Chapter II

REVIEW OF RELATED LITERATURE

➢ Theoretical Overview
➢ Review of Related Studies
REVIEW OF RELATED LITERATURE

The review of related literature is an important aspect of a research study. Any worthwhile study in any field of knowledge requires an adequate familiarity with the work which has already been done over the same area.

Review avoids du of work that has already been done and it helps the investigator to go deep into the problem at hand and it helps to study the different aspects of the problem. It provides an insight into the methods, measures, etc. employed by others which will lead to significant improvement of the research design.

The first section of this chapter deals with theoretical background of the four variables, viz., Intellectual Styles, Motivational Belief, Techno Culture and Moral Maturity Behavior and second section deals with the empirical studies connected with the variables under consideration. Theoretical outline of the variables and the review of the studies related to the variables are presented in this chapter. These are presented in two major headings;

A. Theoretical Overview
B. Review of Related Studies

Theoretical Overview

Intellectual Style

Learning Style is the forerunner of Intellectual Styles. Witkin (1976) is considered as the pioneer style researcher. He developed the Field Independent and Field Dependent learning Styles. The origin of Intellectual Style can be traced from the studies conducted by Sternberg (1997) and others, and developed one of the most popular theories of Intellectual Styles known as the theory of Mental Self Government.
Sternberg (1988) pointed out that one cannot fully understand intellectual abilities unless one also knows how individuals apply them in adapting to the hassles of their environment. Sternberg’s (1988, 1990 and 1997) theory of mental self-government addresses Intellectual Styles as an interface between intelligence and personality. The basic assumption is that the way individuals use their mind is similar to the various dimensions of governing a society in the real world. Just as there are many ways of governing a society, there are many ways of handling one’s daily social interactions and activities. These different ways of using one's abilities are interpreted as people's Intellectual Styles. Sternberg proposed 13 thinking styles that fall into five dimensions: (1) functions (including the legislative, executive, and judicial styles), (2) forms (hierarchical, monarchic, oligarchic, and anarchic styles), (3) levels (global and local styles), (4) scopes (internal and external styles), and (5) leanings (liberal and conservative styles).

**Functions of Intellectual Styles**

Similar to the protagonist of executive, legislative and judicial played by the govt. people also perform these roles and its functions in their own thinking and working. The executive person carries out the initiatives. Policies and laws are enacted by the legislative people and the judicial person evaluates whether the laws are being carried out correctly and if there are violations of these laws (Sternberg, 1988, 1990, 1997).

**Legislative Style**

Legislative people like to come up with their own ways of doing things, and prefer to decide for themselves what they will do and how they will do it. Some of the preferred kinds of activities of a legislative stylist are writing creative papers, designing innovative projects, creating new business enterprises and inventing new things. Some kinds of occupations they prefer are creative
writer, scientist, artist, sculpture, investment banker, policy maker, and architect (Sternberg, 1988, 1990, 1997).

Unfortunately the school settings do not often reward the legislative style. Indeed even the preparation for occupations that require people to be creative often discourages the legislative style. Creative writers need a legislative style, but a legislative style is not often encouraged, and is often discouraged in literature classes, where the emphasis in the lower classes is likely to be on comprehension and in the upper grades on criticism and analysis (Sternberg, 1988, 1990, 1997). Legislative students tend to be critical of the schooling they receive. They may not want to do things the way their teachers want them to. They enjoy doing things the way they decide to do them.

**Executive style**

Executive people like to follow rules and prefer complications that are pre structured or pre-fabricated. They like to fill in the gaps within prevailing structures rather than to create structures themselves. Some of the kinds of deeds they are likely to prefer are solving given mathematical problems, applying rules to difficulties, giving talks or lessons based on other people’s ideas, and imposing rules. Some careers that can be a good fit to executive thinkers are of lawyer, police officer, builder, soldier, and administrative assistant. The executive style tends to be respected both in school and in business, because executive stylists do what they are told, and often do it joyfully. They follow directions and guidelines, and evaluate themselves in the same way the system is likely to evaluate them, namely, in terms of how well they do what they are told. Thus a gifted child with an executive style is likely to do well in school, whereas a gifted child with a legislative style is more likely to be viewed as uncharacteristic and even rebellious (Sternberg, 1988, 1990, 1997).
**Judicial style**

Judicial people like to evaluate rules and processes, and prefer complications in which one analyses and evaluates existing things and ideas. The judicial stylist prefer doing such as writing critiques, giving opinions, judging others and their works, and evaluating programs. Some of their preferred kinds of career are judge, critic, program evaluator, consultant, admission officer, grant and contract monitor, and system analyst. Schools often deprive the judicial style. Although the work of a historian, for example, is in large part judicial – the analysis of historical events – many children get the idea that the work is largely executive – remembering dates of events (Sternberg, 1988, 1990, 1997). As in science, therefore, some of the ablest students may decide to pursue some other field, even though their style of thinking may be well suited not to their preparation for the career, but to the actual career itself. Judicial people prefer problems in which they can analyze and evaluate things and ideas. A journal editor normally will be a judicial scholar. His primary job is to evaluate the aptness of manuscripts for publication. A literary critic is likely to be judicial, whereas the writer whose work is being criticized is more likely to be legislative (Sternberg, 1988, 1990, 1997).

**Forms of Intellectual Styles**


**Monarchic style**

A monarchic person is someone who is single-minded and driven. The individual tends not to let anything get in the way of his or her solving a problem. Monarchic people can be counted on to get a thing done, given that
they have set their mind to it. Monarchic bosses often expect tasks to be done, without excuses or extenuating circumstances (Sternberg, 1988, 1990, 1997).

Monarchic children often encounter a problem in school: They usually want to be doing something other than what they are doing, and are likely to be thinking about the other thing while they are supposed to be attending to the teacher. Sometimes, their interests are best served when a teacher brings whatever they are monarchic about to bear on other things they are doing. For example, a child who has a strong interest in sports but is not a reader may become a reader if given sports novels to read. A child who loves cooking but not math could be given math problems to do that involve recipes. In these ways, a child may become interested in things that previously were of no interest (Sternberg, 1988, 1990, 1997).

People who exhibit a predominantly monarchic style tend to be motivated by a single goal or need at a time. Monarchic people often attempt to solve problems, full speed ahead, without considering the obstacles. If a monarchic person cannot see how something relates to a preferred issue, the person may find the thing lacking in interest. This means that their interest can often be grabbed if one relates what one has to offer to their issue. Thus political candidates quickly learn to tailor their speeches to their audience, trying to hit on the hot-button issue or issues that are of concern to particular constituencies (Sternberg, 1988, 1990, 1997).

*Hierarchic style*

The hierarchic person has a hierarchy of goals and recognizes the need to set priorities, as all goals cannot always be fulfilled or at least fulfilled equally well. This person tends to be more accepting of complexity than is the monarchic person, and recognizes the need to view problems from a number of angles so as to set priorities correctly.
Hierarchic individuals tend to fit well into organizations because they recognize the need for priorities. However, if their priorities are different from those of the organization, problems may arise. Then they may find themselves organizing their work according to their own, but not their organization’s priorities (Sternberg, 1988, 1990, 1997). The company lawyer who wants to spend too much time on pro bono work, the university professor who wants to spend too much time on teaching, and the cook who wants each meal to be perfect but who takes forever in cooking the meals may soon find themselves unwelcome in their respective organizations (Sternberg, 1988, 1990, 1997).

Hierarchic people tend to be systematic and organized in their solutions to problems and their decision making. Perhaps this organization is part of what puts them at a great advantage in school and in many other institutions. Most institutions place hierarchic people at an advantage in school and in many other institutions. Most institutions place hierarchic people at an advantage, and schools are perhaps most notable. Students study multiple subjects, so they have to set priorities for their time and their expenditures of effort (Sternberg, 1988, 1990, 1997). They take tests that often are rather long for the time period, so that the hierarchic students will be at an advantage as they devise a system of priorities for finishing as much of the test as possible within the time period allotted. They tend to write in the hierarchic style preferred by teachers, and read in a way that distinguishes between more and less important points.

**Oligarchic style**

The oligarchic person is like the hierarchic person in having a desire to do more than one thing within the same time frame. But unlike hierarchic people, oligarchic people tend to be motivated by several, often competing goals of equal perceived importance. Often, these individuals feel pressured in the face of completing demands on their time and other resources. They are not always sure what to do first, or how much time to allot to each of the tasks they need to complete. However, given even minimal guidance as to the priorities of the
organization in which they are involved, they can become as effective as or even more effective than people with other styles (Sternberg, 1988, 1990, 1997).

Oligarchic persons have trouble in deciding which goals to give priority to. The result is that they may have trouble allocating resources. They may have the ability to do excellent work, but it doesn’t always show through if they are in a situation that requires resource allocation. Oligarchic people may need to be guided in the setting of priorities. In instances where there is sufficient time or there are sufficient resources to get everything done, their oligarchic style may even show through. But in instances where there is resource allocation problem, either direct guidance or other forms of assistance can make them potentially quite effective (Sternberg, 1988, 1990, 1997).

In a way, an oligarchic person is a cross between a monarchic person and a hierarchic one. Like the monarchic person, the oligarchic one is not a natural priority setter. And like the hierarchic person, the oligarchic person likes to do multiple things at once. In fact, in situations where there are no resource limitations, the oligarchic person may be indistinguishable from the hierarchic one.

Oligarchic employees and students sometimes suffer because they have competing demands on their time, and if, for example, they have short term and long term projects, they may find themselves putting their time into one set of priorities and neglecting the other. People in managerial and other kinds of jobs sometimes fail because they pay attention to the pressing short term issues, but fail to allow time for the less pressing, but ultimately perhaps more important, long term issues. Sometimes they lose out just because the competition was attending to the long term (Sternberg, 1988, 1990, 1997).

Anarchic style

The anarchic person seems to be motivated by a potpourri of needs and goals that can be difficult for him or her, as well as for others, to sort-out
Anarchic people take what seems like a random approach to problems; they need to reject systems, and especially rigid ones, and to fight back at whatever system they see as confining them.

Although anarchic individuals may have trouble adapting to the worlds of school and work, especially if the environment is rigid one, they often have greater potential for creative contribution than do many of the people who find the anarchies so distasteful. Because anarchies tend to pick up a little from here, a little from there, they often put together diverse bits of information and ideas in a creative way (Sternberg, 1988, 1990, 1997). They are wide ranging in the scope of things they will consider, and so may see solutions to problems that others overlook. The problem for the teacher, parent or employer is to help the anarchic person harness this potential for creativity and achieve the self discipline and organization that are necessary for any kind of creative contribution. If this harnessing effort works, then the anarchic person may end up succeeding in domains where others may fail.

In schools, anarchic students are at risk for antisocial behavior. They don’t fit in, so they drop out, whether physically or psychologically. Even when they are part of the school, they stick out like sore thumbs. They are the students who challenge teachers, not necessarily on principled grounds, but rather for the sake of challenging the teachers or any other authority figures themselves, they tend to be unsuccessful, because they are no better at maintaining their own systems than at anyone else’s (Sternberg, 1988, 1990, 1997).

**Levels of Intellectual Styles**

The theory of mental self government specifies two levels of thinking: global and local. Just as governments function at multiple levels, for example, federal, state, district, village and so on and so does people.

**Global style**

Global individuals prefer to deal with relatively large and abstract issues.
They ignore or don’t like details, and prefer to see the forest rather than the trees. Often, they lose sight of the trees that constitute the forest. As a result, they have to be careful not to get lost on “cloud nine”. The student who was interested in child development was not able, even after a fairly long discussion, to pin down the potential interests enough to formulate any concrete hypotheses. She insisted on staying at the level of child development, which is fine as an interest, but which in and of itself does not lead to testable hypotheses (Sternberg, 1988, 1990, 1997).

**Local style**

Local individuals like concrete problems requiring working with details. They tend to be oriented toward the pragmatics of a situation, and are down to earth. The danger is that they may lose the forest for trees. However, some of the worst system failures, such as in aviation and rocketry, have occurred when people have ignored what seemed at the time to be small details. Thus almost any team requires at least some local individuals. The government bureaucrat presumably has a local style, at least in his work. He somehow manages to rationalize to himself salary received for checking margins and who knows what else on documents submitted to a particular agency (Sternberg, 1988, 1990, 1997).

**Scope of Intellectual Styles**

Governments need to deal both with internal or domestic affairs and with external or foreign ones. Similarly, mental self governments need to deal with both internal and external issues, as people find out every day in their personal lives and at work (Sternberg, 1988, 1990, 1997).

**Internal style**

Internal individuals are concerned with internal affairs- that is to say, these individuals turn inward. They tend to be introverted, task-oriented, aloof,
and sometimes socially less aware. They like to work alone. Essentially, their preference is to apply their intelligence to things or ideas in isolation from other people (Sternberg, 1988, 1990, 1997). Internal children will probably prefer to work alone, and may become anxious in a group setting.

An example of how teachers can confuse style with abilities is shown by the case of a kindergartner who was recommended by her teacher for retention. When asked why she had made this recommendation, the teacher pointed out that although the child’s academic work was quite good, the child did not seem socially ready for first grade. That is to say, the child preferred to be on her own rather than to interact with other children, which the teacher took as a lack of some kind of social intelligence. In fact, the child was simply an internal. She was promoted, and has done splendidly well both academically and in her social relations (Sternberg, 1988, 1990, 1997).

**External Style**

External individuals tend to be extroverted, outgoing, and people oriented. Often they are socially sensitive and aware of what is going on with others. They like working with other people wherever possible. External children will prefer working in groups and will probably learn better when learning with others.

This is not to say that internals should never work in groups or with externals but needs to develop the flexibility to learn to work in a variety of situations. But the stylistic point of view implies that teachers, like students, need to be flexible in the way they approach the teaching learning process. They need to provide children with both individual and group settings so that children can be comfortable some of the time and challenged the rest of the time. Always providing the same working setting tends to benefit some students and to penalize others (Sternberg, 1988, 1990, 1997).
**Techno Culture**

A wide range of definitions for technology related terms exists in the literature. These are summarized as follows: Betz (1998) defines technology as the knowledge of the manipulation of nature for human purposes, whereas Joerges (1988) describes technology as artificial things that require engineering knowledge for their design and production and perform large amount of operations by themselves.

*Technology adoption* is the process through which organizations or individuals decide to make full use of an innovation in their daily businesses (Rogers, 1983). Rogers defines adoption as “a decision to make full use of an innovation as the best course of action, and conversely, rejection is a decision not to adopt an available innovation”. Furthermore, Rogers states that technology users go through five stages before they can adopt a new technology. The five stages are: (1) awareness, (2) interest, (3) evaluation, (4) trial, and (5) adoption. Rogers differentiates the adoption process from the diffusion process of innovation in that the diffusion process occurs within society, as a group process; whereas, the adoption process pertains to an individual.

When we take into consideration the words ‘technology’ and ‘culture’ separately, both of them seem totally different. But both of them are closely related when we see that there is great impact of technology on culture and culture in turn shapes technology. Another difference lies when we see culture as a context in which technology is to be inserted. Culture is so wide in its meaning that it includes all that is there in a tradition which are adopted and adapted by us. In some other aspect culture can be brought as a process of selecting, challenging, and arranging. Here tradition is reconfigured. In the modern culture, technology is of at most important and the two are inseparable. Thus culture and technology together constitute techno culture.
Stages of technological development

The emergence of technology, for the first stage—hunter-gatherers—provides a mechanical advantage in accomplishing a physical task, and must be powered by human or animal effort for procuring food. Tools such as a container, spear, arrow, plow, or hammer that augments physical labor to more efficiently achieve his objective. Later animal-powered tools such as the plow and the horse, increased the productivity of food production about tenfold over the technology of the hunter-gatherers. Tools allow one to do things impossible to accomplish with one's body alone.

The second technological stage was the creation of the machine. A machine is a tool that substitutes the element of human physical effort, and requires only controlling its function. Examples of this include cars, trains, computers, and lights. Machines allow humans to tremendously exceed the limitations of their bodies. Putting a machine, tractor on the farm increased food productivity at least tenfold over the technology of the plow and the horse.

The third and final stage of technological evolution is the automation. The automation is a machine that removes the element of human control with an automatic algorithm. Examples of machines that exhibit this characteristic are digital watches, automatic telephone switches, pacemakers, and computer programs. It's important to understand that the three stages outline the introduction of the fundamental types of technology, and so all three continue to be widely used today. A spear, a plow, a pen, and an optical microscope are all examples of tools.

The process of technological evolution culminates with the ability to achieve all the material values technologically possible and desirable by mental effort. An economic implication of the above idea is that intellectual labour will become increasingly more important relative to physical labour. Contracts and agreements around information will become increasingly more common at the marketplace. Expansion and creation of new kinds of institutes that works with
information such as for example universities, book stores, patent-trading companies, etc. is considered an indication that a civilization is in technological evolution.

Interestingly, this highlights the importance underlining the debate over intellectual property in conjunction with decentralized distribution systems such as today's internet. Where the price of information distribution is going towards zero with ever more efficient tools to distribute information is being invented. Growing amounts of information being distributed to an increasingly larger customer base as times goes by.

**Addiction**

Addiction has been defined historically as “physical and psychological dependence on psychoactive substances, which cross the blood-brain barrier once ingested, temporarily altering the chemical milieu of the brain”. Addiction may also be a continuous involvement with a substance or activity, whatever its negative consequences may be. The main cause of addiction is the seeking of pleasure and enjoyment. Addicted people feel normal only when they involve with the substance or activity that they are addicted to. This is reflected in the individual pursuing reward and relief by substance use and other behavior. The addiction is characterized by impairment in behavioral control, craving, inability to consistently abstain, diminished recognition of significant problems with one’s behavior and interpersonal relationship.

Addiction is of two kinds; Substance dependence and other dependence. Substance dependence can be diagnosed with physiological dependence, evidence of tolerance or withdrawal, etc. Alcohol dependence is an example of substance dependence. Other dependence is referred to the dependences such as compulsive shopping, sex addiction, over eating, etc. here individuals have a compulsion to engage in some specific activity, even though there are harmful effects. Doing of these activities in moderation is not a problem. But when these
activities interfere in the daily activities of a person, it can be taken as addiction. If no treatment or recovery activities are done, addiction progresses and may end up in disability or premature death.

**Internet Surfing Addiction**

With the advent of Internet, communication and information are easily accessible and faster. But modern people rely on Internet too much and their social interactions decrease and they are isolated from any human contact. Internet surfing has a strong power to attract people to it again and again. Many people are addicted to that they never want to go away from it. In the recent years, the problem has been debated and discussed. But till now American Medical Association (AMA) has not formally recognized it as addiction. The AMA has recognized the Internet Surfing Addiction and they tell that Internet Addiction has some serious side effects. Studies have shown that Internet Addiction shares many of the same behavioral and health consequences of gambling addiction.

Internet has the power to rob the individuals of their time, their families and the quality of their lives. In the American culture Internet Surfing Addiction increases uncontrollably. Using Internet too much has a negative hypnotic effect. It is human to have connection to other people. Internet provides facilities for that. But when it is unlimited, it is problematic.

**Negative Effects of Internet Browsing**

Internet Surfing is a daily routine of most of the modern human being. Many studies that have been so far conducted tell that Internet has much power to attract people to its vast and varied sources. People depend on Internet for varied reasons. The main things that attract many to the Internet are its treasure of information and freedom.

Logging onto Internet has been compared to a child going to a toy store. One does not have to sit idle there and each of its activities can thrill us that we
never want to leave it. There is enough freedom for people to choose whatever he likes. So there are chances for people to do things which they will never do in real life. The real life and the life that we experience in front of a computer screen are totally different. Internet may help a person in finding his ideal self, but it will be totally different from his social self. Internet cuts the social interactions, even though we save a lot of time doing things via Internet. Internet encourages the illegal activities like stealing the files/documents. As they need not be true to themselves and others, many people express their hatred towards social, cultural and religious systems in online. But if they do it in real life, they will be criticized and judged by those around them. Thus Internet becomes a sanctuary for those who are afraid to express their opinion in public.

**Symptoms of Technology Addiction**

- Lack of sleep and excess fatigue.
- Less investment in relationships.
- Withdrawal from activities or events.
- General apathy, edginess or irritability when offline.
- Denial of the seriousness of the problem.
- Rationalizing the things that they learned from net as superior to their experience or society.
- Lying about how much time they spend online and what they do there.
- The remembrance of online activities thrills them even when they are offline.
- Spending too much time with Internet than they actually wants to.
- Unable to control Internet use, even though they really want to.
- Feelings of helplessness, guilt, anxiety and depression about Internet usage.

**Causes of Technology Addiction**

Usually it is a habit, which gradually develops into an addiction. The causes of addiction are difficult to list out. Addiction is usually caused by a
combination of physical, mental, incidental and emotional factors. Specialists say that there is a link between the repeated use of an addictive substance and how human brain experience pleasure while using it. The use of the substance or the doing of activity acts as a reward, which leads to its frequent use.

The following factors contribute to Technology Addiction;
- Free and unlimited Internet access
- Unstructured time.
- Freedom of expression.
- Freedom from societal and other barriers.
- No monitoring or censoring of what they say or do online.
- The desire to escape from stresses and problems of the real world.
- Social intimidation and alienation.
- Lack of sharing and comfort.
- Bitter childhood experiences.

**Motivational Belief**

The Latin root of the word “Motivation” means “to move”; hence, in this basic sense the study of motivation is the study of action. Motivational Beliefs refers to the forces encouraging a person to engage on a task or to pursue a goal; in the school setting it concerns to reach a desirable result (Wotters & Rosenthal, 2004). Most human motivation is cognitively generated. People motivate themselves and guide their actions anticipatorily by the exercise of our thought. They get goals for themselves and plan courses.

There are certain basic motives that every person- child and adult strives to satisfy. In fact motives are the dynamic forces that energize all behavior. What we do and the manner, in which we do it, is governed by the motives behind it. Our all acts are the results of our attempts to satisfy our motives. When one is concerned with making and retaining friendship with opposite sex, we say he has sex motive. When a student desires to become monitor of his
study tour or the leader of the class, he is said to possess power motive and his
desire to seek the reward and approval of his parents or friends or teachers is
termed as approval motive. Similarly the desire to improve his performance at
school or to get a good grade or to become a teacher and so is known as
achievement motive. The belief which one possesses and leads to achieve the
task assigned to him is called motivational belief. In general, the motives are
classified into two broad groups as primary and secondary motives.

**Types of Motives**

Primary motives are the biological or physiological motives. These
motives ensure the preservation of life for the individual and for his race.
Examples of such motives are hunger, thirst, sex, avoidance of pain, elimination
of body wastes, sleep and rest etc. The primary motives are universal motives;
they are found in all organisms whether it is human or non-human, in one form
or the other. They serve the basic physiological need of the organism. They are
inborn and innate.

Secondary motives are the psychological or social motives. They are
acquired like other forms of learned behavior in the course of satisfaction of the
biological needs. Examples of such motives are – the need for belongingness and
affiliation, need for security, desire of gaining status and recognition, power
motive and achievement motive etc.

Motives are derived from desires and wants. Every individual, who has
his existence in this planet, has to strive for the satisfaction of his needs.
Normally these needs of an individual are explained under two heads namely
Primary and Secondary. Primary needs means biological or physiological such
as need for food, oxygen and shelter. Secondary needs means sociological and
psychological such as need for security need for affection etc.
Theories of Motivation

Modern theories of Motivation focus more specifically on the relation of beliefs, values and goal with action. The work growing out of these theories of achievement motivation with a particular emphasis on developmental and educational psychology.

Furthermore, motivation theories have emerged from different intellectual traditions (Weiner 1992), we focus on those that are most closely linked to expectancy value models of behavior. The motivational theories are made into four broad categories.

- The first focuses on beliefs about competence and expectancy for success
- The second focuses on the reasons why individuals engage in different activities; these theories include constructs such as achievement values, intrinsic and extrinsic motivation, interest and goals.
- The third integrates expectancy and values constructs.
- The fourth draw links between motivation and cognitive processes.

Over the past 15 years, one of the most active areas of research on students motivational beliefs has been the investigation of achievement goal orientations are students reasons for engaging in or avoiding achievement-directed behavior. These goal orientations are important because they serve as the basis for how students define their own competence (Pintrich & Schunk, 2002) students goal orientations context – sensitive and can be influenced by classroom procedures, practices and policies (Ames, 1992)

Finally, teachers should avoid basing grades on motivational beliefs. Although students motivational beliefs should be monitored and feedback provided an effort to encourage the development of adaptive goal orientations, students should not be further penalized by receiving low marks for holding performance avoidance goals or other maladaptive motivational beliefs.
Maslow’s Hierarchy of Needs

Abraham Maslow proposed five sets of needs that can be arranged in a definite hierarchical order for understanding human motivation. Starting from the satisfaction of the physiological needs, every individual strives for the satisfaction of the other needs provides the motivation for his behavior. The need of a higher order does not occur until a need of a lower level has been sustained. The five levels of his hierarch are: physiological needs, safety needs, love and belonging needs, esteem needs and self actualization. When the esteem needs are satisfied, then comes the need for self-actualization. According to Maslow it is the noblest of human needs.

Dimensions of Motivational Beliefs

Although there are many theories of Motivational Beliefs which predicted many components that are relevant to students motivational belief (Seiferd ,2004), the present quest pertains to three components, namely Self-efficacy beliefs, Task value belief and Goal orientation.

Self-efficacy Beliefs

Everyone wants to experience success. The need for success has close relationship with their confidence. Self-efficacy Beliefs has been defined as one’s own approval of his ability to plan and execute actions that lead to achieving a specific target. Unfortunately our educational set up is not helping the child to realize the repository of strength he is possessing. As the educational process has underestimated our children, the curriculum and the methods of teaching are adjusted to the average child.

Task Value Beliefs

At each new stage of development there are certain tasks, skills, attitudes and understanding that must be met before a person can move on to a higher level of development. If a child could evaluate the task positively and value it in
an higher level, then the individual possesses a sound task value beliefs. It helps for the individual for the successful adjustment in the society. Successful achievement of the tasks leads to happiness of the individual and tranquility of the mind. It is also said that which may leads to further motives in accepting the challenges in life and to overcome the problems.

Goal Orientation

Goal orientation refers to the student’s perception of the reasons why to engage in a learning task. Children are usually found to blame their own fates or teachers or parents or illness for their failure in their assigned task. Such types of defense mechanisms are due to their lack of goal orientations. Academic procrastination is also due to their failure in setting goals. Goal orientations help the individual to achieve the target within the stipulated time. Otherwise it leads the child to serious mental conflicts and disorders.

Moral Maturity Behavior

The Association for Supervision and Curriculum Development’s panel on moral education (1987) brought out the description of a morally matured person. A morally matured person habitually;

- Respects human dignity
- Cares about the welfare of others.
- Integrates individual interests and social responsibilities.
- Demonstrates integrity.
- Reflects on moral choices.
- Seeks peaceful resolution of conflict.

The panel concluded that a morally matured person understands moral principles and accepts responsibility for applying them.

Moral maturity refers to matured morality. A morally matured person applies a body of knowledge or a skill to solve a problem or to understand a
situation by interpreting his knowledge or skill to be applied to a specific case. Moral development involves changes that are brought in the areas of thoughts, feelings and behaviors regarding the standards of right or wrong. Moral development has two dimensions like interpersonal dimension and intrapersonal dimension. Intrapersonal dimension regulates a person’s activities when he/she is away from a social interaction. The interpersonal dimension regulates the person’s activities when he/she is in a social situation.

**Domains of Moral Development**

The domains of moral development include the four domains such as moral thought, moral behavior, moral feeling and moral personality. These four domains are interrelated.

**Moral thought**

Moral thought refers to the capacity of individuals (the children and the adults) to think about what is right and wrong. Two persons, who analyzed and described moral thought in detail, are Piaget and Kohlberg.

**Moral Behavior**

People understand moral concepts from different situations. But all the understood moral concepts need not be translated into moral behavior. It is the basic processes like the punishment, reinforcement and imitation that the moral behavior depends upon. Punishment often helps in eliminating immoral behavior, reinforcement and presentation of a suitable model, etc encourage in developing a moral behavior. Moral behavior of one person mainly depends upon the situation. The stability of moral behavior depends upon the resistance of the person to temptation and self control.

**Moral Feeling**

This domain deals with the effect and role of emotions on morality. When an individual goes wrong, he feels guilty.
**Moral Personality**

There are three aspects of moral personality viz, moral identity, moral character and moral exemplars. For building up a moral identity, the person needs to have a will power, integrity and a moral desire. Will power includes the skills and strategies for analyzing the problems, setting goals, focusing attention, etc. integrity includes a sense of responsibility to their own actions. Moral desire is the motivation and intention to pursue a moral life. Moral character involves the commitment to act, strength of the conviction, persistence and overcoming distractions. Moral exemplars have a moral personality, identity, character, and a set of virtues that reflect moral excellence and commitment.

**Theories of Moral Development**

For being a morally matured person, it needs to undergo different moral developmental stages. The theories and aspects of moral development are given below.

**Piaget's theory**

Piaget (1929, 1932, 1954) tried to know how the children think about moral issues by observing and interviewing the Swiss children between the ages 4 and 12. He observed children when they play and noticed how they keep the rules of the games and interviewed children about their concepts of theft, telling lies, punishment and justice. As a conclusion, Piaget brought out two distinct stages of moral thinking. They are;

i. **Heteronomous morality (4-7 years):** - the children of this stage show much respect to the rules and think that rules are unchangeable. The word heteronomous means ‘under the authority of another’. Piaget has found that there are two factors that limit the children’s moral thought; the power of adults and cognitive immaturity. Moral understanding is characterized by realism. They believe that wrong doing inevitably leads
to punishment. 7-10 years, children are in a period of transition. They sometimes show the moral thought of the first stage and sometimes that of the second stage.

ii. Autonomous morality: - From about 10 years and older, the child becomes aware that rules are created by people and in moral judgments of an action. They consider the situation and consequences. They learn to settle conflicts in mutually beneficial ways. They consider the welfare of others, which is called reciprocity by Piaget. They acquire new perspective on punishment.

Kohlberg’s extension of Piaget’s theory

For studying moral development, Kohlberg presents the subject certain moral dilemmas and asked them to decide what the main character should do and why. This method of Kohlberg is known as clinical interview. He used ‘Heinz dilemma’, which depicted the story of Heinz. He emphasized the structure of the response to different questions, than its content for considering the individual’s moral progress.

Kohlberg’s Stages of Moral Development

Based on his clinical interviews on moral development, Kohlberg brought out three levels of moral development, each with two stages in it. These stages, according to him, are invariant and universal. All the people go through these stages in a fixed order. Each new stage, according to him is a more equilibrated way of making and justifying moral judgments. Each successive stage is built on the moral development of the preceding stages. Each stage was believed to form an organized whole.

Kohlberg believed that the factors brought by Piaget, that influence the cognitive development is important in moral development also. When a moral issue comes, a person’s mind becomes equilibrated and he equilibrates by
finding suitable solution to such problems. The levels of morality and its sub stages are discussed below.

i. **Preconventional level**

   It is the lowest level of moral thought according to Kohlberg. During preconventional level, good and bad are interpreted in terms of external rewards and punishments, i.e. morally controlled. It is similar to Piaget’s heteronomous stage, which is controlled by some authorities.

   **Stage 1:** - The orientation of punishment and obedience. If they are presented with a moral dilemma, they are unable to concentrate on two views. They give importance to the authority. Authoritarian view and thinks of the way to avoid punishment as morality. They do not consider people’s intentions.

   **Stage 2:** - The second stage of moral development gives importance to individualism, instrumental purpose and exchange. During this stage, children understand the importance of pursuing their own interests and they let others do the same. They, thus, give the importance to equal exchange; they understand that what is given to them is given in return.

ii. **Conventional level**

   They believe in keeping standards and obeying societal rules not for reasons of self interest but as others want them to do it.

   **Stage 3:** - this stage is categorized by mutual interpersonal expectations, relationships and interpersonal conformity. They need to be good girl/good boy in front of others. They believe that caring and loyalty to others as the basis of moral development.

   **Stage 4:** - During this stage, moral judgments are based on social order, justice, law and duty.
iii. **Post Conventional level**

This is the highest level of moral development. This stage is also known as principled level. Individuals at this stage go beyond the rules of the society. Morality is considered as abstract principle applicable to all situations and societies.

**Stage 5:** The people of this stage give importance to social contract and individual rights. Individuals reason that values, rights and principles transcend the law. A person evaluates the validity of actual laws and social systems, by their own degree of preservation of human rights and values.

**Stage 6:** Right action is defined by self chosen ethical principles of conscience, which are valid for everyone. They do not regard social laws or agreements. They accept the universal ethical principles.

**Social Cognitive theory**

Cognition often acts as a mediator between environmental experiences and moral behavior. The social cognitive theory of morality put forwarded by social cognitive theorists, emphasizes the distinction between an individual’s ability to perform moral behaviors, which is referred to as moral competence and moral performance. The former includes the capabilities of individual, their knowledge, skills, cognitive abilities to construct behaviors, etc. the latter is determined by the motivation and the rewards and incentives to act in a moral way.

They give emphasis to modeling, from where children pick up morality. Harsh punishment is not supported as it has many side effects and the parents can think of alternatives for the punishment.

According to Albert Bandura, moral development is the combination of moral and cognitive factors. It involves self control. The moral behavior is under the control of an individual, who sets standards of right and wrong, and judge
actions according to this standard. Individuals do things that provide satisfaction and sense of self worth to themselves.

**Psychoanalytic theory**

According to Freud, morality emerges during phallic stage of childhood, during which the sexual impulses transfer to the genital organs of the body. Gradually ‘oedipus complex’ and ‘electra complex’ arises due to which children are lead to intense anxiety. To master the anxiety and to avoid punishment, children form a super ego by identifying themselves with the same sex parent and they take the parent’s characteristic to their own personality. Finally children turn hostile to the same sex parent and there the super ego fails to act. There arises a feeling of guilt.

The very foundation of moral behavior is the guilt and the desire to avoid feeling guilty, says Freud. The super ego is the moral branch of personality. It has two components, the ego ideal which conveys a sense of pride and personal value when one sticks to morality and the conscience which punishes the individual when he/she goes wrong. Freud tells that children feel guilt when they go away from the standards of morality that they understood from their dear ones because they do not want their dear one’s love to be lost. Here the parental control is gradually replaced by self control.

**Factors affecting Morality**

Morality is the result of constant interaction with the environment. Morality is different from person to person as it is an automatic development of people in relation to their natural environment. So there are many factors that influence a person’s moral development. They are discussed below.

1. **Situational factors**:

Morality is formed from the actions and their reactions in the environment in which a person lives. It includes all the natural surroundings to which the person
is exposed to and influenced by, either positively or negatively.

I. **Parental interactions**: The important source of moral development is, no doubt, family. The very concept of good and bad are formed at the childhood itself from the family. The actions approved by the parents and other members in the family are considered by the child as good and those rejected by them are regarded as bad. Thus the very foundation of morality is laid in the family.

II. **Role Model’s interactions**: “What you do speaks so loudly, I cannot hear what you are saying” What Abraham Lincoln told is true because each person try to imitate what seems to them as good. The role model can be anything or anyone that influences a person. It forms their moral environment. It can be teachers, parents, peers, etc.

III. **Social and cultural interactions**: A person forms his morale from each and every situation he is exposed to. Society and culture is of at most important among them. The moral behavior of a person who belongs to a cultured society will be totally different from that of the uncivilized society.

IV. **The influence of religion**: - Religion has a deep influence on the moral development. All the religions are basically same in morality and if people are exposed to the right concepts and practices of religion, they will develop a good morality.

V. **Influence of Media**: In this modern technological era, media often decides what a person’s morale should be. Some children turn to be aggressive just because they might be imitating something the witnessed through media or they may be negatively influenced by something from media. Things can happen just in the reverse also.
2. **Biological factors**: It is not only the situation that helps a person to have his morale developed. But there are some other factors like the age, sex, etc.

   I. **Age**: A middle aged person is more morally matured than that of a youth. As individual passes from one phase to the other the more tolerant he will be to the good and bad situations.

   II. **Sex**: It is evident that there is much sex difference in moral development. A girl will be less aggressive than the boy of the same age. Boys set their own standards of morality, but girls often stick to what the elders say.

   III. **Intelligence**: Intelligence helps in the moral development of children. Quick understanding, justification of factors and solving moral dilemmas are easier to the intelligent children.

3. **Genetic factors**: Hereditary factors are more important as they decide what a person should and should not accept.

**Review of Related Studies**

*Studies Related to Intellectual Styles*

Ming and Chang (2011) studied the association between teachers' preferred interpersonal behavior in teaching and their thinking styles. Results indicated that teachers in both regions preferred to employ student-centered interpersonal behavior in the classroom teaching. Teachers' thinking styles were related to their preferred interpersonal teaching styles among Hong Kong and Macau teachers.

Chang and Zhang (2011) examined university students' thinking styles and the relationship with their views of creativity. The result indicated significant relationships between thinking styles and conceptions of creativity.
The study of Carolyn and Christopher (2011) focused on the thinking styles of online learners in a post baccalaureate teacher education program. The findings led to the conclusion that all thinking styles profiles must be considered in instructional systems design to ensure student learning is maximized. The primary objective of the research conducted by Zhang (2011) was to investigate the predictive power of thinking styles for psycho-social development of Chinese university students in Shanghai, mainland China. The study conducted by Clarke, Lesh, Trocchio and Clara (2010) investigated the relationship between two Intellectual Styles approaches: Sternberg's thinking styles of teachers and Felder and Silverman's learning styles. Results reveal that several thinking styles from Sternberg's theory of self-government were highly to moderately correlated with Felder's learning styles. Participants differed in their thinking styles in teaching and in their learning styles, based on their educational major.

The study of Fan, Zhang and Watkins (2010) examined the incremental validity of thinking styles in predicting academic in the hypermedia-based learning environment. The test was designed to examine the students' achievement in the course of General Psychology. The results partially supported the hypotheses concerning the relationships between students' Type I and II thinking styles and their academic achievement in Type I test and Type II test and showed that some Type III styles were significantly related to their academic achievement. Zhang (2010) reported two studies that aim at further distinguishing Intellectual Styles from abilities by taking into account the confounding effects of age and gender on the relationship between these two constructs. The results suggested that although statistically significant relationships could be identified between thinking styles and abilities, when age and gender were put under control, styles and abilities became fundamentally independent.
The study of Sofu, Berzins, Colapinto and Ammirato (2009) set out to explore if university students from a northern and a southern Italian university report markedly different thinking style preferences. If economic and socio-cultural differences impact on preferred ways of thinking of university students, the impacts may very well be mediated through various pedagogical or informational methods and communication technology. The results of the study did not produce all the expected differences.

Another study of Higgins and Zhang (2009) aimed to investigate the thinking styles and workplace experiences of 152 human resource (HR) practitioners pursuing Chartered Institute of Personnel and Development (CIPD) membership. It seeks to explore whether their thinking styles complemented their jobs and consider the implications for the CIPD’s notion of the thinking performer. Correlation coefficients revealed that age, length of service with current organization and perceived autonomy at work are the most significant socialisation variables.

The study conducted by Fan and Zhang (2009) examined the relationships between thinking styles and achievement motivation among Chinese university students. Results partially supported the hypothesis that the more norm-favoring and simplistic thinking styles (Type II styles) had negative correlation with MS, and positive correlation with MF. The study also found that the situation-/task-dependent thinking styles (Type III styles) were positively correlated with MS, and negatively correlated with MF. Implications for educational practice were discussed.

The predictive power of socialization variables for thinking styles among adults in the workplace is examined by Zhang and Higgins (2008). Results indicated that covert socialization variables were more powerful than were overt variables in predicting thinking styles. The implications of these findings are
discussed for ordinary managerial workforce, management leaders, organizational counselors and educators.

Ramkrishnan (2008) conducted a study on thinking styles and school adjustment of 486 secondary school students of Kerala. The study reveals that there is positive correlation between the different dimensions of thinking styles and school achievement. The multiple regression analysis reveals a low predictability of thinking styles on school adjustment of secondary school students.

Fur (2007) identified that little research has focused on the study of non-Western students' thinking styles. The study reported here used quantitative methods with a survey sampling design. The results of factor analysis for construct validity of the inventory addressed 13 subscales under the five dimensional constructs with 104 items. When the ANOVA findings of the research is evaluated as a whole, it is said that the student teachers' particular thinking styles were differentiated by the socialized variables - gender, age, type of university attended, as well as field of study followed. The results of this study demonstrated a diversity of thinking styles among the participants.

Another study conducted by Zhang (2007) examines the role of students' thinking styles in their knowledge as well as in their attitudes towards the use of computing and information technology (CIT) in education. The findings were, first, the more creativity-generating thinking styles positively predicted knowledge and use of CIT as well as a favorable attitude towards the use of CIT in education, whereas the more norm-conforming thinking styles negatively did so. Second, female students reported less knowledge and use of CIT. Minor differences were also identified between the U.S. and Hong Kong groups. These findings have implications for teachers, staff development personnel, and for CIT program designers.
The main purpose of this study conducted by Betore t (2007) was to examine the effect of teachers' and students' thinking styles on students' satisfaction with the course followed and on their learning process. Results revealed that both teachers' and students' thinking styles are good predictors of students' satisfaction and their involvement in the learning process.

The study conducted by Zhang (2007) empirically addresses two longstanding controversial issues in the field of Intellectual Styles. The first concerns the distinction (or similarity) between various style constructs. The second relates to whether or not Intellectual Styles make a difference to students' academic achievement. Specifically, the study investigated the relationship between Torrance's modes of thinking and Sternberg's thinking styles. It also examined the role of the two style constructs in achievement in Chinese, English, and mathematics. In general, conservative Intellectual Styles predicted better achievement across the three subjects among students in lower grade levels, whereas creative Intellectual Styles contributed to achievement in Chinese among students in higher grade levels. It is concluded that each of the two style constructs has a unique value in explaining individual differences in human performance. Furthermore, the study makes another call for cultivating creative Intellectual Styles among school students.

Gakhar and Megha (2006) studied that the differences in the academic achievement of physiotherapy students due to different learning styles, thinking styles and study skills found that students’ academic achievement did not differ significantly due to their preference of learning styles, thinking styles and study skills.

The research conducted by Sofu (2005) examined how Chinese leaders view the thinking process, what thinking styles they value and how they prefer to think. The findings showed that Chinese leaders have strong preferences for executive, judicial and legislative styles of thinking as well as high preferences
for independent and exploring styles. They reported moderate preferences for inquiring and creative styles and low preference for conditional style, an indication that Chinese leaders may be at the forefront of change in an historically conditional China.

A study reported by Park and Choe (2005) investigated the thinking styles of Korean gifted students in Korea and examined whether thinking styles based on the theory of mental self-government could predict scientific giftedness based on Korean peoples implicit concepts. Results indicated that Korean gifted students had higher scores than non-gifted students in all factors, including scientific accomplishment, leadership, creativity, morality, motivation, and cognitive experimentalism. In addition, Korean gifted students preferred the legislative, judicial, anarchic, global, external, and liberal styles, whereas Korean non-gifted students preferred the executive, oligarchic, and conservative styles. Results from the stepwise multiple regression analysis procedures indicated that the subscales of thinking styles could be significant predictors of scientific giftedness.

Zhang (2005) reported a series of six studies, each investigating the power of self-rated analytical, creative, and practical abilities for predicting one of six individual-difference variables: cognitive development, modes of thinking, career interests, learning approaches, thinking styles, and personality traits. Each of the six variables was assessed by a self-report inventory. Results indicated that in all three cultures (Hongkong, China and US), students who rated themselves higher on the ability scales tended to score significantly higher on the individual-difference variable scales that denote positive values, such as higher cognitive-developmental levels and creativity-generating thinking styles.

Kroll (2004) examined college students' motivational orientations toward learning and views concerning purpose of education in relation to various Intellectual Styles. Task orientation was positively associated with Tolerance for
Ambiguity, Thoughtfulness, and Open-Mindedness. Ego orientation was negatively associated with Tolerance for Ambiguity, Thoughtfulness, Complexity, and Individualism.

The study reported by Yang and Lin (2004) investigated the relationships among demographic variables (class grades, school types, major field, parent's education level, etc.), psychological type, thinking style, critical thinking, and creative thinking in senior high school students. The study explored the extent to which students' inclinations and perceived competence to engage in creative thought, as well as their ability to think critically, can be predicted by one aspect of their personality and their psychological preferences. The findings showed that the scales across the TSI and MBTI inventories are, in general, related in predictable ways.

Verma (2004) conducted a study on Indian and Tibetan Senior Secondary Students found that Indian student had significantly stronger preference for legislative and conservative thinking styles and lower preference for global and external thinking style than Tibetan students.

The purpose of the study of Lee and Tsai (2003) was to undertake research on the effects of thinking styles on learning transfer. The results were (a) significant differences exists between the near transfer of the Executive Group and the Legislative Group, (b) no significant differences in far transfer are found among groups of different thinking styles, (c) the near transfer of the Mixed Group is superior to that of the Legislative Group and the Judicial Group, and (d) the far transfer of the Mixed Group is superior to that of the Legislative Group.

In the study reported by Zhang and Hen (2003), the thinking styles are tested against yet another domain relevant to student learning. This domain is students' knowledge as well as their attitudes toward the use of computing and information technology (CIT) in education. Results indicated that, after age and
gender being controlled for, the more creativity-generating thinking styles and a preference for working with others (as opposed to a preference for working alone) statistically predicted more knowledge and more frequent use of CIT. Moreover, a favorable attitude toward the use of CIT in education was identified among students of all thinking styles but of the local thinking style.

Verma, Suraj and Sharma (2003) in a study of thinking styles of B.Ed Teacher Trainees found that male B.Ed Teacher Trainees were more oligarchic in their Thinking styles than their female counterparts. Stream and personality type was also found to have significant association with the thinking styles.

Nachmias and Shany (2002) examined student learning in virtual courses and the relationship between their performance and thinking styles based on a study of Israeli junior high school students. Result showed that there is significant relationship between performance and thinking styles.

Zhang (2002) studied the role of thinking style development in 245 Chinese college students. Results indicated that thinking styles predicted students' sense of purposefulness, an important dimension in psychosocial development. The study suggests that theories of Intellectual Styles should be integrated with the traditional student development theories.

Cilliers and Sternberg (2001) measured thinking styles of first-year South African university students using the Sternberg Mental Self-government Thinking Styles Inventory. Found that the preferred thinking styles were executive, legislative, hierarchic, internal, and conservative. Age and language were differentiating factors in thinking style preferences; gender was not. However, gender was a differentiating factor within majors and the Afrikaans-speaking group.

Canogarcia and Hughes (2000) examined whether college students' learning styles and thinking styles were interrelated and if these could predict academic achievement. The study revealed a moderate relationship between both
types of styles and that students' academic achievement was related to students' thinking styles.

Zhang (2000) investigated the relationship between thinking styles and personality types by having 600 undergraduate students from the University of Hong Kong. They respond to the Thinking Styles Inventory (TSI) and the Self-directed Inquiry. Study reported that thinking styles and personality types overlap to each other.

Dai and Feldhusen (1999) examined internal and external validity of the Thinking Styles Inventory (TSI) of 96 gifted adolescents within the framework of Sternberg's (1988) theory of mental self-government. Results provided evidence of the external discriminant validity but lent only partial support to the internal validity of the instrument.

**Studies Related to Techno Culture**

Anantharaj (2012) analyses the causes, symptoms and coping strategies of techno stress among Educators. The findings indicate that the teacher had a strong desire to integrate ICT in to education.

Ambily and Smitha (2012) in their study on relationship between techno stress and self-efficacy of the higher secondary teachers followed a survey method to collect data from 150 higher secondary school teachers using techno-stress inventory and self-efficacy scale. Study revealed that Teachers with high sense of efficacy about their teaching capabilities have an easier time motivating their students and enhancing their cognitive development.

In a comparative study of Techno pedagogic skills and Techno stress of teacher educators, Nagavalli (2012) pointed out that those who have more Techno pedagogical skill has less Techno stress.

Frances and Simon (2011) examined Techno stress and assess symptoms and manifestations of techno stress among workers. The findings of the study
are: i) Academic staff manifested significantly higher levels of Techno Stress than the non academic staff. ii) Older respondents manifested higher levels of Technostress than younger respondents, iii) No significant difference was obtained for male and female participants on Techno stress. iv) A positive correlation was observed between computer hassles and stress reaction.

Goddard and Michalle (2011) studied technological predictors of depression among college students. The purpose of the study was to investigate the ways that reduce quality, techno stress and misuse of technology might be associated with depression among college student. A total 236 college undergraduates from a large urban university was surveyed. The study revealed that no mean group score difference between men and women for depression, reduced quality, Technostress or misuse of technology. A multiple hierarchical regression indicated that younger age and reduced quality were linked to higher amounts on depression among college students. Additional regression analyses revealed that Techno stress predicted additional 1.1% variance in depression after controlling for sleep quality and misuse of technology predicted on additional 4.9% of the variance in depression after controlling for reduced quality.

RadhakantaGartia and RajniKumari (2011), studied on the attitude of Secondary School Students of North Delhi towards the use of computer. The findings of the study reveal that 31% of the total sample has low level of computer attitude. No significant difference was found in the computer attitude of male and female students.

OyedepoTunji and Okorie Nelson (2011), conducted a study on the effect of e-portal system on corporate image of the universities. The study was conducted to find out the knowledge of the students about e-portal, the interaction between lecturers and student through e-portal and the improvement brought out by the e-portal system on the image of the universities. The results
show that the 70% of participants between the ages 15-24 was the highest in each of the universities. 68% of participants were females.

Aijaz and Gujjar, SairaIjaz Ahmed and MuhammedRamzan (2011) conducted a study on the application of information technology in Distance Education in Pakistan. It was found that the telecommunication and computer facilities are not provided properly to students of distant education, instead radio and TV programs are used. IT tools are useful to minimize the financial restraints of the distant learner and university itself and improve the quality of education.

Muntajeeb Ali Baig (2011) conducted a critical study of effectiveness of online learning on students’ achievement. The results show that there is no significant difference in the level of achievement difference in the level of achievement in Physics of tenth grade boys and girls when taught online.

Tsai (2010) investigated the gender differences in Junior High School Students’ self -efficacy and their use of the Internet. The results revealed that the gender gap may no longer exist in young students’ confidence in using the Internet. However, the boys and girls used Internet for significantly different purposes suggesting that the Internet played different roles for boys and girls in Taiwan.

Strom (2010) investigated adolescent learning and the Internet applications for school leadership and student engagement in learning. Results showed that the school quest to increase student engagement could more often be met through online assignments that facilitate self-directed learning.

A case study of Erean (2010) presents the way the University students gather their course project requirements during the project elicitation phase, how they access the Internet and other resources and the trends in the literature review using Internet. The results obtained from the study have been discussed
and evaluated, the academic resources, accessibility and usability in the universities have been assessed and their importance discussed.

Demiralay (2010) conducted a study on the effect of use of information and communication technologies on Elementary student teacher’s perceived information literacy self-efficacy. The findings of the study revealed that most of the elementary student teachers use ICT frequently at least at intermediate level and access to ICT from multiple locations.

Jijesh AK (2006) conducted a study on the extent of use of Internet facilities by student teachers of Kerala. The findings of the study reveal that most of the student teachers depend on the Internet facilities for acquiring knowledge and educational information. It also reveals that the student teachers have a positive attitude towards using Internet facilities.

Domine and Vanessa (2006) conducted a study on the student attitude about classroom Internet. The findings suggest that the classroom teachers should be careful about the student’s social uses of Internet outside school to deepen and extend access to information and knowledge provided in the classroom.

Mehra and Aman Deep (2005) conducted a study on Internet use among university students. In this study, the investigator compares the Internet use among male and female university students, besides comparing the Internet use among arts and science university students and found that there is no difference between the Internet use by male and female university students while arts and science students differ significantly in the Internet usage.

Rajasekhan S and Sini S (2005) conducted a study on the Internet knowledge of research scholars. The findings of the study were that internet knowledge of male research scholars had relatively than those of the female
research scholars. There was no significant difference between urban and rural research scholars of various subjects in the internet usage.

Mishra, et.al (2005) conducted a study to know Internet utilization pattern of the undergraduate students of GB Pant University of Agriculture and technology, Pantna Nagar. The findings of the study indicated that a majority of the students (85.7%) used Internet. Out of the internet users, 67.7% were male students and 32.3% female students. The findings of the study showed that 61.5% of the males and 51.6% of the females used internet for preparing assignments. Majority of the respondents, i.e., 83.1% male and 61.3% female respondents indicated that they faced the problem of slow functioning of Internet connection.

Asemi (2005) revealed that, all the respondents were using Internet frequently because all faculties were provided with the connection to Internet. It was revealed that the researchers of the university were getting quality information through internet. 55% of the respondents searched for scientific information through internet because the university library had provided access to various databases and online journals for all the students and staff.

Andritt Enochsson (2005) conducted a study on technology use for information seeking. The finding of the study is that boys and girls have different interest in the internet technology in practice. But boys talk about their knowledge to a greater extent and these interplays with their reflections about internet ability.

Amritpal and Rajeevkumar (2005) conducted a study on Internet and its use in the Engineering colleges of Punjab, India. A well structured questionnaire was distributed among 90 teachers and students of all the Engineering colleges of Punjab. The finding of the study was that internet had become a vital instrument for teaching, research and learning process of these respondents.
Hanaver et.al (2004) surveyed a diverse community college to assess the use of internet by the students for health related information. The survey showed that although all the students surveyed had free internet access through their community college.

Beena Chintalapuri and AnupamaAnaparti (2003) conducted a study on entertainment on internet. The findings of the study revealed that entertainment of internet users appear to show signs of poor mental health.

Maniar and Talapatra (2002) conducted a study on how internet users use internet service for educational purposes. The findings of the study were that the respondents had undergone changes in their study habits after they had started using internet services for educational purposes.

Gopish (2002) conducted a study to find out ‘utilization of computer and internet facilities by post graduate students in cochin university of Science and Technology and University of Calicut’. The findings of the study was that the facilities in computer and internet are more used by the post graduate students of CUSAT than that of University of Calicut’s post graduate students.

Sindhu K K (2001) conducted a study on the influence of internet among college students. The findings of the study reveal that the use of internet among college students for educational purposes is increasing day by day.

Chandel, et.al (2001) conducted a study on the motivational aspects of using the internet by university students. The findings of the study suggested that parents and institutions should make efforts to provide computer and internet facilities to students. They should be provided with proper facilities to use it. Academic use of the internet should be encouraged students of Science and education streams should be encouraged to use internet.

Chandran (2000) conducted a study at SV University, Tirupathi, which showed that more than 25% of respondents used internet for 2-3 times a week.
and more than 56% used it for accessing information. A majority of the respondents used general websites as compared to recreational and discipline oriented websites.

Amritpal Kaur (2000) conducted a survey regarding the use of internet facility at Guru Nanak Development University, Amritsar. The study indicated that all respondents used internet for sending emails and 82% for searching web. More than 60% of the respondents used internet for primary information, 38% for the secondary and 15% for consulting OPACS purposes. A majority of the respondents, i.e. 75.06% faced the problem of slow internet connectivity.

Allen D Truell (2000) conducted a study on student attitude towards and evaluation of Internet Assisted Instruction. A survey of 82 students in a telecommunication course found no significant difference in their attitude towards and evaluation of Internet Assisted Instruction in terms of learning style, field dependence, gender or undergraduate or graduate status.

**Studies Related to Motivational Belief**

Alinaghi Kharrazi and Hossein Kareshki (2010) examine the correlations among environmental perceptions, Motivational Beliefs and self-regulated learning of Tehran third –year high school boys based on a proposed model, multistage cluster sampling method gave a sample of 685 students. Analysis showed relations among components of self-regulated learning, environmental perceptions and Motivational Beliefs. Structural equation modeling indicated the proposed model had an acceptable fit of the data. All paths or structural equation modeling indicated the proposed model had an acceptable fit of the data. All paths or structural co-efficient of the proposed model were statistically signified.

Fatma Kayan Fadlelmula (2010) had conducted a study on educational motivation and student’s achievement goal orientation. This study aims to
enhance teachers understanding of the nature and importance of student’s achievement goal orientations in elementary mathematics education.

Kesici, sahim and Erdogan, Ahmet (2009) conducted a study to determine whether motivational belief and self regulated learning strategies are significant predictors of college student’s mathematics anxiety. The study group was comprised of 183 college students. It was determined that college students motivational belief and self-efficiency for learning and performance are significant predictors of college students mathematics anxiety. In addition, college student’s rehearsal and elaboration of cognitive learning strategies were found to be significant predictors for their mathematics anxiety.

Julia. M. Matuga (2009) conducted a study on self-regulation, goal orientation and academic achievement of secondary students in online university courses in a sample of 40 secondary students’. By administering MSLQ-Motivation strategies for learning questionnaire data was collected. Andrew. J. Martin, Herbert. W. Marsh, Raymond L. Debus, Lars-Erik Milberg (2008) investigation assesses performance and goal orientation from a Rash perspective among high school and university students and provides a complementary approach to the factor analytic methods typical in goal theory research. Data show that both school and university students are high in goal orientation relative to performance orientation, and there is broad agreement for the separation of performance and goal orientation. However, there is less school-university difference on performance orientation than goal orientation, with university students more goals oriented than high school students.

Lars-Erik Milberg (2008) conducted a study aimed to investigate whether student teachers achievement goal orientation changed during teacher studies, and how motivational trajectories were related to academically and teaching relevant antecedents and outcomes. A total of 170 participants were followed by two and five time points. Using individual growth models, achievement goal
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orientation were found to increase overtime and to peak during the third year of students. Secondary school grades predicted a higher level of performance approach goal orientation and graded performance. Reflective thinking, teacher intrinsic motivation and teacher control – expectancy beliefs were related to increase of mastery goal orientation. Task –irrelevant behavior was related to low graded performance as well as to increase in performance approach and performed and performed – avoidance goals.

Mahboob Alborzi, Bahram, Jowkar and Mohammad Khayyer (2008) investigated the role of perceptions of parents, perceptions of teacher and perceptions of perceived control as antecedents of the creativity and also the mediation role of Motivational Beliefs between antecedent variables and creativity was examined. The result showed that two motivational beliefs have different antecedents profile. Results also demonstrated that autonomy regulation style was negative predictor of creativity. These results were an evidence for confirming any significant effects of antecedent variables on creativity variable would occur through the Motivational Beliefs.

In a study of goal orientations and perceptions of Motivational climate in physical education classes among Colombian Students conducted by James Jersild (2008) in 689 students ranging in age from 9 to 18 year revealed that there exist consistent relationship between goal orientations and perceptions of Motivational climate. He used the Task and Ego Orientation in Sport Questionnaire (TEOSQ) and the Learning and Performance Orientations in Physical Educations Classes Questionnaire (LAPOPECQ) for data collection.

Lars-Erick Malmsserg and Todd D. Little (2007) conducted adopting a person –centered approach, we profiled 5th and 6th grade children’s (152 boys 161 girls) school related beliefs about perceived task difficulty and agency beliefs in ability and effort. Five clusters were compared a cross key learning – related dimensions encompassing underlying world views, motivation and
adjustment, Agenticstrivers, Disengaged (low ability, low effort, high difficulty) and challenged. The findings suggest that difficulty perceived either as challenge or obstacle plays an important role for the beliefs, and that relationships with worldviews and motivation are indicative of adaptation and mal adaptation.

Lars-Erick Malmsserg (2006) examined the relationship between goal orientations, intrinsic/ extrinsic motivation for the teaching profession. The findings suggested that goal – orientation was instrumental for long-term teacher motivation and that teacher motivation, in turn, formed a basis for goal orientation during teacher student.

Heafner (2004) conducted a study in many teachers struggle with motivating students to learn. This article advocates the use of technology in social studies as a means to motivate students by engaging students in the learning process with the use of a familiar instructional tool that improves student’s self-efficacy and self-worth. The potential that technology has to motivate students is discussed as it relates to expectancy – value model of motivation which focuses three areas of motivational theory (Pintrich&Schunk, 1996): value (students beliefs about the importance or value of a task), expectancy (students beliefs about their ability or skill to perform the task), and affective (emotional reactions to the task and self-worth evaluation).

Bong (2004) assessed Academic Motivation in self-efficacy, task value and achievement goal orientation in reference to English Korean, mathematics and general school learning among 389 Korean high school girls. Studies found out that Motivational Beliefs in each of specific school subjects were strongly correlation with Motivational beliefs in general school learning than with beliefs in other areas of subject matter.

Karen L. and St.Clair (1999) explored compulsory attendance policies have been instituted in higher education with the expectations that Academic achievement will improve. The empirical research findings of the relationship
between class attendance policies and academic achievement are equivocal. Pintrich’s theoretical model of motivation in the college classroom posits that students Motivational Beliefs, classroom context, and student’s behaviors are important variables in academic achievement. A case against compulsory attendance policies which is based on evaluation of the empirical research and the application of Pintrich’s model of the question of the value of compulsory attendance policies in higher education is presented.

Nirmala Rao and John Sachs (1999) examined confirmatory factor analysis was used to evaluate the factor structure of a Chinese version of Pintrich and De Groot’s Motivated Strategies For Learning Questionnaire (MSLQ) data were gathered from a sample 12 to 19 years (M=15.4, SD=1.84), in Hong Kong. Results indicated that a modified five factor model had a better overall fit to the data than the five factor model reported by Pintrich and De Groot in a sample of junior high school students in the limited states. Although the motivational factors of the original MSLQ and its Chinese version were similar, items from the two- self regulated learning factors of the MSLQ combined to form one factor on the MSLQ – Chinese version.

Hangborg (1992) made a study on 157 which ninth and tenth grade students to compare school motivation, scholastic competence and intrinsic motivation and found that the high group was different from both the medium and low group measure of scholastic competence and Motivational orientations.

Stephanic and Hershoff (1990) investigated the relationship between social science classroom environment and students motivation. The findings revealed that the student’s satisfaction significantly affects the motivational constructs such as Academic motivation, Academic self concept and social self concept.
Academic intrinsic motivation and children’s school achievement was studied by Gott Fried (1985). He found that Academic intrinsic motivation was positively correlation with children academic achievement.

**Studies Related to Moral Maturity Behavior**

R Gracy and A.W Edward (2011) studied how Science nourishes values in children. The study meets out the philosophical ideas pertaining the meaning of value and how it is nourished by Science subjects. The findings of the study reveal that the social value and the moral value of the High School students are normal. The achievement in Science and scores of social value is negatively correlated. G Baradha and SumatiRajkumari (2011) conducted a study on the factors responsible for value crisis and need for value education during adolescent period. The study reveals that the explosion of knowledge in Science and Technology, breakdown of joint family system and the present education system as the factors responsible for value Crisis. The study ends up by bringing the importance of value education for a better today as well as tomorrow.

Anita Nangla, Satinder Dhillion and Batani Devi (2011) studied the emotional intelligence and personality types of academically talented and average students. The final sample selected includes 64 senior secondary school students, out of which 29 academically talented students and 35 average students. The conclusions drawn from the findings reveal that both academically talented and average students are alike in the emotional intelligence. Academically talented students are intrinsically motivated and enjoy individualized learning. But the average students are extrinsically motivated and enjoy co-operative learning. Average students have more extraversion tendencies than the talented students.

K. Subrmanyan (2011) studied the impact of emotional intelligence and study skills of High School students. The study skill inventory developed by Prof. P V Ramamurthy and GeethaNath and Emotional Intelligence scale
developed by Nutankumar Thingujam and Usha Ram was administered to 60 High School students to assess their level of emotional intelligence and study skills. Based on the findings, it was concluded that there is no significant difference with regard to the impact of gender on emotional intelligence and study skills of High School students.

Sambit K Padhi and Jyoti Varma (2011) conducted a study on the effectiveness of secondary school teachers in relation to emotional intelligence and life satisfaction. The purpose of the study was to examine the relationship between teacher effectiveness, emotional intelligence and life satisfaction and the interaction effect of emotional intelligence and life satisfaction on teacher effectiveness of secondary school students. The study revealed that there is significant correlation between teacher effectiveness and emotional intelligence and levels of life satisfaction are dependent on types of school management. The interaction effect of emotional intelligence and life satisfaction on the teacher effectiveness of secondary school teachers is insignificant.

N S Jadhav (2011) conducted a study on the relation between home environment and emotional maturity of college students. The Home Environment Scale and Emotional Maturity Scale were administered to 200 samples out of which 120 were boys and 80 girls. The Pearson’s correlation coefficient technique was used for analysis. It was found that there was a positive and significant relation between home environment and emotional maturity among boys and girls. There was no significant relation between home environment and emotional maturity of urban students of government colleges of high economic status and students less than 20 years old.

Geetha Garg (2011) studied the life skills and academic anxiety of secondary school children in relation to their gender and type of school. The sample was 120 students from 8th, 9th, and 10th standard students from Karnal district in Haryana. The findings reveal that there is no significant difference in
academic anxiety between boys and girls and government and private school students. Also, there is no significant difference in the life skills of boys and girls, but there is significant difference in the life skills of private and government secondary school students. The study reveals significant highly negative relationship between life skills and academic anxiety.

Rani Mariet Jose and Lavina Dominic (2011) studied the impact of residential status of parents on the interpersonal relation among peers and creativity of adolescents. Parents have been classified into resident and nonresident groups. The study reveals that the residential status of parents has impact on the adolescent’s interpersonal relationship among peers as well as creativity. Boys and girls of resident parents maintain better interpersonal relationship, but boys and girls of nonresident parents are more creative. Gender does not have a significant impact on the interpersonal relationship and creativity of the children of resident and nonresident parents.

S K Zareena and Vatsala V M (2011) studied the adjustment problems, time management and effects of parents’ socio economic and educational status on students’ achievement. A sample of 80 pupils of standard VIII was taken for the study. By administering two tools, one to measure the time management capacity and the other to study the adjustment problems were administered. It was found that the socio economic factor did not have an effect on the achievement of students, but the qualification of father had an effect on their achievement. There was no significant difference in the time management capacity of the high and low achievers, but low achievers showed more adjustment problems than the high achievers.

Anees Mohammed and Sheena (2010) studied the influence of internet surfing addiction and morality of higher secondary school students of Kerala. The study was conducted on a sample of 581 Higher Secondary School Students from 12 Higher Secondary schools in Kerala. Due representation was given to
gender, locale, type of school management and teaching experience. The collection of data was done using Scale on Internet Surfing Addiction and Moral Maturity Scale. The findings of the study reveal that there exists significant relationship and differences among internet surfing addiction and morality.

**Conclusion**

A thorough survey of literature scanning revealed a number of studies on Intellectual Styles, Techno Culture, Motivational Belief and Moral Maturity Behavior. Investigator reviewed a large number of studies. However, studies which are most relevant and after 1985 are only presented in the review of related studies. The reviewing of the related literature helped the investigator to know the morality of children at different levels of education and also the factors affecting the morality. As adolescent period is the crucial stage of development, it is very important that the teachers who are assigned for teaching adolescent children should be aware of their morality and how the morality can be fostered among them. Review shows that most of the studies on these variables are conducted in other countries especially at European and American Universities and a very few in Asia. Many Indian Studies were identified on Morality. However, no attempts were found to investigate the influence of any cognitive, affective and conative variables in a single study. Studies reveal that Intellectual Styles, Techno Culture, Motivational Belief and Moral Maturity Behavior influences academic performance, problem solving abilities, self efficacy, creativity and a number of cognitive and socio-affective variables. Review of related studies made the investigator to feel a need to investigate in to the influence of Intellectual Styles, Techno Culture and Motivational Belief on Moral Maturity Behavior. The investigator found that the study is relevant in the present situations and decided to proceed with the study.

The procedure adopted for the present study is explained in chapter III.