CHAPTER V

SUMMARY OF THE STUDY

This chapter is a summary of the procedure adopted for the study, major findings, conclusions and suggestions. The content of this chapter is organized in the following sections:

- Study in Retrospect
- Methodology
- Major Findings
- Educational Implications
- Conclusions and Recommendations
- Suggestions for Future Research

5.1 STUDY IN RETROSPECT
Various aspects in the different stages of the present study such as the problems, variables, objectives, hypotheses etc are viewed retrospectively.

5.1.1 Restatement of the Topic

The topic for the present study is: ‘Effectiveness of School AIDS Education Programme (SAEP) on Developing Health Behaviour among Secondary School Students of Calicut district in Kerala’.

5.1.2 Variables

**Independent variables** - School AIDS Education Programme intervention


**Moderate Variables:** Gender, Locale, Type of the management of the schools

5.1.3 Objectives

The objectives of the present study are:

- To evaluate the effectiveness of School Aids Education Programme among adolescents.
- To assess the effectiveness of SAEP intervention on enhancing health aspects such as; Dietary Behavior, Hygiene, Mental Health, Physical Activities, Protective Factors, Sexual Behavior, Tobacco, Alcohol and Drug use, and Violence and Unintentional Injury.
- To assess the relative effectiveness of student’s socio-demographic variables such as Sex, locale and type of the Schools on the Intervention.
5.1.4 Restatement of Hypotheses

1. There is no significant difference between Experimental Group, and Control Group in scores of school AIDS Educational programme with respect to:
   - Awareness of Adolescence,
   - Awareness of HIV,
   - Life Skills, and
   - Attitude towards HIV and AIDS before the intervention

2. There is no significant difference between Experimental Group and Control Group in scores of Health Behaviour with respect to:
   - Protective Factor,
   - Mental Health,
   - Sexual Behaviour,
   - Alcohol, Tobacco and Drugs,
   - Violence and Unintentional Injury,
   - Dietary Behaviour,
   - Hygiene and
   - Physical Activities before the intervention.

3. Experimental group is significantly higher than the Control group in the score of SAEP after the intervention.

   3.1 In Awareness of Adolescence component of SAEP the Experimental group is significantly higher than the Control group after the intervention.

   3.2 After the intervention the Experimental group is significantly higher than the Control group in Awareness of HIV component of SAEP.

   3.3 In Life Skills component of SAEP the Experimental group is significantly higher than the Control group after the intervention.

   3.4 Experimental group is significantly higher than the control group in Attitude towards HIV/AIDS component of SAEP after the intervention.

4. The score of the Experimental group in Health Behaviour is significantly higher than that of the Control group after the intervention.

   4.1 In Protective Factor component of Health behaviour the Experimental group is significantly higher than the Control group after the intervention.
4.2 Experimental group is significantly higher than the Control group in Mental Health component of Health behaviour after the intervention.

4.3 In Sexual Behaviour component of Health behaviour the Experimental group is significantly higher than the Control group after the intervention.

4.4 Experimental group is significantly higher than the Control group in Use of Alcohol Tobacco and Drug component of Health behaviour after the intervention.

4.5 Experimental group is significantly higher than the Control group in Violence and Unintentional Injury component of Health behaviour after the intervention.

4.6 In Dietary Behaviour component of Health behaviour the Experimental group is significantly higher than the Control group after the intervention.

4.7 Experimental group is significantly higher than the Control group in Hygiene component of Health behaviour after the intervention.

4.8 In Physical Activities component of Health behaviour the Experimental group is significantly higher than the control group after the intervention.

5. There is no significant difference in SAEP score between Male and Female students with respect to:
   - Awareness of Adolescence,
   - Awareness of HIV,
   - Life Skills and
   - Attitude towards HIV and AIDS after the intervention.

6. Between Male and Female students there is no significant difference in Health Behaviour score with respect to:
   - Protective Factor,
   - Mental Health,
   - Sexual Behaviour,
   - Alcohol, Tobacco and Drugs,
   - Violence and Unintentional injury
   - Dietary Behaviour,
   - Hygiene and
   - Physical Activities after the intervention.

7. Between Urban and Rural school students there is no significant difference in SAEP score with respect to:
   - Awareness of Adolescence,
   - Awareness of HIV,
   - Life Skills and
Attitude towards HIV and AIDS after the intervention.

8. There is no significant difference in Health Behaviour score between Urban and Rural school students with respect to:
   - Protective Factor,
   - Mental Health,
   - Sexual Behaviour,
   - Alcohol, Tobacco and Drugs,
   - Violence and Unintentional injury,
   - Dietary Behaviour,
   - Hygiene and
   - Physical Activities after the intervention.

9. There is no significant difference in SAEP score between Government school and Private school students with respect to:
   - Awareness of Adolescence,
   - Awareness of HIV,
   - Life Skills and
   - Attitude towards HIV and AIDS after the intervention.

10. Between Government school and Private school students there is no significant difference in Health Behaviour score with respect to:
    - Protective Factor,
    - Mental Health,
    - Sexual Behaviour,
    - Alcohol, Tobacco and Drugs,
    - Violence and Unintentional injury,
    - Dietary Behaviour,
    - Hygiene and
    - Physical Activities after the intervention.

5.3 MAJOR FINDINGS

The main objective of the study was to evaluate the effectiveness of School AIDS Education Programme for fostering Health Behaviour of the experimental group subjected to the intervention. The study also evaluated the effectiveness of the intervention in enhancing the SAEP components among the sample group. The differences between the experimental group and the control group in post test scores of SAEP and also in the post test scores of Health behaviour were statistically assessed.

School AIDS Education Programme has four components; viz, Awareness of Adolescence, Awareness of HIV, Life Skills, and Attitude
towards HIV. The findings from assessing the differences between control group and by experimental group in the scores of the four components and also of the total SAEP are discussed below.

1. Awareness of Adolescence

The Experimental group is significantly higher than the Control group in Awareness of Adolescence component of SAEP, after the intervention. It indicates that the intervention of School AIDS Education Programme had significantly increased the score of experimental group with respect to the Awareness of Adolescence, a component of SAEP. The intervention helped to promote the adolescent sample group’s awareness of adolescence component of SAEP which includes physical and mental changes, sexual maturation, conception and beliefs about sexuality, nutrition, and acne and body odour.

2. Awareness of HIV

The Experimental group is significantly higher than the Control group in Awareness of HIV component of SAEP, after the intervention. It indicates that the intervention of School AIDS Education Programme had significantly influenced for increasing Awareness of HIV, a component of SAEP, among the students. The result shows that the intervention could increase the adolescent’s knowledge about HIV which includes basic facts about HIV and STD, assessment of risk, teenage pregnancies, prevention against HIV/AIDS, testing for HIV, donating blood and confidentiality.

3. Life Skills

The Experimental group is significantly higher than the Control group in Life Skills component of SAEP, after the intervention. The result indicates that there is a significant difference between control
group and experimental group in Life Skills among the sample. The intervention was effective in increasing the Life Skills component of Health Behaviour among the experimental group. The result shows that the intervention could increase the adolescent sample group’s Life Skills which includes Self Awareness, Critical Thinking, Goal-Setting, Decision-Making, Communication Skills, Negotiation, Assertiveness, and Interaction between the Opposite Sex, and Skills for Coping with Stress.

4. **Attitude towards HIV/AIDS**

The Experimental group is significantly higher than the Control group in Attitude towards HIV/AIDS component of SAEP, after the intervention. This indicates that there is a significant difference between control group and experimental group in Attitude towards HIV among the sample group after the intervention. The intervention was effective in promoting positive the Attitude towards HIV among the experimental group. The analysis of the result shows that the intervention was significantly effective to inculcate a positive attitude towards HIV, among the adolescent sample groups, which includes Understanding of Risk factors, Impact of HIV/AIDS, Reasons for Stigma and Discrimination and their effects, becoming Empathetic and Learning to show Compassion to People Living with HIV/AIDS.

5. **SAEP Total Score.**

The Experimental group is significantly higher than the Control group in the score of SAEP after the intervention. The result indicates that there is a significant difference between control group and experimental group in SAEP score among the sample. The intervention was effective for increasing the total SAEP score among the experimental group. The analysis of the result shows that the intervention was effective in achieving the goals of SAEP by enhancing the awareness of adolescence, awareness of HIV/AIDS,
6. **Protective Factor**

The Experimental group is not significantly higher than the Control group in Protective Factor component of Health behaviour, after the intervention. The result indicates there is no significant difference between control group and experimental group in Protective Factor component of Health behaviour, after the intervention. This shows that the intervention had no influence on experimental group with respect to Protective Factor component of Health Behaviour.

7. **Mental Health**

The Experimental group is significantly higher than the Control group in Mental Health component of Health behaviour, after the intervention. The result indicates a significant difference between control group and experimental group in Mental Health component of Health behaviour among the students. The intervention was effective for enhancing the Mental Health among the experimental group. The SAEP intervention was proved useful in reducing the mental health problems like anxiety disorders, depression and other mood disorders among the adolescent students.

8. **Sexual Behaviour**

The Experimental group is significantly higher than the Control group in Sexual Behaviour component of Health behaviour, after the intervention. The result indicates that there is a significant difference between control group and experimental group in Sexual Behaviour among the adolescent students. The intervention effectively increased the Sexual Behaviour component of Health Behaviour among the experimental group. Findings from the present study show that the SAEP programme was effective in curbing the risky sex behaviour of
the adolescents. The increased health behaviour score in the sexual behaviour indicates that the students are less likely to indulge in sexual behaviour even if they have negative models from the society.

9. Use of Alcohol, Tobacco and Drug

The Experimental group is significantly higher than the Control group in the Use of Alcohol, Tobacco and Drug component of Health behaviour, after the intervention. The result indicates that there is a significant difference between control group and experimental group in the Use of Alcohol, Tobacco and Drug among the students after the intervention. The intervention was significantly effective for enhancing the health behaviour with respect to the use of alcohol, tobacco and drug among the experimental group. The analysis of the result shows that the intervention had significant positive influence on the Health Behaviour score in the Use of Alcohol, Tobacco and Drug. SAEP intervention has reduced the tendency of the adolescents for taking alcohol, tobacco or drugs either directly or through items like soft drinks, pan masala, smoking, etc. This indicates that adolescents have comparatively better health behavior and that they are less likely to use these items though they are aware of their parents, guardians, siblings and peers using them, after the intervention.

10. Violence and Unintentional Injury

The Experimental group is significantly higher than the Control group in Violence and Unintentional Injury component of Health behaviour, after the Intervention. The result shows that there is a significant difference between control group and experimental group in Violence and Unintentional Injury Component of Health Behaviour among the students. The intervention could enhance effectively the health behaviour components Violence and Unintentional Injury among the students. The analysis of the result shows that the
intervention was effective in reducing the tendency for, and occurrence of Violence and Unintentional Injury among adolescents.

11. Dietary behaviour

The Experimental group is not significantly higher than the Control group in Dietary behaviour component of Health behaviour, after the intervention. The result indicates that there is no significant difference between control group and experimental group in Dietary behaviour component of Health Behaviour after the intervention. This shows that the intervention had no influence on the experimental group with respect to Dietary behaviour component of Health Behaviour.

12. Hygiene

The Experimental group is significantly higher than the Control group in Hygiene component of Health behaviour, after the intervention. To test this Hypothesis t- test was used. The result indicates that there is a significant difference between control group and experimental group in Hygiene component of Health behaviour among the adolescents. The intervention is significantly effective for promoting Hygiene component of Health behaviour among the experimental group.

13. Physical Activities

The Experimental group is not significantly higher than the Control group in Physical Activities component of Health behaviour, after the intervention. The result indicates that there is no significant difference between control group and experimental group in Physical Activities. The intervention was not significantly effective for enhancing Physical Activities component of Health Behaviour among the adolescent students.
14. Health Behaviour Total

The Experimental group is significantly higher than the Control group in the score of Health behaviour after the intervention. The result indicates that there is a significant difference between control group and experimental group in Health Behaviour among the adolescent sample group. The result shows that the intervention was effective for enhancing Health behaviour among the experimental group. Analysis of the total score of Health Behaviour, including all the components, showed that the intervention of School AIDS Education Programme had significantly improved the health behaviour of the students, thereby highlighting that SAEP was an effective and useful intervention for enhancing health behaviour among adolescent students of Calicut district in Kerala.

15. Gender differences.

There is no significant difference between male and female students with respect to Awareness of HIV and Attitude towards HIV and total SAEP score. There is a significant difference between male and female students with respect to Awareness of Adolescence and life Skills component of SAEP; the female students have an edge over males in these components of SAEP. There is no significant difference between male and female students with respect to Protective factors and Dietary behaviour components of Health Behaviour. There is a significant difference between male and female students with respect to Mental Health, Sexual Behaviour, Use of Alcohol, Tobacco and Drugs, Violence ands Unintentional Injury, Hygiene and Physical Activities components of Health behaviour and over all Health behaviour. The female students are having high health behaviour in all the components except in Physical Activities. The male students have an edge over the female students in Physical Activities components of Health Behaviour.
16. Location Differences

There is no significant difference between urban school students and rural school students with respect to Awareness of Adolescence, Life Skills, Attitude towards HIV and total score of SAEP, whereas there is a significant difference between urban school students and rural school students with respect to Awareness of HIV components of SAEP.

There is no significant difference between urban school students and rural school students in Protective Factor, Mental health and Sexual behaviour components of Health Behaviour, whereas there is a significant difference between urban school students and rural school students in Dietary Behaviour, Hygiene, Physical Activities, Use of Alcohol, Tobacco and Drug and Violence and Unintentional Injury components of Health Behaviour and also overall Health Behaviour. The rural students are having high Health Behaviour than the urban students.

17. Types of Management

There is no significant difference between Government school students and Private school students with respect to Life Skills and Attitude towards HIV score, whereas, there is a significant difference between Government school students and Private school students with respect to Awareness of Adolescence and Awareness of HIV and the total score of SAEP. The private school students have an edge over the government school students in these components.

There is no significant difference between Government school students and Private school students with respect to Mental Health, Sexual Behaviour, Use of Alcohol, Tobacco and Drugs, Violence and Unintentional Injury, Dietary behaviour, Hygiene, Physical Activities and over all Health behaviour. But, there is a significant difference
between Government school students and Private school students in Protective factor component of Health behaviour. Private school students are an edge over the government school students in Protective Factor component of Health behaviour.
5.4 EDUCATIONAL IMPLICATIONS

Adolescence is a crucial period for adopting new learning to modify the existing behaviour pattern and to lay foundation for remaining periods of life. School is the right place and right choice to implement health education programme which will have a significant impact on the school children’s learning habits, academic progress, career and success in life. The findings of the present study substantiates that School AIDS Education Programme (SAEP) is effective among adolescents for fostering their health Behaviour. SAEP having components such as Life Skill, Awareness of adolescence and Awareness and attitude to HIV, which facilitates enhancement of health behaviour, is fundamentally an educational strategy for character formation. The outcome of this study contributes to the attainment of educational objectives: evolving of healthy and creative personalities in children.

Life skills

Life skills are abilities that enable individuals to behave in healthy ways. Teaching life skills as generic skills in relation to everyday life could form the foundation for the promotion of mental well-being, and healthy interaction and behaviour. More problem specific skills, such as assertively dealing with peer pressures to use drugs, to have unprotected sex, or to become involved in vandalism, could be built on this foundation. The present research indicated that teaching Life skills as part of School AIDS Education Programmes is an effective approach for prevention education. Hence, Life skill education can be made essential and critical part of formal courses of study. Life skill makes a person psychologically and socially competent to perform the basic human functions and enables him/her to lead a fruitful life. In Mahatma Gandhi’s words (1909) “Learning to live a good life is in itself education. All else is useless”.

Awareness of adolescence

The aim of education upheld by ancient Greek thinkers and the sages of Vedic times as ‘Know thyself’ has far and vital relevance pertaining to the needs of adolescents. Adolescents should understand their physical and emotional state in order to avoid developing risk behaviour at the critical time of life. The findings of the present study showed that information about sex, reproductive health and special features of the period of adolescence can be imparted to adolescents effectively and successfully in class rooms. The outcome of the study also emphasises the role of school and teachers in imparting adolescent health education to the students. Mahatma Gandhi opined: ‘I am strongly in favour of teaching young boys and girls the significance and right use of their generative organs. And in my own way I have tried to impart this knowledge to young children of both sexes for whose training I was responsible’ (Gandhi, 1936).

Awareness and attitude to HIV

The findings of the present study established that knowledge about HIV/AIDS can be imparted successfully, and positive attitude towards the HIV infected can be inculcated among adolescents by the teachers in school settings. Lack of awareness about this disease is a major block in containing the spread of this fatal disease. The outcome of the study suggested that Health behaviour and preventive education against such lifestyle diseases can be made an integrated part of school curriculum. The studies conducted earlier had proved that, “Education is a crucial, and currently essential, element in society’s armory against HIV transmission”. “Creating awareness is the great weapon against the disease (AIDS)” (Kelly, 2003 and Coombe, 2003).

Hygiene

The present study attempted to impart hygienic habits among adolescents in such aspects as oral hygiene, hand washing, cutting nails
and cleaning body parts especially reproductive areas. The findings indicate that as part of HIV awareness programme hygienic messages can be imparted to the students in the formal settings of the class rooms. Conduct of such classes can compel those school managements, who otherwise may neglect, to provide sanitary facilities in schools as a model to both students and the broader community.

**Mental health**

Mental health of the sample group of students has significantly improved after the intervention. The present study emphasizing participatory group learning has given ample room for interpersonal interaction among the students and facilitated the exercise and strengthening of communication skills, co-operation, understanding, acceptance, respect, empathy, problem-solving, critical thinking, and methods to cope with emotions and crises. Students acquired these qualities in the learning situation, indicating that the intervention adopted in the present study has facilitated ‘the natural, progressive and harmonious, development of all the powers and qualities of human beings.’ (Pestalozzi).

**Violence and Unintentional Injury**

Victims of bullying and ragging suffer from increased stress and a reduced ability to concentrate and are at increased risk for substance abuse, aggressive behaviour, and suicide attempts. Poor interpersonal relation can disrupt study habits among adolescents. The participatory learning method employed in the present study enforced such qualities as sharing, understanding, acceptance, respect, tolerance, and group cohesiveness which could annul the tendencies for animosity, quarrel, and bullying among the adolescents. The study established that implementing health education in schools can help students adopt safe lifestyles that facilitate a supportive environment and conditions for academic pursuit.
Alcohol, Drug and Tobacco Use

SAEP intervention has reduced the tendency of the adolescents for taking alcohol, tobacco or drugs either directly or through items like soft drinks, pan masala, smoking, etc…. Evidences from related studies shows that alcohol use decreases concentration, attention, and memory retention, which all adversely affect academic achievement among adolescents. Smokers often do not perform well at school. Most of the smokers feel they have little hope of going to college or getting a good job after high school. They experience pressure from home and school, and use tobacco as a form of relief. In addition, teen smokers enjoy trying to hide their smoking or outwit school administration. This has made school more fun for some tobacco users. John Anos Comenius, who is considered as the fore runner of Modern Education had held education as the means to redeem mankind from evils which render life worthless and invaluable (Spinka, 1943). The intervention conducted in the present study could lessen the tendency among adolescents for resorting to alcohol, drugs or tobacco, and also reversed the concept of holding such practices as gallant and heroic. Thus the present study upheld that risk behaviour among students practiced in the school campus and outside can be minimized and even obliterated by adopting proper preventive measures like Life Skill training Programme. This is the aim of education propounded by Plato when he said, ‘I mean by education that training which leads you always to hate what you ought to hate, and love what you ought to love, from the beginning of life to the end.” To Plato, ‘education is a moral training and an attempt to pass on good habits to the new generation by the older generation’ (Cooper, 1997). The Mahatma (1939) also reported, “An education which does not teach us to discriminate between good and bad, to assimilate the one and eschew the other is a misnomer.”

Sexual Behaviours
Findings from the present study showed that the SAEP intervention is effective in curbing the risky sex behaviour of the adolescents. The Health Behaviour score with respect to sexual behaviour indicates that the students are less likely to indulge in sexual behaviour even if they have negative models from the society. During adolescence, youth are experiencing physical growth and hormone changes that prompt sexual feelings. Evidences from related studies showed that parents and teachers play very little roles in giving proper information on reproductive health and are even reluctant (Kotchik, 2001). Peers are often the most important source of information, which is often misleading and inaccurate, and lead to deviant behaviour.

According to ancient thinkers brahmacharya or celibacy is the first means of achieving concentration. Abstinence helps to improve and sharpen various psychological processes such as learning, remembering and thinking. Another reason for discouraging student sexuality is the fact that worldwide, the highest reported rates of STDs and HIV are found among people between 15 and 24 years. The intervention conducted in the present study proved successful in giving students awareness on reproductive health and bringing about a change in their attitude and behaviour. The study implies that proper education on reproductive health can keep adolescents safe in their passage to adulthood and also make them pursue education with sharp and undivided attention. The findings of the present study support the statements; ‘Adolescents need to understand the concepts of risk behaviour, such as unprotected sex and the use of alcohol and drugs, the possible consequences of such behaviour and how to avoid them’ (WHO, 1998). “There is compelling evidence from studies conducted around the world and in many different cultures that, in fact, sex education encourages responsibility” (Nair, 2004). “Knowledgeable young people tend to postpone intercourse” (Jagnayak, 2005). “We cannot properly control or conquer the sexual passion by turning a blind eye to it” (Gandhi, 1936).
The discussion above indicates that the intervention adopted in the present research proved that SAEP is effective for enhancing health behaviour components such as Mental Health, Hygiene, Sexual Behaviour, Alcohol, Tobacco and Drug use, and Violence and Life Skills. All these components have direct impact on study habits and educational performance of the adolescents. The result of the present research has major implication in tackling student risk behaviour and solving study problems. The programme employed in the present study for enhancing Health Behaviour can keep the adolescents safe in their Passages to Adulthood.

The aim of education, as Bertrand Russell opined, is to bring out the development of excellence, and other qualities in a child so that he may grow into a man (Schilpp, 1944). Such an education helps a person to identify himself and his place in the society. Aldous Huxley pointed out that a perfect education is one which trains every human being to fit into the place he/she is to place in the social hierarchy (Soëtard, 1994). Education, as John Dewey (1916) considers, is the development of all capacities of the individual which will enable him/her to control his/her environment and fulfill his/her possibilities.

The present study introduced and endorsed an alternative method that can help young people become smart, healthy and constructive. An enterprising and healthy character is developed through education for healthy lifestyle. The study appraised an innovative educative programme showing how far the content and curriculum of this intervention educated adolescents about their bodies, nutrition, general health and well being, reproductive health, dangers of teenage pregnancy etc.
The findings of the present study emphasized the significance of SAEP as life changing agent for adolescent students. The components of SAEP are not merely fostering and developing Health behaviour alone, instead, the components and techniques imparted do have a significant role in influencing a student’s cognitive development through maximizing abilities such as problem solving, decision making, critical thinking, and emotional coping. Exercises given to such facilities of students are helpful for them to stimulate their lateral thinking and other higher cognitive functions along with affective domains which will ultimately bridge the gap between body and mind and bring about an integrated and wholistic growth and development of school children.

The outcome of this study reminds that education, in schools has a key role to play in preventing HIV/AIDS. Awareness of HIV and positive attitude towards the HIV infected can mitigate the ill effects of this fatal disease on individuals and communities. Health behaviour education conducted in the class rooms can lead to a change in the individual and in the society. In modern times schools are not considered as just imparting syllabus oriented curriculum but it is also aimed at shaping the over all personality with holistic approach with a view to moulding future generation. In this context, Health Behaviour Education becomes a crucial input in addition to the normal curriculum.
5.5 CONCLUSION

The main objective of the study was to assess the effectiveness of the School AIDS Education Programme (SAEP) for enhancing Health Behaviour among adolescent students in Calicut district in Kerala. The study also aimed at assessing the effectiveness of SAEP as HIV prevention programme as well as a Life Skill training Programme. The present study was conducted among 1520 adolescents drawn from 19 different schools of Calicut district in Kerala. 760 students fell into control group and the remaining 760 to experimental group. Pre test administered to the total sample group indicated the similarity of the both groups in the concerned areas.

SAEP intervention was given to the Experimental group. The post test result showed that School AIDS Education programme was effective both as HIV prevention programme and Life Skill training Programme among the adolescent school students of Calicut district in Kerala. Both the composite result as well as the componential result substantiated the effectiveness. The study further indicated that the programme was useful for boys and girls, local and urban settings and in Government and Private Institutions.

The effectiveness of the School AIDS Education Programme (SAEP) as a tool for enhancing Health Behaviour among adolescents was also verified. Before and after the intervention Global School Student Health Survey was administered to the total sample. The pre-post scores indicated that the SAEP was effective for enhancing Health Behaviour among the adolescent students of Calicut district in Kerala. Among the components of Health Behaviour in ‘Dietary Behaviour’, ‘Protective Factor’ and ‘Physical Activities’ the intervention did not show significant effectiveness. In the remaining five Health Behaviour components such as ‘Mental health, Sexual behaviour, Use of Alcohol Tobacco and Drug, Violence and Unintentional Injury and Hygiene’ the SAEP programme was effective.
Among the subgroups of gender, locale and management the programme was not found uniformly effective. There was a significant difference between male and female, in the effectiveness of the intervention with respect to the variable Health Behaviour. The programme found to be more effective among the female group than the male. Urban and rural school students showed significant difference between each other in the effectiveness of SAEP for enhancing Health Behaviour: The intervention was more effective among rural students than urban students. The results of the study showed that SAEP intervention was equally effective in both management institutions for enhancing Health Behaviour. School AIDS Education Programme was effective irrespective of the type of the management.

The study implied that School AIDS Education Programme can meet the special and distinct needs of adolescents. It can help the adolescents to take wise decisions and right choices in life especially in the critical stages; what happens in the future depends, to a large extent, on the decisions taken by adolescents as they enter their reproductive years. Conduct of this programme in all the school is a good investment not only for the socio-economic development of the country but for the other societal concerns like social harmony, gender justice, population stabilization and improving the quality of life of the people.

The outcome of this study contributes to the attainment of educational objectives: evolving of healthy and creative personalities in children. Adolescents with sound mind in the sound body can participate in the development and welfare of the society. Physical and mental well being influences the way one feels about oneself and others and can promote one’s productivity, self-esteem and self-confidence and improves interpersonal relations which enhance the competency of young people to face the realities and challenges of life.
5.6 RECOMMENDATIONS

However, the present study sheds light on certain aspects to modify and certain paths to open: SAEP should include some aspects on Nutrition, and should deal more with, Physical activities and exercise and can introduce yoga and meditation. Inclusion and integration of cultural activities in the intervention, differing from community to community suiting to own culture, has multi pronged benefits as it makes the programme hearty and lively, and ensures active involvement with sustained interest. Conducting the session on Sex and Reproductive health separately for boys and girls and by female teachers for girls and male teachers for boys makes it more comfortable to school students. The nature and approach of the teacher is a vital factor for the success of the programme: the teachers themselves should feel comfortable with the programme; open and democratic approach is conducive; taste and talent in art -singing, acting- is an added benefit. However, willingness and dedication is essential for the successful conduct of the programme. Hence, SAEP and similar adolescent education programme can be made a compulsory part of school curriculum, but not all the teachers can be compelled to handle the sessions: effective training to sensitize the teachers and to equip them with resource and skill can produce desired result.

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5.7 SUGGESTIONS FOR FURTHER RESEARCH

The present study aimed to assess the effectiveness of the School Education Programme (SAEP) for enhancing Health Behaviour among adolescent students in Calicut district in Kerala. The same study can be conducted in other districts, communities and countries also. A comparative study on the effectiveness of SAEP can be conducted among different districts, states, cultures and communities.

Among the components of Health Behaviour, in ‘Dietary Behaviour’, ‘Protective Factor’ and in ‘Physical Activities’ SAEP intervention did not show significant effectiveness. This gives scope for further exploration to understand the reason why SAEP was not effective in enhancing Dietary Behaviour, Protective Factor and Physical Activities components of health Behaviour.

Among the sub groups of gender and locale the programme was not found uniformly effective. Between Male and Female, there was a significant difference in the effectiveness of the intervention with respect to the components and also total Health Behaviour. This gives scope for conducting an in depth and comprehensive assessment to understand and to identify those significant variables causing gender differences in adolescence. Further, there is also a need to develop and implement certain compartmentalized, need focused and gender based interventions.

There was regional disparity in the effectiveness of the programme. The programme was more effective among urban school students in Hygiene and Awareness of HIV components. In the remaining variables rural school students scored higher after the intervention. This indicates the need for exploring why the post test differences between urban and rural school students, and what are the factors contributing to the same with reference to the existing socio economic educational and
public health system of Kerala. Also this outcome gives further opportunity for designing a specific intervention suitable to the need of urban and rural school students.

A longitudinal study may be designed across life span of school children to higher education and even further to understand the changes in the trend of Health behaviour. A cross sectional study also can be conducted across various school going children in government, private and unaided school set up, in informal educational set up, non school going children and marginalized children such as HIV infected and juvenile home children. Findings from such studies will provide more valuable inputs for researcher to modulate and develop target group focused intervention and assessment models.

There is also a scope for understanding to what extent SAEP is influenced by cognitive abilities, socio, emotional and personality factors of children. A study in this direction will provide adequate information on how, whether or to what extent these variables play a crucial role enabling children to become successful recipients of SAEP and similar adolescent education programmes. Besides, a study also may be conducted to assess whether there is any significant relationship between academic success and success in SAEP.

The impact of SAEP programme on the class room behaviour of the teachers as well as the students can be assessed. The influence of moral values on the health behaviour and AIDS prevention can also be assessed.
5.2 METHODOLOGY

For the present study a descriptive survey with built in Experimental design was conducted. Pre intervention –Post intervention equivalent group experimental design was used to ascertain the effectiveness of SAEP on enhancing Health Behaviour among adolescent students. The methodology adopted for the present study is the following:

5.2.1 Sampling and Design

The sample for the study was selected from 19 Secondary Schools (Class VIII to X) of Calicut district in Kerala by following representative random sampling procedure.

- 5 government schools from rural area, 5 private management schools from rural area, 4 government schools from urban area and 5 private management schools from urban area were selected randomly from Calicut District.
- One teacher from each of the selected schools was selected, constituting 19 teachers totally. Workshop was conducted for the selected teachers for familiarizing SAEP intervention programme for 6 days for 3 hours per day.
- Questionnaires of Health Behaviour and SAEP were administered to the students of secondary classes in the selected schools.
- From all the students who underwent the pre test, based on the score, from each school, 40 girls and 40 boys were selected starting from the lowest score so that 80 students from each of the 19 schools constituted totally 1520 sample pupils.
- From the sample pupils of 80 (40 boys+40 girls) from each school, by randomization procedure, 40 students formed Control Group and the remaining 40 formed Experimental Group for the intervention. Care was taken to ensure equal number of boys and
girls in both groups.

The number of students for the class was limited to 40, because it was a convenient class room size for conducting interactive activities. The class room size, furniture available and the convenience of the facilitators were considered for limiting the strength to forty. As per NACO guidelines maximum 50 students can be accommodated in the class for SAEP.

**Teachers’ Selection**: The teachers who had full time teaching experience of 2 years, who were below age of 52 years and above 25 years, who were not previously trained in the area of health, through School AIDS programme and who were willing to take up this responsibility were selected for the conduct of the present study.

**5.2.2 Tools Used for the Study**

The following assessment tools were used for the present study:

- **a) Socio-demographic data sheet**

  A personal data sheet was used for the present study to elicit details of date of birth, age, gender and the class studying in.

- **b) Global School Based Student Health Survey**

  Global School Based Student Health Survey was used in the present study to assess health behaviour of students. The GSBSHS was developed by the World Health Organization (WHO) in collaboration with United Nations’ UNICEF, UNESCO, and UNAIDS and with technical assistance from CDC. GSBSHS was a school-based survey conducted primarily among students aged 12–16 years. The purpose of the GSBSHS was to provide data on health behaviours and protective factors among students and to help countries develop priorities, establish
programmes, and advocate for resources for school health and youth health programmes and policies.

The survey consisted of 60 items. The items were based on a core questionnaire module. The core questionnaire modules address the leading causes of morbidity and mortality among children and adults worldwide. The module comprises items pertaining to following topics: Alcohol, Tobacco and Drug use, Dietary behaviours, Hygiene, Mental Health, Physical Activity, and Protective Factors, Sexual behaviours, Violence and Unintentional injury.

c) School Aids Education Programme (SAEP) assessment tools.

The SAEP Review Tool has been prepared by the UNICEF-KSAPS (2005). This tool is useful to assess the school AIDS programme and its impact in socio-cultural context anywhere in India. The tool had been field tested on 470 students from urban, semi-urban, and rural backgrounds in a group setting in the first round and individually administered on 10 students in the second round of administration. Based on the results of the field tests, the tool was reviewed, modified and finalized into the present form.

SAEP tool can assess AIDS education programme at multiple levels; including Students, Teachers, Headmasters, School Development Monitoring Committee (SDMC), and Parents. Of them only one was taken for the present study: SAEP impact Assessment tool for Students. The SAEP tool assesses the programme for students in four areas such as: Understanding of Adolescence, Knowledge of HIV infection, Life Skills and Attitude towards HIV and AIDS.

5.2.3 Statistical Techniques Used
The descriptive statistics like mean, median and standard deviation were used to describe the distribution. The t-test and ANOVA were used to test the formulated hypotheses.