowledge and practices which explains and defines the role of business in the economic development of the country as an Indian enterprise system and also provides necessary understanding as well as experiences which help to mould an individual for effective participation as a productive citizen and successful consumer in the Indian society. Thus, commerce education not only prepares an individual to lead a civilized life but also enables an individual to earn for a livelihood by providing training in commercial practices and preparing for proficiently taking up the duties and responsibilities of the business world. Commerce education satisfies the cultural aspect of education by preparing the individuals according to the needs of the individual and satisfies the practical side of education by preparing young people intended for business careers to meet the demands of the society.

During the Vedic period, among the four basic castes, commerce was the monopoly of Vaishyas. The younger generations of Vaishyas were educated about business by the elders. With the passage of time Vaishyas began to accept other professions and people of other castes entered into the field of commerce. The entry of individuals from various castes without relevant knowledge and experience in the field of business necessitated the need of imparting formal education of commerce and business in ancient India. In the Middle Ages, as a form of apprenticeship the tradesmen taught
book keeping to their children in order to keep the records of business. During the last quarter of 18th century, more attention was paid towards the scientific side of management due to the advancement of technology. The history of formal commerce education can be trace back to the Hunter Commission Report in 1882, the first Indian Education Commission, emphasized the need for introducing diversified courses with academic as well as practical emphasis (Government of India, 1883). Following the recommendations of Hunter Commission, in 1886, Government of Madras under the trustees of Pachyappa Charities by setting up the first commercial school laid the foundation of formal commercial education in India (Singh, 1990). More and more professional institutions were set up in the field of commerce as a result of need for commerce education which aroused from industrial sector in twenties and afterwards. Commerce subjects were taught in technical schools following the recommendations of Sargeant Report in 1944 and in the light of recommendations of Secondary Education Commission in 1952-53 to start diversified courses in multi-purpose higher secondary schools, commerce education gained its importance in secondary stage also (Singh, 1990). The public commerce education was highly influenced by the adoption of 10 + 2 pattern of education. Formerly commerce subjects were taught in secondary schools and as a result of new pattern of education, majority of the state boards of secondary education permitted to offer commerce as a stream at
senior secondary stage also. Now, in almost all states of India, commerce subjects are taught in general stream and at vocational stream.

Commerce education can be viewed as general education as well as a vocational education. In the aspect of general education it satisfies the goals and objectives of education. Commerce education aims at the development of knowledge related to business and to develop personal, social, and economic competencies of an individual. In order to satisfy the vocational aspect of education, commerce education includes development of technical competencies to meet the business standards. It aims at providing training in job and to develop job potential among the individuals in various areas of business. Commerce education is a generic term which is used to cover all types and levels of education which facilitates the functions and operations of business. Trade, industry, and commerce play an important role in our day to day life and almost all activities of our life are related with these aspects. The increasing complexity of business and commerce organization in the present day world would make it mandatory for students to be conversant with modern principles and practices of management and accounting. The demand from the private sector to handle with increasing complexities of the business world also necessitated the introduction of commerce subjects as a part of the curriculum in our country. Hence, commerce education undoubtedly plays a key role in the development of a country in this age of globalization, urbanization, privatization, and industrialization.
Commerce education prepares the students for entry into and advancement in jobs in the areas of business and is also important for preparing the students to handle their own business affairs in daily life and to function as an intelligent consumer as well as a citizen in the business economy. Popham, Schrag, and Blockhus (1975) explained the facets of commerce education which described the role of commerce education in the development of students. The facets of commerce education are general education and vocational education. The general education deals with *education about business* which includes development of economic competency, career exploration, social adjustment, and knowledge about the areas of business along with its functioning by including subjects such as basic business, business law, consumer economics, marketing, and functional management. The vocational part of commerce education deals with *education for business* which includes development of job competency, career preparation, work adjustment, and subjects such as accountancy, data processing, office procedures, and secretarial procedures. According to Herrick (1904), commerce education is that form of instruction that both directly and indirectly prepares the businessman for his calling. Thus, all those experiences received by the child in job training for business that may take place in and out of the school which helps the individual to adjust with the business environment is considered as commerce education. According to Tonne, Popham, and Freeman (1957) commerce education is a general
education, as it helps the students to become an intelligent consumer of business goods and services. It also provides the individual with some understanding of the national economic system and helps individuals to become a more intelligent and more useful member of the community. Thus, commerce education helps the individuals to adjust to his business environment by providing with essential abilities to use their specialized skills in business world. Commerce education also meets the vocational demands of the society by preparing several workers needed in all phases of business, commerce, and industry.

Shollapur (2007) mentioned the importance of commerce education by stating that during the first ten years of schooling students are not given any formal instruction relating to commerce and accountancy subjects. In order to overcome this backdrop, it becomes necessary that at higher secondary stage, students should be given instruction in these two aspects so as to receive a good understanding of the principles and practices bearing on commerce, trade, and industry and their relationship to society. The students need to be exposed to the realities of business world as a part of economic, legal, and social environment. This will facilitate them to be aware of and appreciate the functions and extent of business activities in the economic set up. Higher secondary stage is a critical and transitional stage in between the school and university education or secondary and higher education. The intellectual levels of the students begin to widen and more experiences related
to real life situation is gathered at this stage. The higher secondary pattern was introduced with a view to develop employable skills among the students while completing their career in school to get jobs. Commerce as a stream of education as such bears its own significance in nurturing industrial and commercial activities which are essential for our daily life. Thus, commerce education becomes an important part of curriculum at higher secondary stage.

The Central Board of Secondary Education included business studies and accountancy subjects in the commerce curriculum, as part of restructuring the curriculum in the academic year 1995-96, to explain and understand the enlarged functions and scope of commercial activities to the students at higher secondary stage (Shollapur, 2007). While considering the subjects provided in commerce stream in our country, accountancy is an important subject in commerce education as it is necessary to satisfy the vocational needs. A business organization communicates its financial information to the interested parties through accounting practices. Thus, accounting is well thought-out as the language of business. In 1941, the American Institute of Certified Public Accountant (AICPA) defined “Accounting as the art of recording, classifying, and summarizing in a significant manner and in terms of money, transactions and events which are, in part at least of a financial character and interpreting the results thereof” (Maheshwari & Maheshwari, 2010). Accounting is a field of study that requires sound analytical and logical reasoning to record, measure, classify, and analyze financial transactions. In early stages
accounting is used only by businessman to track their transactions in a systematic manner. Later, accounting is recognized as an indispensable tool for economic development as well for balancing the financial aspects of all sectors of society. It is the responsibility of the accountancy teacher to develop positive attitude towards accountancy subject among the students. The study conducted by Chawla, Jain, and Mahajan (2013) examined the attitude of senior secondary school students towards accountancy subject and revealed that even though the students are having positive attitude towards accountancy teacher and the methodology of teaching, they are having negative attitude towards the subject and dilemma about the numerical as well as confusing nature of the subject. Thus, the studies for enhancing accountancy learning will be helpful for the students as well as the teachers to facilitate learning.

**Need and Significance of the Study**

Educational scenario of India is going through an era of constructivism in which innovative activities are used by the teachers as well as students for transacting and mastering the content. The constructivist approach to education necessitated the incorporation of learner centered approaches in classroom environment. In learner centered approaches, the teachers encourage the students to think, generate hypothesis, collect necessary information, analyze and evaluate the collected information, and find out
solution for a problematic situation. The control over the learning process is vested with the teacher as well the students and students are encouraged to reflect upon their own activities related to learning. The factors affecting students’ learning process include both the factors connected with the learner and factors associated with the learning process. The factors associated with learner includes motivation, readiness, ability of the learner, level of aspiration and achievement, attention, mental health, physical health, attitude, maturation level of the learner, self-efficacy beliefs, and emotional condition. Factors related to learning process involves home environment, school environment, methods of learning, use of instructional strategies, and knowledge of result feedback.

The educationists and psychologists have carried out large number of research to understand the relation of epistemological beliefs to various aspects of learning and evidences indicate that the students epistemological beliefs about learning influence the problem solving behaviours, academic performance, use of cognitive strategies, comprehension skills, motivation to learn, and learning processes (Ryan, 1984; Schommer, 1990, 1994; Windschitl, 1997; Schommer & Walker, 1997; Paulsen & Feldman, 1999). Schommer and Walker (1997) examined the relationship between beliefs about the nature of knowledge or epistemological beliefs and their attitudes toward education of high school students. The students who believed less in fixed ability to learn and quick learning are more likely to support going to
college and having positive attitude to appreciate the role of school in education, gaining employment, and living everyday life. Paulsen and Feldman (1999) in their study found that there exists positive relationship between students' motivation to learn and their epistemological beliefs. The students having more sophisticated epistemological beliefs are having high motivation to learn. Ryan (1984) examined the individual differences in text comprehension of undergraduate students and found that epistemological beliefs about knowledge affect the students' comprehension standards. The study also reported that the low level comprehension strategies, such as recalling factual information are used by dualist students while relativist students tend to use high level comprehension strategies like applying new information to different contexts. The results of the study confirms that the students using high level comprehension strategies secure better course grades than those who are using low level comprehension strategies. According to Windschitl (1997) the epistemological beliefs influence the conceptual development and potential conceptual change and students in larger cooperative groups can have their attitudes and achievement influenced by their partners.

The empirical studies conducted in the area of epistemological beliefs provide evidences that more sophisticated epistemological beliefs are related to more adequate learning strategies and therefore better learning outcomes. Hofer (2002) opined that the beliefs associated to knowledge and knowing
had a strong impact on learning and understanding the learning process which in turn would enhance the effectiveness of the instruction. The research studies in epistemological beliefs showed that learning beliefs affect the degree of students' active involvement and persistence in learning in addition to that the epistemological beliefs play an important role in reading comprehension, mathematical problem solving, formation of conceptual understanding, handling anomalous data, and coping with ill-structured questions or tasks (Schommer, 1994; Manson, 2000). Epistemological beliefs and learning approaches change, as pupil progress in their studies and the relationship between epistemological beliefs and academic achievement is mediated by approaches to learning. The studying skills, higher cognition level, and problem solving are considered to be in relation with epistemological beliefs as it affects the decisions on finding the correct strategies in order to cope with the challenging nature of the mental functions (Öngen, 2003). Perry (1968) found that the students’ attitudes towards knowledge and learning change over time. The students’ develop more complex and integrated ways of viewing the world progressively, starting with the dualistic view that knowledge is simple and certain and that knowledge is to be transmitted by authorities later moving on to the relativist views believing that the knowledge is complex, tentative, and uncertain. According to Schommer (1993a), the belief in simple knowledge, certain
knowledge, and quick learning decreased from freshman to senior year students.

The domain specific research studies exploring epistemological beliefs reported the findings proving that domain specific epistemological beliefs has influence on study strategies and problems solving in history, mathematics, and hypermedia learning (Buehl & Alexander, 2001; Schommer-Aikins, Duell, & Hutter, 2005; Schommer-Aikins & Duell, 2013). Paulsen and Wells (1998) examined the differences in the epistemological beliefs of college students across the hard vs. soft and pure vs. applied fields of study and identified that the dimensions of epistemological beliefs such as simple knowledge, quick learning, and certain knowledge, the beliefs of the students vary across the domains. But beliefs in fixed ability do not differ significantly across the domains. The findings of the study indicated that students in pure fields are less likely to hold naive beliefs in simple knowledge, quick learning, and certain knowledge, than those in applied fields. Furthermore, the students belonging to soft or pure fields were less likely to hold naive beliefs in certain knowledge than others. Palmer and Marra (2004) in their grounded theory described that the students move from simple to complex epistemological beliefs more naturally in humanities and social science than the science subjects. Students’ epistemological beliefs may not be consistent across knowledge domains and they may vary with respect to the context of studying the subjects. Thus, understanding the epistemological beliefs or
beliefs about the nature of knowledge and knowing across the domains are important to explain how students develop their perceptions about knowledge and how they are using these beliefs to acquire information.

Motivation an internal process which encourages an individual to move towards their goal is considered as the central factor in learning. Achievement goal is an important perspective in contemporary research on student motivation, learning, and competence in academic achievement. (Elliott & Dweck, 1988; Dweck & Leggett, 1988; Ames & Archer, 1988; Ames, 1992; Elliot & McGregor, 2001). Achievement goal is defined as the purpose of students’ commitment in tasks which reflects students’ general orientations for approaching and evaluating their performance in achievement contexts to accomplish the achievement outcomes (Maehr & Midgley, 1991; Elliot, 1997; Pintrich, 2000a). An individual’s goal orientation explains the goal students choose and the methods used to achieve those goals. According to Dweck and Leggett (1988) the two types of goal orientation are mastery goal orientation and performance goal orientation. In mastery goal orientation, students’ intention is to improve their competence, abilities, learning, and understanding, whereas, in performance goal orientation the individual’s intention is to perform better than others in academic situations.

In the dichotomous classification of achievement goals various names are used to represent these two types of achievement goals such as learning
goals and performance goals (Dweck & Elliott, 1983), task-involved goals and ego-involved goals (Nicholls, 1984). In the trichotomous framework of achievement goal theory, Elliot and Harackiewicz (1996) identified three types of goals such as performance-approach goal, performance-avoidance goal, and mastery goal. The trichotomous framework was extended by Pintrich (2000a) into 2 X 2 achievement goal framework which includes mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance goals. Elliot, Murayama, and Pekrun (2011) worked on the 2 X 2 framework of achievement goal construct and developed a 3 X 2 achievement goal model which comprised of task-approach goal, task-avoidance goal, self-approach goal, self-avoidance goal, other-approach goal, and other-avoidance goal.

According to Nicholls (1989), the purpose of achievement activities and strivings of an individual are reflected through the goals adopted by the individual. The research studies in the area of achievement goal revealed that both the mastery goal and performance goal orientations are beneficial for academic achievement of the students at various levels (Dweck, 1986; Ames & Archer, 1988; Eppler & Harju, 1997). According to Dweck (1986), students who set mastery goal perform better in school and are flexible to face difficulties while those students who set performance goals are not prepared to face the challenges rather they seek only those activities which assure academic success. Eppler and Harju (1997) identified that students certified
with learning goals rated higher in performance scores than those certified with performance goals. Mattern (2005) identified that both the high mastery goal group and high performance goal group had significant effect on achievement than those students who followed multiple goal perspective which means combination of mastery goal and performance goal. According to Sharma and Nasa (2016) the students who give more importance to performance approach goals secured higher grades and had beliefs about their abilities.

Research evidences shows that achievement goal orientations are related to various aspects of learning such as self efficacy, academic performance, learning styles, and anxiety (Ames, 1992; Coutinho & Neuman, 2008; Barkur, Govindan, & Kamath, 2013; Rameli & Kosnin, 2016). Ames (1992) noted that students pursuing mastery goals selected challenging tasks, held positive attitude towards learning, adopted deeper, and elaborate study strategies as well as courageous to face difficulties in learning process. On the other hand, the students pursuing performance goals were more likely to select easier tasks, used superficial learning strategies, and engage in maladaptive behavior patterns following difficulty or failure. According to Coutinho and Neuman (2008) the performance-approach and mastery-approach goals are positive predictors and mastery-avoidance and performance–avoidance goals are negative predictors of self efficacy. Both the deep processing and surface processing learning styles are adopted by the
students who pursue mastery goal orientation to attain mastery of the subject matter. Barkur, Govindan, and Kamath (2013) identified that students who pursue mastery-goal and performance-approach goals secured high academic achievement compared to those students who pursue performance-avoidance and work-avoidance goals. Rameli and Kosnin (2016) indicated that the mastery goal orientation and performance avoidance goal orientation correlated significantly with the scores of mathematical anxiety and performance avoidance goal orientation contributes largest to the changes in mathematical anxiety. According to Sharma and Nasa (2016) mastery goal orientation and performance goal orientation are positively correlated with academic self efficacy. Mastery goal orientation is positively correlated with academic help seeking behavior but performance goal orientation is negatively correlated. Thus, the understanding of the achievement goal pursued by the students will help the teachers to provide proper guidance in their learning in order to achieve their goals in the academic context.

Self regulated learning is recognized as an important predictor of student academic motivation, student learning, and academic performance in various subjects. (Pintrich & De Groot, 1990; Zimmerman, 1994; Schunk, 1994; Chen, 2002; Yusuf, 2011; Chandran & Kadhiravan, 2012; Sadi & Uyar, 2013; Kumari & Chamundeswari, 2015; Yıldızlı, Saban, & Ewing, 2016). Self regulated learning integrates learning strategies and mental processes that learners consciously engage to help themselves to learn and achieve better
gains academically (Schunk & Zimmerman, 1998). Zimmerman (1989) theorized the relation between self regulated learning and academic achievement with a social cognitive view that self regulated learning is acquired through an interaction between three important characteristics viz., self-observation, self-judgment, and self-reactions. The self-observation involves monitoring one's actions and seen as the most important of these processes. Self-judgment involves evaluation of one's performance and self-reactions indicate one's response to performance outcomes. According to Pintrich and De Groot (1990), the self regulated learning strategies include cognitive strategies that are used by the students to learn, remember, and understand the material, metacognitive strategies for planning, monitoring, and reflection of academic activities that are used by the students, and the resource management strategies to take control of academic environment.

According to Zimmerman (1990), self regulated learners are characterized by their systematic use of metacognitive, motivational, and behavioral strategies and their feedback about the learning performance and perceptions about their academic accomplishments.

Zimmerman (1989, 1990) found that the use of self regulated learning strategies accounted for the academic success among the students in school. According to Zimmerman (1996), the self regulatory process such as learning strategies, goal setting, and self-monitoring is used by the students and the use of strategies predicts academic achievement as well self motivation. Research
evidences show that compared with low achieving students a variety of learning strategies are used by high achievers. Risemberg and Zimmerman (1992) identified that gifted students spontaneously use self regulatory learning strategies more frequently than non gifted students. Throndsen (2011) indicated that students who possess high self regulated learning strategies performed high in achievement scores in mathematics and the basic mathematics skills of young primary school students differ with respect to overt strategies, covert strategies, and retrieval strategies of self regulation. Mahadi and Subramaniam (2013) examined the role of metacognitive self regulated learning strategies in enhancing language performance and suggested that metacognitive self regulated learning strategies assist students to become more self regulated in their learning process which in turn enhances the academic performance of the students.

Students can be taught to become more self regulated learners by acquiring specific strategies that are both successful for them and that enable them to increase their control over their own behavior and environment. Most researchers agree that the best learning occurs when someone carefully observes and considers his own behaviors and acts upon what he has learned. Instead of using a single strategy, it is better to encourage the students to use a combination of various self regulatory strategies which would help them to optimize their efforts in an academic context. Through the studies the researchers established the importance of self regulated learning for students’
at all academic levels and self regulation can be taught, learned, and controlled. Thus, the understanding the use of self regulated learning strategies by students in accountancy learning will help the teachers and parents to support the students’ for managing their efforts in academic situations.

The review reveals that the variables, Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies, individually contributes either positively or negatively to the academic achievement in the context of various subjects. Review of related literature on Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies indicated that majority of the studies associated with these variables are conducted in foreign countries and only very few studies can be traced related to academic outcome in Indian context. The empirical studies also revealed that the three variables are effective predictors of academic achievement across the domains. But no study can be identified in relation with the academic achievement in accountancy. Hence, the investigator felt that it would be highly significant and useful to study the influence of Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on Achievement in Accountancy of higher secondary school students. The following research questions are formulated by the investigator to analyze the role of Epistemological Beliefs, Achievement Goals, and Self Regulated
Learning Strategies on Achievement in Accountancy of higher secondary school students.

1. Do Epistemological Beliefs influence Achievement in Accountancy of higher secondary school students?

2. Whether the type of Achievement Goal pursued by the students, influence Achievement in Accountancy?

3. Which type of Achievement Goal contributes more to Achievement in Accountancy of higher secondary school students?

4. Is there any role for Self Regulated Learning Strategies on Achievement in Accountancy of higher secondary school students?

5. Is there any combined effect of Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on Achievement in Accountancy of higher secondary school students?

6. To what extent Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies can predict Achievement in Accountancy of higher secondary school students?

**Statement of the Problem**

The present study is designed to find out the influence of Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on Achievement in Accountancy of higher secondary school students.
The study is entitled as “INFLUENCE OF EPISTEMOLOGICAL BELIEFS, ACHIEVEMENT GOALS AND SELF REGULATED LEARNING STRATEGIES ON ACHIEVEMENT IN ACCOUNTANCY OF HIGHER SECONDARY SCHOOL STUDENTS”.

Definition of Key Terms

The key terms used for stating the problem are described below.

Epistemological Beliefs

Epistemological Beliefs have been defined as the beliefs pertaining to what is knowledge and how the knowing and learning occurs (Schommer, 1990).

For the present study, Epistemological Beliefs specifically in the context of Accountancy learning are considered. The epistemological beliefs refer to the beliefs of the students related to the nature of the subject Accountancy and the process of acquiring knowledge in Accountancy which is measured using Scale on Epistemological Beliefs in Accountancy.

Achievement Goals

Achievement Goals are conceived as cognitive representations of what individuals are trying to do or what they want to achieve and represent the individual's orientation to the task or situation, their general focus or purpose for achievement (Pintrich, Conley & Kempler, 2003).
For the present study, Achievement Goals refer to the purpose and motivation of an individual to engage in academic activity. The type of achievement goal viz., mastery goal, performance-avoidance goal, and performance-approach goal, which is pursued by the students while engaging in academic and learning tasks are considered and they are measured with the help of Achievement Goal Inventory.

**Self Regulated Learning Strategies**

Self Regulated Learning Strategies refer to the combined use of cognitive strategies, metacognitive strategies, and resource management strategies by the students to take control of their effort and classroom learning environment (Pintrich & De Groot, 1990).

For the present study, the Self Regulated Learning Strategies are the strategies used by the students to achieve their goal in classroom and academic related activities. The cognitive, metacognitive, and resource management strategies adopted by the students in completing learning tasks are measured using a Scale on Self Regulated Learning Strategies.

**Achievement in Accountancy**

The term Achievement in Accountancy refers to the relative accomplishments of students in accountancy as measured by a Test of Achievement in Accountancy constructed and standardized for higher secondary school students of Kerala.
**Higher Secondary School Students**

The term higher secondary school students refer to the students studying in standard XI and XII of the recognized higher secondary schools in Kerala State.

For the present study, higher secondary school students refer to those students studying in commerce stream of higher secondary schools of Kerala state.

**Variables Selected for the Study**

The following are the independent and dependent variables selected for the present study.

**Independent Variables**

- Epistemological Beliefs
- Achievement Goals
- Self Regulated Learning Strategies

**Dependent Variable**

Achievement in Accountancy is selected as the dependent variable.
Objectives of the Study

The objectives of the study are:

1. To find out whether there exist any gender, type of management, and locale differences for the selected independent variables namely, Epistemological Beliefs, Achievement Goals, Self Regulated Learning Strategies, and the dependent variable, Achievement in Accountancy among higher secondary school students.

2. To study the influence of Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on Achievement in Accountancy for the total sample and subgroups based on gender, type of management, and locale of schools.

3. To find out the individual and combined contributions of Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on Achievement in Accountancy for total sample.

4. To work out the equation to the regression lines for predicting Achievement in Accountancy based on the variables namely, Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies.
Hypotheses

The study is carried out to test the following hypotheses:

1. There is significant gender difference in the mean scores of Epistemological Beliefs, Achievement Goals, Self Regulated Learning Strategies, and Achievement in Accountancy of higher secondary school students.

2. There is significant difference in the mean scores of Epistemological Beliefs Achievement Goals, Self Regulated Learning Strategies, and Achievement in Accountancy of higher secondary school students based on the type of management of schools.

3. There is significant locale difference in the mean scores of Epistemological Beliefs, Achievement Goals, Self Regulated Learning Strategies, and Achievement in Accountancy of higher secondary school students.

4. There is significant main effect and interaction effect of each of the independent variable namely, Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on the dependent variable, Achievement in Accountancy for total sample.

5. There is significant main effect and interaction effect of each of the independent variable namely, Epistemological Beliefs, Achievement
Goals, and Self Regulated Learning Strategies on the dependent variable, Achievement in Accountancy for girls of higher secondary schools.

6. There is significant main effect and interaction effect of each of the independent variable namely, Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on the dependent variable, Achievement in Accountancy for boys of higher secondary schools.

7. There is significant main effect and interaction effect of each of the independent variable namely, Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on the dependent variable, Achievement in Accountancy for government higher secondary school students.

8. There is significant main effect and interaction effect of each of the independent variable namely, Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on the dependent variable, Achievement in Accountancy for aided higher secondary school students.

9. There is significant main effect and interaction effect of each of the independent variable namely, Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on the dependent
variable, Achievement in Accountancy for rural higher secondary school students.

10. There is significant main effect and interaction effect of each of the independent variable namely, Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on the dependent variable, Achievement in Accountancy for urban higher secondary school students.

11. There is significant individual and combined contribution of Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on Achievement in Accountancy for total sample.

**Methodology in Brief**

**Method**

The study adopted survey method as it is intended to find out the influence of Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on Achievement in Accountancy among higher secondary school students.

**Sample**

The population considered for the study is higher secondary school students of commerce stream in Kerala state who follow Kerala state syllabus. The present study was carried out on a representative sample of 1012 higher
secondary school students studying in standard XI of commerce stream selected from Kasargode, Kozhikode, Malappuram, Palakkad, Thrissur, Eranakulam, and Thiruvanathapuram districts of Kerala State. Stratified sampling technique was used for selecting the sample by giving due representation to the subgroups on the basis of gender, type of management of the schools, and locale of the schools.

**Tools Used for Data Collection**

To measure the independent and dependent variables, four tools were used for the present study. The tools used for the study are the following:

1. **Scale on Epistemological Beliefs in Accountancy (Usha & Niranjana, 2015)**

To measure the epistemological beliefs of higher secondary school students with respect to Accountancy subject, the investigator developed and standardized a Scale on Epistemological Beliefs in Accountancy with the help of the supervising teacher. The scale consists of 40 items on five dimensions of Epistemological Beliefs such as certainty of knowledge, structure of knowledge, source of knowledge, control of knowledge, and speed of knowledge acquisition. The items related to naive and sophisticated beliefs of students about Accountancy and the process of learning related to Accountancy subject are included in the scale. The draft scale was prepared by including 55 items and was standardized by the investigator.
2. **Achievement Goal Inventory (Usha & Niranjana, 2015)**

The investigator developed and standardized an Achievement Goal Inventory with the help of the supervising teacher to measure the type of achievement goal pursued by higher secondary school students. The final inventory consists of 45 items on three types of Achievement Goal pursued by the students’ viz., mastery goal, performance-approach goal, and performance-avoidance goal. The draft inventory was prepared by including 56 items related to mastery goal, performance-avoidance goal, and performance-approach goal.

3. **Scale on Self Regulated Learning Strategies (Usha & Niranjana, 2015)**

In order to understand the use of self regulated learning strategies of higher secondary school students, by using summated rating technique the investigator developed and standardized the Scale on Self Regulated Learning Strategies. The final scale consists of 58 items related to the three components of Self Regulated Learning Strategies viz., cognitive strategies, metacognitive strategies, and resource management strategies. The draft scale was constructed by including 63 items related to various components of Self Regulated Learning Strategies.

Achievement Test in Accountancy based on the chapters from basic concepts to final accounts was used to measure the Achievement in Accountancy of higher secondary school students studying in standard XI of commerce stream. The achievement test was constructed on the basis of Revised Bloom’s Taxonomy of Educational Objectives. The standardized achievement test consists of 40 multiple choice test items from Accountancy subject of standard XI. The draft test consisted of 60 multiple choice test items and was standardized by the investigator with the help of achievement test standardization procedure.

Statistical Techniques Used for the Study

The present study made use of both descriptive and inferential statistics for the analysis of collected data. The major statistical techniques used for the present study are:

Descriptive Statistics

Mean, median, mode, standard deviation, skewness, and kurtosis of each of the independent variable, Epistemological Beliefs, Achievement Goals, and Self Regulated learning Strategies and the dependent variable, Achievement in Accountancy were calculated. The descriptive statistics were calculated for the total sample as well as separately for the subgroups based
on gender, type of management of schools, and locale of schools of higher secondary students.

**Mean Difference Analysis**

Mean difference analysis was carried out in order to know whether there exists gender difference, difference based on type of management of schools, and locale of schools for Epistemological Beliefs, Achievement Goals, Self Regulated Learning Strategies, and Achievement in Accountancy of higher secondary school students. Test of significance of difference between means of large independent sample (t-test) was used.

**Analysis of Variance with 2X3X2 Factorial Design**

The three-way Analysis of Variance with 2X3X2 factorial design was used to understand the main and interaction effect of three independent variables namely, Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on the dependent variable, Achievement in Accountancy. Epistemological Beliefs in Accountancy were classified into High Epistemological Beliefs group and Low Epistemological Beliefs group. The Achievement Goals were classified into Mastery Goal group, Performance-Avoidance Goal group, and Performance-Approach Goal group. The Self Regulated Learning Strategies were classified into High Self Regulatory Learning Strategy group and Low Self Regulated Learning Strategies group. Data were analyzed for total sample and subgroups based on
gender, type of management of schools, and locale of schools. When $F$ ratios are found significant, further analysis of Scheffe's Test of Post Hoc Comparison was performed to locate the exact group which differ in mean scores.

**Multiple Regression Analysis**

Multiple regression analysis was used for the present study to predict the individual and joint contributions of predictor variables namely, Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on the criterion variable, Achievement in Accountancy. The method used for multiple regression is Enter method. Regression equation was also developed to predict the scores of Achievement in Accountancy for the predictor variables.

**Scope of the Study**

The present study aimed to investigate the influence of Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on Achievement in Accountancy of higher secondary school students. It is expected that the present study will be helpful to understand the influence of Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on Achievement in Accountancy of higher secondary school students. The mean difference analysis of scores of the independent and dependent variables were done by the investigator to investigate the mean
differences among girls and boys, government and aided school students, and rural and urban school students at higher secondary level. The investigation of main effect of Epistemological Beliefs will reveal the effect of Epistemological Beliefs on Achievement in Accountancy of higher secondary school students. The investigation of main effect of Achievement Goals will help the investigator to understand which type of achievement goal contributes more to Achievement in Accountancy of higher secondary school students. The effect of Self Regulated Learning Strategies on Achievement in Accountancy among higher secondary school students will throw an insight into how the use self regulated learning strategies influence the academic performance of the students. The investigation into the interaction effect of the three independent variables on Achievement in Accountancy will enable the researcher to understand how the combined effect of these variables contributes to academic performance of the students and which independent variable is the strongest predictor of Achievement in Accountancy of higher secondary school students.

Accountancy is a field of study that requires development of problem solving skills among the learners for systematic and logical recording, classifying, and analyzing of financial transactions. The findings of the study will help the teachers as well as the educational practitioners to understand and promote the effective use of these variables for enhancing the academic performance in Accountancy among the higher secondary school students.
Promoting more sophisticated epistemological beliefs is helpful for the accounting learners to understand the nature of Accountancy and to form better epistemological beliefs about the Accountancy subject. The development of more sophisticated epistemological beliefs can also benefit other aspects of learning such as performance on learning, problem solving, and reasoning tasks. Pursuing appropriate goal related to the academic activities enable the students to engage in tasks more responsibly and to select appropriate activities to attain their goal. To promote personal and academic success, effort must be placed on developing and incorporating use of self regulated learning strategies among the students.

Limitations of the Study

The limitations identified for the study are presented below.

- The study was conducted only on higher secondary school students studying in commerce stream.
- Among the higher secondary school students studying in commerce stream, the study is confined to students who are studying in standard XI of commerce stream.
- The study is confined only to three independent variables namely, Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies and only to one dependent variable, Achievement
in Accountancy. The other factors which may affect the Achievement in Accountancy are not considered.

- The commerce stream in higher secondary schools comprises of two major subjects namely, Accountancy and Business Studies. Only the subject, Accountancy is considered for the present study.

**Organization of the Report**

The report of the study is presented in five chapters namely, introduction, review of related literature, methodology, analysis and interpretation and summary of findings and suggestions. The details of organization of the report are described below.

**Chapter I**

This chapter deals with a brief introduction of problem under study, need and significance of the problem, statement of the problem, definition of key terms, variables of the study, objectives of the study, hypotheses, a brief description of the method of study, scope of the study, and limitations of the study.

**Chapter II**

This chapter provides a detailed theoretical overview of the variables Epistemological Beliefs, Achievement Goals, and Self Regulated Learning
Strategies and the review of related studies associated with these variables and Accountancy subject.

Chapter III

In this chapter the investigator gives an account of the methodology adopted for the study in detail by including description of variables, objectives of the study, hypotheses, tools employed for data collection, sample drawn, data collection procedure, and statistical techniques used for analyzing the data.

Chapter IV

This chapter describes details of preliminary analysis, mean difference analysis, investigation of main and interaction effect of Epistemological Beliefs, Achievement Goals, and Self Regulated Learning Strategies on Achievement in Accountancy and the regression analysis of the predictor and criterion variables.

Chapter V

This chapter gives a brief account of the study in retrospect with respect to objectives of the study, hypotheses and methodology, the major findings of the study, educational implications of the study, and suggestions for further research in this area.