Chapter V

RESULTS AND DISCUSSION

The main purpose of this present investigation was to find out the effect of study methods on performance, adjustment and educational aspirations of the Nepalese high school students. The main findings of the present study, hypotheses related discussion, general discussion and out come of the intervention program have been discussed in this section.

I. MAIN FINDINGS OF THE PRESENT STUDY

a). The experimental group is found to have improved its performance after the intervention program compared to the control group’s performance.

b). The experimental group is found to have improved its educational aspirations after the intervention program compared to the control groups’ educational aspirations.

c). Boys of the experimental group are found to have improved their performance from pre to post test situations compared to the girl’s performance of the same group.

d). The experimental group is found to have improved its study habits after the intervention program compared to the control groups’ study habits.

e). Girls of the experimental group are found to have improved their study habits after the intervention program compared to the boys’ study habits.

f). Boys of the experimental group are found to have improved their educational aspiration after the intervention program compared to the girls’ educational aspiration.

g). Boys of the experimental group are found to have reduced their adjustment problems after the intervention program compared to the girls of the same group.
h). Valley sector schools of the experimental group have been found to have improved its performance after the intervention program compared to the mountain, hill and plain sector’s schools.

i). Valley sector schools of the experimental group have been found to have improved its study habits after the intervention program compared to the mountain, hill and plain sector’s schools.

j). Plain sector schools of the experimental group have been found to have improved its educational aspiration after the intervention program compared to the mountain, valley and hill sector’s schools.

k). Valley sector schools of the experimental group have been found to have reduced its adjustment problems after the intervention program compared to the mountain, valley and hill sector’s schools.

l). Government schools of the experimental group have been found to have improved its performance after the intervention program compared to the private school’s performance.

m). Private schools of the experimental group have been found to have improved its study habits after the intervention program compared to the government school’s study habits.

n). Private schools of the experimental group have been found to have improved its educational aspiration after the intervention program compared to the government school’s educational aspiration.
o). Private schools of the experimental group have been found to have reduced its adjustment problems after the intervention program compared to the government school’s adjustment problems.

p). The report from the experimental schools, “it is found that they have been benefited to develop their study habits. More or less they acquired positive results both in the exams and the study habits. Noticeable changes in study behavior have been found after the eight months intervention program. The study method taught by the researcher increased reading and writing skills, besides this it helped to improve memory and creative thinking which is very essential to obtain good marks in every exams”.

q). The report from the students of the experimental group, “We are highly motivated and applied the study methods which the investigator regularly taught us up to eight months. Our study schedule, note taking and revision habit, learning motivation, memory, and physical health as well as taking exam habits have improved. A regular study habit and performance in the final exam has also improved. They also said that they have been able to evaluate their weaknesses openly, self confidence to talk with teachers and friends has also been developed.”
II. HYPOTHESES RELATED DISCUSSION

The findings are discussed with reference to the hypotheses of the present study that are stated in chapter III.

HYPOTHESIS H1.1

There will be a significant increase in the examination performance of the experimental group as compared to the control group.

The hypothesis was accepted because a significant increase in the examination performance of the experimental group was found as compared to the control group. A significant increase was found (Table 4.6) indicating the positive effect of study method intervention on the examination performance of the experimental group. The experimental group’s mean increased by 21.32 where control group’s mean increased only by 2.89.

The positive effect of intervention program on performance was supported by the significant increase in study habits from pre to post test situation of the experimental group (Table 4.13). A significant F was found indicating the intervention program improved study habits of the experimental group as compared to the control group.

The research carried out by Haslam and Brown (1968) found similar findings. They conducted a research on the Brown-Holtzman Effective Study Course: High School Level was taught to 74 high school sophomores during the fall of 1965 at Highlands High School, San Antonio, Texas. 59 of the 74 students receiving the instruction were individually matched with a control group of 59 students not receiving such instruction.
Matching of the 2 groups was done on the basis of age, sex, race, intelligence quotient, subjects being studied, and 1st 9 weeks' grade-point average. Administration of the Survey of Study Habits and Attitudes before and after study-skills instruction indicated significant improvement in the measured study orientation of the experimental group.

HYPOTHESIS H1.2

There will be a significant increase in the examination performance of the boys and girls of the experimental group as compared to the control group.

The hypothesis was accepted because the examination performance of the boys and girls of the experimental group was increased significantly as compared to the control group. The mean of the experimental group was increased by 21.32 where the mean of the control group was increased only by 2.89 (Table 4.5).

HYPOTHESIS H1.3

There will be a significant increase in the examination performance of the private and government school of the experimental group as compared to the control group.

The hypothesis was accepted because the examination performance of the private and government schools of the experimental group increased significantly as compared to the control group. The mean of the experimental group was increased by 11.32 where the mean of the control group was increased only by 3.22 (Table 4.9).
HYPOTHESIS H1.4

There will be a significant increase in the examination performance of the mountain, valley, hill and plain sector’s schools of the experimental group as compared to the control group.

The hypothesis accepted because the examination performance of the mountain, valley, hill and plain sector’s schools of the experimental group improved significantly as compared to the control group. The mean of the experimental group was increased by 21.32 where the mean of the control group was increased only by 2.89 (Table 4.7).

HYPOTHESIS H2.1

There will be a significant decrease in the adjustment problems of the experimental group as compared to the control group.

The hypothesis was rejected because the adjustment problems of the experimental group did not decrease significantly as compared to the control group (Table 4.18).

Dunn, Putallaz, Sheppard, and Lindstrom (1987) investigated the role of perceived social support in facilitating adjustment to a residential high school for those who were gifted in science and Math. Successful overall adjustment in the school environment was related to perceived support from family, whereas psychological adjustment showed a clear relation to perceived support in general.
HYPOTHESIS H2.2

There will be a significant decrease in the adjustment problems of the boys and girls of the experimental group as compared to the control group.

The hypothesis was accepted because the adjustment problems of the boys and girls of the experimental group decreased significantly as compared to the control group (Table 4.17).

HYPOTHESIS H2.3

There will be a significant decrease in the adjustment problems of the private and government schools of the experimental group as compared to the control group.

The hypothesis was accepted because the adjustment problems of the private and government schools of the experimental group decreased significantly as compared to the control group. The mean reduction of the experimental group was 4.58 where the mean reduction of the control group was 3.67(Table 4.21)

HYPOTHESIS H2.4

There will be a significant decrease in the adjustment problems of the mountain, valley, hill and plain sector’s schools of the experimental group as compared to the control group.

The hypothesis was accepted because the adjustment problems of the mountain, valley, hill and plain sector’s schools of the experimental group decreased significantly as
compared to the control group. The mean reduction of the experimental group was 4.58 where the mean reduction of the control group was only 3.67 (Table 4.19).

**HYPOTHESIS H3.1**

**There will be a significant increase in the educational aspiration of the experimental group as compared to the control group.**

The hypothesis was accepted because a significant increase in the experimental group’s educational aspiration was found as compared to the control group. A significant increase was found indicating a ($F = 14.537; P = .000$) (Table 4.24) positive effect of intervention program on the educational aspiration of the experimental group.

A research by Witkow and Fuligni (2007) supports the findings of the present investigation. They examined the fit of a $2 \times 2$ achievement goal model among a diverse sample of nearly 700 10th-grade students, distinguishing between both mastery and performance goals and approach and avoidance orientations. Additionally, relationships between achievement goals and GPA and intrinsic value of school were examined, and adolescents' interpretations of daily school experiences and feelings were found to mediate these relationships. Together, these findings suggest that experiences in adolescents' daily lives help explain the relationship between goals and achievement outcomes.
HYPOTHESIS H3.2

There will be a significant increase in the educational aspiration of the boys and girls of the experimental group as compared to the control group.

The hypothesis was accepted because there was significant increase in the educational aspiration of the boys and girls of the experimental group as compared to the control group. The mean of the experimental group was increased by 1.76 where the mean of the control group was increased only by 0.93 (Table 4.23).

HYPOTHESIS H3.3

There will be a significant increase in the educational aspiration of the private and government schools of the experimental group as compared to the control group.

The hypothesis was accepted because the educational aspiration of the private and government schools of the experimental group increased significantly as compared to the control group. The mean of the experimental group was increased by 2.12 where the mean of the control group was increased only by 0.93 (Table 4.27).

HYPOTHESIS H3.4

There will be a significant increase in the educational aspiration of the mountain, valley, hill and plain sector’s schools of the experimental group as compared to the control group.
The hypothesis was rejected because the educational aspiration of the mountain, valley, hill and plain sector’s schools of the experimental group did not increase significantly as compared to the control group (4.25).

III. GENERAL DISCUSSION

High school is the period of physiological, cognitive and psychological changes. They bridge childhood and adulthood or the primary education and higher education. They have to confront various changes and integrate all the enormous changes taking place in this period. They are neither a child nor a mature adult. They also face a range of developmental issues. They have to make various decisions for future career. Because of such challenges the life of high school students is stressful. To pursue their education and development of life they need to make a balance between adjustment at home, school, social setting, and educational Advancement (Woolfolk, 2004).

Life is becoming complex for everyone day by day among that the high school adolescents are the most victims. They have to study different subjects in the schools, they have to perform better result in the exams and they have to balance their relationship with their friends, parents and the teachers. School and the teachers of high school play a major role to make the life of high school students more interesting and meaningful for achievement in education. They are the ones whom high school students believe the most. School nurtures the educational, moral and developmental aspect of an adolescent. If the high school employs good counselors they will be the best resource to meet the educational as well emotional and psychological needs of the pupils. They can enhance the whole well being of the school.
The result of the present study reveals that the students who are well informed about the study techniques have done better performance in their school grades. Also they have developed effective study habits, their educational aspiration is increased. The result shows that the impact of proper method has a great value in achievement. When student know the right study method, they enjoy even the most difficult task because they now how to do. Study method intervention increased examination performance, study habits and educational sanitation of the high school students.

IV. THE OUTCOME OF INTERVENTION PROGRAM

The intervention program employed in this study has a positive impact on high school student’s performance and educational aspiration. After intervention program experimental group is found to have improved performance scores and educational aspiration. The study further suggests that intervention program can be useful to great extent to understand and overcome high school students’ problems and apply study methods to enhance their academic performance.

Study method intervention program improved the students’ study habits, examination performance and educational aspiration also it reduced their adjustment problems at some extent. High school students are neither children nor mature young people. So they are: excited, able to learn quickly, query minded, changeable, loving, helpful, friendly, energetic, flexible in their decisions, unstable, entertaining, imitators and unable to tolerate sufferings and hardships. When they know the right study method they are likely to do better in their studies (Mathur, 1994).
The mind of adolescents is full of queries so there is no correct and ready made answer for them by the teachers. Teacher should know in which subject they are weak and why they are weak? What is the problem behind poor studies? Are they really weak or due to lack of emotional support they are being unable to pay full attention the teacher should find out. Also the teachers of different subjects should train their students how to study different subjects applying the basic principle of PQRST method. High school students are query minded adolescents so they should not be treated like a child or like a mature people. There are various factors that affect the study habits of the students. If they are properly guided to use the PQRST study method their academic performance will be high and the life will be more enjoyable. The common problems of the Nepalese high school students are categorized into the following headings.

**Performance related Problems**

Performance in final examination alone doesn’t reveal that students have done well in academic life. There are certain rules if they follow them sincerely they will secure good marks in the examination. Unless they have developed a good study habit high performance alone doesn’t benefit the student for long term. They should secure high marks as well as develop a good study habit. The main reason of poor performance is lack of proper study method, adjustment problems and academic aspirations. Performance is one major motivating factor for high school students. Who have higher performance experience in past they will have positive motivation in future. One who is continually a failure will have negative aspiration for future performance.
When performance is high the students are highly motivated to learn and advance their academic career. If the students performance in school subjects is poor that shows they have poor study habits. The bad habits can be broken or they can be replaced by good habits easily. Most of the time it is much easier to replace a habit than to break it completely. So students should not adopt the poor study habits, but they should learn the good ones to substitute for the bad ones. The more they use the method the more ingrained it becomes. They should confess their decision that they will improve their study skills and do better in the school subjects. If they are familiar with effective study techniques they will do well in the examination. To become expert in applying the good study skill is really a long term process (Fry, 2005).

Some students think they will learn everything on their own and without suggestion, while other students seek out ways to improve their ability to learn and succeed. Life is a combination of experiences. When they determine the learning style that fits them the best, they will find that studying and learning will become easier.

It is good to take notes while listening to the teacher (Wong, 2006). When students are willing to implement the principles and learn the skills necessary to make success they will achieve higher performance. Success in any field requires that we take personal responsibility for it. Those who use their time wisely and take care of their academic responsibilities will do well in examination. It should be obvious that taking responsibility and being successful go hand in hand. One leads to the other. One important aspect of being responsible and successful involves the careful planning of
class schedule and the successful completion of each course. This is one application of the formula for success.

To ensure academic success, the careful planning of class schedule is important. Study schedule should be realistic including other responsibilities. One of the worst habits students can develop is wasting their time and money. The ability to retain and recall large amounts of information is essential for becoming an effective student, a good memory alone is not enough. In other words, being a good student requires more than the simple regurgitation of facts in an exam. One must also be able to take factual information and use it as a critical thinking to address key questions and solve problems (Brophy & Good, 1969).

Critical thinking refers to the willingness and ability to use systematic and objective methods to solve problems. In other words to think critically is to solve problems in an effective manner. Scientists and other scholars make their living this way. The most successful students, the leaders of tomorrow, also must develop these skills. Some essential skills for critical thinking:
1. A active process of questioning
2. A systematic method of reasoning
3. The ability to develop rational arguments
4. The ability to understand rational arguments
5. The ability to identify faulty arguments
When students have confidence in their abilities they can approach study task with zeal and enthusiasm. They should know the value of task, not only to get good grade in the exam but to utilize in the future benefits. When they are internally motivated they stay focused on the task and will not be worried about future and failure. Also the teacher should arouse interest of the students by presenting the lesson in an interesting way. The teachers have to provide incentives and rewards regularly. Avoid over emphasis on grading and be a motivation model for the students.

**Adjustment related Problems**

Psychological factors play a major role in academic performance. When students are well adjusted they tend to have a good motivation in their studies and interest will be high in all subjects. Interpersonal relationship with parents, teachers and peer groups has a significant effect upon performance and study habits. A good relationship with close people facilitates learning motivation and better performance. To have a good relationship student should be well trained when they are brought up. Parents have to teach them properly to express their emotions. Their heart and hands should be opened and widened to help and co-operate others. They have to respect feeling of others and be able to adjust in all situations. The law of relationship is, “Do for others what you want them to do for you”. To get love, respect, cooperation and good behavior from others first we have to do the same than we can get the same back. In this foundation if children are brought up they will have good relationship with their parents, teachers and peer groups. If any problem arises they can solve the problem positively.
Short term training to improve adjustment of the high schools students is not possible. Adjustment is related to the people and environment. The relationship with people is a moral and emotional matter. Adjustment problem occur because of various reasons. This problem may be at home, neighborhood, the educational institute, and mental, physical and financial condition of the student himself, the political condition of the country and so on. When students face adjustment problems they find it very difficult to express their feeling on one hand and on the other hand they find it very difficult to hold it. Emotion should be expressed positively, without hurting others and damaging oneself. Unexpressed emotion is dangerous for ones own psychological and physical health (Santrock, 2007).

Those who are weak and unable to deal with this problem properly may exhibit physical and psychological symptoms. Those who are emotionally healthy they grow in a better way even when problem arises. They are shaped for better purpose by the difficulties but the emotionally immature will suffer from personality problems, e.g. inferiority, emotional immaturity, identity crises, and excessive concern for self development (Hall & Lindzey, 1991).

The students who tend to have high self-esteem are sensitive to the feelings and needs of others and try to be cooperative. First, they tend to be helpful and encouraging to fellow students. Sometimes they find that academic success is facilitated by working with other students in study groups, at many of the best colleges, law and medical schools study groups are very common and often necessary for maximum success.
Some suggestion to improve adjustment

Adolescence is the age of physical change: Parents and the teachers should inform the teenagers that they will be changing rapidly in their body. If they are not informed they will be worried about their physical changes. Rapid growth will occur; sapping energy and strength for a while they need more sleep and better nutrition than before. They should be well informed about their sex organs and other physical changes in both boys and girls separately. When they know about the changes in their body they will be aware about their relationship. Provide opportunities for proper out let of their youthful energies.

Adolescence is an age of inferiority: Young people are often jealous when their friends perform better and are appreciated by the teacher. Adolescents should be happy and content. Every parents and teacher should teach them how to overcome the self worth crisis. Almost every teenager feels inadequate. Even a small thing makes them too much worried and anxious about their present and future. If they are well informed they can take defensive action when it is needed.

Adolescence is an age of conformity: They are pressed to follow the whims of the groups. They should know how to be safe from the ridicule of their peer groups. Those who are emotional and not confident will be in a great risk. They should be balanced and wise to deal with their friends and groups. Many socially unaccepted behavior and defective habits are learnt through friends. They should have a healthy home, family and
social environment. The School administration should provide regular guidance and counseling service in the school. Nepalese high schools have to introduce this service without delay.

_Adolescence is an age of confusion:_ Parents teach their child what to think and how to behave. Parents teach them about the attitudes, biases, and beliefs which is right and proper. When they reach the adolescence age they will have confusion between what they were told versus what they believe. This is one of the most important bridges leading from childhood to adulthood. Parents should teach and train their children wisely. The training of childhood affects the whole life of a person. Train a child in the way he should go, and when he is old he will not depart from it. Listening to the problems and opinions of the students will create an environment of love and trust. By this they feel respected and loved. Listening is showing concern. This heals many psychological problems.

**Study Habits Related Problems**

Pascal said, “The strength of a man’s virtue is measured by his habitual acts.” Human beings are creatures of habit if they don’t develop good habits, they will develop bad ones. Developing a good habit including effective study habit is a long time process. High school administration, teachers, parents and ministry of education are responsible to provide them favorable environment and develop effective study habits of the Nepalese high schools.

Habit is developed with the practice of proper method for a long period of time. Good study habit is affected by the basic abilities, born talents and skills. These basic abilities
have the most to do with success in school 50 percent. May be even 60, and the environment in which students are trying to learn, their health, and other such factors may account for another 10 percent, maybe 15, finally 25 to 40 percent for study skills. When students learn with a purpose and proper method they will develop a good study habits (Fry, 2005).

Goal setting is one of the most important keys to have better study habits. Goal setting is determining what they want to do in future. Many students may have never thought about this, but most of the students want to live a happy and long life. But success or the meaning and purpose of life come when they have reasonable goals. First they have to set long term goal and be careful about the steps they need to take to accomplish the goal. The decisions to accomplish long term goals are short term goals. These goals are secondary to long term goals but they are equally important. It is easy to make goals, but it needs a real discipline to follow through on those goals. Study is a skill that they must master if they want to be a successful student. It is a skill that requires practice and patience. No one is born a great reader, but the more they study their ability will improve (Carter & Dylan, 2006).

**Essential Reading Strategies:**

1. Begin with a clear intention to understand what you read.
2. Use an organized system for reading textbook chapters.
3. Be Inquisitive or ask questions while reading.
4. Relate new information to existing schemes in your long-term memory.
5. Manage your textbook reading time effectively.
6. Use spaced practiced or spaced studying.

7. Include some form of feedback as you study.

The smarter students more easily learn and adapt study techniques. If they adopt study techniques they will find study enjoyable and do their homework within less effort. They will spend less time on their homework than before. They should be encouraged to apply study techniques until they are familiar. They should be sincere.

The development of good study skills is the highway to the goals. If they are clear about their goal no matter how hard they have to work or how much adversity they have to overcome along the way, the journey will indeed be worth it. Here are some guide lines how to set the goals in life.

**Student should be realistic while setting goals.** They shouldn’t aim too high or too low. They should be realistic about their expectations to understand the subject for which you have little aptitude. When the study becomes difficult they should not give up easily, because if they persist they can overcome the problems. At the same time the students shouldn’t aim too high and feel miserable when goal achieving is tough or aim too low and never fully utilize their abilities (Armstrong, Henson & Tom, 1992).

**Concentrate on areas that offer the best chance for improvement.** Unexpected successes can do wonders for your confidence and might make it possible for them to achieve more than they thought. Monitor your achievements and keep resetting your goals, daily weekly, monthly, yearly. They have to evaluate how well they have done the
job. If they put the goal pyramid in their room which they could see and watch daily that will inspire them for further advancement.

**Keep your word:** Commitment is the key factor for your future as a student and as a professional. Avoid over-committing; if there is any problems ask specially your teacher to help you. Integrity at school is the foundation of your success. Be clear about your expectations. Be clear about your goals and communicate your problems or the needed support to your teachers. They should know what students really need. If this is clear they can create opportunities to enhance those skills. They should have an attitude of saying, “I can do”. They should not undermine their capabilities. The attitude they have about their ability will determine the success level in high school. This is an inner motivation.

**Help others with your talents.** Most of the high school students are egocentric but the good students should be willing to help with their gifts and abilities to others. When they help others they will increase their ability. If they have a helping heart they can be a source of blessing for their weak, shy and unable friends. They should contribute creatively to be the best student in the class. They should look at the problem from various angles and solve it creatively. They have to set their sight high and learn to enjoy while in high school.
Chapter VI

CONCLUSION

The intervention program PQRST study method has made a significant effect on performance (exam score and study habits both) and educational aspiration of the Nepalese high school students. In performance scores Repeated Measure of ANOVA revealed a significant increases from pre to post test situation. Where the increase in performance score were analyzed group wise (experimental v/s control), experimental group \((F = 9.358; P = .002)\) (Table 4.6) increased its performance score significantly than the control group’s score. The effect of intervention on performance was found in boys, government schools and valley sector schools of the experimental group. The positive effect of intervention on performance score was supported by the significant increase in study habits score from pre to post test situation of the experimental group.

The intervention program has made no significant decrease in adjustment problems of the experimental group. However, boys, private schools and valley sector schools of the experimental group reduced their adjustment problems after the intervention program.

Educational aspirations of the experimental group increased significantly after the intervention program \((F = 14.537; P = .000)\) (Table 4.24). The intervention program also increased the educational aspirations of boys, private schools and plain sector schools of the experimental group.
I. LIMITATIONS OF THE STUDY

- The sample of the present research is small in number to represent the whole student population of Nepal; it may not fully represent the picture of whole Nepal.
- In this study only a few variables were studied. Other important variables like effect of counseling, self-esteem, intelligence test, aptitude test could have studied.
- Some extraneous variables could have affected the dependent variables, such as PQRST learning session, investigators’ unfamiliarity with the students, and the home and educational environments to apply the study method.
- Different school background, division of the country and the political conditions of Nepal (the political condition and the moist revolt which were at the highest peak level when the investigations were carried out) have affected the variables.

II. SUGGESTIONS FOR FURTHER STUDY

- The effect of study method on personality development, vocational choices can be explored.
- The effect of study method on performance, adjustment and personality development of college students can be studied.
- The effect of parent’s and teacher’s support on performance, adjustment and educational aspiration can be explored.
- How the educational policy of government and the teaching skill of a teacher affect the performance, adjustment and educational aspiration can be studied.
- How the study method affects various ethnics groups’ students on performance, adjustment and educational aspiration can be compared and explored.
The effect of intrinsic and extrinsic motivation on performance and adjustment can be explored.

Role of father, mother, teacher and media on the academic performance of high school students will be a good issue to investigate further.