CHAPTER - V
SUMMARY, CONCLUSIONS AND SUGGESTIONS

5.1 SUMMARY

5.1.1 Introduction

Risk has been an integral part of human life since ages to contend with the harsh realities of nature (Yates, 1992; Trimpop, 1994; Vaughan, 1997; Ale, 2009). People nowadays experience risks relating to close proximity, industrialisation (Vaughan, 1997), technology, as well as, overpopulation (Ale, 2009). With every advancement there comes an element of uncertainty. Although the environmental conditions change, risk remains the same and is prevalent, in one way or the other, with a varying degree of intensity.

Defining risk is a controversial issue (Yates, 1992; Trimpop, 1994), as people define risk in different ways. Some people view risk as the probability of losing money, other people view risk as possible loss of crop, damage to buildings and infrastructure, not keeping to a budget or a time constraint. Still, others view risk as potential loss of safety, health and life (Yates, 1992). Risk is essentially a subjective construct as everyone agrees on a set definition of risk and two people discussing risk may hold very different ideologies (Fischhoff, Lightenstein, Slovic, Derby & Keeney, 1983; Trimpop, 1994). Still, there is an agreement that risk taking behaviour can be assessed, objectively, as a number of research tools for the same have been developed from time to time (Kogan and Wallach, 1964; Weber et al., 2002; Rubio et al., 2004).
In order to define risk one needs to understand the relevance of risk in its context. Differing definitions of risk have been generated because risk has been analysed differently by individuals, groups, departments and organisations. Popularity, risk has been classified into eight dimensions. Financial vs. non-financial, static vs. dynamic, fundamental vs. particular, speculative vs. pure. The diversification of risk has made it difficult to define risk precisely and has made the term risk conceptually specific to its context (Vaughan, 1997):

- Financial vs. non-financial risks are concerned with financial loss or loss of assets.
- Static vs. dynamic risks are concerned with changes to the economy.
- Fundamental vs. particular risks are concerned with groups of people, where fundamental risks are concerned with impersonal losses experienced by a group, and on the other hand particular risks, however, are concerned with loss which effects all or some members of a group.
- Speculative risks are concerned with loss vs. advancement, whereas pure risk assesses only the probability of loss or no loss.

Pure risk is further divided into areas of personal, property, liability and failure of others.

- Personal risk involves loss of income or assets.
- Property risk involves loss or destruction of property.
- Liability risk involves compensation to injured parties because of carelessness or negligence.
Risk by failure of others involves financial loss because a person did not fulfil an obligation.

However, there remains elements of risk that give meaning to its conceptualisation. For example, risk contains elements of uncertainty, potential loss, potential advancement and a cognitive component about whether or not to engage in risk-taking (Yates, 1992; Trimpop, 1994).

Risk is the potential that a chosen action or activity (including the choice of inaction) will lead to a loss (an undesirable outcome) or vice-versa. The notion implies that a choice having an influence on the outcome exists (or existed). Potential losses themselves may also be called "risks". Almost any human endeavour carries some risk, but some are much more risky than others. The Oxford English Dictionary (1971) defines risk as: (exposure to) the possibility of loss, injury, or other adverse or unwelcome circumstance; a chance or situation involving such a possibility. It also defines risk as a hazard, danger; exposure to mischance or peril." Therefore, to put oneself "at risk" means to participate voluntarily or involuntarily in an activity or event that could lead to injury, damage, or loss.

The ISO 31000 (2009) /ISO Guide 73 definition of risk is the 'effect of uncertainty on objectives'. In this definition, uncertainties include events (which may or not happen) and uncertainties caused by a lack of information or ambiguity. This definition also includes both negative and positive impacts on objectives. Another definition is that risks are future problems that can be avoided or mitigated, rather than current ones that must be immediately addressed. According to Factor Analysis of Information Risk (2006) Risk can be seen as relating to the
probability of uncertain future events. For example, risk is the probable frequency and probable magnitude of future loss.

OHSAS (Occupational Health & Safety Advisory Services; 2007) defines risk as the product of the probability of a hazard resulting in an adverse event, times the severity of the event.

Financial risk is often defined as the unexpected variability or volatility of returns and thus includes both potential worse-than-expected as well as better-than-expected returns. References to negative risk below should be read as applying to positive impacts or opportunity (e.g., for "loss" read "loss or gain") unless the context precludes this interpretation. Hubbard (2009) also argues that defining risk as the product of impact and probability presumes (probably incorrectly) that the decision makers are risk neutral.

Insurance is a risk-reducing investment in which the buyer pays a small fixed amount to be protected from a potential large loss. Gambling is a risk-increasing investment, wherein money on hand is risked for a possible large return, but with the possibility of losing it all. Purchasing a lottery ticket is a very risky investment with a high chance of no return and a small chance of a very high return. In contrast, putting money in a bank at a defined rate of interest is a risk-averse action that gives a guaranteed return of a small gain and precludes other investments with possibly higher gain.

Information technology risk, or IT risk is a risk related to information technology that are relevant to IT and the real world processes it supports, and coming of new terms like IT risk and Cyberwarfare (Cortada, 2007)
Flyvbjerg (2008) argued that economic risks can be manifested in lower incomes or higher expenditures than expected. The causes can be many, for instance, the hike in the price for raw materials, the lapsing of deadlines for construction of a new operating facility, disruptions in a production process, emergence of a serious competitor on the market, the loss of key personnel, the change of a political regime, or natural disasters.

Means of assessing risk vary widely between professions. Indeed, they may define these professions; for example, a doctor manages medical risk, while a civil engineer manages risk of structural failure. A professional code of ethics is usually focused on risk assessment and mitigation (by the professional on behalf of client, public, society or life in general). In the workplace, incidental and inherent risks exist. Incidental risks are those that occur naturally in the business but are not part of the core of the business. Inherent risks have a negative effect on the operating profit of the business.

Some industries manage risk in a highly quantified and enumerated way. These include the nuclear power and aircraft industries, where the possible failure of a complex series of engineered systems could result in highly undesirable outcomes.

In finance, risk is the probability that an investment’s actual return will be different than expected. This includes the possibility of losing some or all of the original investment. In a view advocated by Damodaran (2003), risk includes not only “downside risk” but also “upside risk” (returns that exceed expectations). Some regard a calculation of the standard deviation of the historical returns or average returns of a specific investment as providing some historical measure of risk; see
modern portfolio theory. Financial risk may be market-
dependent, determined by numerous market factors, or
operational, resulting from fraudulent behavior.

In a peer reviewed study of risk in public works projects
located in twenty nations on five continents, Flyvbjerg, Holm,
and Buhl (2002, 2005) documented high risks for such ventures
for both costs and demand. Actual costs of projects were
typically higher than estimated costs; cost overruns of 50% were
common, overruns above 100% not uncommon. Actual demand
was often lower than estimated; demand shortfalls of 25% were
common, of 50% not uncommon. Due to such cost and demand
risks, cost-benefit analyses of public works projects have proved
to be highly uncertain.

Huge ethical and political issues arise when human beings
themselves are seen or treated as 'risks', or when the risk
decision making of people who use human services might have
an impact on that service. The experience of many people who
rely on human services for support is that 'risk' is often used as
a reason to prevent them from gaining further independence or
fully accessing the community, and that these services are often
unnecessarily risk averse.

Flyvbjerg et al. (2003) demonstrate that big ventures (big
construction projects, big capital investments, etc.) are highly
risky. For instance, such ventures typically have high cost
overruns, benefit shortfalls, and schedule delays, plus negative
and unanticipated social and environmental impacts. The audit
risk model expresses the risk of an auditor providing an
inappropriate opinion of a commercial entity's financial
statements.
These are few examples of risk taking in different socio-economic conditions and by the stakeholders. It can be observed that these risk taking behavioural tendencies are prevalent among people in different situations across different population groups.

As usually perceived risk taking is not a negative connotation. Rather, most of risk takers are innovators and fearless. They are for a positive change, but do not hurt the system or common man. Essentially they are explores of nature and in search of new truths and believe in a positive change.

On the basis of positive and negative behaviour as observed in adolescents a comprehensive approach of risk taking has been given by Gullone and Moore (2000) as:

a) thrill seeking,
b) rebellious risk,
c) reckless, and
d) antisocial risk

Thrill seeking risks involve behaviours that are challenging but socially acceptable, such as, skydiving or bungee jumping. Rebellious risk behaviours are often "experimental rites of passage" for adolescents seeking independence (Gullone, 2000). These behaviours include such things as smoking, drinking or swearing, which are acceptable for the adult generation, but usually disapproved of for adolescents. Reckless risk behaviours, on the other hand, are thrill seeking but have a higher chance of not being accepted in the adult population, and having a negative social or health related risks (Gullone, 2000). Examples of reckless behaviours are drinking and driving. Antisocial risk
behaviours are unacceptable behaviours for adults as well as adolescents. Examples of antisocial behaviours include cheating and teasing others. The most important factor on whether adolescents choose to engage in risky behaviours as if they themselves view or make a judgement that the behaviour is risky (Moore, 2000). Overall viewing risk taking as being both positive and negative to adolescent development is still a controversial topic that is in the process of producing new research.

From the above discussed definitions and types of risk taking behaviour it is clear that each activity of our life includes some extent of risk whether it is related to intellect, physical, emotional, social, aesthetic, financial, academic or cultural aspect of our life. Results of these risks may be desirable or undesirable. No doubt it is argued that risk taking is subjective, still efforts have been made to assess it in a generalized construct. Since risk taking is being seen as a psychological construct, different measurement tools have been developed to make an objective measurement of risk taking behaviour.

The Kogan-Wallach Choice Dilemmas Questionnaire (Kogan and Wallach 1964) consists of 12 situations, and the subjects are asked to indicate the minimum odds of success he would require before recommending a risky course of action on a seven point scale.

The Chance Bets Instrument (Kogan and Wallach 1964) consists of 66 pairs of dice bets varying the probabilities of winning and losing, and amounts of money to be won/lost (with the same expected value EV=0). Individuals could choose the bet they preferred to play.

The most well-known instrument for assessing risk taking
behaviour is the Zuckerman's Sensation Seeking Scale (SSS, Zuckerman, 1979) consists of four subscales (Thrill and adventure seeking, Experience seeking, Disinhibition and Boredom susceptibility). Its widespread use has produced an amount of psychometric and cross-cultural data and it has become the most frequent instrument for assessing risk taking.

Risk Taking Questionnaire by Sinha and Arora (1983) has been designed to measure the extent of ‘risk’ taken by a particular individual in his personal as well as in his social life. Eight areas of risk are included in the test, which are considered to be the most important and affiliated areas of ‘risk’ for Indian life by a number of sociologists, psychiatrists and psychologists. These are- Hills, Space, Sea, Commercial Trades, Police and Intelligence Services, Fire, Professional Trades and Military Services.

HIV Risk Taking Behaviour Scale (HRSB) is being used to assess HIV risk among intravenous drug users including two subscales to measure injecting and sexual behaviour (Darke et al. 1991).

A risk-taking scale was developed by Field and Yando, (1991) which was divided into two sub-scales of sports-related and danger-related risk questions. The sports related risk taking subscale measure students’ participation in the sports like rock climbing, water skiing, mountain climbing, scuba diving, sky diving, downhill skiing, wind surfing, horseback jumping, white water rafting, flying an airplane, parasailing, surf boarding, and long-distance sailing. On the other hand, in "danger-related" risk-taking subscale students were asked if they would do the ride a roller coaster, try marijuana, drive over the speed limit, try
crack or cocaine, drink alcohol, ride a motorcycle, and hitchhike across the country. In addition, the scale included two "gambling" risk-taking items: Students were asked if they would bet a dollar on a 50/50 chance of winning two dollars and whether they would buy a book of lottery tickets. Thus the scale measures three aspects of risk taking behaviour.

Three computerized task-based tests for an objective assessment of the risk tendency construct-The Betting Dice Test (BDT), The Roulette Test (RT) and The Crossing Street Test (CtST) have been developed (Sante and Santacreu 2001; Arend, Botella, Contreras, Hernandez and Santacreu 2003; Rubio, Santacreu and Hernandez 2004). The Betting Dice Test (BDT) consists of a task in which individuals have to bet on one alternative out of four in order to estimate the result of the sum of two dice: more than 4, more than 7, more than 9, a straight bit on number 12. Each alternative is associated to a prize 1, 2, 5 and 30 points respectively. It is assumed that the choice of an option with a higher probability (though a lower prize) is a more conservative choice than the choice of a highly improbable alternative. Thus, the lower the score, the more conservative the risky tendency is. The Roulette Test (RT): The RT is similar to the BDT. In this case subjects have to bet on one of the four options of the game of roulette. Thirty numbers (from 1 to 30), fifteen numbers (even numbers from 2 to 30), six numbers (from 31 to 36) and a straight bet (17). Prizes, instructions, lack of feedback, system messages and scoring are the same in BDT. The Crossing Street Test (CtST) consists of a task in which individuals should decide where to cross a pedestrian from one side of a road to another in order to reach a chemist. Here the issue is to look
into avoidance of risk in crossing the road and achieving the goal. Subjects have to 10 trials and they are not informed about any sort of accident they might have produced. Risk score is equal to the average of the distance from the right side of the screen in a horizontal axis.

Weber, Blais and Betz (2002) have developed a Risk Attitude Scale that consists of 8-item subscales in four content domains (health/safety, ethical, social and recreational risks) and two 4-item subscales (investment and gambling) for financial risk taking.

Nicholson et al. (2005) have also developed another Risk Propensity Scale which assess the reported frequency of risk behaviours in six different domains i.e. recreation, health, career, finance, safety and social.

From the description of these measures of risk taking behaviour, it is amply clear that the researcher are, in continuity of research efforts, trying to establish psychometric properties of construct of risk taking behaviour using different population groups, which is multidimensional and situation specific. Researchers have found through longitudinal (long term studies) that risk taking behaviour among adolescents is statistically normative and psychologically adaptive (Moore, 2000). This means that experimenting in risky behaviour is a normal part of adolescent life, and that experimentation with risky behaviours may have positive benefits for older adolescents. Risky behaviour may serve as a “mode of roles experimentation” (Moore, 2000).

From above discussion the question arises whether risk taking among secondary school adolescents depends on cognitive factors such as intelligence and creativity and non-
cognitive factors such as socio-economic status, locale and gender.

Risk taking and Intelligence are positively and significantly related with each other (Jose (1970); though no significant correlation between risk taking behaviour and Intelligence has been reported in another study (Saran (2003); Risk taking is considered to be one of the most important characteristics of creative persons (Taylor, 1963; Taylor and Holland, 1964; Anderson and Cropley, 1966; Pankove and Kogan, 1968; Patel, 1976; Bhattacharya, 1978; Agarwal, 1982; Tripathi, 1983; Piyavadee, 1988; Pathak, 1989 Krishnan, 1993. Krishnegowda (1991) and Singh (1992) found a significant relationship between creativity and risk taking. Pandey and Singh (1992) found no relationship between risk taking and any of the sub dimensions of creativity. Kaur (2002) found significant correlation of fluency, flexibility dimensions of creative behaviour with risk taking behaviour. Nisha Gupta (1976), Singh (1978) and Reddy (1991) reported that creative males were adventurous while creative females were shy, timid, restrained and threat sensitive.

Creativity has been found to be better related with risk taking behaviour than intelligence (Pankove (1966, 1967), Pankove and Kogan (1968) found that creativity bears a more powerful relationship to risk taking than does intelligence).

Gender differences in risk taking behaviour is also an issue of concern for researchers. The male group of adolescents and secondary school students show a more explicit choice in risk taking behavior (Pankove, 1967; Jhag, 1979; Agarwal and Kumari, 1982; Ginsberg and Miller, 1982; Huth, 1996; Agarwal 2005). However, few studies talk of girls’ superiority over men
(Dorros and Kogan (1976). No significant gender differences have also been reported (Kaur, 1999; Kumari, 2006; Kaur, 2007; Kaur, 2008).

There are some studies that focus on locational differences in risk taking behavior (Jhag, 1979; Saran, 2003; Kaur, 2004; Kumari, 2006; Meenakshi, 2009). Also socio-economic status has been a focus of studies to explain risk taking behaviour (Rosan, Tsai and Downs, 2003; Saran, 2003; Langille, Curtis, Hughes and Murphy 2004).

Risk taking behaviour has also been studied in different kinds of life threatening/antisocial activities in which it has been reported that alcohol and drug abuse often leads to serious health risks such as death, cancers, brain damage, liver damage and health problems (Australian Bureau of Statistics, 2008). Men appeared to be significantly more willing to find interested in risk taking activities such as substance abuse and unsafe sex (Huth, 1996).

From the overview of these researches, it is evident that risk taking behaviour has been focus of psychological and educational researches since 1960s to explain human behaviour in different social and economic conditions of social life. It is a well known fact that the secondary school students in today's world are facing a number of threatening uncertainties and are over exposed to mass media depicting a lot of antisocial behavioural patterns including violence, drug/sexual abuse and cheating/forgery and unfair means to earn quick money etc. So, in such a situation, it was thought worthwhile to look into risk taking behaviour in secondary school students in relation to certain cognitive and non-cognitive variables. More specifically,
the risk taking behaviour of secondary school students, in relation to certain cognitive and non-cognitive variables taken together has not been explored. Hence, the present study is an endeavor to look into risk taking behaviour among intelligent and creative secondary school students in term of gender, locale and socio-economic status.

**Statement of the Problem**

“RISK TAKING BEHAVIOUR IN RELATION TO INTELLIGENCE AND CREATIVITY AMONG SECONDARY SCHOOL STUDENTS”.

**5.1.2 Objectives**

1. To study risk taking behaviour of secondary school students in relation to intelligence.
2. To study risk taking behaviour of secondary school students in relation to creativity.
3. To study risk taking behaviour of secondary school students in relation to gender.
4. To study risk taking behaviour of secondary school students in relation to locale.
5. To study risk taking behaviour of secondary school students in relation to socio-economic status.
6. To study interactive effect of gender, locale and socio-economic status with intelligence and creativity on risk taking behaviour of secondary school students.

**5.1.3 Hypotheses**

1. There will be no significant mean difference between high and low intelligent secondary school students in their risk taking behaviour.
2. There will be no significant mean difference between high and low creative secondary school students in their risk taking behaviour.

3. There will be no significant gender difference in risk taking behaviour of secondary school students.

4. There will be no significant mean difference between rural and urban secondary school students in their risk taking behaviour.

5. There will be no significant mean difference between high and low socio-economic status secondary school students in their risk taking behaviour.

6. There will be no significant interaction effect of gender with intelligence on risk taking behaviour of secondary school students.

7. There will be no significant interaction effect of locale with intelligence on risk taking behaviour of secondary school students.

8. There will be no significant interaction effect of socio-economic status with intelligence on risk taking behaviour of secondary school students.

9. There will be no significant interaction effect of gender with creativity on risk taking behaviour of secondary school students.

10. There will be no significant interaction effect of locale with creativity on risk taking behaviour of secondary school students.
11. There will be no significant interaction effect of socio-economic status with creativity on risk taking behaviour of secondary school students.

12. There will be no significant interaction effect of gender, locale and socio-economic status with intelligence on risk taking behaviour of secondary school students.

13. There will be no significant interaction effect of gender, locale and socio-economic status with creativity on risk taking behaviour of secondary school students.

5.1.4 Delimitations of the Study

1. Risk taking behaviour among secondary school students was studied and compared in relation to selected cognitive and demographic variables only.

2. The study was restricted to plus one students of government and privately managed recognized secondary school of Punjab, affiliated with Punjab School Education Board.

5.1.5 Method and Procedure

Descriptive method of research was followed in the conduct of the present study.

(i) Sample

The universe of the study was secondary school students of Punjab. In total, 29 schools from five randomly selected districts of Punjab were selected on random basis giving due representation to rural and urban schools. Further, all the students in plus one class from single section schools and one randomly selected section from multi-section schools were
selected as cluster sample. In this way 619 secondary school students comprised the sample for the present study. Among these 619 secondary school students rural students were 304 and urban students were 315. The number of male and female secondary school students were 367 and 252 respectively.

(ii) Tools

The followings tools were used to collect data.


5.1.6 Collection of Data

After selection of schools the researcher administered the tools, personally to the students in a group. The standard instructions were taken care of while collecting the data from the students.

5.1.7 Statistical Techniques

The following statistical techniques were used for analyzing the data:

1. Conversion of raw scores of all the twenty measures of verbal creativity into T-scores with mean 50 and SD 10 for obtaining total scores on different dimensions of creativity (fluency, flexibility and originality) to obtain total creativity.
2. Descriptive statistics i.e. mean median, standard deviation, skewness and kurtosis to examine the nature of distribution of scores.
3. Three way analysis of variance (ANOVA) was used to study risk taking behaviour in relation to intelligence and creativity vis-à-vis gender, locale and socio-economic-status.

4. Four way analysis of variance (ANOVA) was used to study risk taking behaviour in relation to creativity, locale, gender and socio-economic-status taken together.

5. Four way analysis of variance (ANOVA) was used to study risk taking behaviour in relation to intelligence, locale, gender and socio-economic-status taken together.

5.2 CONCLUSIONS

Keeping in view the delimitations of the study and analytical approach, conclusions have been drawn on the basis of both main and interaction effects.

1. The secondary school students have exhibited moderate level of risk taking behaviour, when compared to available norms; it stands in the range of 80-149 (overall population), 80-164 for rural adolescents and 85-147 for urban adolescents.

2. Secondary School boys have exhibited significantly higher level of risk taking behaviour than secondary school girls.

3. The rural secondary school students have shown significantly higher level of risk taking behaviour than urban secondary school students.

4. Secondary school students with high socio-economic status have significantly higher level of risk taking behaviour than secondary school students with low socio-economic status.
5. There is no significant mean difference in risk taking behaviour of high and low intelligent secondary school students.

6. There is significant mean difference in risk taking behaviour of high and low creative students, favouring high creative group.

On the basis of interaction effect of independent variables, in combination with each other the above mentioned conclusions are stated in a qualified manner (in terms of levels of the other independent variable/variables).

7. The secondary school students with high socio economic status have significantly higher level of risk taking behaviour than low socio economic status secondary school students only in case of urban group, whereas such difference become negligible in case of rural group of secondary school students.

8. High socio economic status students have significantly higher level of risk taking behaviour only in case of low creative group whereas in case of high creative students, low socio economic status students have a tendency to have higher level of risk taking behaviour.

9. Also, when high socio economic status and low socio economic status secondary school students are compared at high and low level of creativity for rural and urban groups of students, high socio economic status students are significantly better in their risk taking behaviour in case of low creative urban group of students whereas it remains true in case of high creative secondary school students in rural group.
10. In other words, it may be stated that high socio-economic-status group of secondary school students has significantly higher level of risk taking behaviour than their low socio-economic-status counterparts only in case of (i) low creative-urban group (ii) high creative-rural group. High creative students have significantly higher level of risk taking behaviour in case of low intelligent students whereas low creative have a tendency to be more risk taking tendency than high creative students in case of high intelligent secondary school students. On the other hand, low creative secondary school students have shown higher level of risk taking behaviour than high creative secondary school students only in case of high socio-economic status-urban group of students.

Our results are in line with earlier studies as mentioned below:

Anderson and Cropley (1966), Pankove and Kogan (1968), Patel (1976), Bhattacharya (1978), Tripathi (1983) Pathak (1989) found that high creative thinkers were significantly more willing to take intellectual risk than their low creative counterparts. Ritchi’s (1981) results of analysis of data showed a positive relationship of teachers’ rating of creativity to I.Q. Tuli (1988) found that in addition to be characterized by certain other personality factors, high creative in mathematics are venturesome and socially bold. Krishnegowda (1991) and Singh (1992) found a significant relationship between creativity and risk taking. Kaur (2002) found significant correlation exist between fluency, flexibility and risk taking behaviour. Saran (2003) found that there is no significant correlation exist between risk taking and intelligence.
Pankove (1967), Jhag (1979), Agarwal and Kumari (1982), Ginsberg and Miller (1982) examined sex differences in risk taking and found that significantly more boys than girls engaged in risk taking behaviour. Nisha Gupta (1976), Singh (1978) and Reddy (1991) reported that creative males were adventurous while creative females were shy, timid, restrained and threat sensitive.

Jhag (1979) found that semi-urban boys were more venturesome than the urban boys. Saran (2003) found that rural students are more risk takers than urban students. Kaur (2004), Kumari (2006) found that there is insignificant difference in the risk taking behaviour of rural and urban adolescents. Meenakshi (2009) concluded that there is no significant difference in risk taking behaviour of senior secondary school boys and girls belonging to rural and urban areas.

Risk takers, in general are considered to be innovators as they are consciously working for a positive change in society (Bedi, 2001) it is well cited evidence that most of the decisions taken at political level and in warfare having a risk and to be successful risk taking becomes an essentiality. Thus it seems worthwhile to conclude these cognitive factors, namely, creativity and intelligence have an impact on risk taking behaviour.

5.3 SUGGESTIONS FOR EDUCATIONAL IMPLICATIONS

It is well known fact that risk in life is very essential. To attain a desirable objective each person has to face risk to some extent. Risk taking behaviour is a part and parcel of life, but it should be kept in mind that excess of everything is bad. So, risk taking among persons should be developed to a certain limit and it should be associated with proper guidance. The secondary
school students involved in the present study have shown a moderate level of risk taking behaviour. Following suggestions may be laid down, on the basis of the findings of the study, for educational implications:

1. The findings of the study indicate that secondary school boys have exhibited higher level of risk taking behaviour than secondary school girls. Since boys have more opportunities to express themselves, they gain more chances to enhance their self-confidence; it may be in the field of academics or in profession. When girls do not face any risk in their lives, how they can become outspoken or independent? For their betterment, opportunities involving risk should be presented before girls but it should be kept in mind that proper guidance always be there.

2. Students with high creativity have a high level of risk taking behaviour, creativity is divergent thinking. When your thinking is diverted then there is more risk because each area of our thinking may not be right. But it is also equally true that each thinking concept cannot be wrong. More we are creative; more we have chances to gain success. Creativity enhances self-expression among students, it deviates them from normal students. To develop creativity among our students our curriculum must be organised in such a way that most of the pupils can be involved in risk taking activities under the able guidance of teachers.

3. Students belonging to low socio-economic-status have significantly lower level of risk taking behaviour; may be due to lack of confidence among them. They fear that if
they will take any risk, they have to face failures. But it should be kept in mind that economic progress is impossible without taking risk: indeed it is arguable that even the maintenance of an economic status quo involves risk taking. Hence risk has about it an aura of achievement and progress, communities commonly rewarding those who handle different risk situations successfully.

4. Risk taking behaviour is to be developed among individuals to develop their personality. As Arora (1982) writes that a risk taker possesses high self-disclosure, dominating, leading and optimistic personality with a huge amount of firm determination, logics and power of quick and accurate judgment timely. Therefore special chances of risk taking should be promoted through ensuring participation of school adolescents in co-curricular and social service activities.

5. Occasional exposure to risk-small or big-is going to be a part of the academic life of a student. Higher his efficiency to manage risk is, the smaller is the damage likely to be caused to him. Students at the secondary school stage must develop and possess in them self-healing type of behaviour in case they undergo for any type of risk. Moreover, at this stage risk taking must be in students with guidance cautions for academic or career choices.

6. System of modern education is to be set with several risks that can be managed and controlled. For this purpose remedial and promotional services in the form of orientation, guidance, counseling, placement and
internship reference to expert agencies should be organised to reduce the incidence of failures during risk taking of a student.

7. Creativity is directly related to risk. It has already been mentioned that highly creative students are more risk takers. A mental person cannot be creative. Some level of intelligence is must for creativity. Similarly for risk taking intelligence is also must, so that a person can handle any situation logically. It will help him to choose better academic and career options.

8. Positive and healthy feedback acts as a motivator, morale booster and performance enhancer. The recognition and approval of good work done by risk taking motivates the pupils to develop more risk taking tendency. The institution must create provisions for timely rewards/reinforcements so that other students can be motivated to be participated in risk involving activities.

9. When we associate risk taking behaviour with health then it becomes socially undesirable behaviour such as alcoholism, drug abuse, rash driving and gambling etc. No doubt risk taking is essential in life but it should not be at the cost of life. People should be warned that they should not be involved in such type of activities, as these may be harmful to them and their dears also.

To some extent risk in life is required as Alexander Smith says, “Everything is sweetened by risk” from birth to death and beyond the grave, uncertainty is universal and even desirable. Imagine....without uncertainty----what
words would be spoken, what sight would be seen, how every game would turn out----never the pleasure of surprise, never the joy of winning. As Cardinal Newman said, “there would have been triumph in success if there had been no hazard of failure.”

5.4 SUGGESTIONS FOR FURTHER STUDY

1. The present investigation was undertaken on 10+1 boys and girls of secondary schools affiliated with Punjab School Education Board only. The study of same nature may be carried out selecting schools from both the government aided private schools as well as self-financed private schools.

2. Cross cultural studies may be done, selecting sample from all over the country, covering different types of schools such as Navodayas, KVs etc. affiliated with state education boards, CBSE or ICSE that a more comprehensive results related to these variables can be found out.

3. Along with risk taking behaviour only non-verbal measure of intelligence and verbal measure of creativity were used to assess creativity of the subjects. The results may be done more comprehensive if both verbal as well as figural measures of intelligence and creativity are employed to assess cognitive abilities.

4. Other psychological variables like achievement, adjustment, motivation, interest, personality traits, self-esteem, home environment can be added in some research endeavors.
5. A comparative study may be designed to know the gender differences in risk taking behaviour among of adolescents studying in English medium and Punjabi medium schools of Punjab.

6. Different school systems are characterised by their own administrative set ups. It will be a useful research endeavour to compare risk taking behaviour of schools affiliated with Punjab School Education Board, Mohali with other school systems such as Navodaya Vidyalayas, Kendriya Vidyalayas, other government, private, central or public schools to cross validate the findings of the present study.

7. Researches can be undertaken to study the parental attitude towards risk taking of their wards vis-à-vis their cognitive, emotional and social development.

8. A descriptive study may be carried out to find out the attitude of adolescents towards risk taking behaviour vis-à-vis their life orientation and future career plans.

9. A comparative study of risk taking behaviour of school going adolescents in relation to certain cognitive and personality variables vis-à-vis maternal working status may be carried out.