

Illicit drug use among Finnish children: Channels of acquisition

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Bachelor's Thesis

Bachelor of Health Care

Registered Nurse UAS

Kemi 2014

Lapland University of Applied Science
Bachelor of Health Care

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Commissioned by	Hannele Pietilainen and Kaisu Vinkki		
Subject of thesis	Illicit drug use among Finnish children: Channels of acquisition		
Number of pages	41 + 8		

This thesis was conducted on the topic 'illicit drug use among children and adolescent' with the main purpose of describing the channels the underage use in acquiring illicit drugs. The objectives were to describe the means children use in acquiring illicit drugs and also to determine the most abused drugs as well as describe the effects illicit drugs have on children and finally map out strategies to help prevent illicit drug use among children. The thesis was conducted as part of the Arctic Children InNet program and hence a self-awareness educative social media tool was created for participating children.

The research design of the project was literature review and content analysis was used in analysing the data collected. A systematic literature review was undertaken and the findings were discussed in the body of the thesis.

Some of the findings and conclusions drawn from the data analysed were that no 'true market' of illicit drugs exist in Finland such as those that fit an open market definition for illicit drugs trade. No internet website was found in Finland offering illicit drugs for sale however; Finnish youth procure illicit drugs via internet from foreign countries. Other findings are home-cultivation of cannabis has become the primary source of cannabis acquisition among adolescents and the general population as a whole. Close relations and friends remains the most profound source of drug acquisition among the adolescents. Recommendation of the thesis includes 'parents must store their legal drugs (alcohol and tobacco) under double locks' and 'the formal education sector should inculcate illicit drug health education into the curriculum'.

Key words: sources, drugs, children, illicit drugs and Finland, Finnish adolescents and drugs, effects on adolescents' drugs and society.

ACKNOWLEDGEMENT

I am grateful to Hannele Pietilainen and Kaisu Vinkki for their patience, good guidance and supervision. Thank you very much, you are truly the best.

DEDICATION

This thesis work is dedicated to God for His unconditional love.

And to Christina Amoako my wife, for her love, support and encouragement throughout the writing of this research report. Thank you Krissy; you are most appreciated.

TABLE OF CONTENT

Abstract of Thesis	2
ACKNOWLEDGEMENT	3
DEDICATION	4
TABLE OF CONTENT	5
1 INTRODUCTION	6
2 THE THESIS PROCESS	9
2.1 Statement of the problem	9
2.3 Purpose of the study	11
2.4 Objectives of the study	12
3. METHODOLOGY	13
3.1 Research design	13
3.2 Collection of research material	15
3.3 Analysis of data collected	20
3.4 Reliability and Validity	22
3.5 Research Ethics	23
3.6 Limitation of the study	23
4 LITERATURE REVIEW	24
4.1 Overview of illicit drug abuse among adolescents in Finland	24
4.2 Typical sources of illicit drugs	30
4.3 Prevention of illicit drugs	33
5 DISCUSSION	36
5.1 Most prevalent drugs to the adolescents	36
5.2 Sources of drug abuse	37
6 CONCLUSION AND RECOMMENDATIONS	40
6.1 Finding and conclusions of the study	40
6.2 Recommendations	41
APPENDIX A.	43
REFERENCES	43
APPENDIX B.	47

1 INTRODUCTION

This thesis is being written as a part of an academic requirement for the award of Bachelor of Health Care (Nursing). It has been organised into five chapters and each chapter begins with introduction to that chapter. The thesis primarily focuses on the use of illicit drugs among adolescents and children by exploring the channels through which they acquire these illicit drugs. It also examines the profound effects drugs have on children, how to improve prevention and access restriction as well as treatment programs. The design of the project was literature review; data relevant to nursing, social work and parents in their quest to guide children from illicit drug misuse was collected and analysed. It also demonstrates the relationship between the effects of illicit drugs on the physical health of children and their psychosocial health as well. It also showed the effects illicit drug abuse produces on the society at large. In the final chapter some recommendations on the prevention of illicit drugs among adolescents were recommended.

This thesis is also being written as part of the Arctic Children InNet project and in line with the objectives of the Arctic Children InNet project, it aims at providing adequate information to promote good (psychosocial) health of adolescents and children. The Arctic Children InNet is a part of the Innovation Programme in Lapland well-being of children, youth and families promotional activities. The main objective of the Arctic Children InNet project is to explore the social media opportunities and to improve the challenges faced by schoolchildren's psychical, psychological, emotional, social and spiritual health and well-being, security and cultural identity through Information and Communication Technologies (ICT) applications in the Barents Region. It provides a social platform for the children to interact with resource professionals and also with each other in the area of healthcare. The Arctic Children InNet project is hosted by the University of Lapland and the Lapland University of Applied Science in Rovaniemi and Kemi-Tornio campus, Murmansk State Humanities University (Department of Social Pedagogy and Social Work), Northern Arctic Federal University (Department of Information Technology). The European Social Fund (ESF) provides funds for the Arctic Children InNet project. (Arctic Children InNet 2010-2013)

The question of how and where children and adolescents acquire illicit drugs has always bothered me, am always amazed when I find children and adolescents indulging in the practice of illicit drugs misuse. I keep asking myself ‘where do they get it from?’ there is strict application of laws to illicit drugs (including legal drugs such as tobacco and alcohol) in Finland. In as much as regulatory laws are binding to all inhabitants of Finland, children are prohibited from the use of illicit drugs and must be protected by any means necessary. Children and adolescents are vulnerable to many negative effects; their psychological, social and physical developments are all directly affected by use of illicit drug. I developed an interest in the situation and decided to conduct my thesis on the subject.

As the English proverb goes ‘prevention is better than cure’ (The English club, 2014); the dynamism in healthcare is directed towards prevention and gradually moving away from just curing a phenomenon. The status quo in health has shifted from treatment to primary preventive measures. Nurses are core component of healthcare and hence play a vital role in this paradigm shift. Health education remains the primary tool for preventive healthcare. Nurses are getting more and more interested in preventing illicit drug use among adolescents in addition to treating the negative effects of it. This thesis seeks to strengthen the knowledge base of Nurses and other health workers including social workers with information on illicit drug among children and adolescents particularly ‘how they acquire illicit drugs’. The information provided will help in preparing more pragmatic public health preventive programs. In addition this thesis will provide information to will enable nurses to educate parents and other stakeholders such as the adolescents themselves on the dangers of illicit drug abuse. Knowing the reasons, causes, effects and channels of acquisition of illicit drugs among adolescents; health education can be tailored to meet their needs. Nurses who work as school nurses in junior and senior high schools and are in direct contact with these adolescents can provide a much better health education. Nurse educators can also train student nurses with the information this thesis will come up with. Through this thesis parents and authorities in charge of illicit drug abuse prevention can acquire more in-depth information on the reasons and causes and subsequently strategies on how to prevent illicit drug abuse among adolescents. City and municipal authorities can amend their strategies in combatting illicit drug abuse based on the findings and recommendations of this study. Finally since this project explores the basis of underage illicit drug abuse from the perspective of channels of acquisition whiles bearing in mind the cultural

perspectives; it will serve as a bed rock for future researches and education on illicit drug abuse. The intention of the thesis is to contribute to the ongoing debate about the appropriate and effective means of ensuring that teenagers are free from the menace of illicit drugs while shaping future government and municipal authorities' policies on underage drug use.

2 THE THESIS PROCESS

2.1 Statement of the problem

The acquisition of illicit drugs (including legal drugs such as alcohol and tobacco) among children is illegal in almost all countries, in Finland the laws are so strict and most people obey them, the problem is children still get access to illicit drugs. According to the Ministry of Social Affairs and Health, Finland (2014, P5, 25-27) the Alcohol Act, Section 16 (www.finlex.fi) bans the sales of alcohol to persons below the age of twenty years. The Tobacco Act section 10 and 11 (www.finlex.fi) forbids the sale of tobacco products from automatic vending machines as well as the sale, possession or importation of tobacco products by persons under the age of eighteen. The child welfare act (www.finlex.fi) also gives authority to the appropriate institutions confiscate substances or objects with characteristics that render them suitable for endangering the child's own or another person's life, health or safety or damaging property. The Narcotics Acts (www.finlex.fi) on the other hand has the objectives of preventing import, export, manufacture, distribution and use of all illicit narcotic drugs in Finland among all age groups. In spite of these provisions; children are seen indulging in the use of illicit drugs across the length and breadth of Finland. And the question of 'where and how these children get access to these drugs?' remains yet to be thoroughly explored.

The graph below depicts the alcohol consumption to the point of intoxication among Finnish boys and girls as researched by the Finnish Foundation for Alcohol Studies in 2011.

Figure 1.0 a graph of alcohol consumption percentage among boys in Finland from 1981 to 2011. It shows alcohol consumption among three age groups 14, 16 and 18 years and the percent of how often they got drunk at least once a month.

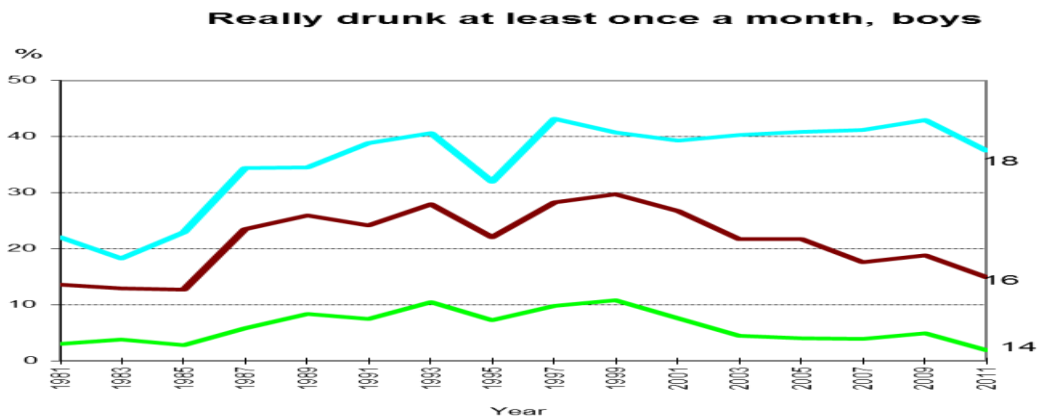
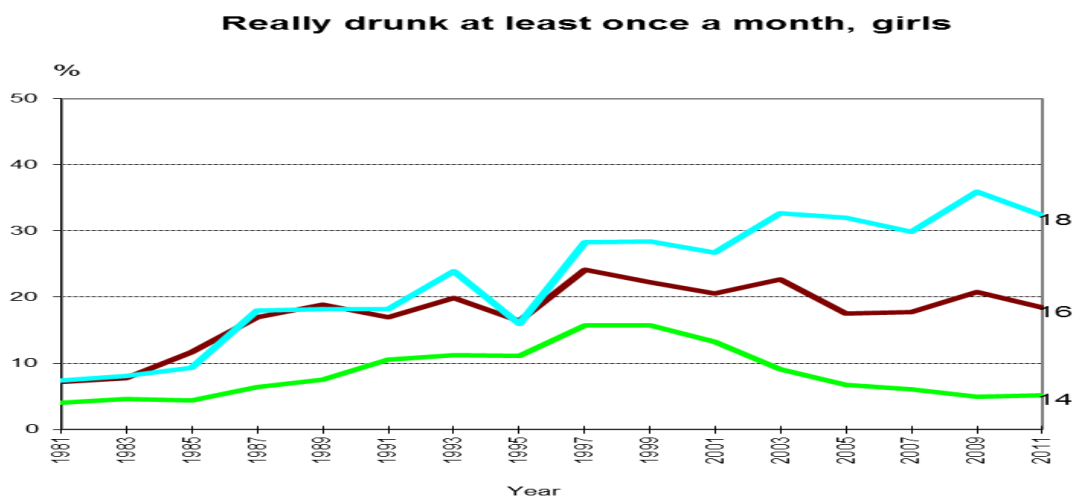


Figure 2.0 a graph of alcohol consumption percentage among girls in Finland from 1981 to 2011. It shows alcohol consumption among three age groups 14, 16 and 18 years and the percent of how often they got drunk at least once a month.



According to Social Research Institute of Alcohol Studies, Helsinki, (2014) a survey (total sample size =1745), the proportion of 15-year-olds who reported having been drunk two or more times was 53.3% for boys and 55.7% for girls. On the use of tobacco; National Institute of Health and Welfare (2012, 43.) stated that nearly one in every five Finns smoked daily implying that in 2011 the percentage of men who smoked was 22 per cent and that of women was 15% women. The problem with smoking is that 19% of boys and girls aged 16 also smoked daily in Finland. Finally Ilomäki R. (2012, P5) also stated that over 90% of drug addicts start substance abuse as adolescents. The channels used in acquiring these drugs maybe familiar, obscure or perhaps even hidden from the authorities and their parents. It is essential to explore and discover these channels children and adolescents use in securing illicit substances in order to help prevent subsequent addiction now and later in life.

In gathering data to finding answers to the above stated problem, the initial approach was to gather primary data from the school children by interviewing them directly and soliciting for their means of acquiring the illicit drugs they use. However upon discussing with my thesis supervisor I was advised that I would have to seek permission from the Kemi city authorities before I can approach the school children to undertake the data collection. I was informed the permit from the city authority can take up to a year but I don't have that much time to wait so I should find a new way of approaching the topic. I therefore decided to use secondary sources or otherwise stated researches that have been conducted on the topic could provide the answers I seek. I therefore started gathering data from both Finland and the outside world, from sources that could count as a genuine source. I used search engines from google and the Lapland University of Applied Science e-library to look for data on the topic.

2.2 Research questions

How adolescents and children acquire illicit drugs?

What are the means of preventing access to illicit drugs among children?

2.3 Purpose of the study

The purpose of the study is to describe the channels children and adolescents use in acquiring illicit drugs and to seek for means of access prevention.

2.4 Objectives of the study

The objectives of this study are to describe the means children use in acquiring illicit drugs and also to determine the most abused drugs. The study intends to describe the use of verbal and non-verbal means as a tool for luring young adolescents into illicit drugs use. It will also describe the effects illicit drugs produce on children while mapping out strategies to help prevent or eliminate illicit drug use among children. Finally this thesis will create self-awareness educative social media tool for the Arctic Children InNet program; this tool will assist participating children to measure their role in pressuring their friends into illicit drugs abuse. The participating children can learn how to avoid peer pressure and how to avoid leading others into illicit drug abuse; as well as know the effects drugs have on their developing bodies.

3. METHODOLOGY

3.1 Research design

This session describes and discusses the research design, data collection procedure and analysis of data. It also describes the how the instrument for data collection was used as well as the inclusion and exclusion criteria of the data used in the project. It also touches on how the analysis of the collected data was done and finally stating the various limitation of the study encountered in the course of conducting the study. Finally it talks about the limitations of the study.

The research design refers to the chosen means of presenting the entire research by portraying the different components of the study in a more logical way to conform to the study plan. The purpose of research design is to ensure that the research approach and the resource materials are good enough to answer the research questions. Research design also ensures that the proper and most effective strategies are adopted in collecting research data (Moule and Goodman 2009, P168-172). Cohen L and Manion L (2009, 56-59) indicated that research design is simply the main means of ensuring that the research project finds answers to the research question thereby ensuring that the project achieve its' objectives. Research design normally comprises of the following:

- Clearly stated beliefs of the researcher concerning knowledge generation

- The research questions for which answers are being sort for

- The research approach (quantitative, qualitative or perhaps a combination of both)

- It also clearly states the resource materials to be used, the process of data collection and finally the process of data analysis.

The research design of this thesis was literature review method. The criteria for choosing this method is that literature review holds the advantage of combining the finding and conclusions of different researches and articles written by different authors and publishers at different times on the topic of illicit drug abuse among adolescents and children. The thesis will combine the facts available from different resource materials and in the end it will be directed at answering the research questions 'how do adolescents and children acquire illicit drugs?' and also seek for the means of access prevention among teenagers and children. According to Parahoo K (2008 P94.) a literature review gives an account of published researches and articles on a specified topic within a certain time period. These researches under review must have been

accepted by scholars and research academicians or must have been peer reviewed. Literature review combines both summary and synthesis of the material resources by recapping the most important content that relates to the study being undertaken. The research approach relies solely on secondary sources (published materials) as a result it's not possible to manipulate data to achieve something that was not in the original published materials or the resource materials used. However it is possible to assign a new interpretation and to fish out the facts in relation to the topic being studied

Moule and Goodman (2009, P172.) added that it re-organizes the information from all the various sources to bear meaning to the study being undertaken. It also provides insight into the study and provides what is known about the phenomenon being studied. Literature review can trace the intellectual progress of the field or topic under study, including major debates, controversies and their final conclusion. Finally literature review evaluates the resource materials and come out with the most pertinent or relevant information they contain either in support or against the phenomenon being studied.

According to Booth W.C, Colomb G.G, Williams J.M (2008, P92) the purpose of a literature review research design is to collect, verify, and generate evidence from the published documents that aids in finding answers to the research questions and in general meeting the set research objectives. The use of secondary sources and primary documents such as, logs, diaries, official records, reports, archives, and non-textual (graphical information e.g. maps, pictures, audio and visual recordings). Literature review as a research design presents some advantages where researcher-subject interaction does not affect the research process and its findings, also literature review can be used to research into various research problems using the same sources over and over again. In addition it can also be used to replicate a previous done study. According to Parahoo K. (2008 P81-98.) the disadvantages of literature review is that the data collection and interpretation process can be time consuming. Also distinguishing the perspective of the researchers from those of the original authors can be difficult; making it virtually impossible to ascertain facts from myths in the resources materials used. Literature review uses only available data to address a research problem; this makes it difficult to fully explore the stated research problem therefore, gaps and limitations need to be acknowledged. In addition Neutens J.L and Rubinson L (2007 P 47.) indicated that literature review presents some limitations as a research method. They elaborated that the sources of data are secondary and must pass both authentication and validity test.

Also the ability to achieve ones objectives and aims are related to the amount of published documents on the topic that the researcher can access.

The project reviewed relevant previously published researches, journals, books and online materials from various organisations and persons with a connotation and academic bearing on the topic on the topic. The project investigated by reviewing the detailed outline of these study material and analysing using content analysis. The research design outlined the data collection and how analysis of data was done. It also identifies the research problems clearly and justifies its selection.

2.2 Collection of research material

Data was collected in several ways; using the research topic, question, and the objectives as a guide into the inquest; data was sought from published books, online materials, and direct contact of organisations through e-mails. The main instrument for data collection of this research project was online search engine, Google and Bing was the most used. Online library and online data bases was also searched for useful materials relating to the topic and the research questions. The databases that were used include EBSCO, PubMed, Elsevier, Terveysportti, DOAJ, JBI and ConNET. Key words were used in the search process and the result sorted out using the stated inclusion and exclusion criteria. The keywords includes: sources of drugs among children, illicit drugs use Finland, Finnish adolescents and drugs, effects of drugs on adolescents, drugs and society.

The search results accessed produced lots of resource materials some of them were used for the thesis the reasons for their use as part of this study were given as follows: A report titled 'The drug situation in Finland: new developments, trends and in-depth information on selected issues' by Tanhua et al (2011), it was published as part of the Finnish National Focal Point annual report on the dynamics of illicit drugs abuse in Finland. The merits of this report to this thesis are; it presents in totality illicit drugs use in Finland and also gives at a goal the entire drug situation picture (new development and trends) in Finland. This report was good for the thesis because it contained issues that help in addressing some of the research questions that was raised. Most important to this thesis is the issue of underage drug abuse which the report addresses. The report touched on issues such as channels of acquisition among both adults and adolescents, the harm illicit drugs brings to individuals and society, legislations and policies on illicit

drug use as well as treatment and intervention options. This made the report an ideal choice to be included in the study.

National Institute of Health and Welfare also published the Statistical Yearbook on Social Welfare and Health Care for the year 2012, this booklet also contained appropriate information that bear lots of connotations to the project hence its inclusion in the study. The yearbook contains issues on tobacco use and access to specialised health care services. It also contained current information on illicit drug abuse among parents, pregnant women and children; this made the year book a good material for the thesis work. The Government of Finland adopted in May 2001 a Resolution on the Health “2015 public health programme” this resolution detailed Finland’s health policy for the next fifteen years. The Health 2015 public health programme was also included in the thesis work because one of the goals of this program was to decrease smoking among young people to a level below 15% and also to handle health problems associated with alcohol use appropriately as well as ensuring that levels of illicit drug abuse will not exceed those of the 90’s. In addition the progress reports on the “2015 public health programme” were also accessed for current information concerning the achievement of the stated objectives.

Also Risto Ilomäki’s research on substance use disorders in adolescents: comorbidity, temporality of onset and socio-demographic background was also accessed as part of this project. Risto Ilomäki’s research was used because it was a study of adolescent psychiatric inpatients in northern Finland; the research touch on issues such as how to treat inpatient adolescents of drug induced psychosis or neurosis. It also expressed the level of drug abuse among adolescents in northern Finland in a more graphical way for easy understanding. This made the research work an ideal research to be included in the study as it had information that could aid in finding tangible answers to the research questions raised.

Another research that proved very useful to the project was titled ‘Measuring the Cannabis Market in Finland – A Consumption-Based Estimate Contemporary Drug Problems by Hakkarainen P, Kainulainen H. and Perälä J; this research contained lots of information on how adolescent gets access to cannabis and how they trade it among themselves. It was very important in the attempt to answer the research questions that was raised. The setting of the research was in Finland and the population of study was also Finnish adolescents, this made the research an ideal document to use since the project was being undertaken with a Finnish implication in mind.

On the use of snuff Huhtala S A, Susanna U R, Rimpelä A H research was adopted for the information in them, it was titled ‘Adolescent snus use in Finland in 1981–2003: trend, total sales ban and acquisition’ this research was good source of information because it contained all the relevant information concerning the research questions raised in this particular studies. Most important to this research was how the children acquire the snuff and that research dealt with that area well, it was good source information.

United Nations Drug Crime Prevention prepared this report ‘The social impact of drugs’ to be presented at the World Summit for Social Development in Copenhagen, on March 1995 it was also to state their position on matters being deliberated. This document was important to the research because it had clear views on the social impact of drugs on the society which was an effect and hence its’ inclusion in the project.

On the issue of underage alcohol consumption articles and reports from both local and international setting was accessed for information. The Finnish Foundation for Alcohol Studies (FFAS) published a report on alcohol activities in Finland for the year 2011 also Tomi Lintonen who doubles as the Research director for the FFAS and an adjunct professor for the University of Tampere also published an article titled ‘The teenage origins of students' drinking habits’. The International Centre for Alcohol Policies (ICAP) also wrote an article titled ‘what drives underage drinking: an international analysis’. And the World Health Organisation’s (WHO); Global status report on Alcohol were all accessed for information concerning the research topic. To begin with; the target population of these studies was underage children; meaning adolescents and those even younger than adolescents. It also touched on issues such as how to prevent underage drug use, the role the educational institutions could play in reducing illicit drug use among students and finally the effects alcohol use produce on the adolescents and the society at large. These articles and reports contained good information and hence was used as part of the research materials for this thesis.

An America institution the ‘National Institute On drug Abuse’ recommends a research-based guide for parents, educators and community leaders on preventing drug use among children and adolescents; this guidelines was also accessed for more strategies that might produce favourable results in Finland. In addition to the guidelines and strategies; it also touches on the associated effects of illicit drug use, effects that could be directly linked to the use of illicit drugs; hence its inclusion in the project.

There were several other researches, articles, reports and internet websites that were also accessed for credible information; however most of them were from the international organisations, some within Europe and the rest from United States of America. The organisation whose articles and websites were accessed for information with regard to this research includes leading European research institutions such as the European Monitoring Centre for Drugs and Drug Addiction and the European School Survey Project on Alcohol and Other Drugs (ESPAD). The rest are World Health Organization (WHO), United Nations Office on Drugs and Crime (UNODC and Centre for Alcohol Policies (ICAP) website was also accessed for information concerning this research. This was because they are leading organisations with good reputation concerning research and hence information coming from them was less likely to have flaws in them.

Huizink C. et al research ‘Tobacco, Cannabis, and Other Illicit Drug Use Among Finnish Adolescent Twins: Causal Relationship or Correlated Liabilities?’ the British American Tobacco Finland Limited was accessed to find out what they have to say for themselves concerning tobacco use. Also their website was accessed for any other information that would be useful to this thesis.

The following articles and researches were used in reviewing the thesis:

1. *‘Adolescent snus (snuff) use in Finland in 1981–2003: trend, total sales ban and acquisition’* written by Huhtala S A and Rimpelä A H in 2006
2. *‘Alcohol and Drug Use among European 17-18 Year Old Students’* written by the European School Survey Project on Alcohol and Other Drugs (ESPAD) in 2012
3. *Alcohol and Drug Use among Adolescents in Finland 1995–2011* written by the European Monitoring Centre for Drugs and Drug Addiction in 2012
4. *‘Alcohol and Drug Use Among European 17-18 Year Old Students. A review of data from the ESPAD Project’* written by Hibell et al in 2009
5. *‘Binge Drinking and Alcohol-Related Problems among Community College Students: Implications for Prevention Policy’* written by The Clinic Foundation in 2011
6. *Drug and Alcohol Abuse: The Authoritative Guide For Parents and Teachers* written by Howard T. Milhorn in 2003
7. *Drug situation in Finland: New developments, trends and in-depth information on selected issues’* written by Tanhua H. et al in 2011

8. *'Global status report on alcohol'* prepared by the World Health Organization in 2004
9. *'Government Resolution on the Health 2015 programme'* prepared by the Finnish Ministry of Social Affairs 2001
10. *'Health 2015 public health programme'* prepared by the Finnish Ministry of Social Affairs and Health in 2013
11. *'Measuring the Cannabis Market in Finland – A Consumption-Based Estimate Contemporary Drug Problems'* written by Hakkarainen P, Kainulainen H. And Perälä J in the year 2009.
12. *'Report on alcohol activities for the year 2011'* prepared by the Finnish Foundation for Alcohol Studies in the year 2011
13. *'Reviews on drug-related crimes in the year 2009'* prepared by the Finnish National Bureau of Investigation in 2010
14. *'Related problems among adolescent suicide in Finland'* written by Pirkola S, Marttunen M.J et al in 1999
15. *'Statistical Yearbook on Social Welfare and Health Care 2012'* prepared by the Finnish 'National Institute of Health and Welfare' in the year 2012
16. *'Substance use disorders in adolescents: comorbidity, temporality of onset and socio-demographic background'* written by Risto Ilomäki in 2012
17. *'The family context of adolescent drug use'* by Coombs R. H (2008)
18. *'The Role of the Family in the Origin and Prevention of Drug Risk'* written by Blum R et al in 2002
19. *'The social impact of drugs'* prepared by the United Nations Office on Drug and Crime in 1995
20. *Tobacco, Cannabis, and Other Illicit Drug Use Among Finnish Adolescent Twins: Causal Relationship or Correlated Liabilities?'* written by Huizink A.C, Levalahti E, Korhonen T in 2010
21. *'What Drives Underage Drinking?: An International Analysis'* prepared by International Centre for Alcohol Policies (2004)

3.3 Analysis of data collected

The results of the searched data were evaluated and sought into researches conducted in Finland using Finnish population and those that were conducted outside Finland, those of Finnish origin was given more priority. Scientific articles as well as Doctor of philosophy (PhD) dissertation on illicit drug use among Finnish adolescents were also analysed using content analysis. Articles that dealt with illicit drug use among Finnish adolescents and those that were done elsewhere either than Finland were also used. The Data collected was systematically reviewed. All documents containing facts about channels of acquisition of illegal drug use among children were highly used for the project and documented to be part of the study.

A table to allocate the content of systematic review was created where information was placed under the desired heading. The headings created in the tables to sort out the resource materials includes sources of drugs, causes of drug use, effects of drugs and the prevention of illicit drugs all with adolescent in mind. All the resource materials were read and then subsequently the content separated using a tabular tool to organize the data into more meaning information.

The table below depict how the content of the articles was analysed to gather the information they contained.

Table 1 *content analysis of data collected, it shows how the data was organised to retrieve the information in the data being analysed.*

Sources of drugs	Effects of drugs	Causes of drug use	Prevention of drug use
All data from the chosen articles containing information about sources of drugs were place here	All data from the chosen articles containing information about the effects of drugs were place here	All data from the chosen articles containing information about causes of drugs use were place here	All data from the chosen articles containing information about drug prevention were place here

This approach ensured that the data being reviewed was clearly allocated to the part of the project that it belonged to without having to mix up collected information. It also ensured that the data reviewed was of importance to the project being carried out.

Table 2 show analyses of collected data using the setting of the research, the data was classified into three settings: Finnish, European and other settings

Finnish settings	European settings	Other settings
All data from Finnish setting using Finnish population with the target group being Finnish people	All data from European setting, researches conducted using any European country apart from Finland	Other researches that was conducted using other places apart from Europe

This approach ensured that the resource materials being used for the research contained information that relate more to Finland and also had a touch of European and other places to it. However researches with Finnish population were given more priority in the analysis process.

3.4 Reliability and Validity

According to Moule and Goodman (2009.) reliability is the consistency with which an instrument measures what it is intended to and that the idea behind reliability is that results obtained must be more than a one-off finding but repeatable. In addition Cohen L and Manion L (2009) said for reliability to be achieved the research instrument must be able to eliminate bias while ensuring that the three aspects of reliability: stability of a measure, internal consistency and its equivalence are left intact. Validity on the other hand is the degree an instrument measures what it is supposed to measure. The instrument must be able to reduce data distortion to the minimum while guaranteeing that the researcher has conformed to scientifically approved means of data collection. The application of good research or study design also ensures the reliability of the study is achieved. According to Jumisko E. (2010) bias cannot be eliminated completely however a conscious effort to avoid it must be made.

In the process of collecting data and materials for the research lots of materials were gathered and to ensure the reliability and validity of the studies the data collected must be from reliable sources. The study design was literature review which implies the data were collected from secondary sources and hence to bias free, guarantee reliability and validity data used for the research were acquired from reputable institutions with impeccable reputation in research. The inclusion and exclusion criteria this research are describe as follows: Scientific articles as well as Doctor of philosophy (PhD) dissertation, books and researches done by individuals and or groups whose validity and sources could be verified were included as data for the project. The inclusion criteria also included reports and document given by both reputable Finnish institutions such as the Finnish Foundation for Alcohol studies, the British American tobacco Finland Limited and the National Institute for Health and Welfare. The rest are the National Bureau of Investigation (Finland) and Ministry of Social Affairs and Health. As well as reports given by international institutions such as the World health organisation, International Centre for Alcohol Policies, National Institute on Alcohol Abuse and Alcoholism and United Nations Office on Drug and Crime Prevention. On the other hand Data whose sources could not be validated even though they contained useful information was not used for the project; they were excluded on the grounds of unsubstantiated data, their verification could not be confirmed hence those data were eliminated from the project. Data whose authors or editors could not be found were also not used in this project for lack of authentication.

3.5 Research Ethics

Ethics in research refers to conducting a research in a morally acceptable manner and to meet acceptable levels by following all the ethical principles in research such as the declaration of Helsinki, data protection act and freedom of information act (Moule and Goodman 2009, P38-43). In this research all the principles of research ethics was followed in collecting and presenting data. The data collected was presented in such a way as to maintain the original content as presented by the original authors. The authors of the documents used as the primary data were all acknowledged both in the body of the text and in the references. All the data used were public document and their use did not violate and local or international breach of copyright laws. All the information in the thesis are presented with truth and no falsification of data were done. The dignity of people and their anonymity was maintained to protect their confidentiality. No part of this thesis posed as danger to the researcher and to any one for that matter.

3.6 Limitation of the study

Limitations of study are issues and events that arise during a study of which the researcher has no control; however they can affect the study. It is believed that every study irrespective of how well it is conducted has a limitation Wiersma W (2000.) in the course of this study the following limitations were encountered by the researcher in the process of conducting the study and the appropriate measure taken to address it.

Difficulties were encountered in gathering the required data as some of the researches were in-assessable and source of the some of the data could also not verified.

The reliability of the information presented in this research is to the extent of the reliability of the data used for the conduct of this project. The sources were all secondary sources, and as such, nothing new was reported or original experimental work.

There was limited time as the study was couple with other academic and clinical practice activities, therefore certain information were not cross checked; however the appropriate amount of time was devoted to the study for the standard of the research to be of high quality.

4 LITERATURE REVIEW

4.1 Overview of illicit drug abuse among adolescents in Finland

This literature review briefly discusses the core findings, conclusions, and recommendations of the resource materials used as the main data for this research. It holds the advantage of reviewing researches and articles written by different authors and publishers at different times on the topic of illicit drug abuse among adolescents and children. By combining the facts available in different resource materials; this literature review will attempt to answer the research question ‘how do adolescents and children acquire illicit drugs?’ The approach will be summarising and providing the missing links in one research material with one from another in order to direct it towards finding answers to the research questions. This process will ensure that all the facts in the articles under review are coordinated into a single entity directed at answering the research question as well as the fulfilling the objectives of the study.

Research question was generated around the topic, this was to give direction to the inquest and to aid in justifying the data that was included or excluded from the research. The literature review is centred on the following topics:

Overview of illicit drug use in Finland

Sources of illicit drugs among Finnish adolescents

This overview gives a brief and concise description of illicit drug use and acquisition among children in Finland. The overview seeks to recreate the existing drug situation in Finland with respect to drug acquisition among children for a better understanding of the thesis by using available data on Finnish children use of illicit drugs.

Adolescence is the period between childhood and adulthood, it commences from puberty and terminates when the person reaches legal maturity. Adolescence is a period that corresponds to several developmental changes in an individual’s life. In many cultures, according to the United Nations Drug Control Programme (2007, P12) (UNDCP) "adolescence is a time for developing self-identity, which involves establishing new social connections, values and ideals different or similar to that of their parents. In addition adolescence forms other relationships to fill the void created by their need for separation from their parents. The commencement and termination of adolescence varies considerably among different countries according to several criteria

and factors such as somatic, social, cultural or psychological are (Tursz and Cook, (1997). The Child welfare Act defines a child as anyone less than 18 years of age and must at all-time place in the custody of either a parent or a guardian.

In the context of international drug control, the United Nations Office on Drugs and Crime (UNODC, 2012, P15) defines "illicit drug" as:

'Any substances whether natural or synthetic that are produced, trafficked or consumed illicitly and are under international control'

Under the Finnish Narcotics Act (373/2008), the definition of an illicit drug is defined essentially to ratify the international conventions (WHO, UNODC); however the Finnish Government Decree extends their definition of illicit drugs to include all psychoactive substances. The amendment (373/2008) to the Narcotics Act that entered into force in June 2011 dictates that in the future the Finnish government may classify any new intoxicating substances, i.e. new psychoactive substances, as narcotic drugs at its own initiative (Tanhua H, et al 2011, P34). It then follows that underage illicit drug abuse is the use of any substance classified as an illicit drug under both international laws and the Finnish law by persons defined as a child by the Act of parliament (Ministry of Social Affairs and health Finland 2014.) The World Health Organization (WHO1993), following the International Classification of Diseases, defines problem drug use as "harmful drug use and drug dependence". The WHO's defined harmful drug use as substance use responsible for physical (e.g. organ damage) and psychological harm (e.g. drug-induced psychosis). While defining drug dependence based on the presence of three or more criteria: a strong desire to take the substance; impaired control over the use; a withdrawal syndrome on ceasing or reducing use; tolerance to the effects of the drug; requiring larger doses to achieve the desired psychological effect. Drugs are classified into various forms, depending on origin and effects they produce on the human body. Some drugs occur naturally in nature (e.g. cannabis) and some are man-made produced entirely in the laboratory e.g. methamphetamines. The main groups of abused drugs are: Opiates, hallucinogens, cannabis, Central Nervous System Stimulants and depressants. There are some drugs that are however classified as legal drugs, their production and sale is not prohibited by drug laws but is but rather regulated for underage persons. The most normally cited examples are alcohol and tobacco (nicotine). The sale of legal drugs is primarily regulated with age being the most used criteria of determining who can acquire it and who cannot. The age limit is set by law, each and

every member country of the United Nation set their own, the most predominant age limit being 21 and 18 years (UNODC, 2014). In Finland according to the Finnish Foundation for Alcohol Studies (FFAS, 2011 P40) the legal age in Finland for acquiring these legal drugs is 18 years and older; this claim is supported by the Child Welfare Act.

According to the World health Organisation (2013) the experiences of underage illicit drugs use including alcohol and tobacco are common among young people across all cultures. All over the world there is a major concern about illicit substance use among school-aged children. The European School Survey Project on Alcohol and Other Drugs 2012 (ESPAD) estimates that up to 8% of Finnish school pupils aged 15 to 16 had experimented with cannabis at some time in their lives. On the other hand Loupa et al (2010, P52) puts the figures of school-age children that abuse illicit drugs at 11%. Illicit drugs abuse among Finnish children and adolescents is on a considerable increase and many researches on this topic have been conducted. According to Frater J. (2012) the world's top three most predominantly abused illicit drugs are Cannabis, Heroin and Cocaine in ranking order of abuse. However with the insurgence of illicit drugs abuse among Finnish children and adolescents, the most predominantly abuse illicit drugs falls out of the world's top three most abused drugs. Contrary to this trend around the world the most predominantly abuse illicit drugs among adolescents in Finland are those of the legal drugs (tobacco and alcohol). Finnish adolescents and children are vastly into the abuse of alcohol, tobacco and snuff. In general cannabis remains the most abuse illicit drug among Finnish urban adults. The 'Drug Situation 2011' by Tanhua et al (2011, P67) shows less percentage of individuals indulging in illicit drugs. Only 6.4%, 5.9%, 4.3% and 3% of people aged between 25 to 34 years had used amphetamines, ecstasy, cocaine and opiates at one time in their lives. Similarly, figures from European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (2012) also indicated that illegal drug use in Finland is lower than in most European countries. They continued that traditionally the use of alcohol and tobacco related products have posed far greater problems than those of other drugs in Finland.

In a survey conducted by the European School Survey Project on Alcohol and Other Drugs (ESPAD, 2012, P50) 1 in 10 of Finnish youth aged 15 to 16 got drunk on nearly a weekly basis in the year 2012. The study compared alcohol and drug abuse among youngsters in European countries; it revealed that Finnish youngsters consume alcohol with the precise aim of getting drunk. ESPAD, (2012, P50) said:

“Finnish teens drink less often than most of their European age-mates but when young Finns drink, they tend to drink a lot more at a time. What is most worrying is the growing number of young people who drink (mixing alcohol with other drugs) themselves into a near-fatal state,”

From the study, Finnish students appear to use alcohol less often but in larger quantities than the ESPAD average for European countries. This finding is a classic depiction of the Finnish foundation for alcohol study’s definition for binge drinking in which there is the consumption of five or more alcoholic drinks in one sitting. The latest figures indicate that teenage girls in Finland get drunk more often than boys of the same age (National Institute for Health and Welfare 2012). The International Centre for Alcohol Policies (ICAP) (2004) reports similar changing trends of underage drinking patterns among young people around the world in which adolescents are choosing to drink to intoxication. This however has heightened the international attention and interest in preventing underage alcohol-related harm. On the use of cannabis among Finnish students it was found to be much lower (11percent) compared to the European average of 17 percent. Finnish youth were half as likely as Europeans in general to have tried other illicit drugs such as cannabis apart from alcohol and tobacco (National Institute for Health and Welfare 2012, P10)

It has been noted that during summer, the use of illicit drugs and drug related conflicts increase considerably and that sometimes it takes police to separate some brawls. In Helsinki, officials reported of aggravated assaults situations where persons sustained head injuries as a result of drug related conflicts. Twenty-three young people, double the figure of previous years (2012) were brought to sobering-up facilities between just two days. The Helsinki police said they dumped some 700 litres of alcohol confiscated from underage drinkers. *“Parents are the most 'significant role models in children's lives, which is why they have the power to influence their decisions,”* (YLE News 2013).

Hibell et al (2009, P72) noted that smoking cigarettes is common among adolescents, of whom approximately 60% have ever smoked a cigarette. In addition they also stated that although the use of cannabis is less prevalent than smoking tobacco in Finland, early onset of cannabis use has been shown to be a consistent, strong predictor of substance-related problems and may result in adverse psychiatric effects, such as depression and psychotic illness.

Illicit drugs abuse impact gravely on the adolescents'; socially, physiologically, psychologically and physical well-being of the adolescents. Adolescents run a greater risk of harm from illicit drugs due to their under developed bodies. Effects of illicit drugs transcend from the individual to the entire society. Aside the bodily harm, school and career building related problems are encountered by illicit abusing adolescents. Consequently the health related problem will lead to the school related problems which eventually cripples the person giving way to much social problems.

Several prominent institutions and individuals have all released documents proving the gravity adolescents drug use, The British American Tobacco Finland Limited (2014) has stated on their website that *'Smoking is a cause of various serious and fatal diseases, including lung cancer, emphysema, chronic bronchitis and heart diseases.'* The Clinic Foundation (2011, 12-15) stated that the use of illicit drugs is greatly accompanied by the risk of contracting communicable and infectious disease such as HIV, hepatitis, and other diseases. In addition Hakkarainen P, Kainulainen H. and Perälä J (2009) also indicated that other harmful behaviours associated with the use of illicit drugs include delinquency and crime (picking fights with others, stealing and increased risk for being a victim of violence). The United Nation Office on Drug and Crime (2009) the use of illicit drugs provokes violence and crime. Alcohol and other psycho active substances use among adolescents according to Pirkola S. P et al (1999, 320) are often linked with suicidal ideation and suicidal attempts. They added that in Finland per capita alcohol or substance abuse is reportedly associated with suicide, aggressive and impulsive behaviours. The use of alcohol among adolescents is a major component for suicide and self-harm; consistently many studies in Finland have shown that the use of alcohol is associated with suicides. Blum R. et al (2002 P12-14) stated that illicit drug use affect relationships within both the family and friends by causing adolescents to be unreliable, forgetful, dishonest or violent.

According to the National Institute on Alcohol Abuse and Alcoholism NIAAA (1998, P25) nearly 60 percent of 18 to 24 year-old who failed to complete high school had begun to drink before age 16. And that in Finland heavy drinkers who initiated their drinking habits from an early onset are more likely to be less educated. Illicit drugs often results in school related problems, and it is not easy to determine whether the illicit drug use precedes the school problems or vices versa. Sheffield D et al (2005) indicated that school related problems include low school attendance, poor academic performance and a greater tendency of dropping out of school or being expelled. Anglin M. D and Speckard G (2005, P30) stated that illicit drugs impact on society negatively through lost production, expenditure on drug related ill health treatment and prevention of drug related diseases, also expenses incurred through the crime prevention, criminal justice and corrective system. The UNODCP insist that the very reason illicit drug trade must not be tolerated is that aside the harmful effect it brings on individuals, illicit drugs trade also undermines governance, institutions and societal cohesion through corruption of official with illegal money. Drug-related crime deepens a country's vulnerability to instability and poverty.

According to the Ministry of Social Affairs and Health, Finland, (2001) substance abuse strategies and prevention are divided into preventive and corrective substance abuse work to treat all intoxicating substances. Over the past few years; there have been aggressive amendments to Finnish parliamentary acts that regulate illicit drugs. With the sole aim of combating production, sale, possession and abuse of illicit drugs in Finland. Substance abuse prevention and regulation is provided for by laws and forms part of the wider concept of promotion of well-being and health. Substance abuse prevention is regulated through the following legislations: Primary Health Care Act, Temperance Work Act, Child Welfare Act, Youth Act, Narcotics Act and the Health Care Act and also through ongoing policy programmes such as the Health 2015 public health programme) H. Tanhua et al (2011). Prevention is also achieved through conventional methods such as education; both formal and informal. A strong family ties has been identified by Aletha S. (2008, P34) as a source of providing strong emotional and physical support in the prevention of illicit drugs abuse. The family also enables several attributes of society such as socialisation, culture and generational continuity to be achieved. In a properly functioning family the strong members protect the weak or vulnerable members, by providing useful guidance in the areas of drug. However

Coombs R. H (2008, P21-28) said that in a dysfunctional family, the family becomes a source of acquiring deviant behaviours such as alcohol and other drug abuse.

The 'Health 2015 Program' is a public health concept that was conceived in as far back as 2001 to improve the health Finnish people, one of the main aims of the program was *'Smoking by young people to decrease, to less than 15% among those aged 16-18; health problems associated with alcohol and drug use among the young to be dealt with appropriately and will not exceed the level of the early '90s.'*

The implementation of this program is still ongoing and some progress has been made. The available data indicating the target being of is being approached gradually.

4.2 Typical sources of illicit drugs

Almost all of the illicit substances consumed by people in Finland are imported, both the legal and illegal drugs. However the importation of illegal illicit substances is an international crime as such it is also illegal and constitutes a crime in Finland. Drugs are smuggled into Finland concealed in cars, vans and trucks across the borders. Drugs are also smuggled by air, although large quantities of drugs are no longer brought by passengers due to tightened security on both passengers and luggage. Passengers smuggle drugs into Finland concealed in their clothes, luggage and increasingly, within their bodies. Larger quantities are however flown in by air cargo and through courier companies into Finland. Drugs are also smuggled by sea in cargo ships, fast ferries as well as private yachts. The National Bureau of Investigation believes that almost all drugs found in Finland (except the legal drugs) are acquired abroad and subsequently smuggled into Finland by organised criminal groups. Accordingly between 15% and 35% of suspected narcotic offenders in Finland in the year 2010 were actually foreigners and Estonians were in the majority of those offenders. The NBI continued that Finnish criminals are responsible for the distribution and sale of the drugs in Finland (National Bureau of Investigation 2010.)

Local production of alcohol are controlled by the Alcohol Act, there is a State Alcohol Monopoly in Finland this means a limited company (Alko Ltd.) which is wholly owned by the State is to carry out retail trade of alcohol. There are however Finnish companies with huge factories producing beer and other hard liquor. However on the production of tobacco, the British American Tobacco Finland Limited (2014) stated that all their

cigarettes are imported and that they do not have a factory in Finland. Similarly all tobacco including chewable tobacco is all imported. The British American Tobacco Finland Limited is the biggest importer and distributor of tobacco products in Finland.

According to Tanhua H. et al (2011) there is no open drug market exists in Finland, such as those found in some major cities in Europe, the sale of illegal drugs are restricted to private homes. They also stated that most cannabis used in Finland is acquired through home cultivation and subsequently sold to close relations and friends. The arrest of individual in connection with home cultivation of cannabis according to the National Bureau of Investigation has increased considerably since 2007. The Cases of home-grown cannabis is on a rapid rise and according to the Police it is becoming more extensive in Finland. Progressively and increasingly home-grown cannabis plant arrests have been on the rise; since 2012 a record 18,000 cannabis plants were seized and in 2013 the figure climbed to over 23,000. The National Bureau of Investigation They explained that the easy acquisition of cannabis seeds over the internet from locations outside Finland is the main contributing factor for the heightened interest in home cultivation of cannabis. And also detailed growing instructions are found online coupled with grower's manuals and simple equipment necessary for home cultivation found in flower shops. The bulk majority of home cultivation cases occur in major cities, citing Tampere, Helsinki, Turku, and Rovaniemi as examples. Similarly Hakkarainen et al. (2011 42-48) also stated that users of cannabis in Finland more often obtain it from their own cultivation or from another grower known to them, they further indicated that this trend of cannabis acquisition is even more popular these days than obtaining it from the market (a seller unknown to the buyer).

The most profound source of illicit drugs acquisition among children according to Hayes G.D. and Talley M (2011) is from family and friends. They continued that it is close relations and friends that actually lead the way in introducing adolescents and children to illicit drugs. Additionally Coombs R. H (2008) said parents who abuse drugs such as alcohol and tobacco in the house provide easy access for the children in their quest to experiment with illicit drugs. From their parents' stock children pilfer (to steal in small quantities so that it's not noticed) illicit drug. Their own peers also wield lots of undue pressure on them to indulge in illicit drugs for acceptance into groups. Collectively parents, siblings and close relations who use illicit drug have a direct influence on children in the use of illicit drugs. Snuff (snus) is totally banned in Finland however according to Huhtala H. Raino S. and Rimpelä (2006, 10-15) this could not halt the

increment in the use of snuff (snus) among adolescents and adults. They were of the view that friends and family members act as porters when they travel to neighbouring countries and then resell snuff on their return. They continued that snuff is still being used widely by adolescents which contribute enormously to the nicotine dependence process. Huizink A.C, Levalahti E, Korhonen T. (2010) Tobacco, while exploring the use of cannabis and other illicit drugs among Finnish adolescent twins they found out that the influence of shared and environmental factors predominate the use of illicit drugs among adolescents even though there is exist some varying degree of heritability. They concluded that early onset of smoking is a powerful predictor for subsequent use of illicit drugs among Finnish adolescents.

The internet has been identified by the police as a growing source of acquiring illicit drugs among the youth. Internet sourcing for illicit drugs remains an on-going battle and even though according to the National Bureau of Investigation as at 2011 no Finnish websites selling illicit drug-like substances aimed specifically at the Finnish market had been detected. However foreign internet websites selling illicit drugs are still open to people in Finland. People are increasingly ordering cannabis seeds, new psychoactive substances and intoxicating herbal products online from abroad (Netherlands, UK, Poland and Germany via Estonia) mostly for personal use. The websites selling these drugs plainly state them explicitly and the drugs are usually delivered by mail and express cargo.

There are several reasons that will push a child or an adolescent to use illicit drugs this range from peer pressure to environmental factors and even factors and issues yet to be explored. According to Hayes G.D. and Talley M (2011) children from all economic background are vulnerable to illicit drugs abuse; however those from poor or low socioeconomic background appears to be more vulnerable to illicit drug abuse. They continued that many teens also make money selling illicit drugs, thereby benefiting directly from their activities. Parental neglect and abuse also plays a massive role in the life of an adolescent whether they will abuse illicit drugs or not. The home situation also determines how a child will react in the adolescence phase of their life. According to Hayes and Talley teens whose parents talk to them regularly about the dangers of drugs are 42 per cent less likely to use drugs than those whose parents don't. However, only a quarter of teens report having these conversations. Bullying has been noted by Saarnio P, (2011) as a links between adolescents' experimenting with illicit drugs later in life. His study indicated that a child of 8 years who is a bully at school is a fairly reliable

predictor of drug experimentation later in life, at the age of 18. On the other hand a child being bullied seemed to have a decrease tendency of illicit drug use later in life.

4.3 Prevention of illicit drugs

The Finnish society through its government and several programs has been finding solutions to the illicit drug abuse among the youth for a long time. Several legislations have been enacted to help curb the situation. According to Huizink A.C et al (2010) Education is the principal means of preventing underage drug abuse; and this has served as a motivation for the Finnish government to create laws about educational institutions and enacting youth educational and developmental programs to prevent illicit drugs abuse among the youth. Similarly Hibell et al (2009) believes it is in everybody's interest to prevent underage illicit drug abuse and the harm associated with it using parents, the educational setups, government and corporate bodies. They continued that several researches and experiences have shown that there is not a single act that serves as solution to underage drug use but rather a combination of several multiple factors that brings underage drug use under control.

Conventional means of preventing illicit drug abuse such as enacting laws, giving the police the legal authority to search the underage in public; confiscate or destroy any illicit drugs found on them has still not been able to stop illicit drug abuse. As reported by Yle News in 2013 the police in Helsinki dumped some 700 litres of confiscated alcohol from underage drinkers. This all implies these conventional methods of preventing underage drug abuse have not been effective as they thought it would be. Huhtala, Susanna and Rimpelä (2006) stated that the real solution to the drug menace is a total ban on all substances known to be psychoactive substance including alcohol and tobacco. They believe the tolerance of tobacco and alcohol in the society leave a lot of room for abuse. And that the call for a total ban is not baseless but rather one based on the cost associated with the use of illicit drug being pegged or matched boot for boot with that of revenue generated for it. From all indications the cost of illicit drug use to society is far more than the revenue generated from it hence it's in the right direction to place a total ban on it.

Substance abuse prevention and regulation is provided for by laws and forms part of the wider concept of promotion of well-being and health. Substance abuse prevention is regulated through the following legislations: Primary Health Care Act, Temperance Work Act, Child Welfare Act, Youth Act, Narcotics Act and the Health Care Act and also through ongoing policy programmes such as the Health 2015 public health programme) H. Tanhua et al (2011).

Over the last three years laws regulating illicit drugs in Finland have seen aggressive amendments to reflect the changes in the illicit drug situation on the ground. With the sole aim of combating production, sale, possession and abuse of illicit drugs in Finland while conforming to international regulations. The Finnish Government between 2010 and 2011 amended several existing drug legislations which sort to redefine what illicit drugs are, banning existing illicit drugs and also placing a ban on new psychoactive substances that will emergence in the future.

The Acts that saw these amendments were the ‘The Narcotics Act (373/2008)’, amended to Narcotics Act (595/2010, and The Youth Act (72/2006) which was amended to Youth Act (693/2010). Other Acts geared at personal development of persons were also amended, this was to enable individual reach their full potential while avoiding the use of drugs. These Acts came into existence on 1 January 2012 (HE 164/2010) and they were as follows: The Act on Vocational Education (630/1998), Act on Vocational Adult Education (631/1998), The Polytechnics Act (351/2003), The University Act (558/2009) , The Criminal Records Act (770/1993) www.finlex.fi

The Health Care Act (1326/2010) which came into being in 2011 and places much emphasis on mental health care of which illicit drug abuse play a major role.

According to www.finlex.fi ‘The Narcotics Act (373/2008) was amended to Narcotics Act (595/2010) and came into force June 2011. The new Act gives the Finnish Government the right to classify new psychoactive substances found in Finland but not yet known as Narcotics. This new Act enables early classification and early control of new drugs without having to wait for a new law to cover the newly found psychoactive substance so long as the health hazards associated with have been evaluated. This basically means that the manufacture, sale, possession; use and importation of such substances can now be prohibited much more quickly by Government Decree. The new

act is not only limited to new psychoactive substances but also to pharmaceuticals drugs.

The Youth Act (72/2006) was also amended to Youth Act (693/2010) www.finlex.fi and come into being on 1 January 2011; the aim of this amendment is to prevent the drug use of drugs. Provisions of guidance and service networks for adolescents and an outreach youth network to be provided by the local and central government authorities were added to the Act. A youth outreach network was added to contact young people with substance abuse problems and introduce available support and services to them and in addition support to their growth, their access to education and to the labour market.

The principal agencies in the control of illicit drugs in Finland are police service, the Customs service and the National Agency for Medicines. The police focus on two main aspect of drug control; prevent first time offenders from becoming criminals and reducing drug related crimes. The Customs service is however tasked to prevent the illegal importation of illicit drugs and to play an oversight role in importation of legal drugs. The National Agency for Medicines exerts its control by granting license for the manufacture, trade, importation and exportation of drug related substances. It also controls the use of prescription drugs and the use of narcotics in medical practice.

Health 2015 Program is a public health concept that was conceived in as far back as 2001 to improve the health Finnish people, one of the main aims of the program was *'Smoking by young people to decrease, to less than 15% among those aged 16-18; health problems associated with alcohol and drug use among the young to be dealt with appropriately and will not exceed the level of the early '90s.*

The implementation of this program is still ongoing and even though some progress has been made with available data indicating the target being approached gradually.

5 DISCUSSIONS

5.1 Most prevalent drugs to the adolescents

This chapter discusses the findings from the literature; by drawing out the merits and demerits of them. This discussion processes criticises and upholds all the information from the various authors while drawing conclusions and comments on the contents of the various resource materials reviewed. It focuses on the sources and causes of illicit drugs among Finnish adolescents, the effects of illicit drugs on the adolescents and also prevention of illicit drug use among adolescent. It also discusses the cost of illicit drugs to society and the impact it has on adolescents.

The definition of an illicit drug as define by the international treaties and community is ‘any substances whether natural or synthetic that are produced, trafficked or consumed illicitly and are under international control’. Finland is signatory to most of these international treaties and hence ratify the definition of illicit drugs as defined by the international community. This ratification makes the Finnish definition for illicit drugs similar to that of the international community. However the Finnish government extended their definition to include all other psychoactive substances. This implies that there are drugs that are not classified as illicit drug under international laws but remain an illicit drug in Finland.

The world’s top three most abused illicit drugs are heroin, cocaine and cannabis as shown by Frater J. (2012); this position is true irrespective of the population of study world-wide. However underage illicit drug abuse researches in Finland seems to contradict this established trend; adolescents in Finland rather abuse more legal drugs (alcohol, tobacco and snuff) than the worldwide established trend of heroine cocaine and cannabis. The ‘Drug Situation in Finland 2011’ and EMCDDA (2012) all confirms less percentage of underage illicit drugs in Finland as compared to other European countries. The remote location of Finland, its small population and probably its strict application of laws shield it from most of the active illicit drug trade. Hence the quantity of the world top three most abuse illicit drugs that get into the Finland is not much as confirmed by Perälä 2011. There is restricted access to the few illegal illicit drugs that get into the country and hence children and adolescents don’t get much of these substances. On the other hand there are vast quantities of alcohol and tobacco in Finland because they are sold legally to the people over 18 years and this makes access to them within their reach. Acquisition to these drugs (tobacco, alcohol and snuff) becomes only a matter of strategy to the adolescents. Tanhua H. et al (2011) in the ‘Finnish drug

situation' however acknowledged cannabis remains the most abuse illicit drug among Finnish urban adults.

5.2 Sources of drug abuse

Most of the illegal drugs circulating in Finland were actually imported; the very reason the Narcotic Act seeks to prevent. The Narcotic Act (595/2010) makes illicit drug importation and exportation a crime; the objectives of the Act are to prevent importation, exportation, manufacture, distribution and the use of narcotic drugs in Finland. However drugs are still being imported into Finland regardless of the laws as indicated by Perälä (2011, P23) that illicit drugs get into Finland through importation concealed in cars, vans and trucks, others get in concealed in people's bodies, clothes and their luggage. Good quantities of these drugs are imported by foreigners and the National Bureau of Investigation reports a figure close to 35% of all importation are done by Estonian drug barons. After these illicit drugs get into the country it finds its way to the adolescents through Finnish criminals who are responsible for the distribution and sale of the drugs (National Bureau of Investigation). It is therefore very important that illicit drug abuse prevention starts from fortifying the country against importation that is preventing their entry will prevent them from getting into the hands of the adolescents.

Getting access to cannabis on the Finnish market is shrinking and there is no real source of procuring cannabis directly from an unknown seller in Finland as stated by Tanhua et al 2011. There is no open illicit drug market trade in Finland; as such home-cultivation of cannabis is the primary source of acquiring cannabis in Finland. Those who cultivate eventually sell their surplus to friends and family as demonstrated the NBI (2011) in their report on the drug situation in Finland. This implies that even if the adolescents do not cultivate the cannabis themselves they eventually acquire it through friends and family who does. The added dimension of generating money from the sale of the surplus cannabis has given the adolescents a stronger will and motivation to indulge in illicit drugs and it accounts for the increase in cannabis use among adolescents. Hayes and Talley (2011) agrees to this phenomenon; by selling illicit drugs adolescent achieve a primary benefit which serves as a motivation to convince their peers, family relations and friends to indulge in the use of illicit drugs. Peers, friends and family become their primary customers for their drug trade and hence they lured them (making drugs look so cool to use, and how it makes you a boss player) into the use of drugs even if they had originally said no to outsiders.

In Finland it's considered a criminal offense to aid a minor in purchasing alcohol or tobacco. Even though no literature was found supporting the activities of adult purchasing legal drugs on behalf of minors it a known fact that older peers of adolescents also buy tobacco and alcohol on their behalf for certain favours. At times minors acquire some of the illicit drugs from adults around them and sometimes from strangers by boldly asking them for cigarettes. Coombs R. H (2008) demonstrated how parents provide easy access for adolescents to pilfer by keeping tobacco and alcohol in the house. Other sources of illicit drugs acquisition is on the internet from foreign website, this trend is even more worrying because contact between the buyer and the seller is eliminated. Internet drug acquisition removes natural barriers such as age limit; making it possible for minors to order illicit drugs from other countries such as Netherlands and Germany as shown by National Bureau of Investigation in 2011. Even though NBI could not find any Finnish websites explicitly dealing in drug-like substances aimed specifically at the Finnish market they were of the view that the increasingly popularity of home growing cannabis was as a result of easy acquisition of cannabis seeds over the internet.

5.3 Prevention of illicit drugs among children

Several researches over the years have shown that there is no single act that serves as solution to underage drug use but rather a combination of several multiple factors can bring the menace under control. Finnish society has been implementing several measures as solutions to the illicit drug abuse problem among the youth for a long time. Several legislations have been enacted to help curb the situation as demonstrated by the publications by the Ministry of Social Affairs and Health. The laws provide the framework for institutions mandated to curb the vice of illicit drugs among children. The police, social, health and educational institutions are mandated to find solutions as well as prevention measures to the problem of illicit drug abuse among children. This was clearly demonstrated by Hibell et al (2009) when they stated that the prevention of underage illicit drug abuse is in the interest of parents, the educational setups, government and corporate bodies. However if these institutions are to achieve the desired objectives they must be met half way by parents and guardians of the underage. This was demonstrated Hayes and Talley in their research. They stated that "Parents are the most 'significant role models in children's lives and they must talk to them regularly about the dangers of drugs.

Other sources of illicit drugs acquisition is on the internet from foreign website, this trend is even more worrying because contact between the buyer and the seller is eliminated. This simply means even if the seller is not willing to sell to minors because the natural barriers such as seeing and being able to determine the age limit of the person is removed. The National Bureau of Investigation in 2011 must liaise with the police and courier organisation stop the internet trade of drugs.

Education is the principal means of preventing underage drug abuse; this served as motivation for the Finnish government to create laws about educational institutions and enacting youth educational and developmental programs to prevent illicit drugs abuse. It is in everybody's interest to prevent underage illicit drug abuse and the harm associated with it; from parents, the educational setups, government to the corporate bodies. The educational institutions must control bullying in the school as it has been identified by Saarnio P, (2011) as having a negative impact on the adolescents

Researches and experiences have shown that there is not a single act that serves as solution to underage drug use but rather a combination of several multiple factors that brings underage drug use under control. However a total ban on all substances known to be psychoactive substance including alcohol and tobacco can. The tolerance of tobacco and alcohol in the society leave a lot of room for abuse. The call for a total ban is not baseless but rather a one that is based on the cost associated with the use of illicit drug being pegged or matched boot for boot with that of revenue generated for it. From all indications the cost of illicit drug use to society is far more than the revenue generated from it hence it's in the right direction to place a total ban on it. One school of thought believes that the tolerance of tobacco and alcohol in the society leave lots of room for abuse even by children. Other school of thought believes that these illicit drugs generate revenue for the state hence it will not be prudent to place a total ban on it. However from all indications the cost of illicit drug use to society is far more than the revenue generated from it. And that the call for a total ban is not baseless but rather one that is based on the cost analysis between the revenue generated from it and the harm that society suffer from.

6 CONCLUSION AND RECOMMENDATIONS

6.1 Finding and conclusions of the study

This is the last chapter of the study; it contains the findings, conclusions and recommendations of thesis project. They are all based on the literature that was reviewed and inferences made from analysing the data collected.

Illicit drugs are defined to include all psycho-active substance; it also includes tobacco and alcohol even though it is being sold legally (legal drugs).

Drug dependence (addiction) was defined using of three or more criteria: 1. a strong desire to take the substance; 2. impaired control over the use and 3. a withdrawal syndrome on cessation or reduction of drug dosage usually requires larger doses to achieve the desired psychological effect.

Cannabis, Heroin and Cocaine are the most predominantly abused drug among all age group around the world. However the most abused illicit drugs among Finnish children and adolescents are alcohol and tobacco including oral tobacco (snuff).

No 'true market' of illicit drugs exists in Finland such as those that fit an open market definition for illicit drugs trade. Concerning internet trade of illicit drugs no website was found in Finland offering illicit drugs for sale even though Finnish youth procure drugs via internet from foreign countries. Access to cannabis is mostly through home cultivation or by acquiring it from a close relation or friend. Parents stock remains a huge source for the adolescents acquiring illicit drugs such as tobacco and adolescents.

Peer pressure, environmental factors, socio-economic background of adolescents and dysfunctional families were the reasons identified for illicit drugs among adolescents. Bullying and being bullied in school was a key factor identified as an indicator as whether an adolescent will commence drugs or is not likely to use drugs in the future.

Illicit drugs abuse impact negatively on the adolescents; retarding growth and affecting their mental development as well as having physical health consequence. It also has a social effect of having a negative toll on their education producing a rippling effect of non-employability and their ability to be productive in later years. Illicit drugs use among adolescents produces a great cost to the nation; either financially or terms of direct healthcare cost in treatment, or indirectly through cost of programs initiated to prevent drug abuse.

The Finnish government and society has shown considerable effort in preventing illicit drugs in Finland both through legislation and implementation of strategic programs. The education sector remains the primary tool being used to make adolescents more productive and less illicit drug abusers. Several researches and experiences have shown that there is not a single act that serves as a single solution to underage drug use. However combination of several multiple factors proven to be effect can bring underage drug use under control.

6.2 Recommendations

Based on the findings of the study the following are recommended to help prevent the use of illicit drugs among adolescents and children:

- Parents must store their legal drugs (alcohol and tobacco) under double locks to prevent their children from having access to it.
- It has been shown that parents who regularly talk to the children succeed in curbing underage use of illicit drugs hence I recommend that parents set rules with their teens and also set consequences for breaking the rules. Parents must get involved directly in health educating their children on the dangers of illicit drugs. They must complement the health education adolescents and children receive from the formal education system.
- Since adolescents and children spend half of their time in school; the formal education sector should inculcate illicit drug health education into the curriculum to provide teachers the opportunity to educate on illicit drugs. In addition bullying in school must be checked by teachers since it has been determine to be one factor that can lead to underage drug use.
- I recommend that a web based program, on the site of the Arctic Children InNet program be created to help education participating children and adolescents on the use of illicit drugs. This program will aim at creating awareness among the youngsters concerning their influence on other in the use of illicit drugs. This program will be in the form of a game, where questions and possible answers will be the main characters. Through this program the adolescents will evaluate their influence on others (friends and family) and determine whether it is a good or a bad they influence they have on their peers on the use of illicit drugs.

- I recommend further studies to establish the true cost (health, loss of production hours and social cost) of illicit drug use among adolescent to the society as held against the revenue generated from the sale of legal drugs (alcohol and tobacco) by the state. There has not been such a research for a long time in Finland, public document on such a research dates back to the early nineties. This research will give merit or otherwise to the call for a total ban on all substances known to be psychoactive substance including alcohol and tobacco.

APPENDIX A.

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APPENDIX B.

Table 3 An archetype of the proposed web based game

Have you ever tried to convince or encourage someone to drink alcohol		Have you lend money to a friend who was short of money to buy alcohol or cigarette or anything considered an illicit drug.	
0. Never	Click to choose	0. never	
1. Once or less in a year	Click to choose	1. once or less in a year	
2. Once in six months	Click to choose	2. once in six months	
3. Once a month	Click to choose	3. once a month	
4. Once a week	Click to choose	4. once in a week	
Have you given drinks or illicit drugs to a friend at a party before			Have you pressed a friend who doesn't do illicit drugs into telling you their reason?
0. Never	Click to choose	0. never	
1. Once or less in a year	Click to choose	1. once or less in a year	
2. Once in six months	Click to choose	2. once in six months	
3. Once a month	Click to choose	3. once a month	
4. Once a week	Click to choose	4. once in a week	
Have you given drinks or illicit drugs to a friend at a party before			Have you pressed a friend who doesn't do illicit drugs into telling you their reason?
0. Never		0. never	
1. Once or less in a year		1. once or less in a year	
2. Once in six months		2. once in six months	
3. Once a month		3. once a month	
4. Once a week		4. once in a week	
	=Total =		

Table 3 on page 46 shows a prototype of a social interactive media program. In this program adolescents get to answers to questions on their interaction with their peers by choosing how they affect them. The total tally of their answers is then interpreted to them at end of the program. Depending on your score your actions are deemed to be good, fair or bad, a score between 0-5 will be good, 5-10 fair and 10-24 will be deemed as bad influence

Each answer provided corresponds to a numerical figure, the higher the score the worse your actions are on your friends. The intention is to create self-awareness among adolescents that knowingly or unknowingly their actions influence their peers and family. This will also provide an opportunity for them to reflect on their action and perhaps prompt them to stop putting undue pressure on their peers.