

**The State of
Health Behaviour and Lifestyle
of Pacific Youth**

**Pohnpei State
Federated States of Micronesia**

Report

November 2001



The State of Health Behaviour and Lifestyle of Pacific Youth. FSM Report

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UNICEF Pacific (Regional Co-ordinator)

Dr. Ayoade Olatunbosun-Alakija, Youth Officer (HBPY Project Co-ordinator)

Dr. Philayrath Phongsavan, Nutrition Officer

WHO/WPRO

Dr. Gauden Galea

Regional Advisor in Health Promotion

WHO Western Pacific Regional Office (WPRO)

Australian Centre for Health Promotion (Regional Health Management Centre)

Professor Adrian Bauman, Director of Research

Dr. Jack Chen, Statistician

Mr. Ben Smith, Health Promotion Researcher

Mr. Roberto Forero, Research and Evaluation

Dr. Chris Rissel, Epidemiologist

Draft

For more information or additional copies of the report:

Write to us:

UNICEF Pacific

Private Mail Bag

Suva, Fiji

Telephone: (679) 300 439

Facsimile: (679) 301 667

Email: suva@unicef.org

Visit us:

3rd Floor

Fiji Development Bank Building

360 Victoria Parade

Suva, Fiji

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Agencies/Authorship - to be confirmed. *The State of Health Behaviour and Lifestyle of Pacific Youth. FSM Report*. UNICEF Pacific. Suva, Fiji, 2001.

Executive Summary

This survey of health and lifestyle behaviours of young people in the State of Pohnpei in the Federated States of Micronesia (FSM) is the third in a series of surveys which examine needs issues among young people in the Pacific Island nations. It is part of an initiative by UNICEF Pacific and its government and non-government partners in Pacific nations to develop programs for young people in this region. Previous reports document the health and lifestyles of young people in Vanuatu (2000) and Tonga (2001).

The planning and implementation of the Health Behaviour and Lifestyle of Pacific Youth (HBLPY) survey was a collaborative initiative between UNICEF Pacific, the Ministry of Health, Education, and Social Affairs in FSM, the Pohnpei Youth Council, Peace Corps FSM, the Australian Centre for Health Promotion at the University of Sydney (a WHO collaborating centre in Health Promotion) and other agencies.

A sample of 1516 in-school students from Pohnpei and 108 out-of-school youth from this State were surveyed. The survey instrument consisted of core questions from the WHO European Health Behaviour in School Children (HBSC) surveys, adapted to FSM and other Pacific Nations. The instrument covered health and lifestyle issues that included: substance use; dietary habits; physical activity; mental well-being and social support; trust in adults and social institutions; injury and bullying; personal hygiene habits, and; sexual health. School students self-completed the survey under the supervision of members of the survey team, while the out-of-school youth completed questionnaire in a group-interview format.

The results in this summary below relate to in-school youth, as the out-of school sample was too small to produce reliable estimates.

General characteristics

The sample of 1516 youth had equal representation of boys and girls, and were mostly aged between 14 and 17 years. There was a high degree of religious affiliation, mostly Catholic or Protestant.

Substance use

The data about substance use by young people in Pohnpei identified several areas for concern. The prevalence of chewing betel nut was high, with about two-thirds of students reporting that they did this at least weekly, which is a concern given the association between long term use of this substance and oral cancer. One third of students reported chewing tobacco and one in five reported consuming kava at least weekly. Just under one in five students reported smoking at least weekly and one in eight said that they smoked marijuana this often. The experience of drunkenness was also quite common, with almost half of students reporting that they had been drunk at least twice in the past, and one in five reporting that they had been drunk more than 10 times. There were more boys than girls who reported ever consuming each of the substances, and the gender differences were most marked for alcohol, chewing tobacco and kava. The use of most substances increased with age.

Nutrition

The most common drink consumed by students was water, but the next most popular drink was soft drink, with over one-third of students reporting the consumption of this more than once per day. Fruit was the type of fibre most regularly consumed, with about one third of students stating that they ate fruit more than once per day. The next most commonly consumed type of fibre was white bread, followed by fresh vegetables. However, it was concern that one third to two fifths of students reported seldom or never eating fresh fruit

and vegetables or white bread. Data about the consumption of white and red meats showed that chicken was consumed by more than 70% of students at least weekly, and was followed by turkey. Almost two-thirds of students reported eating tinned mutton/corned beef at least weekly. Just under one quarter of students reported that they ate sweets more than once per day.

The most striking gender difference in dietary habits were the higher proportions of girls than boys who reported regularly consuming sweets or soft drinks.

Physical activity

Physical inactivity is at high levels among young people in Pohnpei. There was a relatively small proportion of students, about one in five, who reported four or more sessions of physical activity per week or a total of two or more hours of activity per week. Girls were less likely to be active than boys. About one quarter of students spent considerable time, four or more hours, watching television or videos. This was more common among boys than girls.

Personal well-being and development

The finding that almost two in five students reported not feeling happy indicated that there were a substantial proportion dealing with at least some level of mental stress. In addition, about one in six reported rarely or never feeling confident or often feeling lonely. The vast majority of students (four in five) stated that they had experienced sadness or depression in the last six months, while just under one quarter reported that they had experienced this at a level of severity that they would describe as almost more than they could take. There was a higher proportion of girls than boys at each age who reported feeling unhappy. From age 15 years onwards there were also higher proportions of girls who reported that they had experienced severe sadness or depression in the past six months.

Just under one-third of students who had experienced severe sadness or depression said that they had no one to turn to for support at the time, and this was a more common situation among boys than girls. Following this the most common sources of possible support identified were friends, mothers and boyfriends/girlfriends.

Generally students felt positive about their prospects for getting a job after school

Friends were most frequently identified by students as people that they could turn to in times of difficulty. Apart from friends, female relatives like mothers and sisters were major sources of social support. Those in formal positions, like youth workers and clergy, did not feature prominently among the people identified by students as easy to approach when they were in need of support.

School environment

Generally students were positive about their teachers and peers at school, but had more divided views about their school environment overall. Although just over two in five students did not think that the rules were too strict at school the proportion who held the opposite view was only slightly smaller. About three in five considered the rules at school were fair. Over 70% of students considered their school to be a nice place to be, while a similar proportion had a sense of belonging at school. However, a substantial proportion of students, about two in five, did not consider their school to be clean or safe. Boys viewed the environment at their school more positively than girls, but girls tended to report a more favorable peer environment than boys.

Community participation and community involvement

Students were most likely to feel comfortable to express their views among their parents and their friends. Over three quarters of students felt encouraged to express their views in these social contexts. Following these, the church was the next context where students were most likely to feel encouraged to express their views. Just under half of students felt encouraged to express their views in the community. Girls were more likely than boys to feel comfortable to express their views in the private sphere, that is, among family and friends, while boys were more comfortable in public contexts like church and the community.

While the vast majority of students (over 90%) considered their local community to be important to them only about one in five felt strongly involved in their community, while over two in five felt little or not at all involved. Boys were more likely than girls to consider the community to be important and to feel strongly involved in the community.

Credibility and trust in adults and social institutions

The results concerning the perceptions of students about their social environment revealed marked differences in the level of credibility that they ascribed to figures in the private and public spheres. Over 80% of students identified members of their immediate family as credible figures in their social environment. These were followed in ratings of credibility by church leaders and teachers. Traditional leaders and government leaders were least often considered to be credible.

Physical injury, violence and bullying

The findings indicated that injuries were a major problem confronting young people in Pohnpei. A substantial proportion of students, over two in five, reported suffering an injury that required treatment in the past 12 months, and a similar portion said that they suffered an injury deliberately inflicted by another person in this period. Mothers, unidentified "other people", boyfriends/girlfriends and fathers were the most commonly identified sources of these deliberate injuries. Boys aged 14 years were most at risk of an injury or an injury deliberately inflicted by another person, while boys were more likely than girls to report any form of injury.

While there were substantial proportions of students who had been bullied or bullied others at least once in the past school term there was little evidence of regular bullying. About 4% of students had been bullied one or more times per week in the past school term, while a slightly higher proportion (8%) admitted that they bullied others once per week or more.

Personal hygiene

Most students, and particularly girls, reported good levels of personal care and hygiene, such as regular tooth brushing and hand washing. However, there was still almost one quarter of students who reported not brushing their teeth two or more times per day, one in five who did not always wash their hands after using the toilet and over one third who did not always wash their hands before eating. Girls showed slightly higher rates of these personal hygiene habits than boys.

Sexual behavior

There is a strong indication that sexual health issues are of importance to young people in FSM. The majority of students reported having sex in the past. However, there were substantially higher proportions of boys

(over 80%) than girls (around 40%) who reported this. It was notable that the proportions of boys who reported having sex at age 14 and 15 years were similar to those at older ages, while for girls the experience of sex was more likely to be reported at older ages. In addition more than half of boys said that they had had sex with four or more people in the past while the majority of girls (just under 60%) reported having sex with only one person. A substantial proportion of the sexually active young people reported having unwanted sex when drunk or high on drugs, but this was much more common among boys (61%) than girls (32%).

There were only small proportions of sexually active boys and girls, about one in eight, who reported that they always used condoms. Furthermore, about three in five girls and just over two in five boys reported never using condoms. Public health clinics were the most commonly identified venue in Pohnpei for obtaining condoms. Pharmacies were the next most commonly identified source of condoms, followed by dispensaries and grocery stores, although each of these was identified far less often than public health clinics.

About 45% of students stated that they had been pressured to have sex in the past, with girls slightly more likely to report this than boys. It was not clear whether this pressure was in the form of force, coercion or peer pressure. Boyfriends or girlfriends were identified as the source of this pressure by about one third of students, and these were followed in frequency by “other people” known to the students and unknown people.

This survey of health and lifestyle behaviours of young people in Pohnpei a major step forward in efforts to address the needs of youth in this State in FSM, and is especially important given the limited information available to guide policy and program development in this country. These data have an immediate application in identifying priorities to be addressed in the life skills program for young people in FSM that are being funded and facilitated by UNICEF Pacific. They may also be of benefit to the work the other agencies in identifying needs, providing a baseline from which programs can be evaluated and, more broadly, in fostering an understanding of the life context of young people in FSM.

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Section 1

Youth health and development in the Pacific

1.1. Definition of youth

The Pacific region includes geographically and culturally diverse island nations with demographically young populations. The definition of “youth”, varies in its socio-cultural definition across the Pacific and for the purposes of this report it is important to clarify the definition of youth.

The UN/WHO definitions are as follows:

Young person between 10 –24 years of age

Adolescence between 10 – 19 years of age

Youth as being between 15 – 24 years of age

The Health Behaviour and Lifestyle of Pacific Youth (HBLPY) survey has focused primarily on those between the ages of 11 and 19 years of age and thus is in keeping with the age focus of the UNICEF Youth Health and Development project, which are 12–18 year old, Pacific Islanders. The Convention on the Rights of the Child, however, defines all those under the age of 18 as children. For practical reasons, the term “young people” or “youth” will be used interchangeably to refer to all the HBLPY survey participants between the ages of 11 and 19 years; these terms will be inclusive of the other general words “children” or “adolescents”. Where applicable, the terms “school students” or “students” will refer to the in-school survey sample.

1.2. Major youth issues in the Pacific

Youth issues in the Pacific can be classified into three broad areas: Health and development, education, and employment. These issues and concerns of youth are often linked, and influence each other.

In recent years, there has been an improvement in the health status of Pacific Islanders in general with an increasing life expectancy and reduction in infectious disease prevalence with the exception of Sexually Transmitted Infections (STIs) and HIV/AIDs; nonetheless, lifestyle-related diseases are on the increase.

The pattern of health and disease among young people is different to the leading causes of mortality and morbidity for adults in the general population. The principal sources of morbidity and premature mortality among young people include unwanted pregnancy, STIs, mental illnesses, injury due to motor vehicle accidents, excessive drinking or drug use, and dietary-related illnesses or eating disorders. Young people in the Pacific are increasingly being exposed to the risk factors associated with the rapidly changing social, physical and cultural environments, such as increasing urbanization, decreasing consumption of local foods, shrinking job opportunities, and the availability and accessibility of cheap cigarettes and alcohol.

Educational opportunities are limited for disadvantaged youth in many Pacific Island countries. While the concept of education for all has been embraced throughout the Pacific, the reality for many young people is that the available resources are not sufficient for them to take advantage of whatever educational facilities might be present. Secondary schools are limited in number in many countries and only the most talented of students are able to make the progression from primary to secondary school. A direct consequence of this is high rates of youth unemployment as the non-formal education sector is yet to be developed to a level to which these young people can be accommodated (UNICEF Pacific, *State of Pacific Youth 1998*)¹.

1.3. Life skills for youth development

UNICEF Pacific recently initiated a youth life skills project in the Pacific, a move that signified the need for targeted programming in this category and the subsequent emergence of youth as a priority age group for UNICEF worldwide. The objective of the life skills project is to involve 20% of Pacific Island youth in selected countries in gaining the life skills to build self-esteem and enable them to lead healthier and productive lives. This is to be achieved through the design and implementation of a country specific life skills curriculum that will be disseminated through already existing youth structures outside the school environment. This is not to say, however, that the curriculum will serve out of school youth exclusively, school students are part of this target group and will be reached through their extra curricular activities.

The strategy is to involve youth in assessing their situation and participating in the design and implementation of a program that develops positive self-esteem and skills to prevent risk behaviours. The Health Behaviour and Lifestyle of Pacific Youth (HBLPY) survey has involved youth in the needs assessment phase of this life skills project, from the qualitative phases and translation of questionnaires through to the data interpretation phase, a process to be described in detail later.

1.4. Need for local data in the Pacific

Generally, there is a dearth of quality and up-to-date information available about the health status of adolescents or young people at national or regional levels in the Pacific. While Pacific island governments recognize the importance of addressing the health and developmental needs of young people, health services and campaigns to encourage young people to engage in positive health and lifestyle practices have often been based on anecdotal information. Obtaining quality information about the health and lifestyle characteristics of Pacific youth is one step forward to ensuring that every youth has the right to the highest standard of health and supportive care attainable.

To develop effective youth programs and appropriate policy for the promotion of positive youth development, it is important to identify the existing patterns and prevalence of key youth health and lifestyle characteristics, and the factors that associate with substance use, nutrition, physical activities, mental health and social support. This report presents findings from the HBLPY survey conducted in Pohnpei State FSM, which has its origins in the UNICEF Pacific life skills project. This is the third HBPLY survey that has been conducted in the Pacific region, with the first two being carried out in Vanuatu and Tonga. The project is linked to the WPRO regional office of WHO, and has links to similar surveys in European countries and in Australia in recent decades. The HBLPY survey incorporates an element of a situation analysis whereby the principal risk

¹ UNICEF Pacific. *State of Pacific Youth Report 1998*.

behaviours of youth are assessed. The intention is that the findings from the series of surveys will form an evidence base for planned interventions.

Many of the behaviours investigated have direct relevance to core UNICEF concerns, that is the essential needs of every child and youth should be given high priority at national and international as well as at community and family levels. Governments, non-government organizations, international agencies and individuals all have a duty to ensure that every child and young person are protected from harm and have the opportunity to grow and development to their full potential; these rights are clearly set out in the Convention on the Rights of the Child (CRC). Many of the behaviours and lifestyle issues investigated in the HBLPY survey specifically addressed selected Articles of the CRC. The data gathered and presented here represents a major step forward in galvanizing evidence to support youth rights and development in the Pacific.

Selected CRC Articles

“All children have the right to their protection and care to be ensured by states as a matter of high priority.” (Article 3)

“Every child has the right to freely express their opinion taking account of their age and maturity.” (Article 12)

“Both parents have common responsibilities for the upbringing and development of every child.” (Article 18)

“Every child or adolescent has the right to maintain personal relations and direct contact with both parents on a regular basis, even if separated from one of them.” (Articles 9, 10, 21)

“Every young boy, girl and adolescent has the right to be protected against all forms of violence.” (Articles 19, 34, 37)

“Every young boy, girl or adolescent has the right to freedom of association and to participate freely in cultural, artistic, recreational and leisure activities.” (Articles 15 and 31)

“Every young boy, young girl and adolescent has the right to a quality education, in varied forms and structures for different levels, available under conditions of equal opportunity for all, and designed to promote the development of the individual’s personality and potential.” (Articles 28 and 29)

“Every child has a right to the highest standard of health and medical care attainable.” (Article 24)

“Children have the right to protection from the use of narcotics and psychotropic drugs, and from being involved in their production or distribution.” (Article 33)

Relevant HBLPY Survey Items

- Levels of trust and credibility in adults and social institutions
- Freedom to express opinion in schools
- Freedom to express opinion in community and family contexts
- Ease of communication with parents and others
- Mental health and coping techniques
- Location of parental residence
- Living with parents
- Occurrence of physical abuse, intentional violence and injury
- Rates of bullying and physical abuse
- Preferred lines of communication
- Community involvement and community participation
- Comparison of out-of-school and in-school youth.
- Overview of health behaviour among youth; equity and socio-economic status dimension of youth health explored
- Self-reported levels of mental health, happiness, well-being.
- Frequency of use of major drugs in each country, core questions on smoking, alcohol, marijuana, and kava

1.5. Organisation of this report

This first section defines the terminology used in the report and provides a brief overview of the Youth health development activities auspiced by UNICEF Pacific, and highlights major issues affecting youth and the need for regional data on youth for programming purposes. Section 2 looks at the origins and development of the HBLPY survey within the Pacific context. This section also describes in detail the planning for the implementation of the HBLPY surveys. The

demographics profile and school data and system in FSM are summarized in Section 3. Section 4 outlines the conduct of needs assessment and in-country training of the youth survey teams. The survey instruments and methodological issues relating to the HBLPY survey are provided in Section 5.

Sections 6 and 7 present findings from the HBLPY survey, for the student and out-of-school youth respectively. Section 8 reviews and discusses the key findings of the survey, as well as discusses the public health implications of the results for young people in the Pacific.

Section 2

The development of the HBLPY survey

2.1. Origins of the HBLPY survey

This section describes the origins, development and planning process of the Health Behaviour and Lifestyle of Pacific Youth (HBLPY) survey. This survey had diverse origins, which came together during 2000, and led to the planning for, and implementation of the survey.

The HBLPY is a survey to assess and monitor the health and lifestyles of national samples of young people in the Pacific region. No previous attempts have systematically measured the behaviours, lifestyles, physical and social environments of youth in this region.

The survey has a historical link to the Health Behaviour in School Children (HBSC) set of surveys conducted by WHO Europe since 1982. This was a collaborative endeavor to measure and monitor the physical, social and psychological health of young people in European countries, commencing with a collaboration between three countries in 1982. Since then, there have been several rounds of the HBSC surveys being conducted every four years, involving young people aged 11-15 years. The most recent surveys were in 1997/1998; 28 countries participated in this survey².

The European HBSC group has an overall coordinating centre. Over nearly 2 decades this group has developed methods for collecting and tracking information at a representative population level about youth health. The HBSC results have been used for research purposes to better understand youth health and development, and in national policies and programs, and more widely, as part of the WHO Europe monitoring strategy for youth health.

The HBSC surveys are random samples of national populations, or at least of a large region within a nation³. The target population is school-aged students who are 11, 13 and 15 years old. It is expected in HBSC surveys that 90% of the sampled students from the classes chosen to be in the survey will be aged between 11 and 12 years, 13 and 14 years, and 15 and 16 years of age at the time of the survey. The samples are chosen with the school as the sampling unit, which is a form of cluster sampling. The actual sampling frame is to use classes as the primary sampling unit. As this may increase the variance around prevalence estimates, the sample size is inflated to adjust for this. The HBSC survey group recommends 1,536 students in each of these 3 age bands for sufficient precision for national estimates (HBSC protocol 1997/8). The data are collected for each survey within the same defined period of time in most countries. The objectives of the HBSC analysis are to report the prevalence rates of youth health phenomena, to make cross national comparisons among countries, to explore the determinants or factors associated with

² Health behaviour among young people. Eds. Currie C, et al. HBSC, WHO Europe 2000. Policy series for children and adolescents #1.

³ There is a standardized approach to population sampling, a standardized questionnaire, an established protocol for survey implementation and data management, and consistent approaches to analysis and interpretation. The surveys usually have a core component, which is a set of questions consistently asked among countries, and then specific focus, or supplementary areas, which are optional modules.

positive and negative health behaviors and states amongst young people, and to observe changes and trends over time within and between countries.

The HBSC survey has been an excellent example of international collaboration, which has obtained quality data over many years about youth in Europe. Few examples have succeeded in this kind of survey in other parts of the world, with the exception of the United States, who use the Youth Risk Behaviour Survey (YRBS), which monitors similar phenomena in the United States, and is organised through the Centers for Disease Control. Other examples or development of HBSC-type surveys have been tried in Africa, and in Indonesia and in Malaysia, but have not developed into regional wide initiatives.

The present HBLPY initiative is based on good links and a good understanding of the HBSC survey, and the support and recognition of the WHO Europe group in sharing resources and expertise. Communication between the Pacific region and the European group has occurred for many years, and this has facilitated some of the developments of the HBLPY initiative. Some attempt has also been made in the HBLPY initiative to develop some questions in common with the HBSC group, with a view to comparing developing countries in the Pacific region with mostly developed countries in the European region.

2.2. The confluence of interests and needs that led to HBLPY

In 2000, UNICEF Pacific initiated life skills curriculum programme among Pacific out-of-school youth (see Section 1 for detailed discussion). This programme incorporates an element of a situation analysis whereby the principal risk behaviours of the relevant population are assessed. Youth agencies and government ministries in Vanuatu, Tonga and the Federated States of Micronesia also expressed growing interests in obtaining population-based and up to date information on the health and lifestyle status of youth for programme planning and policy development.

The World Health Organisation (WHO/WPRO) is also developing an adolescent health strategy that encapsulates the northern countries of the Pacific and includes a life skills component. This interest is also related to strategic developments in Health Promoting Schools in the region.

In 1999, UNICEF and WHO collaborated on the conduct of the Fiji segment of the Global Youth Tobacco Survey (GYTS)⁴. Important lessons have been learned about the establishment of systems for tracking health behaviours, the desirability of such a system, its potential impact on public health, the utility of local capacity and regional data management and analysis, and the scope for developing local capacity for the conduct, analysis, and application of such surveys. The primary focus of GYTS, however, was on tobacco use and it was felt that a broader assessment of youth health needs to be taken.

The Australian Centre for Health Promotion (ACHP), based in Sydney, had developed expertise in the conduct of surveys on the health behaviour of schoolchildren in the state of New South

⁴ Meo, L and Movono I. *Global Youth Tobacco Survey. Fiji Field Survey Report*. July 2000. UNICEF Pacific. Suva, Fiji. July 2000

Warren LW, Riley L, Asma S, Eriksen MP, Green L, Blanton C, Loo C, Batchelor S, Yach D. Tobacco use by youth: A surveillance report from the Global Youth Tobacco project. *Bulletin of the World Health Organization*, 2000:78(7).

UNICEF Pacific. *Substance use among adolescents in Fiji: A surveillance report from the Fiji Global Youth Tobacco Survey*. UNICEF Pacific, Suva, Fiji. 2001.

Wales, Australia⁵. During the 1990s, the Centre had conducted several training programs for health and education professionals from Pacific Island countries, under the auspices of Health Promoting Schools movement. Here, the need for baseline national data on the health of young people was recognized. Regional health workers were aware of the HBSC-like surveys conducted in New South Wales since 1992, and the relevance of such data collections for national and regional initiatives to promote the health of young people. Working with UNICEF and WHO, the ACHP provided technical support to this survey and technical capacity building in the region.

2.3. Planning for the HBLPY survey

In June 2000, representatives from UNICEF Pacific, WHO/WPRO and the Australian Centre for Health promotion met in Sydney to devise an HBLPY work plan for presentation to the countries participating in the UNICEF-support life skills curriculum programme. The meeting developed into a Technical Advisory Group or steering group for the ongoing planning of HBLPY, comprised of Dr. Ayoade Olatunbosun-Alakija and Dr. Philayrath Phongsavan from UNICEF Pacific, Dr. Gauden Galea from WHO (WPRO Regional Adviser, Health Promotion), and Professor Adrian Bauman (Research Director, Australian Centre for Health Promotion)⁶.

The initial tasks of the group were to develop core principles and procedures for HBLPY. The options discussed were either to adapt the North American (Centres for Disease Control) YRBS project or to use the European HBSC model. The latter was selected as it has been used in multiple contexts, languages and cultures and was considered more flexible for adaptation to new environments. The framework was based on the HBSC experience, but adapted to a Pacific country context. The main tasks of the initial planning process were then to:

- To define the core questions for use in the initial Pacific Island country surveys.
- To develop a work plan around measurement development and testing.
- To develop a research design and protocol for Pacific country HBLPY surveys, which would allow comparability within countries over time, between countries in the Region, and with other countries outside the Region, especially the HBSC group.
- To identify the roles of a regional support centre in research capacity-building, survey analysis, data archiving, and cross-national analysis of data from multiple countries.

2.3.1. Developing a protocol for the conduct of HBLPY surveys

The HBLPY survey has several purposes:

- Inform the development of youth health interventions, primarily on the life skills curriculum programme.
- Assists countries in tracking trends in youth health behaviour over time, in order to gauge the needs for new interventions or the monitor the net sum effectiveness of existing ones.

⁵ The Centre conducted statewide and regional HBSC-like surveys in 1992 and 1996. Its research director had served as an external methodological adviser to the WHO EURO HBSC consortium since 1994.

⁶ In attendance was Dr Kaili Kepler, who was a visiting Fellow in Sydney, and who is the Estonian country coordinator of HBSC, and works also on the Finnish HBSC program.

- Compare similar data from different countries in the Pacific.
- From a theoretical perspective, the survey will contribute to a better understanding of the factors associated with positive and negative youth health states and behaviours.

The overall design is a cross sectional analytic study, based on a representative population sample of youth in each country. As with the HBSC, the HBLPY is primarily a school-based survey. Key differences in some Pacific countries include different levels of school enrolment at different ages and different levels of literacy. Thus, each sample would differ from country to country with different needs for sampling of in-school youth (hereafter referred to as ISY) and sometimes out-of-school youth (hereafter referred to as OOSY). Also different methods of administration may need to be used: self-completion is preferred for international consistency, but in some contexts, interviewer administration of questions is needed.

The planning group recommended that, rather than impose a definite system to be used by all Pacific countries, a high level of customization would be permitted at this stage. A central feature common to all surveys should be to ensure that all countries had at least samples of youth aged 13 and 15 that were surveyed by the same mode of administration, using at least a core set of questions in school. This would provide a fixed group of similarly collected data to permit inter-country comparisons. Other aspects of the design would be geared to each country's special needs. Among the features of the design that might vary would be the sample size, mode of administration, and whether OOSY sampling was required.

For the initial countries to be surveyed in the region, a detailed protocol was developed and published in September 2000 (Phongsavan P, UNICEF Pacific)⁷. The main aims of the technical manual were to provide survey staff with background information on the survey, to outline procedures on how to prepare for and conduct the surveys in the field, and to provide standard information in response to queries about the questionnaire from students and young people. This manual outlined systematic approaches to the random sampling of schools, survey preparation and administration, data collection procedures and handling of data prior to data entry. Other technical issues such as consent, privacy and confidentiality were also discussed. School record-keeping and registration forms, and information for parents, teachers and young people themselves is also provided.

2.3.2. Measurement development issues for HBLPY

The survey questionnaire (or survey instrument) used in the HBLPY survey was based on the European Health Behaviour in Schoolchildren (HBSC) questionnaire. Details of the final instrument for Pohnpei State FSM are shown later in Section 4. Another report produced alongside this one defines the questionnaire and research protocol in detail⁸.

Core constructs or domains of measurement represent the high-priority areas for investigation relevant for youth across the Pacific countries. This core set of measurement has many comparable questions with the HBSC protocol, with the aim of working towards understanding differences for youth between developed and developing countries. These core HBLPY questions

⁷ UNICEF Pacific. *Health Behaviour and Lifestyle of Pacific Youth. Field Manual and Guidelines*. Suva, Fiji Islands, 2000

⁸ Further details on the specific questions proposed, and their rationale are available from the Data Centre on request.

would be monitored across countries and as trends over time in the Pacific. Core domains in the HBLPY surveys include demographic questions such as age, school class, gender, household size, parental occupation, and religion. Other core domains include substance use, social and family connections, peer relationships, mental health, school environments, hygiene, physical activity and nutrition. Optional questions may be developed in other domains, based on local need; these domains include sexual health, bullying and violence, physical health and somatic symptoms, future life prospects, questions on body image, weight and height, self-esteem and confidence.

2.3.3. Mechanisms to increase the scientific quality, dissemination and sustainability of the HBLPY surveys

The long-term aim of the survey is to set up a sustainable process in which Pacific countries could participate. This would produce cross-national estimates for a range of developed and developing countries, relevant to the policy and program needs of multiple agencies including public health and education organizations across the region. In the medium term, there is a commitment on the part of UNICEF to develop a 5-country life skills curriculum programme and on the part of WHO to support youth health development in the region. Results from the HBLPY will be used to support these initiatives.

To increase the scientific rigor and sustainability of the HBLPY surveys, it was decided that stable scientific and technical support at the regional level was required. In this initial phase of surveys, the Australian Centre for Health Promotion would act as regional data management centre. The centre would be involved in each country survey, and contribute to the following tasks:

- Provide technical advice in the adaptation of instruments to each country, issues in sampling for each country, defining the sample frames, and an overall advisory role in the conduct of each survey
- Conduct data analysis and produce country-level reports, using standard approaches. These reports would include documentation of (i) the process and methods of the HBLPY, (ii) data analysis and methods, and (iv) interpretation of results and recommendations for participating countries about the main issues for youth, and similarities of differences to other countries.
- The data centre would also act as a repository of national datasets for comparative analyses, as well as for archiving. The aim is after the first few countries have completed their surveys, and after country-level reports had been written, there would be a process of disseminating a regional publication summarizing data regarding youth health across the Pacific region.

The steering group agreed that data collection would be the task of the in-country (national) survey teams. Data entry would be on site (if supervised by appropriately trained staff), or forwarded to the data centre for entry⁹.

⁹ The survey focuses on the development of local research capacity through training activities in the conduct of surveys, data entry, and simple approaches to data analyses, interpretation and application of results to public health action. These activities would be conducted under the supervision of staff from the Data Centre.

NOTE ON DATA OWNERSHIP AND USAGE

Ownership for each dataset would reside with the country agency involved in each survey; each country will have absolute jurisdiction on whether access to its data was permitted or prohibited by any given research project. It is understood that data collected for any country will result in at least one country-specific report; each country will decide whether the report is just for local or international publication. Access to the dataset for further studies and publication would be governed by the HBLPY steering group with representatives from each participating country, UNICEF, WHO, and the regional data management centre. The HBLPY steering group would encourage dissemination of these findings through the region, as well as encouraging regional countries to participate¹⁰.

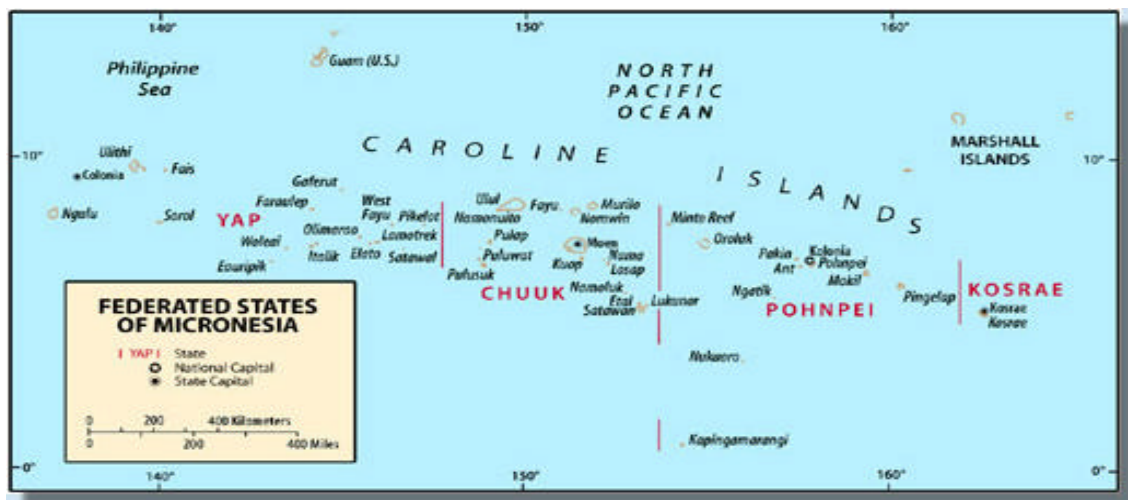
¹⁰ As with the European HBSC study, support of a technical and advisory nature is provided by the steering or planning committees, but countries need to support and fund their own data collections, assist with sampling, contacting schools and other aspects of field work. Countries are then provided with a report and with copies of their own data sets for subsequent use.

Section 3

Introduction to the Federated States of Micronesia (FSM)

3.1 Country profile of FSM

The Federated States of Micronesia consists of 607 islands lying just above the equator, about 4000 kilometres southwest of Hawaii. FSM has four states: Chuuk; Pohnpei; Yap, and; Kosrae. Together these states cover a land area of 700 km², however they are spread across an area of more than 2.5 million km² in the Pacific Ocean.



FSM was formed following a Constitutional Convention in 1978. This was when four former Districts of the Trust Territory of the Pacific islands voted in a referendum to form a Federation under the Constitution of the Federated States of Micronesia. The Trust Territory from which these four districts came was a larger group of islands which had been formed by the United Nations in 1947, and which operated under United States administration. When the FSM constitution was implemented in 1979 these former Districts of the Trusts Territory became States of the Federation and eventually adopted their own constitutions. Democratic elections were held and representatives were chosen for governments at the State and National level. Following the establishment of these State and National Governments the administrative functions which had formerly been carried out by the United States were handed over to local control.

According to the most recent estimates the population of FSM stands at about 105,500, although some estimates consider the population slightly larger than this. Over the last 40 years the population of this nation has grown at a steady rate of about 3% per annum, however, with an emigration rate of about 2% of the population each year the net growth rate in FSM is closer to 1% per annum. Most of those who leave FSM move to the United States as a result of an agreement which allows FSM citizens to enter the US freely and to maintain residence there for the purposes of education or employment. There are over 15,000 Micronesians living in the United States. In FSM the most populous State is Chuuk (50,500) followed by Pohnpei (35,000), Yap (12,000) and Kosrae (7,500).

FSM has a young population, with a median age of 17.8 years . Contributing to this is a high fertility rate, with women of childbearing age having an average of 4.7 children. The average life-expectancy in FSM is 65.2 years while the infant mortality rate is 46 per 1000.

The culture of FSM is predominantly Micronesian, but there is evidence of a Polynesian influence in some islands in the State of Pohnpei. A core feature of the culture and society of FSM is a strong emphasis upon the extended family and clan group. Past contact with Europeans and Japanese is also apparent in the culture of FSM. In spite of this element of consistency it is possible to identify differences in the culture and traditions of each of the four States which have been fostered by the large expanses of water separating each of the States. Pohnpei has emerged as the most westernized State in FSM. The national government is located in this State. Yap, on the other hand, has the most traditional culture in FSM which is characterised by a strong caste system. In Kosrae the Congregational Church plays a central role in everyday life while in Chuuk, clan relationships remain an important factor. At the same time, traditional leadership continues to play an important role.

The social structure of FSM is built around the core unit of the household which is made up of extended families. Most of the islands of FSM also have larger matrilineal clan groups. Traditional systems of government, such as the Nahmwarki Political System in Pohnpei and the Council of Pilung on Yap, continue to play an important role in the lives of the people of FSM.

Religion is predominantly Christian, divided between Roman Catholic and Protestant -other churches include Latter-Day Saints, Seventh-Day Adventist, Assembly of God, Jehovah's Witnesses, and the Baha'i Faith.

The official language of FSM is English, but there are eight major indigenous languages spoken in FSM also: Yapese, Ulithian, Woleaian, Chuukese, Pohnpeian, Kosraen, Nukuoro and Kapingamarangi.

All children are required to attend school until the eighth grade in FSM . As a result of this policy literacy rates in the nation are quite high.

Historically the economy of FSM has been heavily reliant upon aid from the US. In the last 10 years, however, there has been a growth in indigenous, privately owned companies in the areas of construction, road maintenance, telecommunications and water and energy provision. The fisheries and tourism sectors offer good prospects for national income generation in future also. Improving exports is an important priority for economic development, but the geographic isolation of FSM coupled with its limited reserves of natural resources present a number of challenges in this regard. The value of exports remains only a small proportion of imports to FSM, and consequently the nation's balance of trade deficit is a substantial proportions of its total GDP.

The subsistence economy in FSM is based on the cultivation of tree crops (primarily breadfruit, banana, coconut and citrus) and root crops (primarily taro and yam) supplemented by fishing. Sharing, communal work, and the offering of tributes to the traditional leaders are fundamental to the subsistence economic system and the culture of the island societies of the FSM.

3.2 Schooling in FSM

The availability of school places has not been able to cater for the growth in the number of school aged children in FSM. Since 1970, school enrollments in FSM have approximately doubled and many States have not kept up with the demand. It is estimated that there are only high school places for approximately 20% of elementary school graduates in FSM.

Retention rates in FSM indicate that over two thirds of children make it through until the end of elementary school, that is grade 8 (see Table 3.1), but far fewer make it through to the end of high school (grade 12). Only 28 per cent of Pohnpeian youth complete high school. The government does not have a policy for school drop-outs or early leavers [National Advisory Council on Children, 1996 #128].

Table 3.1: Proportion of school entrants who are still enrolled at school at each year of school in in the Federated States of Micronesia [Hezel, 2000 #44]

	School grade			
	1	8	9	12
Pohnpei	100	71	44	28
Chuuk	100	67	35	15
Yap	100	74	60	35
Kosrae	100	82	77	61

Section 4

Pohnpei in-country training and needs assessment

4.1. Needs assessment (qualitative survey)

In August 2000, the UNICEF Pacific Youth Officer conducted a key stakeholder needs assessment in Pohnpei State, Federated States of Micronesia. Key informants included the government Ministry of Health, Education, and Social Affairs, and youth leaders from various organisations. In addition, meetings with non-government organizations stakeholders were held, including the Pohnpei Youth Council, Peace Corps FSM, and other agencies. There was general endorsement of the need for the HBLPY survey and its timeliness in the Federated States of Micronesia and recommendations that the HBPY survey be conducted in all four states of the Federation. While UNICEF Pacific co-ordinated and supervised on-the-ground survey activities, the strong support from the Ministry of Health, Education and Social Affairs, and by the various youth organisations enhanced the efficiency and effectiveness of the survey implementation process.

4.2. Pilot phase – testing the questionnaires

A comprehensive process of testing the draft instrument under field conditions was carried out in August - September 2000. This process is summarized here:

- Careful translation and back translation of the questionnaire from Pohnpeian to English.
- Pilot testing of questionnaires with in-school youth and out-of-school youth, using both self-completed and interviewer administered formats. Because of the high variability in literacy of students below age 13 the feasibility of self-completed was not tested with this age group. Literacy was also recognised as a common problem among out-of-school youth, so interviewer administered protocols were developed for this group.
- Final revisions were made to the instrument (based on focus group discussions with pilot survey completers), regarding the meaning, interpretation and likely relevance of each question. Examples of changes made include addition of the “tobacco chewing” question (substance abuse section) as this is reportedly used in conjunction with betel nut.
- Sampling issues resolved for the in-school youth sample, with State lists of schools and census information obtained.
- A census of secondary schools was decided upon as there are only 8 schools in Pohnpei State and middle schools excluded as these are mainly located on outer Islands and pose both financial and logistical problems.
- Communications among the Technical Advisory Group, and with the Data Centre facilitated this development process, and resolved most technical issues in an efficient manner.

4.3. Training of survey teams

In August 2000, the UNICEF Pacific Youth Officer conducted data collection training with an initial group of 6 youth leaders from urban and peri-urban Pohnpei and 2 United States Peace Corps Volunteers (PCV). The primary goal was to train all participants in the methods of data collection and logistics management for HBPY survey. These objectives were seen as

omplementary to UNICEF priorities of life skills training and capacity building for youth in the region.

The youth had been identified through the Pohnpei Youth Council and the Pohnpei Health department.

The Youth Officer conducted an initial 5-day training on the reasons for the HBPY survey, the historical context and background of HBPY, the collaborating organizations and institutions and the subsequent development from the data of future interventions which would impact directly on their lives. Participating in this initial training was a Masters student from Monash University Beth Fuller who played a crucial role in the field testing process.

Further training focused on the development of the survey instrument, the need for confidentiality and standardization in addition to modes of administration of the questionnaire for both in-school and out-of-school youth. For reasons of literacy the training was mainly conducted in Pohnpeian and was as interactive as possible with most of the work being done in small group sessions to facilitate ease of understanding.

The survey protocol was translated into Pohnpeian by the field staff during the training and was used in practice sessions to simulate survey conditions in the field to ensure standardisation. Final training sessions were devoted to logistics management, in particular the delivery of questionnaires, travel arrangements to schools and communities and the management of completed surveys. This phase took place in April 2001 and was managed by a consultant who had been one of the Peace Corps volunteers trained in Vanuatu.

Section 5

Methods of the study

5.1. Pohnpei survey instrument

There are several stages of the instrument development to be described. These include the choice of questions asked, qualitative input into questionnaire design, the piloting of the questionnaire and mode of administration, and the development (and translation and back translation) of the final instrument.

The table below shows the measures used in the Pohnpei survey instrument. The first column shows the broad domain of questions, or conceptual grouping in which questions are asked. The second column shows the abbreviated name of the questions asked in the “in school youth” (ISY) sample, and the third column shows the “out of school youth” (OOSY) sample. The fourth and last column shows whether these measures were asked in the most recent WHO Europe Health Behaviour in School Children Survey, completed in 1998.

Table. 5.1.1 Questionnaire used in HBPY Pohnpei 2001: In-school and out-of-school surveys, and comparability with WHO Europe Health Behaviour in School children surveys

Domain of questions	In school youth (ISY)	Out of school youth (OOSY)	WHO Europe HBSC 97/98
Demographics	Age	✓	✓
	Date of birth	✓	✓
	Sex	✓	✓
	School grade	Last grade	✓
	Live now	✓	
	Father's job	✓	Similar
	Mother's job	✓	Similar
		Current paid job	
	Parents	✓	Similar
	Residence	✓	
	No. of people at home	✓	Similar
	Religion	✓	
	Religiosity/conviction	✓	
Substance use	Ever smoked	✓	✓
	Smoke frequency	✓	✓
	Ever tasted alcohol	✓	✓
	Drunk frequency	✓	✓
	Car/motorbike drinking	✓	
	Ever chew tobacco	✓	
	Frequency chew tobacco	✓	
	Ever chewed betel nut	✓	
	Frequency chew betel nut	✓	
	Ever drunk Kava	✓	
	Frequency of Kava	✓	
	Ever drunk methylated spirits	✓	
	Frequency methylated spirits	✓	
	Ever smoked marijuana	✓	
	Frequency of marijuana	✓	
	Ever sniffed glue	✓	
	Frequency glue	✓	

✓ presence of question

Table. 5.1.1 Questionnaire used in HBPY Pohnpei 2001: In-school and out-of-school surveys, and comparability with WHO Europe Health Behaviour in School children surveys

Domain of questions	In school youth (ISY)	Out of school youth (OOSY)	WHO Europe HBSC 97/98
Nutrition	Tea	✓	
	Coffee	✓	✓
	Coconut juice	✓	
	Fruits	✓	✓
	Coke/fizzy drinks	✓	✓
	Sweets/chocolate	✓	✓
	Fresh vegetables	✓	✓
	White bread	✓	
	Taro	✓	
	Fresh fish	✓	
	Tinned mutton/corned beef	✓	
	Turkey tails	✓	
	Chicken	✓	
	Water	✓	
Physical activity	Out of school frequently	Usually exercise	✓
	Out of school breathless time	Times exercise	✓
	TV/videos per day time	✓	✓
Communication	Father	✓	✓
	Mother	✓	✓
	Other adults	✓	
	Brothers	✓	✓
	Sisters	✓	✓
	Siblings of same sex	✓	
	Friends	✓	✓
	Youth worker	✓	
	Pastor/Minister	✓	
Other	✓		
Mental health	Feel about life (happy)	✓	
	Feel lonely	✓	
	Feel confident	✓	
	Sad, depressed	✓	
	Severity of sadness/depression	✓	
	Been rejected by peers		Similar
Job prospects	✓		
		Reason for leaving school	✓
		Plan to get future training	Similar
School Environment	School items (7)	X	✓
	Teacher items (4)	X	✓
	Peers items (3)	X	✓
Community/social Participation	Encouraged to express views (4)	✓	
	Think community is important	✓	
	Feel involved in community	✓	
Injury	12 month injury	✓	
	Deliberate injury/violence (6 items)	✓	
	Been bullied by others	✓	✓
	Bullied others	✓	✓
Hygiene	Teeth brushing	✓	✓
	Wash hands (2 items)	✓	
Sexual Behaviour		Ever had sex Times past month First sexual experience (3 items) No. of sexual partners Pressured to have sex	

		Had sex when drunk/high Use of condom Availability of condom	
--	--	--	--

✓ inclusion of question

The text below describes the origins of these questions, indicating where questions were not derived from the HBSC protocol, and indicating their source, known measurement properties, and brief reasons for inclusion.

The demographic data are very similar to the HBSC questions, with the addition of specific questions about residents. This is because many children in Pohnpei as in many other Pacific island countries do not live with their parents during school time, as they may go to school on a different island. There are church and state run boarding schools that take care of a large amount of the population of children from very remote communities or small islands. The question on parent’s occupation is only divided into 4 broad categories in the Pohnpei sample, as any more specific job descriptions would not be understood by respondents. The 4 categories were: do not work, office worker or professional or technical, manual laborer or worker, and works at home to earn money as the 4 categories. Finally, the Pohnpei survey asked questions about religion and religious conviction.

The next domain is substance use. Questions on smoking and alcohol use are derived from the HBSC survey. There is an additional question on car or motorcycle riding with others who have been drinking alcohol in the Pohnpei survey. The next set of questions ask about other substances consumed, including magic mushrooms, kava¹¹, methylated spirits, marijuana and glue sniffing. The format for these questions was derived from the Australian National Drug and Alcohol surveys that have been conducted since 1983. The marijuana questions are identical to those proposed for the HBSC survey in 2001/2002. Some substances asked are specific to Pacific Island nations (Kava) or to individual countries (Betel nut).

The nutrition questions are derived from the HBSC food frequency questionnaire used in 1998. Some items are similar, including coffee, fizzy drinks, sweets and chocolates, fresh vegetables and fruits, and possibly bread consumption. The other questions are specific to the Federated States of Micronesia and the cultural context in which nutrition patterns have changed, particularly towards imported food such as turkey tails from the USA.

The physical activity domain used the same questions as the HBSC survey. The television watching and video watching questions were combined in the Pohnpei survey, and a question was not asked specifically about computer games, as the prevalence of computers is fairly low in the Federated States of Micronesia.

The communication or “ease of communication” questions in the Pohnpei survey were derived from the HBSC survey, but with added questions about youth workers and

¹¹ An infusion prepared from the mildly narcotic root of pepper plant, dried and ground to a powder. Kava is a common and integral part of life in many Pacific countries.

ministers of religion. Several of the mental health questions were derived from the HBSC surveys including feelings about life and feeling lonely. An additional question on sadness and depression and its severity was derived from national mental health surveys amongst young people in Australia. A question on job prospects and the likelihood of finding work when students leave school was very similar in concept to the HBSC question.

The in school youth sample were asked questions about their perceived school environments, with 7 items relating to the school environment, 4 to the teacher environment and 3 to the peers environment. This was identical to the HBSC survey. In addition, the Pohnpeian students were asked how much they agreed that they were encouraged to express their own views by their parents, friends, their communities and their local church group.

The physical injury and bullying questions were similar to those that have been asked in the HBSC surveys, either as optional or mandatory questions. The only addition in the Pohnpei survey is the concept of deliberate injury, where students were asked in the previous 12 months whether they had a physical injury that was caused deliberately by a parent, a teacher or other adults, or their boyfriend or girlfriend.

There were 3 hygiene questions in the Pohnpei survey; one about the frequency of tooth brushing which was derived from the HBSC survey. Then there were 2 items relating to hand washing before eating, and after using the toilet. These were asked of both in school and out of school samples.

Questions regarding sexual behaviour for the first time in this series of surveys were asked of both the in and out of school youth sample. This comprised several questions, including whether these young people had ever had sex, the number of times engaged in sexual activities in the previous month, questions related to their number of partners, at risk situations and the use and availability of condoms. These questions were asked in gender specific groups of the out of school youth samples and self-administered with the in school sample..

The average completion time for this questionnaire was around 40 minutes for the in school sample, and varied substantially for the out of school youth, where the questionnaires were interview administered to groups of out of school youth. Most questionnaires were administered or completed in the Pohnpeian language, it is important to note though that English language questionnaires were requested by a significant proportion of students in some schools due to the high proportion of boarding students from other states. A copy of the Pohnpeian and English versions of the questionnaires are shown in appendices to this report.

5.2. Survey administration protocol

A detailed protocol document was prepared by the UNICEF Pacific office (Phongsavan 2000¹²). The manual was prepared to improve the administration and organisation of field HBPY surveys with specific relevance to the developing nation context. The survey manual provides detailed guidance for each step of the survey process. The generic phases of the survey process which were suggested included qualitative situation analyses in each country, developing the instrument, pilot testing and finally the full administration of the HBPY survey. Specific issues covered in detail in the protocol document include:

- The development of a national team who will coordinate and have responsibility and ownership for the survey.
- Procedures for obtaining consent from the relevant authorities, schools and pupils for the survey to proceed.
- Sampling and selection of ISY and OOSY.
- Checklists of actions to be taken before site visits (sampling of a class, identify enrolment data, absentee rates, collection and storage and transport of data).
- Guidelines for administering the questionnaire, either by self-completion or by interview administration. Issues covered included:
 - Modes of responding to queries.
 - Privacy and confidentiality.
 - Dealing with culturally sensitive questions.
 - Dealing with mixed cultural groups of students.
- Provision of information sheets to schools, parents.
- Description of school level information to be collected (enrolment numbers, classes, dates surveyed, and so on).

5.3. Data collection and sampling

The field work was carried by a team of seven Pohnpeian youth supported by a peace corp volunteer attached to a local NGO, Aramas Kapw, and managed by a UNICEF consultant. Following a 2 day refresher training in Kolonia, fieldwork started in April 2001 and ended in May 2001. Appendix 3 lists the names of the members of the field survey teams as well as the WHO and UNICEF co-ordinators and technical advisors.

Sampling

For the in-school sample, the sampling frame was all government and non-government secondary schools in Pohnpei State - all secondary schools were selected. Middle schools were excluded from the sampling frame for reasons of accessibility. Most middle schools in Pohnpei state are located on outer Islands some 2 days away by boat, with no regular ferry services. Initially, 5 secondary schools were selected but in response to requests to

¹² UNICEF Pacific/WHO WPRO. *Health Behaviour and Lifestyles of Pacific Youth. Field Manual and Guidelines*. Suva, Fiji Islands. 2000.

the survey team, 2 vocational schools were added to the selected schools, these are Our Lady of Mercy Vocational School and Pohnpei Agriculture Trade School.

All students in all classes of the secondary schools were surveyed given the limited number available.

Data collection for the out-of-school youth was based on geographical localities, the aim was to mirror as closely as possible the in-school sample by selecting communities from which the school samples were drawn.

Youth on the main Island of Pohnpei were surveyed. Local communities were identified, and survey team members acted as community liaison focal points to seek permission from community leaders and provide detailed information on the survey. Youth aged between 13 and 19 years were targeted within this convenience sample.

Most of the surveys were conducted in the evenings and often in local community halls or meeting places including churches. Verbal consent was sought from the participating youth prior to the commencement of the survey proper. Based on the pilot process, youth were surveyed in using the self-completion method. For some communities the survey teams had to return for a second or third visit to follow-up on youth who were absent during the previous visits. The denominator in the out-of-school youth surveys is not known, as the underlying number of youth not involved in the survey could not be determined. The out-of-school youth surveys may represent a “best case” scenario, as only the most literate or interested might participate. Further, a gender bias could not be ruled out, as in some communities females were either not allowed to participate or could not participate because all surveys took place at night¹³.

Data management and data entry

Questionnaire coding and raw data from the questionnaires were cleaned and processed for data entry by the Pohnpei survey team. Data entry was done off site for the first time in this series of surveys. A decision was made to enter the data in Fiji as a capacity building exercise for an identified group of young Fiji Islanders. Data entry was not done in Pohnpei for reasons of cost.

A data questionnaire file and a data entry file were created using the databases system Epi Info Version 6.04 format¹⁴. All the questionnaire data were manually entered by a 12-member data entry team in Suva, Fiji Islands. All data entry operators underwent an intensive 2-day training facilitated by the UNICEF Pacific Nutrition Officer¹⁵. They were also introduced to the process of creating a questionnaire file and a data entry file as well as data editing, checking and cleaning. The data entry operators worked under the close

¹³ Part of this may have resulted from gatekeepers who may have been less prepared for girls in these communities to participate in the surveys because of the nature of the questions with respect to the sexual health section.

¹⁴ Dean AG, Dean JA, Burton AH, Dicker RC. *Epi Info, Version 6.04: A Word Processing, Database and Statistics Program for Epidemiology on Microcomputers*. Stone Mountains, Georgia: USD, Inc., 1997.

¹⁵ A copy of the data entry training program is available from UNICEF Pacific.

supervision of a data entry supervisor who was also a member of the entry team. Appendix 3 lists the names of the data entry staff and data entry supervisors.

At the completion of the data entry, all data files were checked and then merged to create two complete data files (in-school and out-of-school) by UNICEF Pacific. These files were then forwarded to the ACHP for further checking and analysis. Communications among UNICEF Pacific, the ACHP team and the Pohnpei core survey team facilitated the data cleaning and editing, and resolved discrepancies and queries in an efficient manner.

5.4. Methods of analysis

Questionnaires were manually entered and stored in a database system Epi Info Version 6.04 format¹⁶. All analyses were conducted using Stata 7.0 and SPSS for Windows 6.1. The data were first carefully cleaned, applying checks of range and logic. Missing values were noted and examined where necessary. Taking into account theoretical relevance and the data distributions, most of the variables were recoded into appropriate and meaningful categories.

Descriptive analyses were carried out for all variables. As most of the variables were categorical, the count and percentage of the response falling into each category were tabulated and stratified by both gender and age groups.

¹⁶ Dean AG, Dean JA, Burton AH, Dicker RC. *Epi Info, Version 6.04: A Word Processing, Database and Statistics Program for Epidemiology on Microcomputers*. Stone Mountains, Georgia: USD, Inc., 1997.

Section 6

Health and lifestyle behaviours of school students

6.1 The characteristics of students in the sample

The sample consisted of 1516 students (Table 6.1.1). There was an even representation of boys and girls, but the age distribution showed that the majority of students were aged 16 years and over. There were very few students under the age of 14 years, and because of this all subsequent age breakdowns of the results are limited to the 14 to 17 years age range. That is because the small samples of students at age 10 and 13 years could lead to spurious results if the data were broken down for these age groups¹⁷.

Table 6.1.1 The demographic characteristics of the student sample

Characteristics	Number	%
Gender		
Boy	728	48
Girl	788	52
Age		
10	1	0.1
13	7	0.5
14	97	6.5
15	312	20.8
16	406	27
17	680	45.2

The age distributions of the boy and girl respondents were similar (Table 6.1.2). The major differences were a slightly higher representation of boys at age 17 years and a slightly higher representation of girls at age 14 and 15 years.

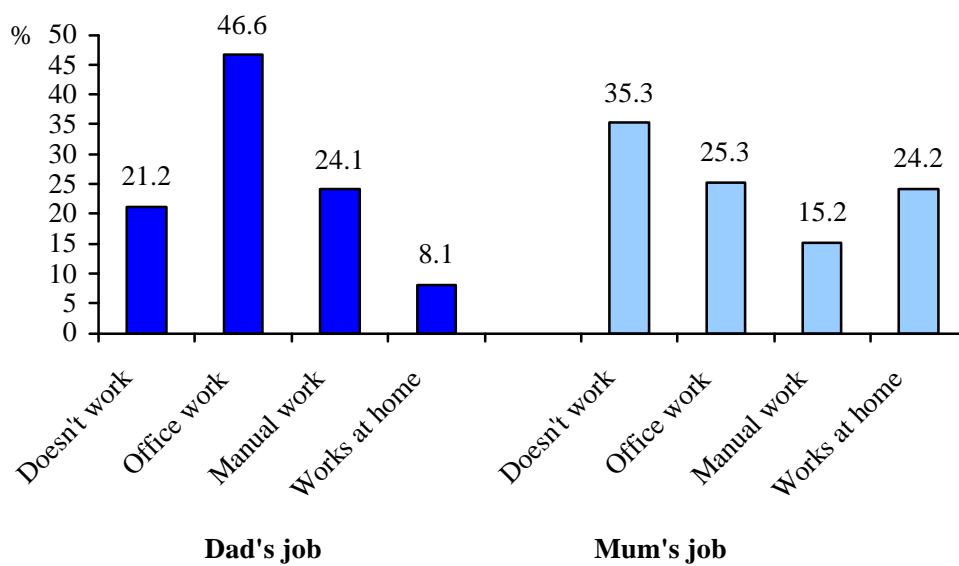
Table 6.1.2 The distribution of the student sample by age and gender

Age	Boys		Girls	
	No.	%	No.	%
14yrs	42	5.8	55	7.1
15yrs	136	18.9	174	22.5
16yrs	200	27.8	205	26.6
17yrs	341	47.4	338	43.8

¹⁷ Note that this is an older distribution than in other HBPY countries, and the inter-country comparisons with 13 year old students will not be possible, as only 7 of them were sampled in Pohnpei. Cross national comparison with 15 year old students will be possible.

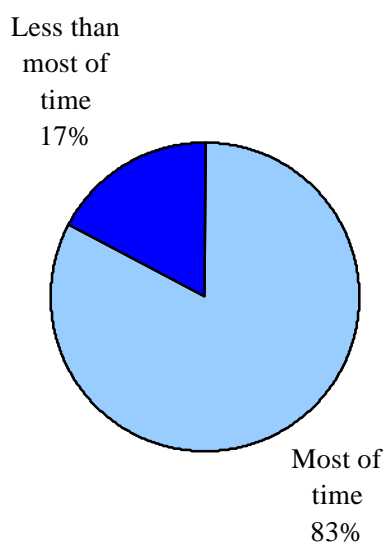
Just under half of students described their father's job as office work, while about one quarter classified their father's job as manual work (Figure 6.1.1). A substantial proportion of students, over one-in-five said that their father was not working. Mothers were most often identified as not working, which was reported by over one third of students. Those mothers who did work were most often described as doing office work or working at home, which were each identified by about one quarter of students.

Figure 6.1.1 Parental occupation



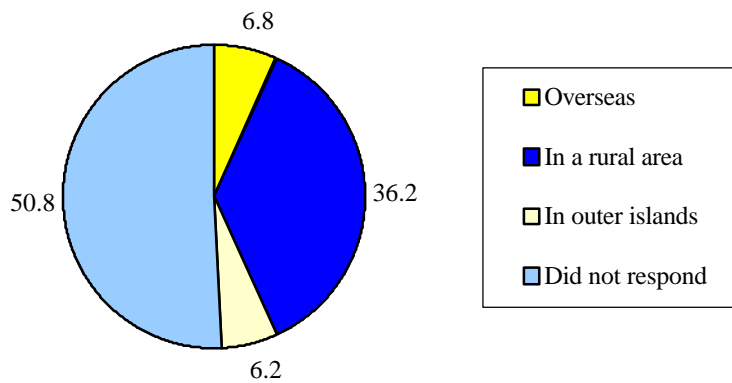
The vast majority of students reported that they lived with their parents most of the time (Figure 6.1.2).

Figure 6.1.2 Proportion of students living with parents most of time



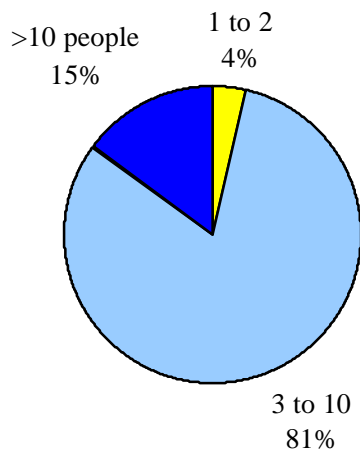
Over 35% of students reported that their parents lived in a rural area. There were far smaller proportions who said that their parents lived overseas or in an outer island (Figure 6.1.3). Most students did not respond to this question.

Figure 6.1.3 Location of parent’s residence



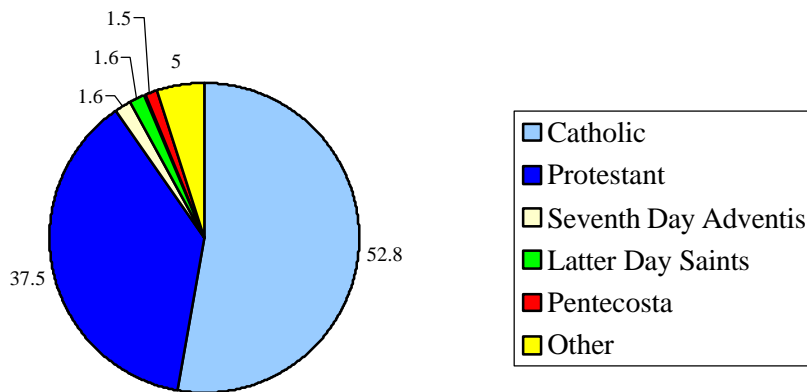
Over 80% of students reported that they lived with between three and 10 others, while just over one in six reported living with more than 10 others (Figure 6.1.4).

Figure 6.1.4 Number of people living with students



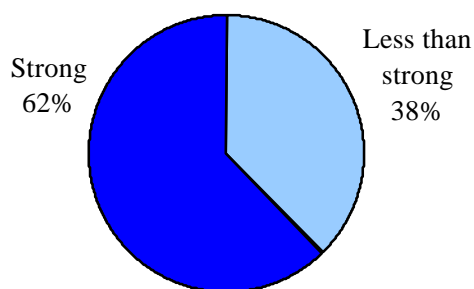
The most common religious affiliation, reported by over half of students, was Catholic (Figure 6.1.5). There was also a substantial portion of students, just under two in five, who described themselves as Protestant. There were small proportions of students who identified their religious affiliation as “other”, Seventh Day Adventist, Latter Day Saints or Pentecostal.

Figure 6.1.5 Religious denomination of respondents



While the majority of students described their faith as strong, a substantial proportion (two in five) said that their faith was not strong (Figure 6.16).

Figure 6.1.6 Strength of commitment to faith



6.2 Substance use

- The most common substance that students reported ever using was betel nut, with over four in five stating that they had chewed betel nut at least once. Just over three quarters of students reported ever drinking alcohol, over three in five reported ever chewing tobacco and a slightly smaller proportion reported ever smoking tobacco.
- Almost two in three students reported chewing betel nut at least weekly while about one third reported chewing tobacco and one in five reported consuming kava at least weekly. Just under one in five students reported smoking at least weekly and one in eight said that they smoked marijuana this often.
- There were more boys than girls who reported ever consuming each of the substances, and the gender differences were most marked for alcohol, chewing tobacco and kava. The use of most substances increased with age.
- Just under half of students reported that they had been drunk two or more times in the past, while one in five said that they had been drunk more than 10 times.

Figure 6.2.1 shows the proportions of students who reported ever using various substances and those who reported using these at least weekly. The most common substance that students reported ever using was betel, with over four in five stating that they had ever chewed betel nut before. Following this, just over three quarters of students reported ever drinking alcohol, over three in five reported ever chewing tobacco and a slightly smaller proportion reported ever smoking tobacco. There were also substantial proportions of students who reported ever consuming kava (just under half) or smoking marijuana (just under one third). Methylated spirits and solvents were the least frequently consumed substances, with 8-12% of students who reported ever using these substances.

The trends concerning weekly consumption of substances followed a similar pattern to those for consumption on at least occasion in the past. Data concerning weekly alcohol use are not shown in Figure 6.2.1 because students were not asked about the frequency that they consumed alcohol as they were for the other substances. Instead, students were asked about the numbers of times they had been drunk and these data are shown in Figure 6.2.4. Betel nut was by far the most common substance that students reported using at least weekly, with almost two in three reporting this. Just under one third of students reported chewing tobacco at least weekly, while one in five reported that they consumed kava and a slightly lower proportion reported smoking tobacco this regularly. While marijuana was one of the drugs that students least frequently reported using regularly, there was still one in eight who said that they smoked marijuana once a week or more. Just under 7% of subjects reported drinking methylated spirits on a weekly basis. Solvents were the substance that fewest students reported using on a weekly basis.

Figure 6.2.1 Students who have ever used substances or used them at least weekly

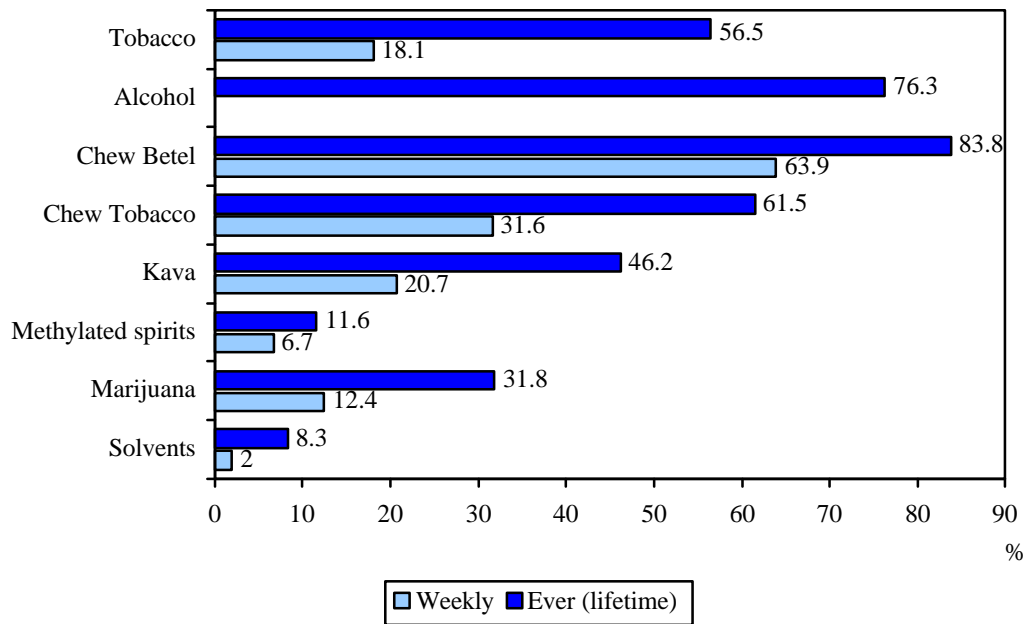


Figure 6.2.2 shows the proportions of boys at each age between 14 and 17 years who reported ever consuming various substances, while this information is presented for girls in Figure 6.2.3. These graphs show that there were age related increases in the proportions of boys and girls who reported using all of the substances examined in the survey, with the exceptions of methylated spirits and solvents. A noticeable difference between boys and girls, however, is that the reported use of the substances increased steadily for boys from age 14 years onwards whereas for girls these increases appear to have taken place in two phases, firstly between 14 and 15 years and secondly between 16 and 17 years. The earlier initiation of substance use appears to be apparent for boys for most substances. There were higher proportions of boys than girls who reported ever consuming each of the substances, and the gender differences were most marked for alcohol, chewing tobacco and kava.

Figure 6.2.2 Male students who have ever used substances

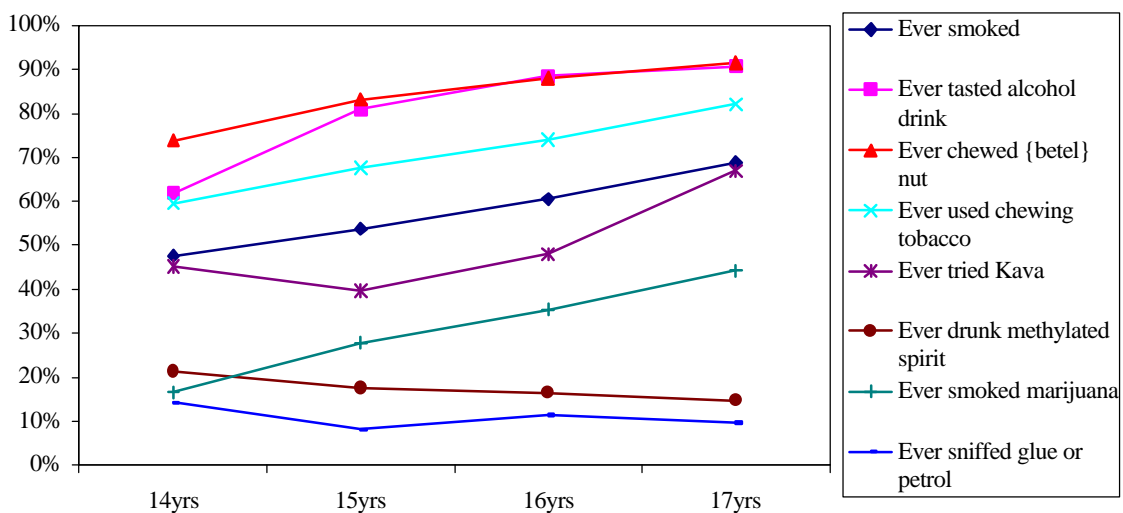
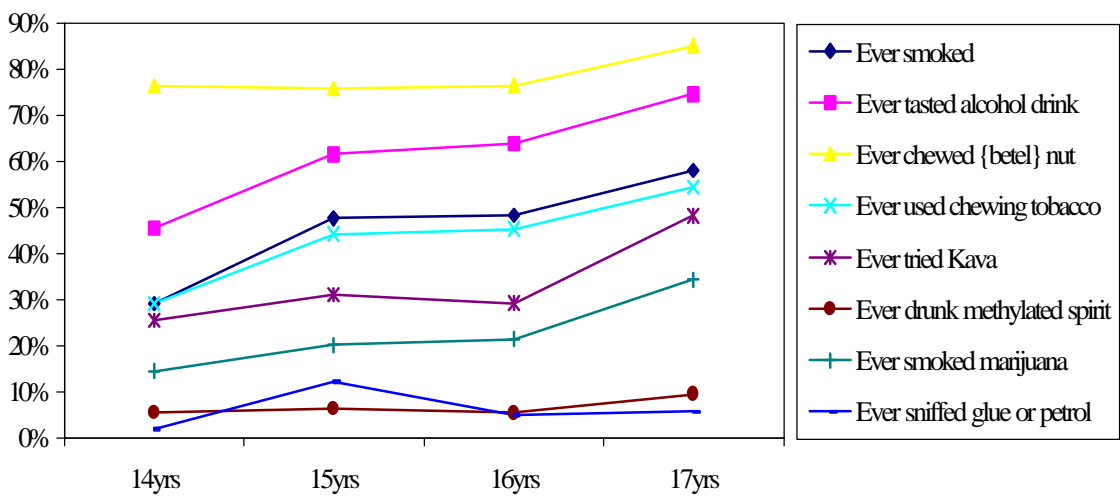


Figure 6.2.3 Female students who have ever used substances



A more detailed breakdown of the frequency of use of various substances is presented in Table 6.2.1. This further highlights the high levels of betel nut use, with just under half of students reporting that they chew betel nut every day.

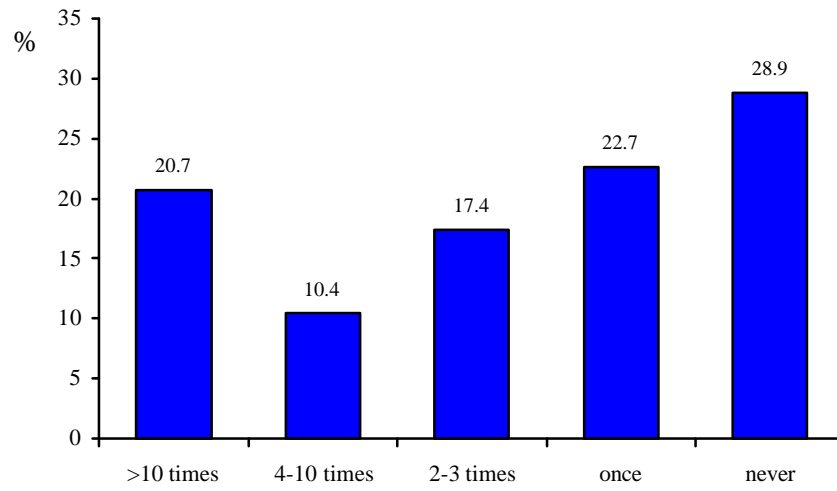
Table 6.2.1 Frequency of substance use

Substance	Frequency of use			
	Daily	Weekly	Occasionally	Do not use*
Tobacco	4.4	13.7	21.5	60.4
Betel	47.9	16.0	8.5	27.6
Chewing Tobacco	8.7	23.0	19.5	48.9
Kava	2.2	18.5	18.1	61.1
Methylated spirits	1.1	5.6	5.1	88.2
Marijuana	2.3	10.1	14.4	73.2
Solvents	0.4	1.6	4.0	94.0

*The category 'Do not use' includes those who did not answer the questions.

Figure 6.2.4 shows that over 70% of students reported being drunk at least once in the past. Just under half reported two or more experiences of being drunk while one in five said that they had been drunk 10 or more times.

Figure 6.2.4 Frequency of being drunk in the past



6.3 Nutrition

- Just under 90% of students reporting drinking water more than once a day. The next most popular drink was soft drink, with over one-third of students reporting the consumption of this more than once per day.
- Fruit was the type of fibre most regularly consumed, with about one third of students stating that they ate fruit more than once per day. This was followed in frequency of consumption by white bread and fresh vegetables. One third to two fifths of students reported seldom or never eating fresh fruit and vegetables or white bread.
- Data about the consumption of white and red meats showed that chicken was consumed by more than 70% of students at least weekly, and was followed by turkey. Almost two-thirds of students reported eating tinned mutton/corned beef at least weekly.
- Just under one quarter of students reported that they ate sweets more than once per day.
- There were generally higher proportions of girls than boys who reported consuming soft drinks at least once per day but higher proportions of boys who consumed coconut juice and coffee this regularly. Fruit was more regularly consumed by boys at age 14 than girls at this age, and boys at all ages were more likely to eat white bread regularly. The proportions of girls at each age who reported eating sweets at least once per day were markedly higher than those of boys.

The frequencies that students reported consuming various types of food and drink are shown in Table 6.3.1.

Water was by far the most popular type of drink consumed with just under 90% of students reporting that they drank this more than once a day. The next most frequently consumed drink was soft drink, with over one-third of students reporting the consumption of these more than once per day. Following this, about one-quarter of students stated that they consumed coconut juice more than once per day. Tea and coffee were the types of drink consumed least frequently, with over 60% of students reporting that they seldom or never drank these.

Among the foods high in fibre that were examined, namely white bread, taro and fresh fruit and vegetables, fruit was the food type that was most regularly consumed, with about one third of students stating that they ate fruit more than once per day. This was followed in frequency of consumption by white bread and fresh vegetables, with just under 30% of students reporting that they ate each of these more than once per day. There were still, however, between a third and two fifths of students who reported seldom or never eating fresh fruit and vegetables or white bread. Taro was not consumed very often, with almost two thirds of students stating that they seldom or never ate this.

Of the types of white and red meat that were examined, chicken was reported to be eaten at least weekly by more than 70% of students while a slightly lower proportion reported eating turkey this frequently. This was followed by tinned mutton/corned beef, which just under two thirds of students reported eating at least once per week, and then fresh fish, which a slightly smaller proportion reported eating this regularly.

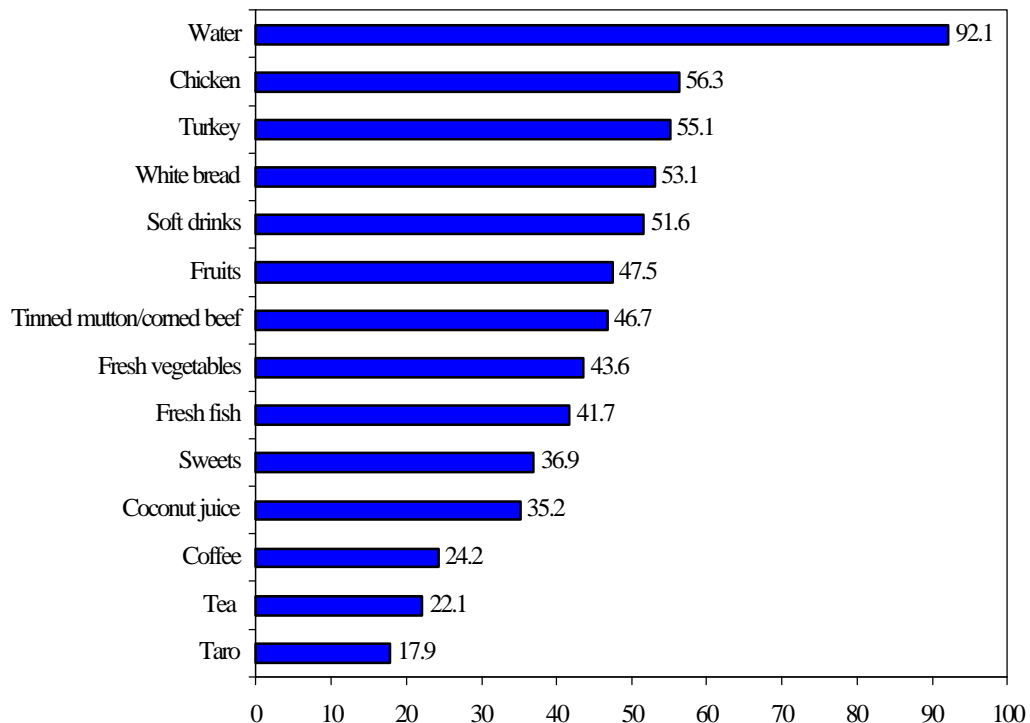
Just under one quarter of students reported that they ate sweets more than once per day, and over half reported eating these more than once per week.

Table 6.3.1 The frequency of consumption of various foods and drinks by students

Food and drinks	More than once a day	Once a day	At least once a week but not daily	Seldom	Never
Tea	11.7	10.4	11.8	55.6	10.5
Coffee	12.2	12.0	14.1	47.6	14.1
Coconut juice	25.5	9.7	20.4	42.0	2.4
Fruits	33.1	14.3	15.0	34.9	2.7
Soft drinks	37.1	14.5	16.1	30.8	1.4
Sweets	24.3	12.7	17.2	42.8	3.0
Fresh vegetables	28.1	15.6	15.6	36.4	4.4
White bread	28.8	24.3	14.0	30.5	2.4
Taro	10.6	7.2	16.4	56.9	8.8
Fresh fish	30.3	11.5	22.3	34.8	1.2
Tinned mutton/corned beef	32.5	14.3	18.6	31.7	3.0
Turkey	43.5	11.6	13.9	26.8	4.2
Chicken	41.6	14.7	17.0	26.3	0.5
Water	89.4	2.8	4.6	2.9	0.4

Figure 6.3.1 presents the proportions of students who reported consuming various foods and drinks once per day or more. This further highlights that water was the most popular type of drink, followed by soft drinks, coconut juice, tea and coffee. White bread was the type of fibre that most students reported eating at least once per day. A slightly lower proportion of students reported eating fresh fruit this regularly, and this was followed in frequency of consumption by fresh vegetables and taro. The patterns of consumption of white and red meats at least once a day or more were similar to consumption of these food types on a once a week or more basis. That is, chicken was most often reported by students to be eaten at least once per day, followed by turkey, tinned mutton/corned beef and fresh fish. Over one third of students reported eating sweets at least once per day.

Figure 6.3.1 Consumption of various foods and drinks at least once per day



The proportions of boys and girls between ages 14 and 17 years who reported consuming each type of food and drink at least once per day are shown in Figures 6.3.2 and 6.3.3 respectively. There were high proportions of both boys and girls at each age who reported drinking water more than once per day (Figure 6.3.3). At all ages except 14 years there were higher proportions of girls than boys who reported consuming soft drinks at least once per day (Figure 6.3.2). On the other hand, boys at all ages were more likely than girls to consume coconut juice and coffee at least once per day (Figure 6.3.2). There was a marked decline in the proportion of boys who reported drinking tea at least once per day from age 14 years onwards, but these levels were still higher than those of girls at all ages except 17 years (Figure 6.3.2).

In the area of fibre consumption the most marked difference between the genders was the higher proportions of boys than girls at age 14 years who reported eating fruit once per day or more (Figure 6.3.2). Figure 6.3.3 shows that there were also higher proportions of boys than girls at each age who reported eating white bread this regularly. Apart from these differences the levels of fresh fruit, vegetable and taro consumption were similar between boys and girls.

The proportion of girls who reported eating tinned mutton/corned beef at least once per day increased between the ages of 14 and 17 years while the levels among boys remained fairly even across these ages (Figure 6.3.3). Figure 6.3.3 shows little difference between the genders in the levels of chicken, turkey or fresh fish consumption at each age.

The proportions of girls at each age who reported eating sweets at least once per day were markedly higher than those of boys, but there was a decline in the prevalence of sweet consumption with age among both boys and girls (Figure 6.3.2)

Figure 6.3.2 Consumption of selected drinks, vegetables and sweets once a day or more, by age and gender

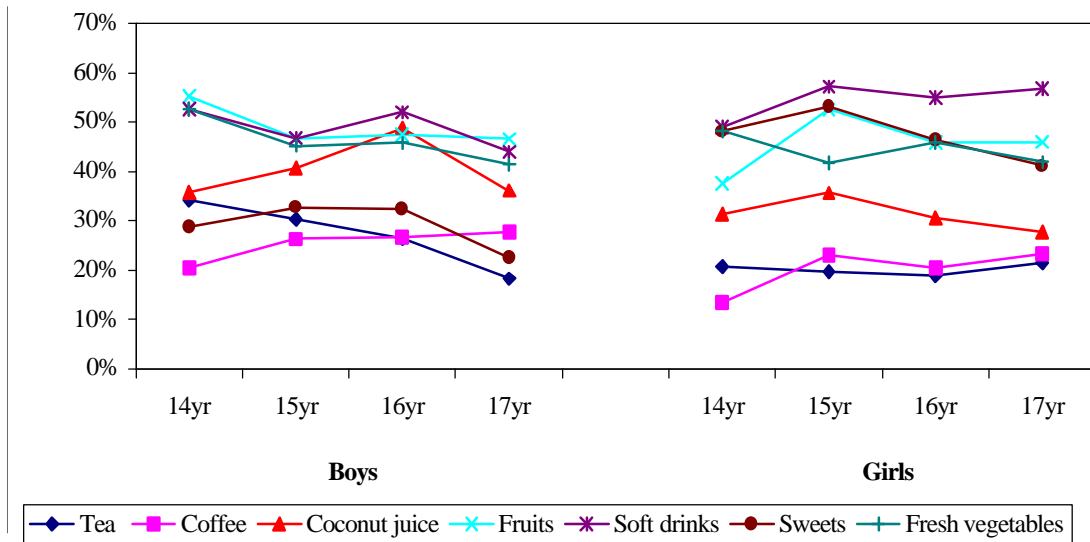
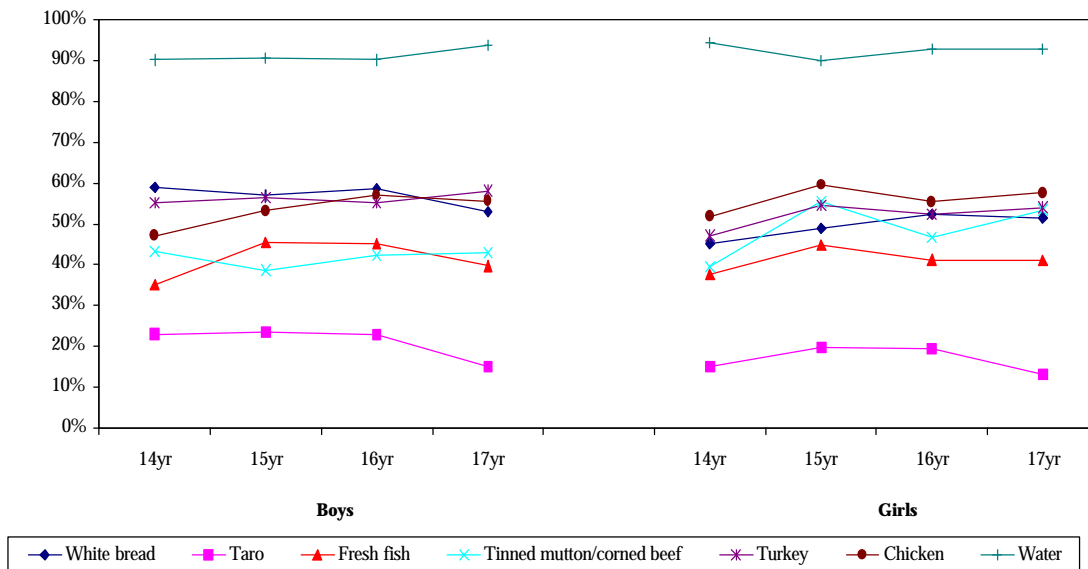


Figure 6.3.2 Consumption of selected drinks, vegetables and sweets once a day or more, by age and gender



6.4 Physical activity

- About one quarter of students reported that they undertook 4 or more sessions of exercise per week and slightly more than one quarter reported doing at least 2 hours or more of physical activity per week in total.
- There were higher proportions of boys than girls at all ages who reported undertaking exercise at least four times per week or for a minimum of two hours in total.
- Just under one quarter of students watched 4 or more hours of television per day. There were generally higher proportions of girls than boys who reported watching television or videos for at least four hours per day.

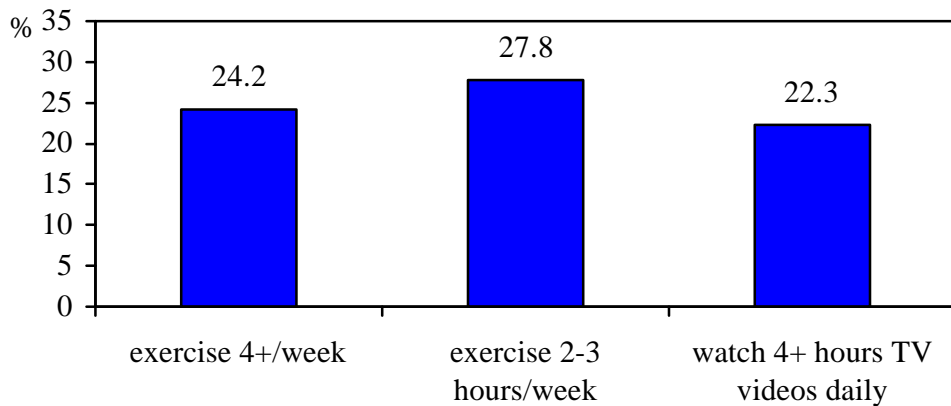
Table 6.4.1 shows that more than half of students reported undertaking exercise once per week or less. Furthermore, the duration of exercise reported by over half of students was less than one hour per week. Table 6.4.1 also reveals that over three in five students stated that they watched television for at least one hour per day.

Table 6.4.1 Frequency of physical activity and television watching by students

	No.	%
Frequency of exercise		
Everyday	213	14.3
4-6 times a week	147	9.9
2-3 times a week	320	21.5
Once a week	417	28
Once a month or less	390	26.2
Number of hours of exercise in a week		
None	399	26.5
About ½ hour a week	428	28.5
About 1 hour a week	258	17.2
About 2-3 hours a week	269	17.9
About 4-6 hours a week	84	5.6
7 or more hours a week	65	4.3
Number of hours of watching TV in a day		
Not at all	131	8.7
Up to one hour a day	429	28.4
1-3 hours a day	614	40.6
4 hours or more a day	337	22.3

Around one quarter of students reported at least four sessions of exercise per week and a similar proportion stated that they undertook two hours or more of exercise each week (Figure 6.4.1). Just under one quarter of students stated that they watched television or videos for four or more hours per day.

Figure 6.4.1 Time spent in physical activity and television watching



Figures 6.4.2 and 6.4.3 present the proportions of boys and girls at each age between 14 and 17 years who undertake regular exercise or spend considerable time watching television or videos each day. These show that there were markedly higher proportions of boys than girls at all ages who reported undertaking exercise at least four times per week or for a minimum of two hours in total. There was a marked decline in sessions for girls with age, noticeable especially by age 17 years. On the other hand there were generally higher proportions of girls than boys who reported watching television or videos for at least four hours per day.

Figure 6.4.2 Time spent engaged in physical activity and television watching by boys at each age level

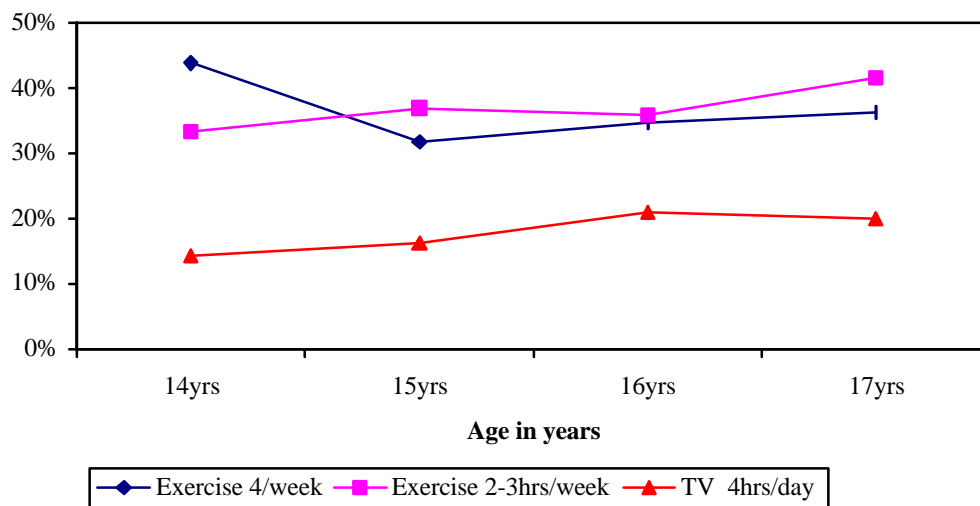
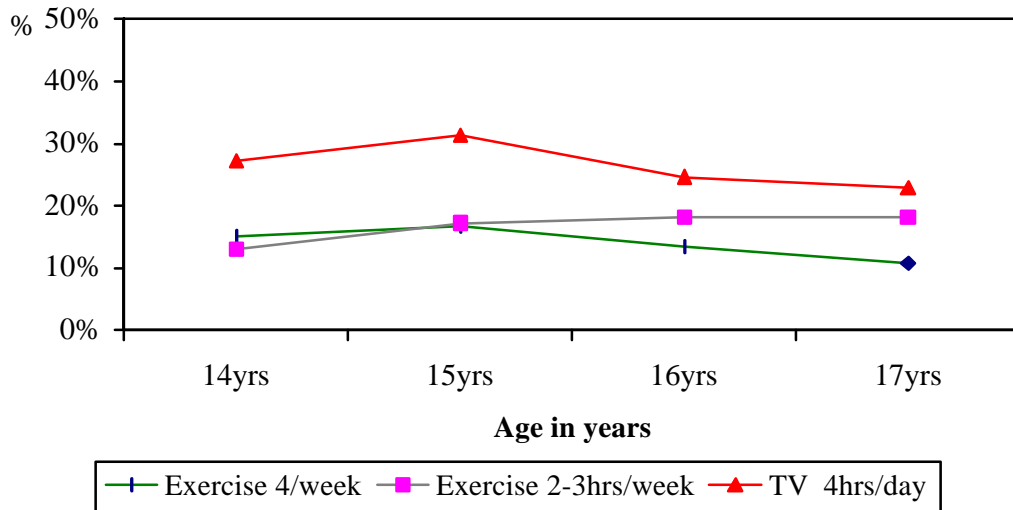


Figure 6.4.3 Time spent engaged in physical activity and television watching by girls at each age level



6.5 Personal well-being and development

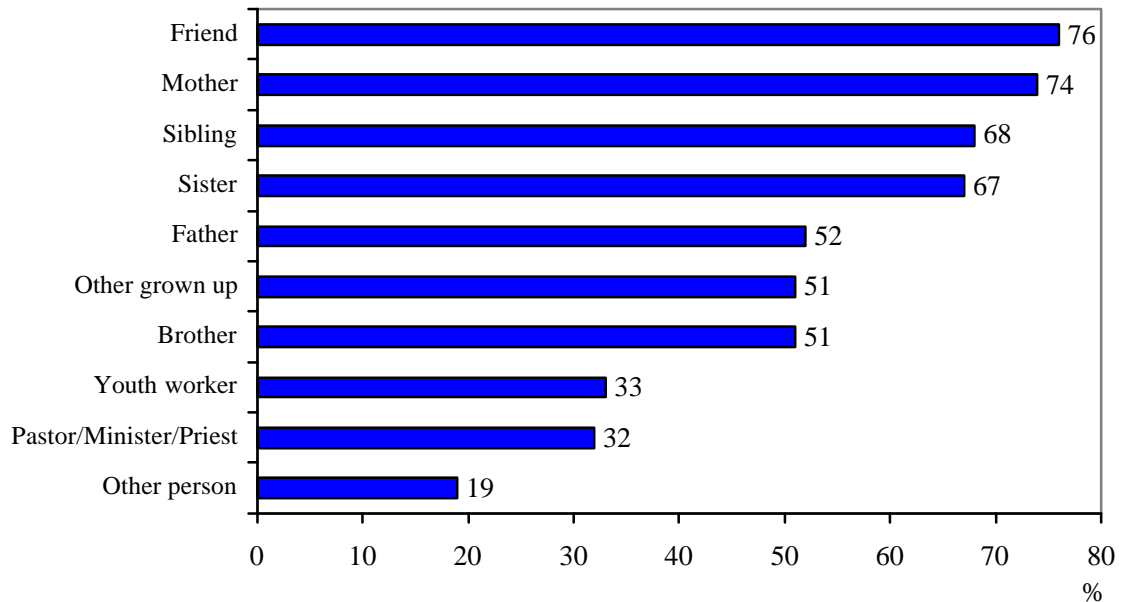
- Friends, followed by mothers and siblings were most often identified by students as people that they could easily talk to about personal difficulties. Boys were much more likely to report that their brothers were easy to talk to while higher proportions of girls reported that it was easy for the to discuss problems with their sisters.
- More than two in five students reported that they did not feel happy and about one in six reported rarely or never feeling confident or often feeling lonely. The vast majority of students (four in five) stated that they had experienced sadness or depression in the last six months, while ... reported that thye had experienced this at a level of severity that they would describe as almost more than they could take.
- Generally students felt positive about their prospects for getting a job after school
- There was a higher proportion of girls than boys at each age who reported feeling unhappy. From age 15 years onwards there were also higher proportions of girls who reported that they had experienced severe sadness or depression in the past six months
- Just under one-third of students who had experienced sever sadness or depression said that they ad noone to turn to for support at the time, and this was a more common situation among boys than girls. Following this the most common sources of possible support identified were friends, mothers and boyfriends/girlfriends.

Table 6.5.1 shows the proportion of students who reported various levels of ease or difficulty discussing personal problems with different members of their social networks. This information is further summarised in Figure 6.5.1 as the proportion of subjects who reported that is was easy or very easy to discuss their personal problems with various significant others. Friends and mothers were most often identified as sources of support, with around three quarters of students reporting that is was easy or very easy for them to discuss their problems with these people. Siblings and sisters were the next common sources of support identified, with just over two thirds of students stating that they found it easy to talk to these people. Fathers, other grown ups and brothers were identified as easy people to discuss personal problems with by just over half of students. The individuals least often identified as easy to approach were youth workers, clergy and others.

Table 6.5.1 The perceived ease of talking to various people about personal problems

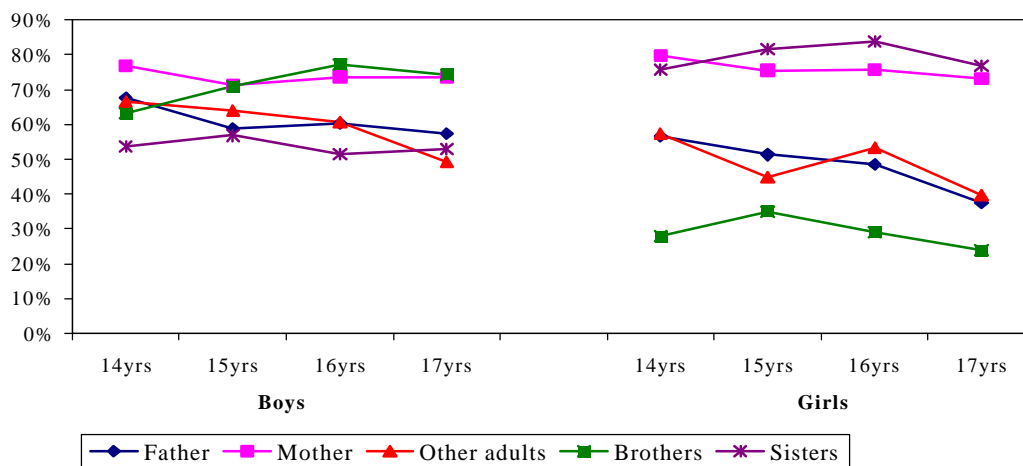
Person	Very easy		Easy		Difficult		Very difficult		Don't have	
	No.	%	No.	%	No.	%	No.	%	No.	%
Father	393	27.7	343	24.2	329	23.2	211	14.9	141	10.0
Mother	620	43.8	433	30.6	200	14.1	107	7.6	57	4.0
Other grown ups	232	16.9	464	33.7	383	27.8	133	9.7	165	12.0
Brothers	346	25.3	345	25.2	252	18.4	199	14.6	226	16.5
Sisters	506	36.9	409	29.8	184	13.4	104	7.6	169	12.3
Siblings	347	25.4	576	42.2	235	17.2	83	6.1	124	9.1
Friends	505	36.2	548	39.3	205	14.7	58	4.2	78	5.6
Youth worker	136	10.1	313	23.1	446	33.0	188	13.9	270	20.0
Pastor/Minister/Priest	169	12.4	274	20.0	344	25.2	289	21.1	292	21.4
Other person	123	9.3	129	9.8	311	23.6	306	23.2	451	34.2

Figure 6.5.1 Individuals that students identified as easy to approach about personal problems (%)



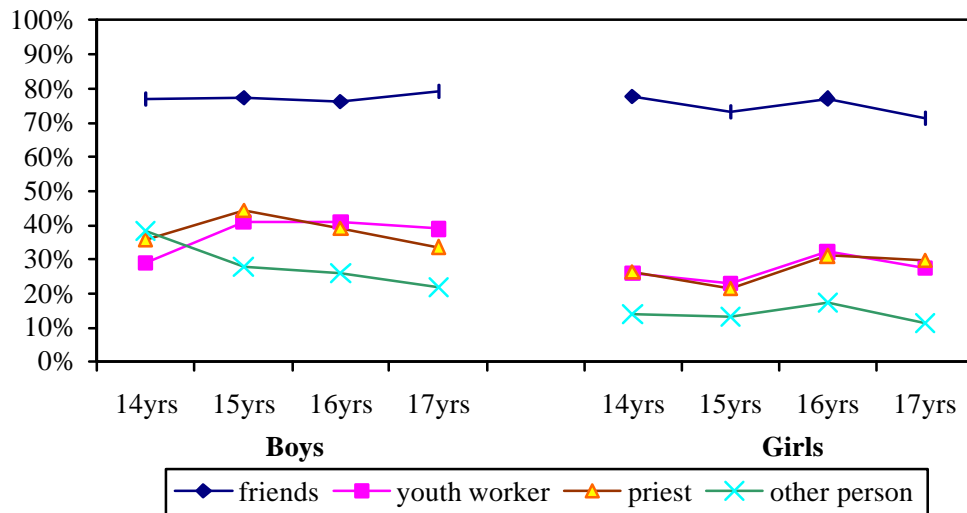
Figures 6.5.2 and 6.5.3 show the proportions of boys and girls at each age level who reported that they felt it was easy to talk with various individuals in their social networks about their personal problems. Figure 6.5.2 reveals a strong preference for same sex siblings, with boys at each age much more likely to report that their brothers were easy to talk to while higher proportions of girls reported that it was easy for the to discuss problems with their sisters. There were similar proportions of boys and girls at each age who reported that it was easy to talk with their mothers about personal problems. On the other hand, a higher proportion of boys at each age than girls reported that it was easy to approach their fathers or other adults, but for both boys and girls the proportions of students who felt that they could obtain support from these sources declined between the ages of 14 and 17 years.

Figure 6.5.2 Proportions of students finding it easy or very easy to communicate with parents, siblings or other adults by age and gender



Similar proportions of boys and girls at each age identified friends, youth workers and clergy as people that they could turn to for support, while slightly higher portions of boys at each identified “other people” as easy to talk to.

Figure 6.5.3 Proportions of students finding it easy or very easy to communicate with friends, youth workers or clergy by age and gender



The responses given by students concerning whether they felt happy, lonely, confident or had experienced severe sadness or depression in the past six months are shown in Table 6.5.2. In addition the proportions who had different levels of optimism in regard to their future work prospects are presented. These data are further summarised in Figure 6.5.4. More than two in five students reported that they did not feel happy at present. About one in six reported rarely or never feeling confident or often feeling lonely. The vast majority of students (four in five) stated that they had experienced sadness or depression in the last six months, while ... reported that they had experienced this at a level of severity that they would describe as almost more than they could take. Generally students felt positive about their prospects for getting a job after school, with just over one in ten reporting that they considered it unlikely or impossible that they would get a job.

Table 6.5.2 Levels of happiness, loneliness, confidence and severe sadness among students

	No.	%
Happiness		
	360	24.1
	503	33.6
I don't feel very happy	553	
I am not happy at all	79	
Loneliness		
Yes, very often		16.7
Yes, rather often		5
Yes, sometimes		68.4
No		10
Confidence		
	616	40.9
	161	10.7
	517	34.4
	173	11.5
	38	2.5
No	297	
Yes, at home and at school	620	
Yes, but only at home	445	
Yes, but	124	8.3
Almost more than I can take	314	
Quite bad	389	
Worse than usual	205	
About usual	394	
Likelihood of getting a job after leaving school		
Very likely		47.1
Likely		41.2
Unlikely		4.6
Impossible		7.1

Figure 6.5.4 Proportion reporting low levels of happiness or confidence and high levels of loneliness or sadness

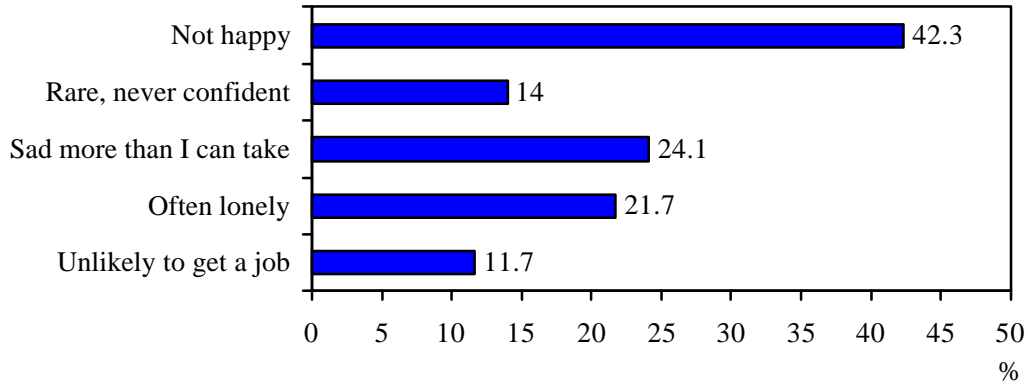
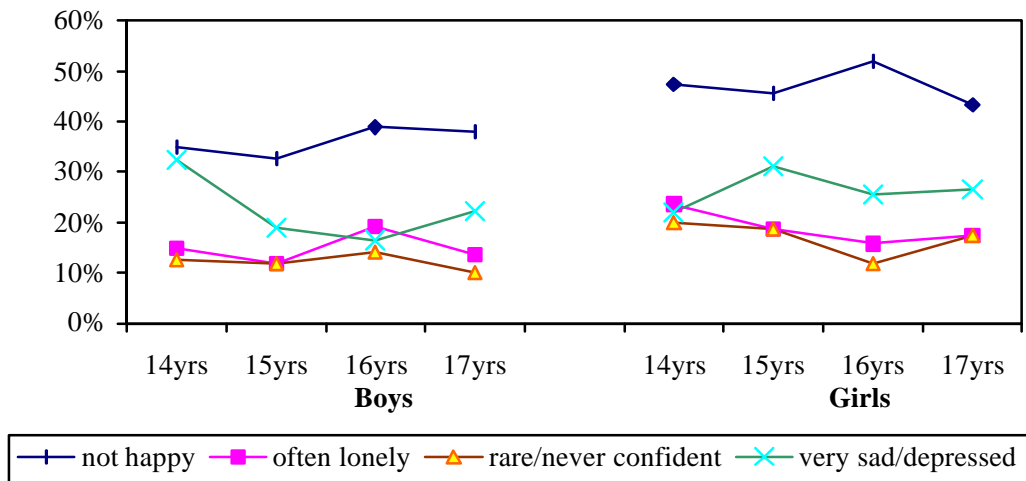


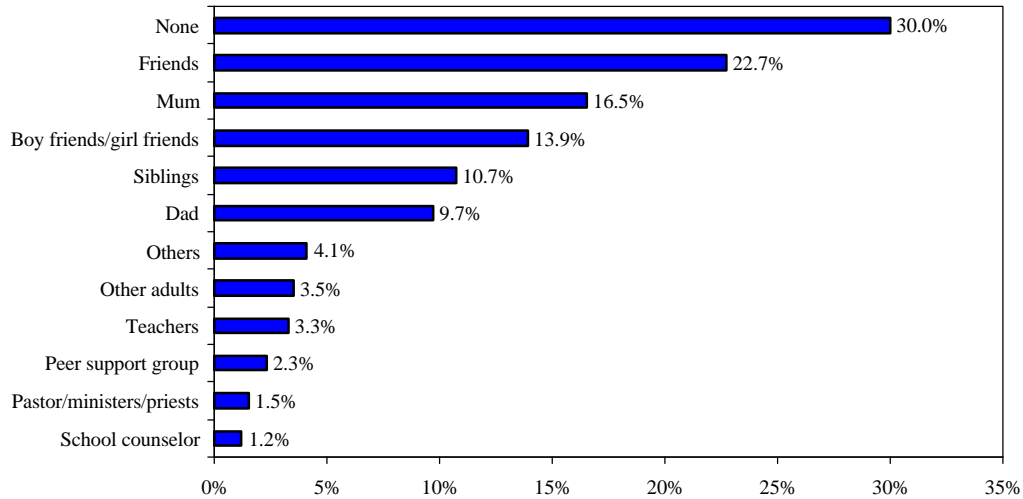
Figure 6.5.5 shows that there was a higher proportion of girls than boys at each age who reported feeling unhappy. From age 15 years onwards there were also higher proportions of girls who reported that they had experienced severe sadness or depression in the past six months. There were less marked differences between girls and boys in the proportions reporting that they had low self-confidence or often felt lonely, but these were generally higher among girls.

Figure 6.5.5 Proportion reporting low levels of happiness or confidence and high levels of loneliness or sadness by age and gender



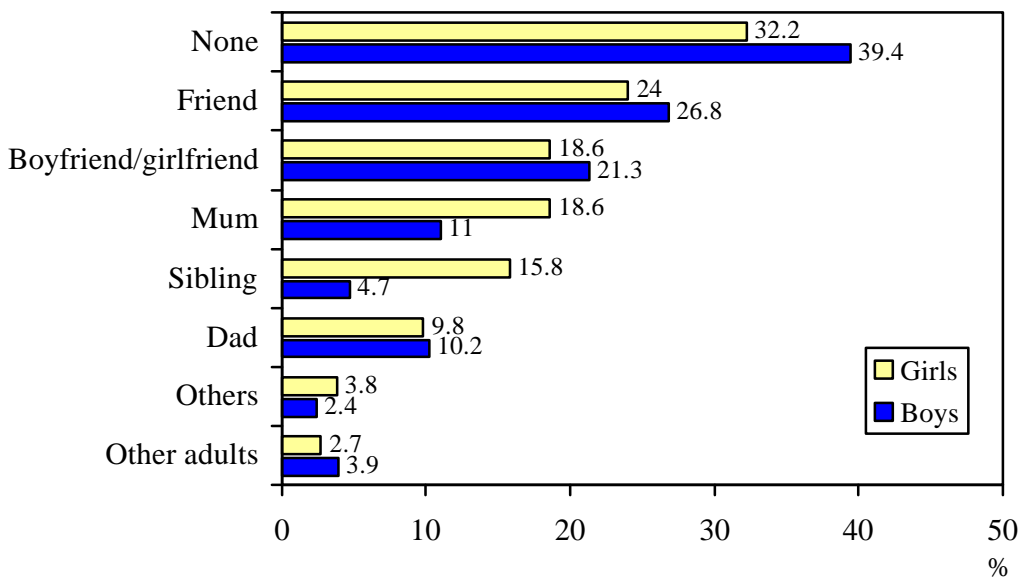
Most commonly students who reported that they had experienced severe sadness or depression in the past six months said that they had no one to turn to for support (Figure 6.5.6). This was reported by just under one-third of students who had experienced this level of depression. Following this the most common sources of support identified were friends, in just under one-quarter of cases, followed by mothers and boyfriends/girlfriends.

Figure 6.5.6 turned to for support by students feeling very sad or depressed



A comparison of the sources of support identified by boys and girls who had experienced severe sadness or depression (Figure 6.5.7) shows that there was a higher proportion of boys, also in five, who reported that they had none that they could obtain support from when they were experiencing such difficulties. The other notable difference was the lower proportion of boys mothers or siblings when they suffered severe sadness or depression.

Figure 6.5.7 Persons turned to for support by students feeling very sad or depressed



6.6. School environment

- Generally students were positive about their teachers and peers at school, but had more divided views about their school environment overall.
- Although just over two in five students did not think that the rules were too strict at school the proportion who held the opposite view was only slightly smaller. About three in five considered the rules at school were fair.
- Over 70% of students considered their school to be a nice place to be, while a similar proportion had a sense of belonging at school. However, a substantial proportion of students, about two in five, did not consider their school to be clean or safe.
- Boys viewed the school environment at their school more positively than girls, but girls tended to report a more favorable peer environment than boys.

In order to measure the level of connectedness with their school and support received from their teachers, students were asked to rate the school that they attend in terms of its qualities of fairness, security, cleanliness, teacher support and peer friendliness. A detailed summary of the results of these questions is shown in Table 6.6.1.

While the majority of students felt that they had an opportunity to take part in making the rules at their school there was still a substantial proportion, over 40%, who were unsure about this or did not agree that this was the case. Students were divided over whether they were treated too severely or strictly at school, although there was a slightly higher proportion, just over 43%, who did not think that the rules were too strict compared to the proportion who agreed that they were (38.4%). Overall, the majority of students considered the rules at their school to be fair, with almost 60% reporting this. Once again, however, there was still a substantial proportion (just over 40%) who were unsure about this or who disagreed that the rules at their school were fair.

Over 70% of students considered their school to be a nice place to be, while a similar proportion had a sense of belonging at school. On the other hand, when asked if they considered their school to be clean, the most frequent response given by students (over 42%) was that they did not. There was a slight majority of students (50.2%) who considered that their school was safe, but still a substantial proportion (almost 37%) who disagreed that this was the case.

Generally students showed positive perceptions of their teachers. Between 70 and 76% agreed that they were encouraged to express their views in class, that their teachers treated them fairly, that they could get extra help in class when they needed it and that their teachers took a personal interest in them.

There were also positive perceptions reported by students of the relationships between students at their school. Over 80% reported that most of the students in their class enjoyed being together. Between 73 and 75% reported that most students in their class are kind and helpful and that most students accept them as they are.

Table 6.6.1 Perceptions of the general environment, teachers and peers at school

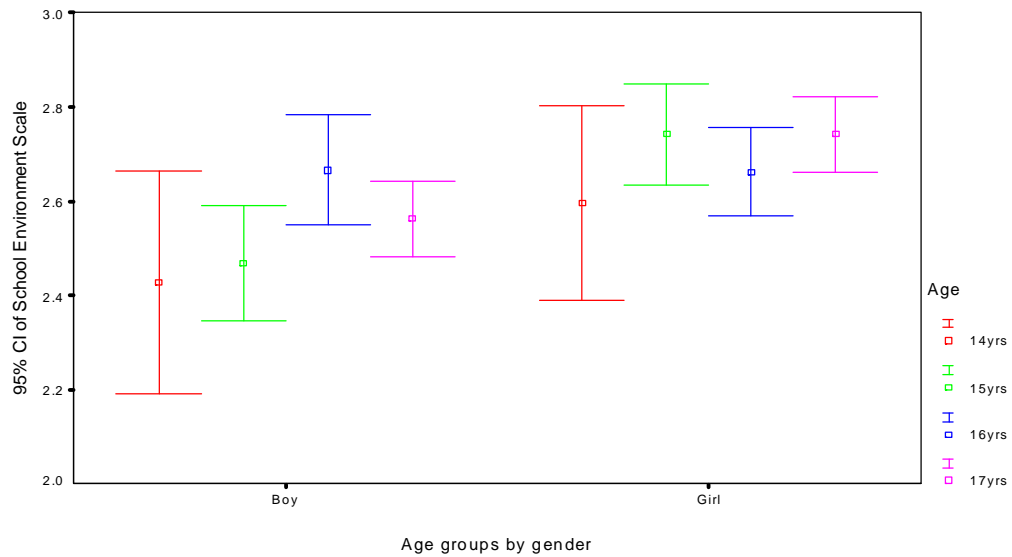
	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
School environment scale					
Students take part in making the rules in school	27.8	30.9	13.4	15.9	12.0
Students are treated too severely or strictly in school	13.7	24.7	18.1	24.5	18.9
Rules in school are fair	25.5	33.5	15.9	16.0	9.1
School is a nice place to be	33.5	38.8	11.4	9.9	6.5
I feel I belong at this school	29.4	40.9	13.6	10.3	5.8
School is clean	15.2	24.4	17.8	26.0	16.6
School is safe	23.3	26.9	13.2	18.0	18.8
Perception of teacher					
I am encouraged to express my own views in my class(es)	35.3	40.8	10.9	8.4	4.6
Our teachers usually treat us fairly	33.2	36.9	12.4	11.8	5.7
When I need extra help, I can get it	30.8	43.2	12.8	9.2	4.0
My teachers are interested in me as a person	32.4	40.9	13.4	8.4	4.9
Peers scale					
Most of the students in my class(es) enjoy being together	42.5	39.7	9.4	6.2	2.3
Most of the students in my class(es) are kind and helpful	34.1	39.6	13.4	9.7	3.2
Most other students accept me as I am	35.6	39.7	12.5	8.0	4.1

The ratings given by students regarding the attributes of their schools were summed to make 3 scales relating to school environments, perceptions of their teacher and peer perceptions. These scales were based on factor analysis which showed these items had acceptable internal consistency¹⁸. On each of these scales a lower score indicates stronger agreement with the characteristic of interest. The means scores for the whole sample of students showed that students rated each of these domains of their school quite positively

Boys generally showed more positive perceptions of the school environment than girls and the differences were most marked at ages 15 and 17 years.

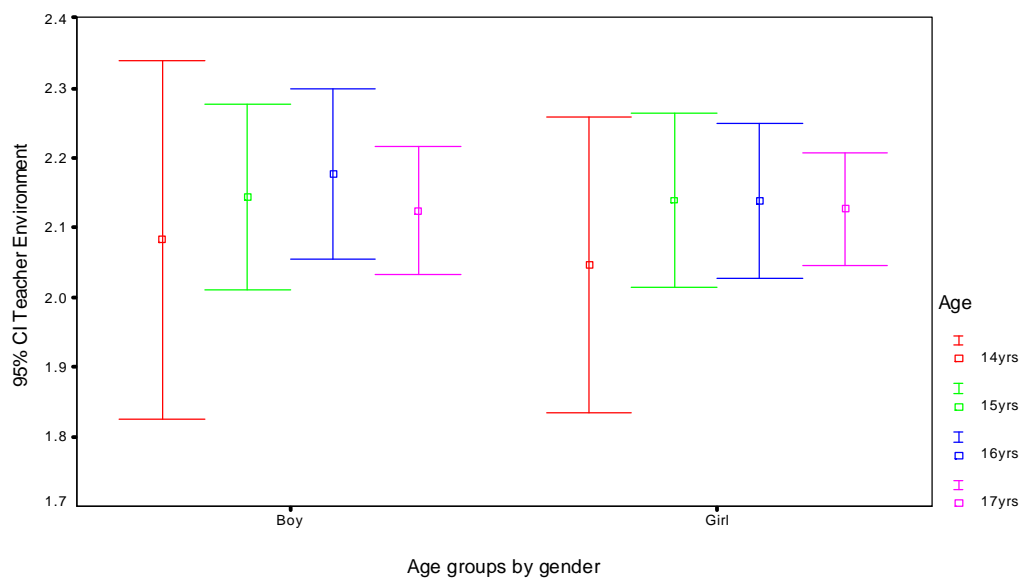
¹⁸ The scores for the three scales were reasonably internally consistent (reliable) with Cronbach's alpha coefficients of 0.68, 0.73 and 0.70 respectively.

Figure 6.6.1 Means school environment scores by gender and age (with 95% confidence intervals)



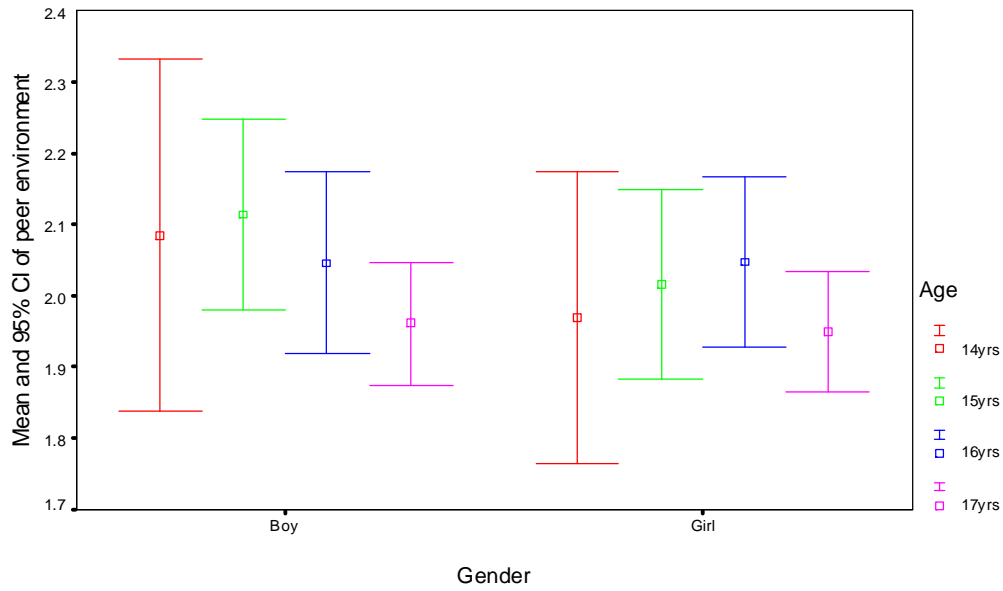
There was little difference between boys and girls at each age level between 14 and 17 years in their perceptions of their teachers.

Figure 6.6.2 Mean ratings of teachers by gender and age (with 95% confidence intervals)



The ratings given by the students of their peer environment were similar between boys and girls at each age level.

Figure 6.6.3 Mean ratings of the peer environment at school by gender and age (with 95% confidence intervals)

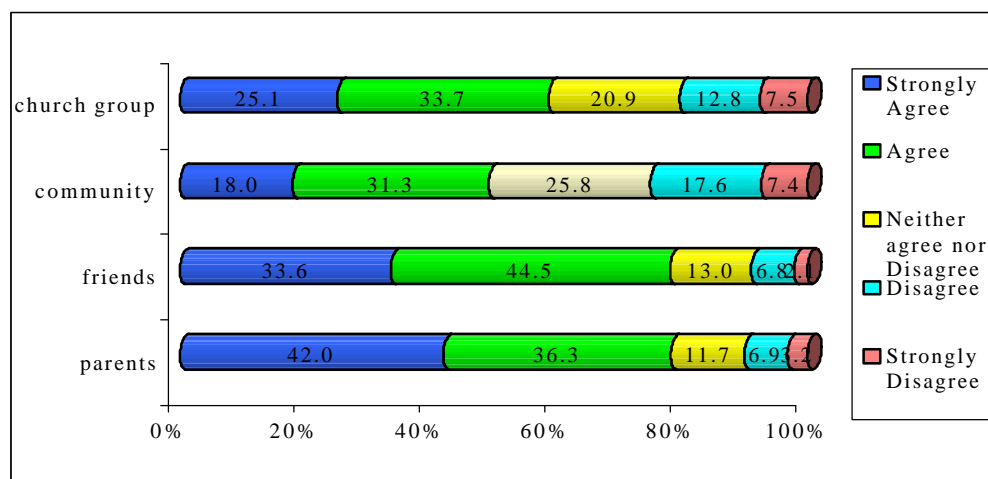


6.7 Community participation and community involvement

- Over three quarters of students felt encouraged to express their views among their parents and their peers. Following these, the church was the next context where students were most likely to feel encouraged to express their views
- Just under half of students felt encouraged to express their views in the community.
- There were slightly higher proportions of girls than boys at each age who felt encouraged to express their views among their parents or friends, whereas higher portions of boys felt encouraged to express their views in the community of church contexts.
- While the vast majority of students (over 90%) considered their local community to be important to them only about one in five felt strongly involved in their community, while over two in five felt little or not at all involved. Boys were more likely than girls to consider the community to be important and to feel strongly involved in the community.

An important dimension of the social environment in which students operate is the extent to which it allows them to participate through the expression of their personal opinions. Figure 6.7.1 shows that the contexts in which students felt most comfortable to express their views were among their parents and their peers, with over 78% of students reporting that they felt encouraged to express their opinions in these contexts. The church setting was the next most common context where students felt encouraged to express their opinions, with just under 60% reporting this. The community was the setting in which students were least likely to feel encouraged to give their opinions, with just under half of students reporting this.

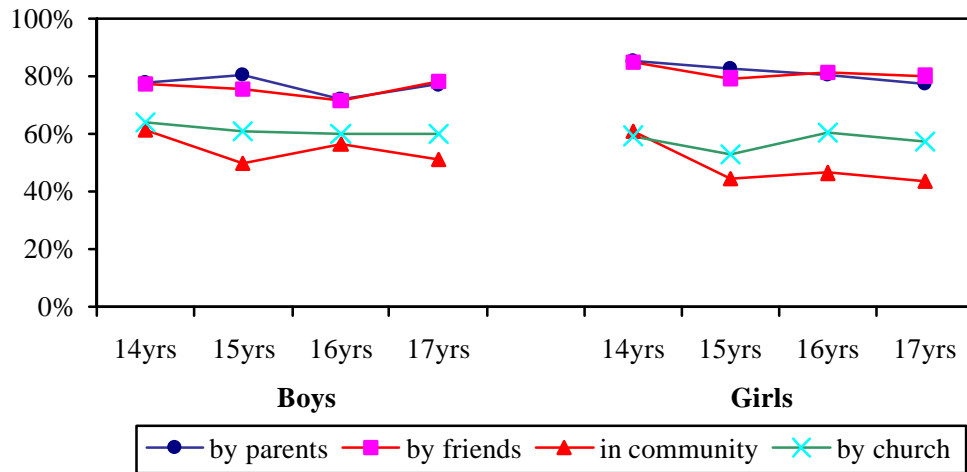
Figure 6.7.1 Level of encouragement students received to express their views in various contexts



As Figure 6.7.2 shows there were slightly higher proportions of girls at each age who felt encouraged to express their views to their parents or friends compared to boys. On the other hand boys, particularly from age 15 years upwards, boys were more likely than girls at each age level to feel comfortable to express their views in the community setting. There were also slightly

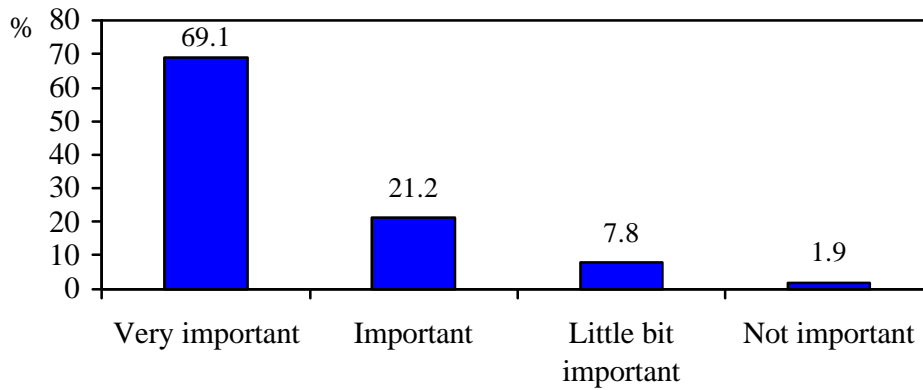
higher proportions of boys at most ages compared to girls who felt encouraged to express their views in the church setting, and the differences were most marked at age 15.

Figure 6.7.2 Proportions of students who felt encouraged to express their views in different contexts by age and gender



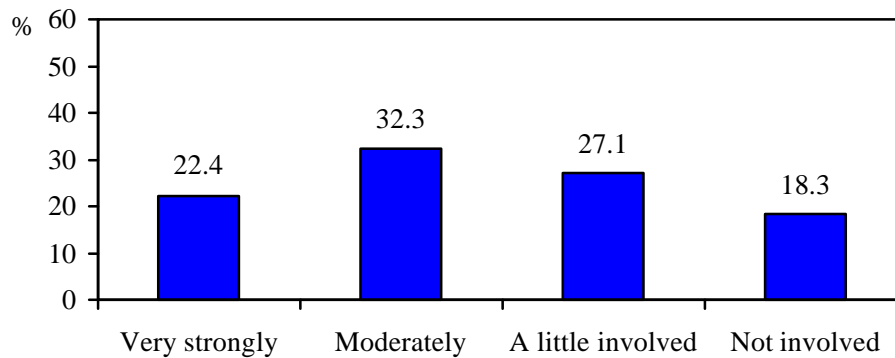
Almost seven in ten students regarded their community as very important to them, and over nine in ten rated their community as important or very important (Figure 6.7.3).

Figure 6.7.3 Ratings of the importance of the community



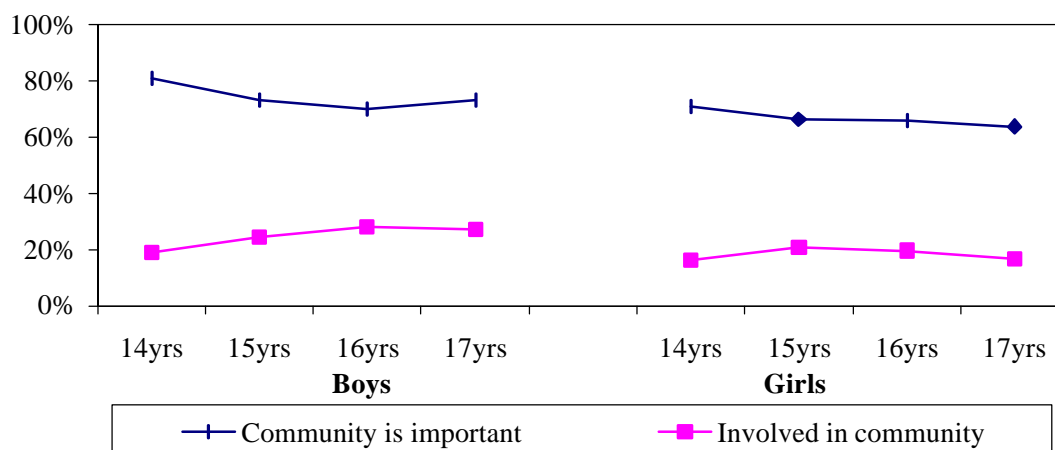
The perceived level of involvement in the community, as shown in Figure 6.7.4, did not match the level of importance that students placed upon community. Only a little over one in five students felt very strongly involved in their community. On the other hand over 45% reported that they felt only a little involved or not involved at all.

Figure 6.7.4 Perceived level of involvement in the community



There were higher proportions of boys than girls at each age level between 14 and 17 years who reported that they considered their community to be very important to them (Figure 6.7.5). Similarly, boys at each age, and especially at ages 16 and 17 years, were more likely than girls to report that they felt strongly involved in their community.

Figure 6.7.5 Proportions of students who rated the community as very important to them or who reported that they were strongly involved in the community by age and gender

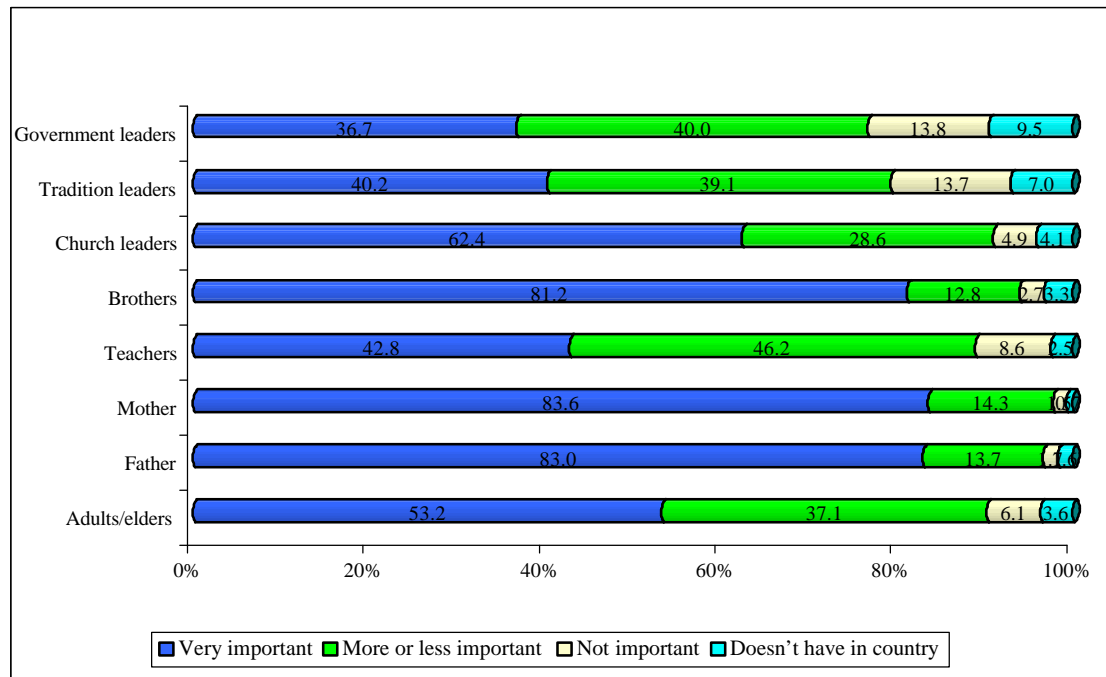


6.8. Trust in adults and social institutions

- Over 80% of students identified members of their immediate family as credible figures in their social environment. Government leaders were least often rated as highly credible, with just over 35% of students expressing this view.

In order to measure perceptions of authority in their social context students were asked to rate the extent to which they considered a range of individuals and institutions as credible. Students identified members of their immediate family, that is, fathers, mothers and siblings, as the figures with the highest credibility in their social environment (Figure 6.8.1). Over 80% of students considered each of these figures to have high credibility. Church leaders were regarded as having high credibility by over 60% of students and these were followed by adults and elders in the community, teachers and traditional leaders. Government leaders were least often rated as highly credible, with just over 35% of students expressing this view.

Figure 6.8.1 Perceived credibility of adults and social institutions



6.9 Physical injury, violence and bullying

- A substantial proportion of students, over two in five, reported suffering an injury that required treatment in the past 12 months, and a similar said that they suffered an injury deliberately inflicted by another person in this period. Mothers, unidentified “other people”, boyfriends/girlfriends and fathers were the most common sources of these deliberate injuries identified by students.
- Boys aged 14 years were most at risk of an injury or an injury deliberately inflicted by another person, while boys were more likely than girls to report any form of injury.
- Around a third had been bullied, and half had bullied others at some time in the previous three months.
- About 4% of students had been bullied one or more times per week in the past school term, while a slightly higher proportion (8%) admitted that they bullied others once per week or more. Boys were more likely than girls to say that they had been bullied or had bullied others.

Just over two in five students reported that they had suffered an injury that needed treatment in the past 12 months and a little under one in five reported two or more injuries over this period. About two in five students reported that they had suffered injuries deliberately inflicted by another person in the past 12 months that required treatment. There were several sources of these deliberately inflicted injuries that were identified with roughly equal frequency (24-28% of students), namely mothers, unidentified other people, boyfriends/girlfriends and fathers. Teachers and Police were least often identified as causes of deliberate injury.

Table 6.9.1 The frequency and causes of physical injury reported by students

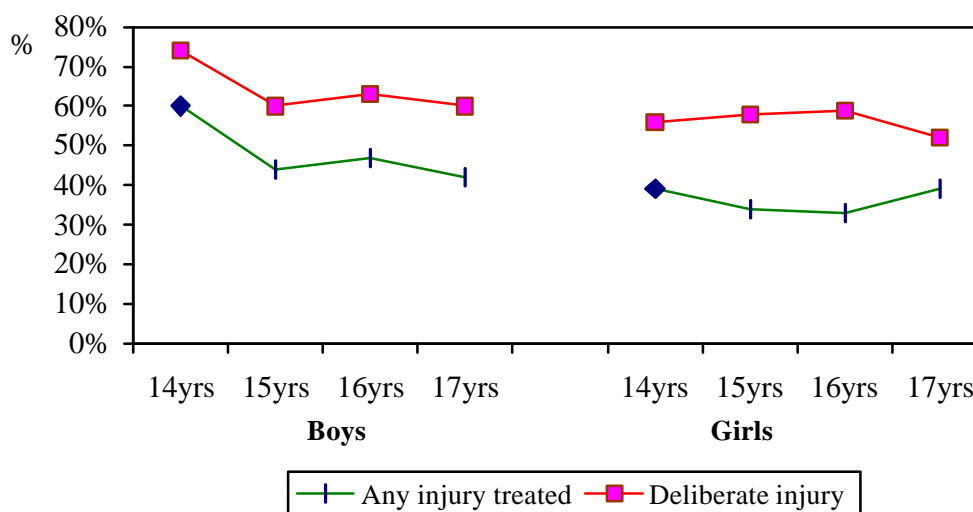
	No.	%
Times had a physical injury that needed treatment in last 12 months		
Never	898	59.0
Once	313	20.6
2-5 times	176	11.6
More than 5 times	120	7.9
Sources of deliberate injury*		
Father	360	23.7
Mother	425	27.9
Teacher	128	8.4
Police	109	7.2
Boy/girl friend	373	24.5
Another person	403	26.5
Suffering any deliberately inflicted injury	609	40.4

*The missing cases were included in the numerator for the calculation of the percentages.

Figure 6.9.1 shows that boys of age 14 years were the highest risk group for injuries, with three in five in this group reporting at least one injury requiring treatment in the past 12 months and

almost three quarters reporting a deliberately inflicted injury. At each age level between 14 and 17 years there were higher proportion of boys than girls who reported any injury or a deliberately inflicted injury.

Figure 6.9.1 The proportion of students who suffered any injury or a deliberate injury caused by another person in the last 12 months, by gender and age



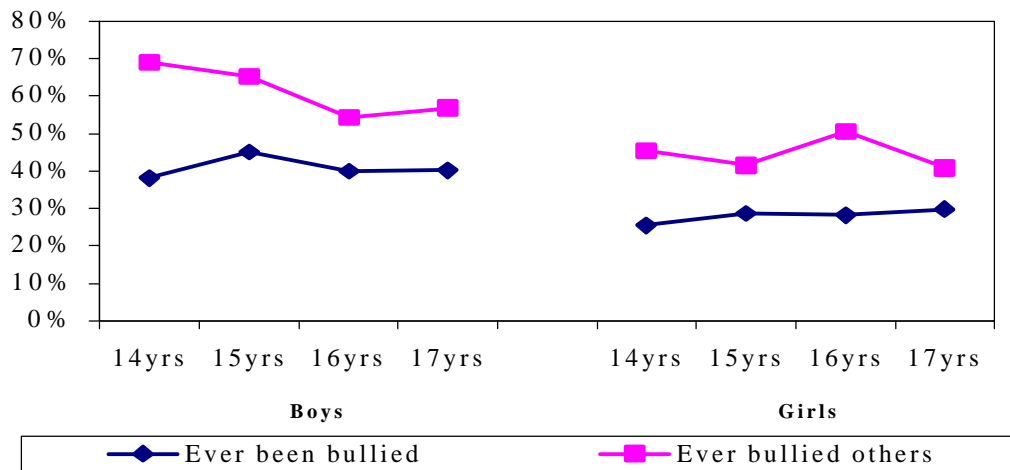
Just over one third of students reported that they had been bullied at least once during the past school term (Figure 6.9.2). There was a small proportions, about 4%, who reported being bullied once per were or more. Over half of students admitted that they had bullied another student at least once in the past school term. Over 37% stated that they had bullied other students sometimes or more regularly, while about 8% reported bullying others on at least a weekly basis.

Table 6.9.2 Frequency of being bullied, deliberately ignored or bullying others in the past school term

Frequency of bullying	No.	%
Ever been bullied in school this term		
I have not been bullied in the last 3 months	980	65.3
Once or twice	185	12.3
Sometimes	283	18.9
About once a week	27	1.8
Several times a week	25	1.7
Frequency of taking part in bullying other students in school this term		
I have not bullied others in the last 3 months	734	49.1
Once or twice	207	13.8
Sometimes	439	29.3
About once a week	46	3.1
Several times a week	70	4.7

At each age between 14 and 17 years there were higher proportions of boys than girls who reported ever being bullied or bullying another student in the past school term (Figure 6.9.2). Boys at age 14 years most frequently stated that they had bullied others at least once, with almost 70% of this group reporting this. The highest proportion of students who reported being bullied were 15 year old boys.

Figure 6.9.2 Proportions of students who had been bullied or bullied others in the past school term by age and sex



6.10 Personal hygiene

- The majority of students reported brushing their teeth 2 or more times per day and washing their hands before eating or after using the toilet. There was still almost one quarter, however, who did not brush their teeth this regularly, over one third who did not always wash their hands before eating and about one in five who did not always wash their hands after using the toilet.
- Girls showed slightly higher rates of these personal hygiene habits than boys.

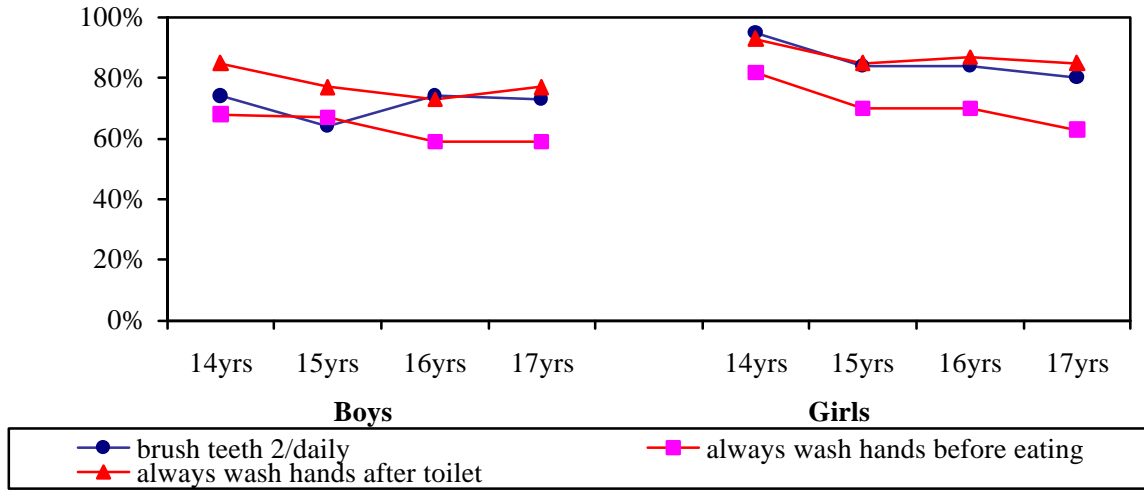
Personal hygiene behaviour provides an indicator of self-care and potential disease risk. While over three quarters of students reported brushing their teeth twice a day there were still 22% who did this once per day or less often (Table 6.10.1). Over one third of students reported that they did not always washing their hands before eating, and just under one in five stated that they did not always wash their hands after using the toilet

Table 6.10.1 Frequency of tooth brushing and hand washing among students

	No.	%
How often do you brush your teeth?		
More than once a day	1170	77.9
Once a day	221	14.7
At least once a week but not daily	33	2.2
Less than once a week	54	3.6
Never	23	1.5
How often do you wash your hands before eating?		
Always	969	64.6
Sometimes	503	33.6
Never	27	1.8
How often do you wash your hands after using the toilet?		
Always	1220	81.6
Sometimes	250	16.7
Never	26	1.7

Figure 6.10.1 shows that girls were more likely to brush their teeth regularly than boys at all ages. There were also higher proportions of girls at each age who reported regular hand washing, particularly after using the toilet.

Figure 6.10.1 Proportions of students who frequently brush their teeth and wash their hands by age and gender



6.11 Sexual behavior

- The majority of students reported having sex in the past. However, there were substantially higher proportions of boys (over 80%) than girls (just over 40%) who reported this. It was notable that the proportions of boys who reported having sex at age 14 and 15 years were similar to those at older ages, while for girls the experience of sex was more likely to be reported at older ages.
- The majority of girls (just under 60%) reported having sex with only one person whereas more than half of boys said that they had had sex with four or more people in the past.
- There was a substantial proportion of students who reported having unwanted sex when drunk or high on drugs, but this was much more common among boys (61%) than girls (32%).
- There were only small proportions of sexually active boys and girls, about one in eight, who reported that they always used condoms. On the other hand, about three in five girls and just over two in five boys reported never using condoms.
- Public health clinics were the most commonly identified venue in Pohnpei for obtaining condoms. Pharmacies were the next most commonly identified source of condoms, followed by dispensaries and grocery stores, although each of these was identified far less often than public health clinics.
- About 45% of students stated that they had been pressured to have sex in the past, with girls slightly more likely to report this than boys. It was not clear whether this pressure was in the form of force, coercion or peer pressure. Boyfriends or girlfriends were identified as the source of this pressure by about one third of students, and these were followed in frequency by “other people” known to the students and unknown people.

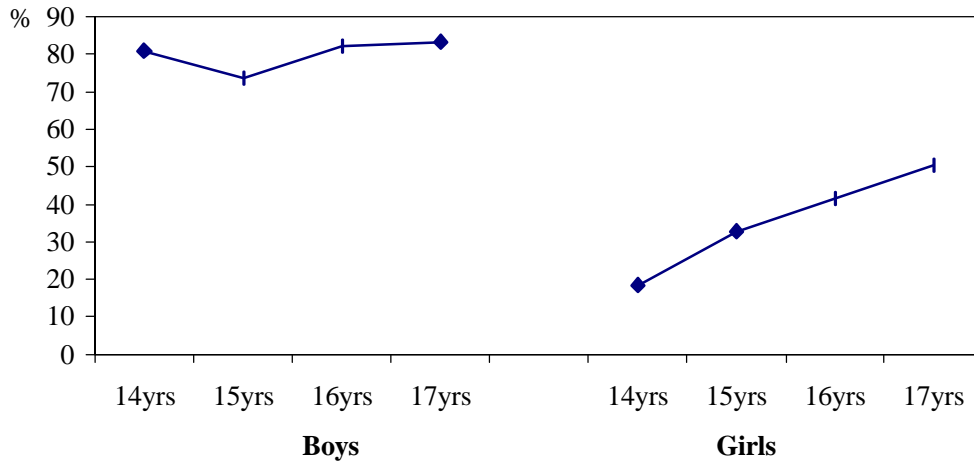
Overall, more than three in five students reported having sex in the past (Table 6.11.1). There was a much higher proportion of boys (over four in five) who reported having sex than girls (just over two in five).

Table 6.11.1 Past sexual experience, by gender

	Boy		Girl		Total	
	No.	%	No.	%	No.	%
Ever had sex						
Yes	580	81	321	42.1	901	60.9
No	136	19	442	57.9	578	39.1

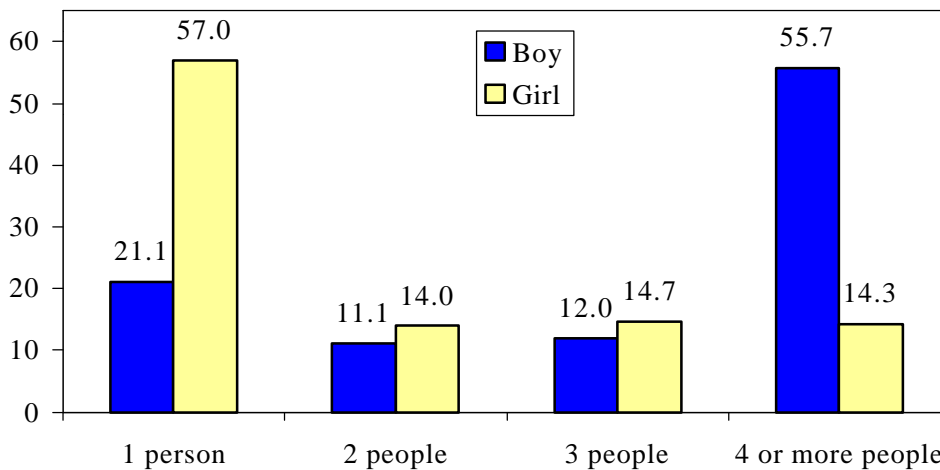
Figure 6.11.1 shows that there was a steady increase in the proportion of girls from age 14 years onwards who reported having sex in the past. On the other hand, the proportion of boys at age 14 years who reported having sex was almost as high as that of boys at age 17.

Figure 6.11.1 The proportions of those whom have had sex by gender and age



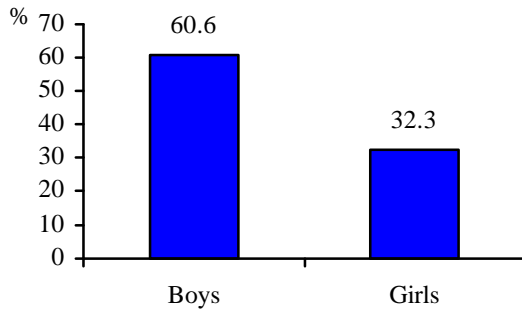
The majority of girls who reported having sex had only had sex with one person in the past. Conversely, the majority of sexually active boys reported having sex with four or more people.

Figure 6.11.2 Number of sexual partners of sexually active boys and girls



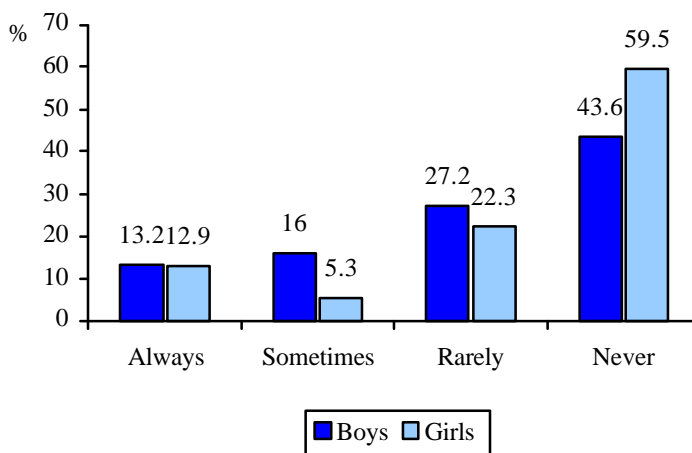
Substantial proportions of both boys and girls who reported having sex in the past also reported having unwanted sex when they were drunk or high on drugs. The rates were particularly high among boys, with three in five reporting that they had unwanted sex when drunk or high. Just under one third of girls reported having sex in such circumstances.

Figure 6.11.3 Proportion of sexually active students reporting unwanted sex when drunk or high on drugs



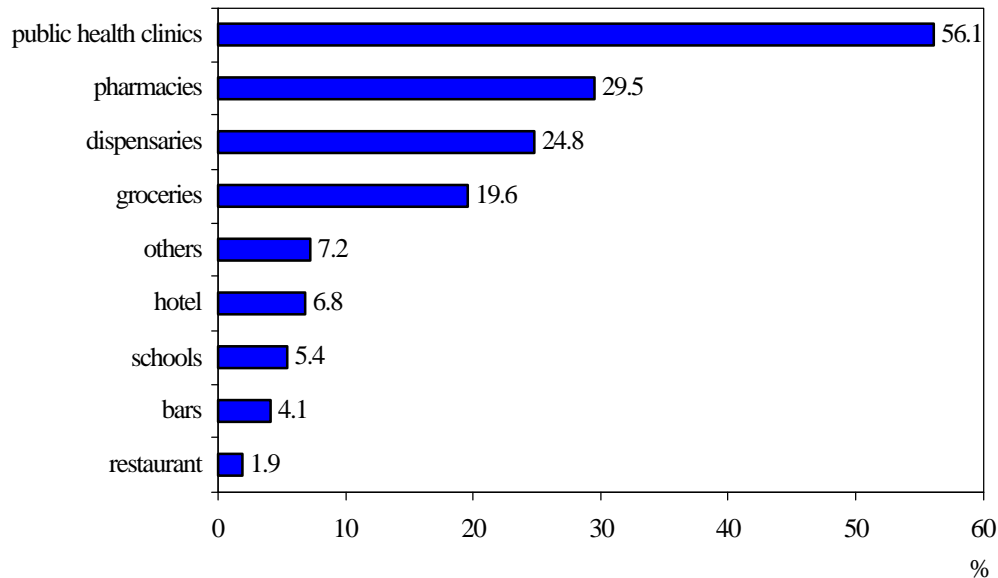
There were only small proportions of sexually active boys and girls, about one in eight, who reported that they always used condoms. On the other hand, there were substantial proportions who reported never using condoms. Girls were less likely than boys to report using condoms, with about three in five girls stating that they never used condoms compared to just over two in five boys.

Figure 6.11.4 Use of condoms by sexually active students



When students were asked where they thought they could obtain condoms in Pohnpei the most common location identified, by just under three in five students, was public health clinics. Pharmacies were identified as sources of condoms by just under one third of students, and these were followed by dispensaries and grocery stores.

Figure 6.11.5 The proportions of the respondents (n=1140) in getting condom from various places



The ability of young people to deal with pressures to have sex is related to their sense of personal security and self-esteem and also reflects the extent to which they can control their exposure to potential health risks. As Table 6.11.2 shows, one in eight students reported that they would not be able to say no to a request for sex from their boyfriend or girlfriend. The proportions of girls who reported being unable to say no to such a request was less than half that of boys. Just under one third of students who stated that they would not be requested to have sex when they didn't want to. On the other hand, there were a substantial proportion of students, about 45%, who stated that they had been pressured to have sex in the past, with girls slightly more likely to report this than boys. Discussions with young people in Pohnpei since the completion of the HBLPY indicate that this is manifested primarily in the form of peer pressure. When asked who pressured them to have sex the most common response, given by about one third students, was boyfriends or girlfriends. After this other people known to the students were identified as the most common source of this pressure, reported by under 20% of students, followed by unknown people and unspecified "others". The major differences between boys and girls in this regard was that boys were more likely to identify unknown men or women as a source of pressure towards sex.

Table 6.11.2 Perceived ability to negotiate about sex, experience of being pressured to have sex and sources of this pressure

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Can say no to boyfriend/girlfriend for sex request						
This would not happen to me	186	33.5	90	29.7	276	32.1
I would definitely be able to say no	119	21.4	123	40.6	242	28.2
I would probably be able to say no	70	12.6	43	14.2	113	13.2
Maybe I would be able to say no	95	17.1	27	8.9	122	14.2
I would not be able to refuse	86	15.5	20	6.6	106	12.3
Been pressured to have sex						
Yes	243	43.9	140	46.7	383	44.8
No	311	56.1	160	53.3	471	55.2
Who pressured you to have sex						
A man or a woman I don't know	66	19.1	19	9.8	85	15.7
My boyfriend or girlfriend	112	32.4	67	34.5	179	33.1
A member of my family	4	1.2	3	1.5	7	1.3
Someone I know	61	17.6	34	17.5	95	17.6
A group of people	40	11.6	27	13.9	67	12.4
A group of males	20	5.8	14	7.2	34	6.3
Another person	43	12.4	30	15.5	73	13.5

Section 7

Health and lifestyle behaviours of out school respondents

7.1 The characteristics of students in the sample

In order to explore the health and lifestyle issues being faced by out-of-school young people a convenience sample of this group was surveyed in the State of Pohnpei. This sample was collected at two time periods. The first of these surveys of out-of-school youth (n=137) included a number of additional questions relating to sexual behaviour and the prevention of sexually transmitted infections and HIV which were part of separate research study. The second survey (n=108) included only the core set of sexual behaviour questions which were also delivered to the student sample. There were also a small number of modifications to the substance use and dietary habit questions used in the second out-of-school youth survey, and the inclusion of some additional questions that were also asked of the students sample¹⁹ Therefore, while most of the results presented in this Chapter represent the total sample of 245 out-of-school youth, there are several questions in which the results shown were only obtained from the second survey sample. In addition, because of the difference in the ordering of some of the sexual health questions between the first and second out-of-school youth surveys, there are a few questions from this domain for which the results of the second survey only are shown. Where this occurs there is indication given in the text.

Table 7.1.1 shows that this out-of-school youth (OOSY) sample comprises mostly boys, with almost all of them 15 years and older, and the majority being aged 17 years. This sample also has an older age distribution compared with the in-school youth (ISY) sample, so comparisons between these two groups should be treated with caution. It is interesting to note that the majority of these out of school youth did not have a job.

Table 7.1.1 The demographic characteristics of the student sample

Characteristics	Number	%
Gender		
Boy	120	64.5
Girl	63	33.9
Age		
12	2	1.1
13	3	1.6
14	6	3.2
15	15	8.1
16	24	12.9
17	84	45.2
18	24	12.9
19	13	7.0
20	15	8.1

¹⁹ These additional questions concerned mother and father's occupation, trust in adults and social institutions, community participation and hand washing.

Do you have a paid job now

No	116	62.4
Yes, part-time	52	28.0
Yes, full-time	9	4.8

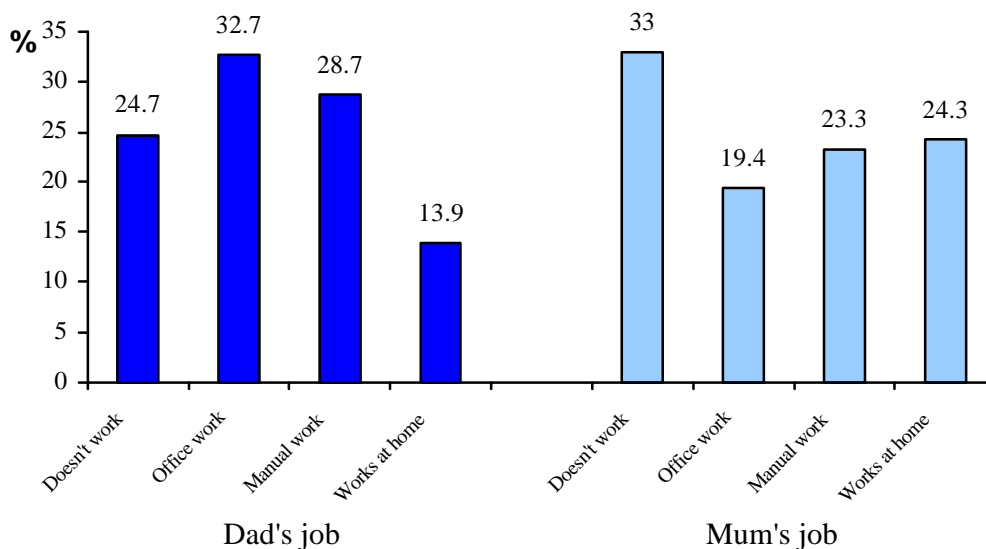
Table 7.1.2 shows that the majority of both girls and boys in the OOSY sample were aged 17 years.

Table 7.1.2 The distribution of the student sample by age and gender

Age	Boys		Girls	
	No.	%	No.	%
<=16yrs	37	30.8	12	19.0
>=17yrs	83	69.2	51	81.0

There was a substantial proportion of out-of-school youth, about one quarter, who reported that their fathers did not work. (Figure 7.1.1). Those fathers who did work were mostly reported to be office workers or manual workers. It was most common for the mothers of out-of-school youth to be described as not working, with one third of youth reporting this. For those out-of-school youth with working mothers the most common occupations reported were working at home and manual work.

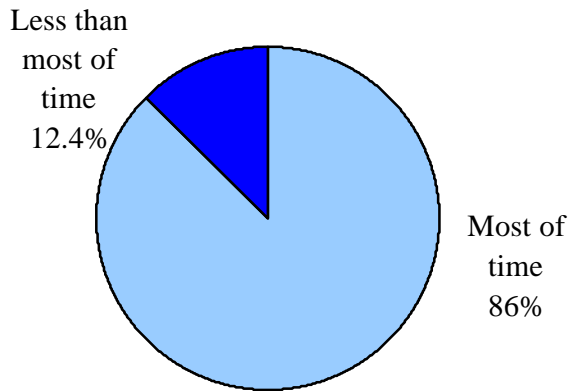
Figure 7.1.1 Parental occupation*



*these results only pertain to the second OOSY sample (n=108)

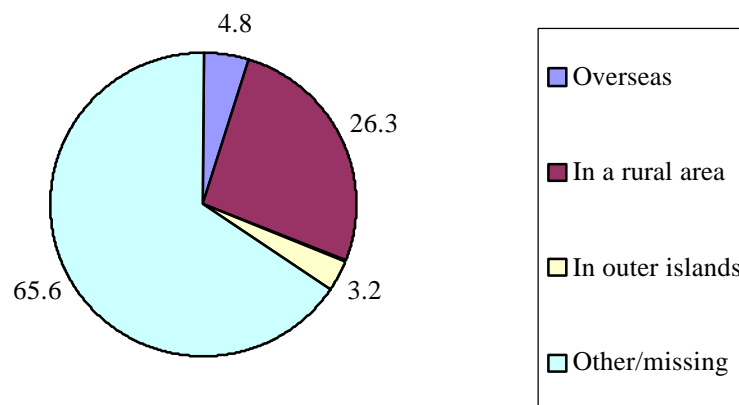
The vast majority of youth, as shown in figure 7.1.2, lived with their parents most of the time.

Figure 7.1.2 Proportion of students living with parents most of time



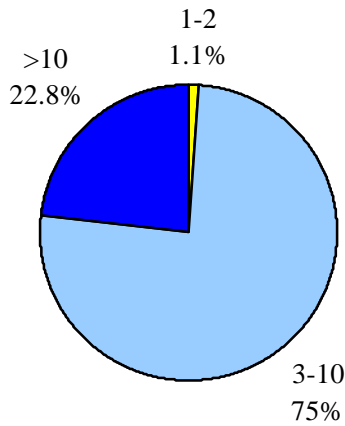
As Figure 7.1.3 shows that the majority of youth did not respond to the question about the location of their parent's residence, which may have been because there was no option given to them to indicate that their parent's lived in the main township of Kolonia in Pohnpei. Just over one quarter of youth reported that their parents lived in rural areas, while small proportions reported that they lived overseas or on outer islands.

Figure 7.1.3 Location of parent's residence



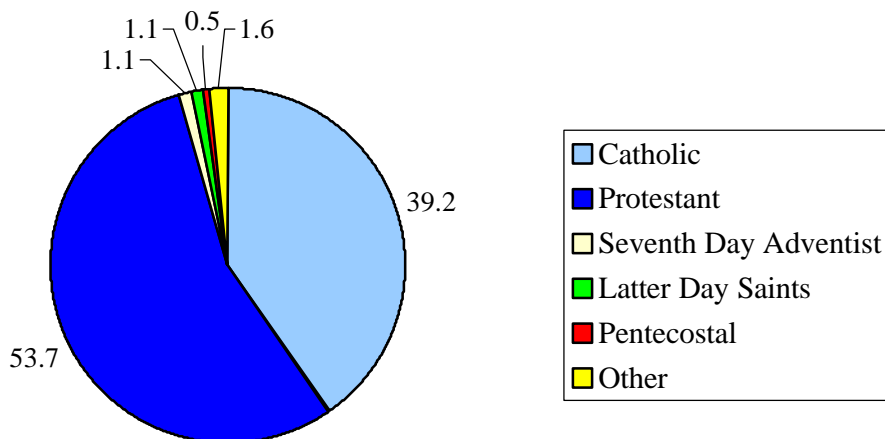
As Figure 7.4.1 shows the majority of youth, three quarters in total, reported that between 3 and 10 people lived with them. Just under one quarter reported that they lived with more than 10 people.

Figure 7.1.4 Number of people living with students



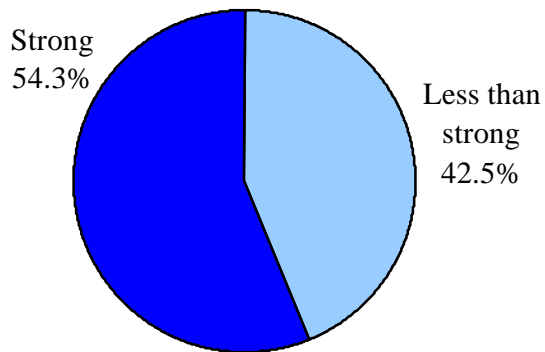
The majority of students described their religious affiliation as Protestant, while about two in five identified themselves as Catholic (Figure 7.1.5). There were only small proportions of youth who reported that they were members of other religious groups like the Seventh Day Adventist church, the Church of Latter Day Saints and pentecostal churches.

Figure 7.1.5 Religious denomination of respondents



While the majority of youth stated that their commitment to their faith was strong, there were still more than two in five who rated their commitment as less than strong (Figure 7.1.6).

Figure 7.1.6 Strength of commitment to faith



7.2 Substance use

Figure 7.2.1 shows that all of the substances except methylated spirits and solvents had been used at least once by most youth. Betel nut was the substance that had been most often tried, with almost all respondents reporting this. This was followed by alcohol and chewing tobacco, each of which had been tried by more than three quarters of youth, and cigarettes and kava, each of which had been used at least once by about two thirds of youth. Half of the young people reported ever using marijuana, on in five methylated spirits and under 10% solvents.

While the proportions of youth reporting that they used substances at least weekly were lower than those who reported using these once or more only, the order of preference for each substance was the same. However, as in the survey of students, out-of-school youth were not asked how frequently they consumed alcohol but rather the number of times that they had been drunk (see Figure 7.2.2) Betel nut was the substance most often used on a weekly or frequent basis, with over three quarters if youth reporting this. Following this, a little under half of youth reported chewing tobacco at least weekly, while two in five reported consuming kava this regularly. Just over 35% reported smoking tobacco on at least a weekly basis. While marijuana was one of the substances the OOSY were least likely to report using regularly there was still just under one quarter who reported using this at least weekly. Methylated spirits were reported to be consumed at least weekly by around 10% of youth, while 5% reported sniffing solvents this regularly.

Figure 7.2.1 Students who have ever used substances or used them at least weekly

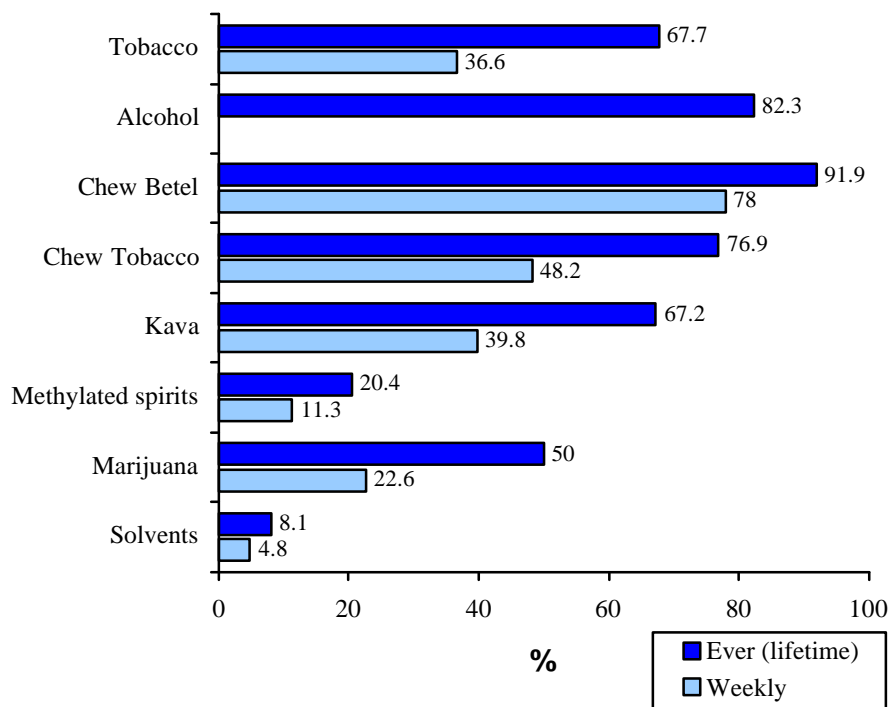


Table 7.2.1 presents a more detailed breakdown of the frequency of use of each of the substances examined in the survey. This highlights the high prevalence of regular betel nut use, with the majority of youth reporting that they undertook this at east daily. Notable also was the finding

that 15% of out-of-school youth reported smoking daily, and 10% reported chewing tobacco this frequently.

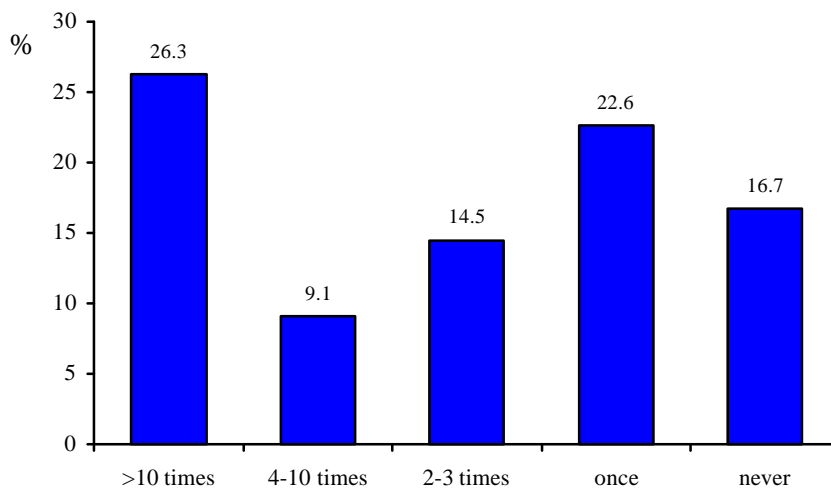
Table 7.2.1 Frequency of substance use

Substance	Frequency of use			
	Daily	Weekly	Occasionally	Do not use*
Tobacco	15.1	20.4	24.7	38.7
Betel	56.5	19.9	9.1	12.9
Chewing Tobacco	10.2	38.0	18.5	33.3
Kava	5.4	32.8	24.7	35.4
Methylated spirits	0.0	10.2	7.5	81.1
Marijuana	5.4	14.5	22.6	54.9
Solvents	0.0	3.2	5.9	89.2

*The category 'Do not use' has been included with those who didn't answer the questions.

As Figure 6.2.4 shows, half of the youth reported that they had been drunk at least twice in the past and over one quarter that they had been drunk more than 10 times.

Figure 6.2.4 Frequency of being drunk in the past



7.3 Nutrition

Table 7.3.1 shows that water was the most frequently consumed drink, with over three quarters of youth reporting that they drank this more than once per day. Coconut juice was the next most popular drink, with about one third of youth reporting that they drank this more than once per day, followed by soft drinks, coffee and tea. Around three in five young people reported seldom or never drinking tea or coffee, and half said that they seldom or never consumed soft drinks.

White bread was the most regularly consumed source of fibre, with just under 30% reporting that they ate this more than once per day. Fresh vegetables were type of fibre next most likely to be eaten this regularly, followed by fruit and taro. About half of youth reported rarely or never eating fresh vegetables or fruit.

The most frequently consumed food substances included white bread, tinned mutton and corned beef, fresh fish, turkey and coconut juice. These were followed by fresh vegetables, coffee fruits, taro, tea, soft drinks and sweets. All of these substances were reported as daily consumption by between one-third and one-half of this out of school sample.

The most commonly eaten white or red meat was fresh fish, with almost two thirds of youth reporting that they ate this once per week or more. This was followed by turkey, which a slightly smaller proportion reported eating at least weekly, then tinned mutton/corned beef and chicken.

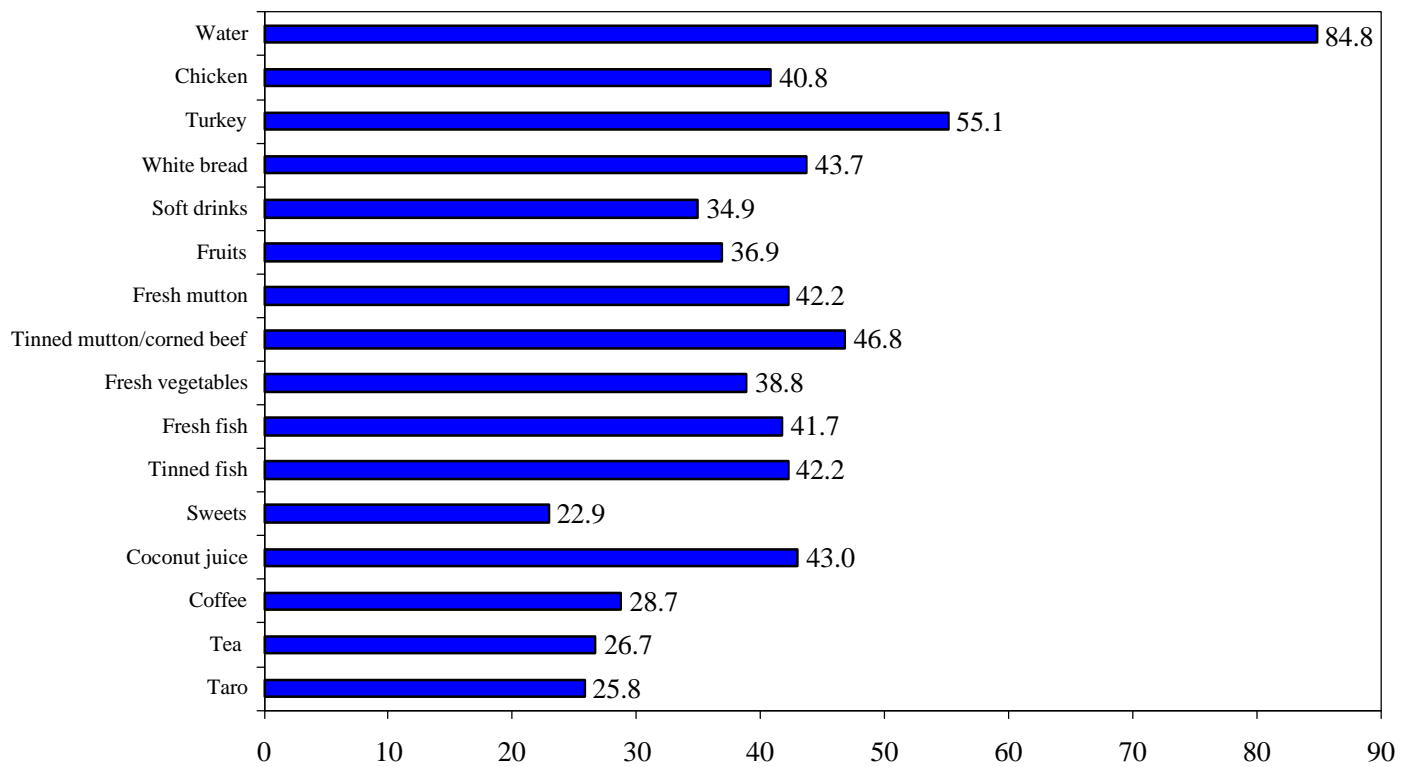
Almost two thirds of young people reported seldom or never eating sweets.

Table 7.3.1 The frequency of consumption of various foods and drinks by students

Food and drinks	More than once a day	Once a day	At least once a week but not daily	Seldom	Never
Tea	13.6	13.1	9.1	51.7	12.5
Coffee	14.9	13.8	13.2	44.3	13.8
Coconut juice	32.0	11.0	11.0	37.8	8.2
Fruits	23.8	13.1	10.1	39.9	13.1
Soft drinks	22.1	12.8	15.1	40.7	9.3
Sweets	12.9	10.0	11.2	54.1	11.8
Fresh vegetables	25.3	13.5	11.8	39.4	10.0
White bread	28.4	25.3	12.6	33.7	0.0
Taro	15.5	10.3	15.5	48.9	9.7
Fresh fish	24.7	24.7	14.6	36.0	0.0
Tinned mutton/corned beef	29.8	17.0	9.9	33.3	9.9
Turkey	33.0	14.8	14.8	34.1	3.4
Chicken	27.2	13.6	10.7	36.1	12.5
Water	78.4	6.4	7.0	2.3	5.9

Figure 7.3.1 presents the proportions of out-of-school youth who reported consuming various foods and drinks once per day or more.

Figure 7.3.1 Consumption of various foods and drinks at least once per day



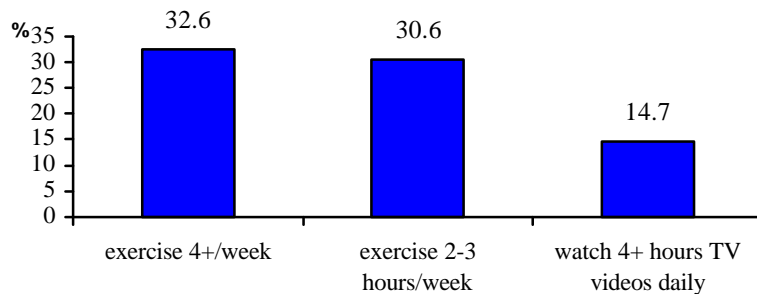
7.4 Physical activity

Questions on physical activity are shown below. Less than half of this sample were physically active 2 to 3 times per week or more often, and only one-third of the sample were physically active for 2 to 3 hours per week or more. Half of the sample reported that they watched one to three hours of television per day, with only 13% reporting four or more hours per day. This OOSY sample were similar in physical activity patterns to the ISY sample, particularly to the data reported for boys, but were less likely than the ISY sample to watch four or more hours of television per day.

Table 7.4.1 Frequency of physical activity and television watching by students

	No.	%
<i>Frequency of exercise</i>		
Everyday	10	15.5
4-6 times a week	16	17.1
2-3 times a week	21	18.2
Once a week	25	27.6
Once a month or less	30	21.5
<i>Number of hours of exercise in a week</i>		
None	30	33.9
About 1/2 hour a week	22	21.3
About 1 hour a week	20	13.1
About 2-3 hours a week	22	18.0
About 4-6 hours a week	5	7.7
7 or more hours a week	5	4.9
<i>Number of hours of watching TV in a day</i>		
Not at all	11	10.9
Up to one hour a day	27	30.4
1-3 hours a day	53	42.9
4 hours or more a day	14	14.7

Figure 7.4.1 Time spent in physical activity and television watching



6.5 Personal well-being and development

Questions about mental health, psychosocial health and inter-personal communication were asked of the sample. Individuals felt that their mother, siblings and friends were the easiest to talk to, followed by other grown ups, their fathers, sisters, and finally followed by church ministers or youth workers. Since most of this sample were male it was not surprising that they reported that their brothers were much easier to talk to than their sisters. Note that these data were not stratified by gender, given the small sample size. The overall rankings, with friends, mother and siblings, were also the same three leading ranked people that the ISY sample felt that they could talk to.

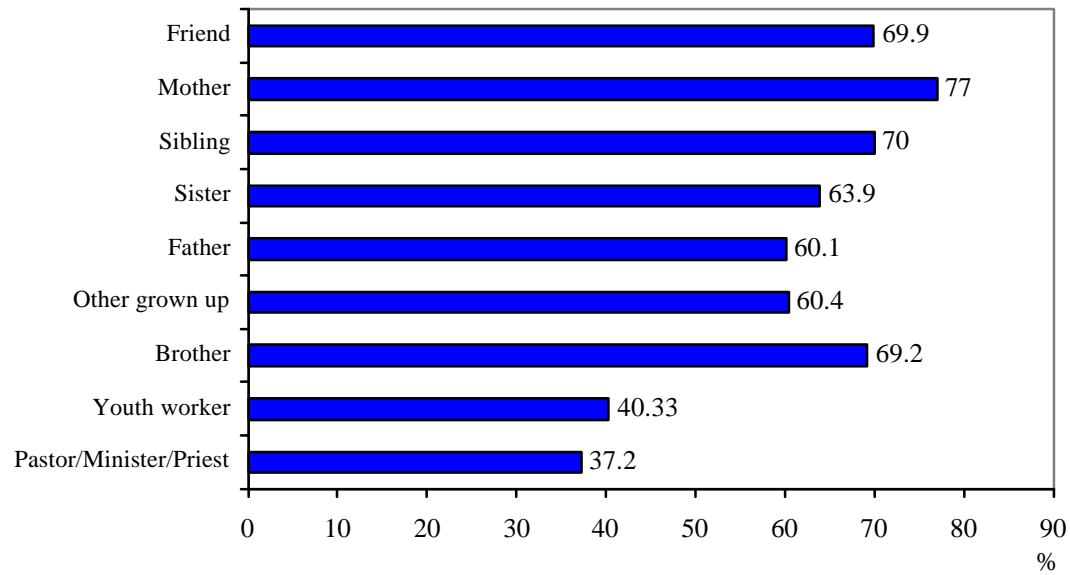
Table 7.5.2 shows some of the psychosocial and mental health questions in this sample. Around one-third reported that they did not feel happy, and a similar proportion reported that they felt lonely. Only 2.5% reported that they rarely or never felt confident. Three-quarters reported that they felt sad or depressed at sometime in the past six months, and 18% reported that this was substantial. Half of this small sample reported that it was unlikely or impossible that they would get a job after leaving school. These data are shown in table 7.5.2 and figure 7.5.2.

Figure 7.5.3 shows who people felt that they could turn to if they were feeling very sad or depressed. Once again this is limited by the very small sample size of responders (N=18) from which this figure is derived. The majority thought that they could turn to no-one for support, or to their mother or father or friends.

Table 7.5.1 The perceived ease of talking to various people about personal problems

Person	Very easy		Easy		Difficult		Very difficult		Don't have	
	No.	%	No.	%	No.	%	No.	%	No.	%
Father	66	37.7	35	20.0	32	18.3	16	9.1	19	10.9
Mother	73	42.4	51	29.7	19	11.0	11	6.4	7	4.1
Other grown ups	39	23.5	54	32.5	39	23.5	11	6.6	11	6.6
Brothers	69	39.9	41	23.7	23	13.3	14	8.1	12	6.9
Sisters	56	33.1	45	26.6	26	15.4	13	7.7	18	10.7
Siblings	34	20.4	71	42.5	22	13.2	13	7.8	10	6.0
Friends	47	28.3	60	36.1	17	10.2	13	7.8	16	9.6
Youth worker	26	16.3	32	20.0	44	27.5	14	8.8	28	17.5
Pastor/Minister/Priest	20	12.3	34	21.0	37	22.2	28	17.3	27	16.7

Figure 8.5.1 Individuals that students identified as easy or very easy to approach about personal problems (%)



The proportion who did not feel happy, 37% of these OOSY group, was similar to the ISY sample (42%). However, this OOSY group were more likely to feel lonely (30%) compared to ISY, 21%. Rates of self-perceived confidence and depression were similar to the ISY sample, but this OOSY were much less confident about getting a job.

Table 7.5.2 Levels of happiness, loneliness, confidence and severe sadness among students

	No.	%
<i>Happiness</i>		
I feel very happy	68	36.8
I feel OK	48	25.9
I don't feel very happy	54	29.2
I am not happy at all	14	7.6
<i>Loneliness</i>		
Yes, very often	25	13.6
Yes, rather often	23	12.5
Yes, sometimes	121	65.8
No	15	8.2
<i>Confidence</i>		
Always	82	44.3
Often	19	10.3
Sometimes	55	29.7
Rarely	24	13
Never	4	2.2
<i>Felt sad or depressed during past six months</i>		
No	40	22.0
Yes, at home and at school	43	23.6
Yes, but only at home	83	45.6
Yes, but only at school	11	6.0
<i>Severity of sadness/depression</i>		
Almost more than I can take	35	19.2
Quite bad	58	31.9
Worse than usual	17	9.3
About usual	62	34.1
<i>Likelihood of getting a job after leaving school</i>		
Very likely	31	16.9
Likely	66	36.1
Unlikely	44	24
Impossible	42	23.0

Figure 7.5.2 Proportion reporting low levels of happiness or confidence and high levels of loneliness or sadness

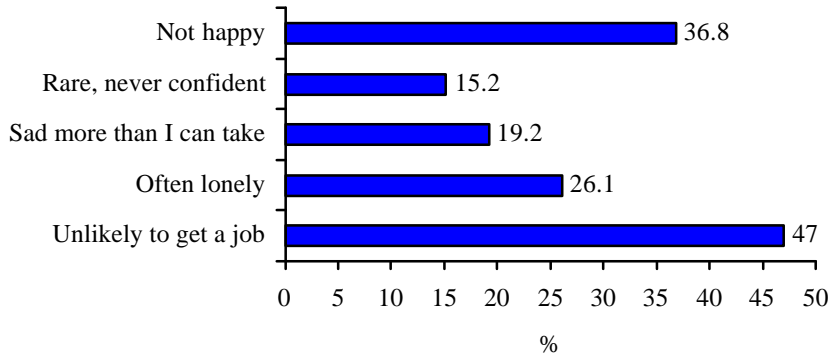
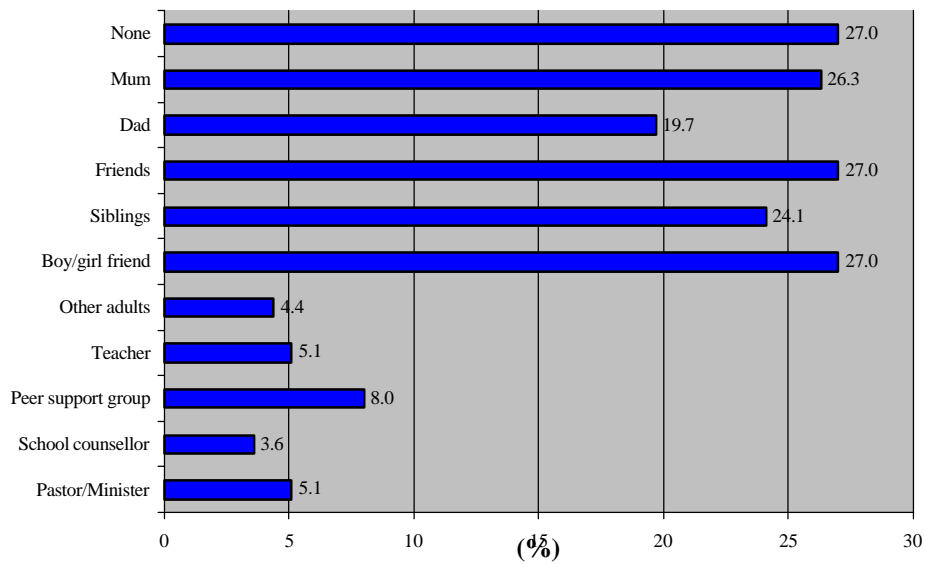


Figure 7.5.3 Persons turned to for support by students feeling very sad or depressed



7.6 Community participation and community involvement

The following section describes self reported community involvement by this out of school group. This group felt that their parents encouraged them to express their views, somewhat more than the community in general or their church group. This was similar to the ISY group. Nonetheless 80% rated their community as very important, shown in figure 7.6.2. Around half of the students indicated that they felt very strongly or moderately involved in their community.

Figure 7.6.1 Level of encouragement students received to express their views in various contexts

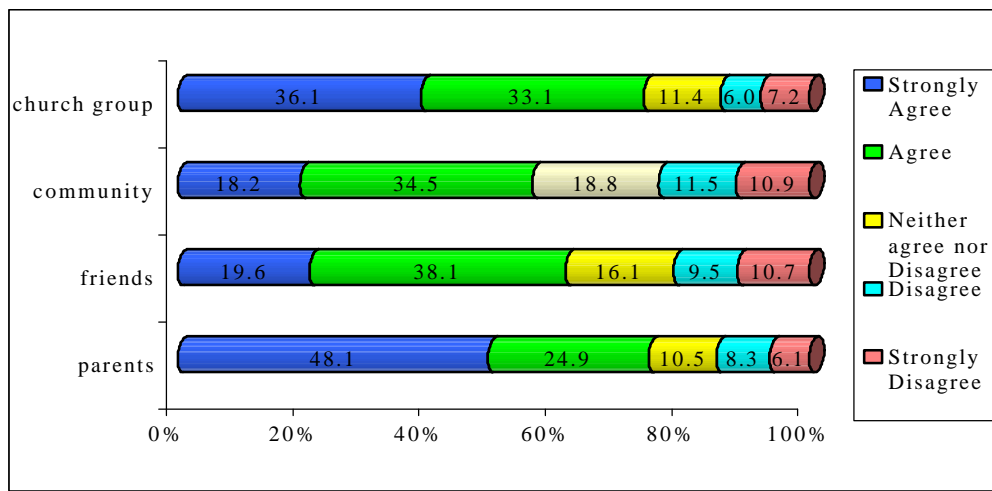


Figure 7.6.2 Ratings of the importance of the community

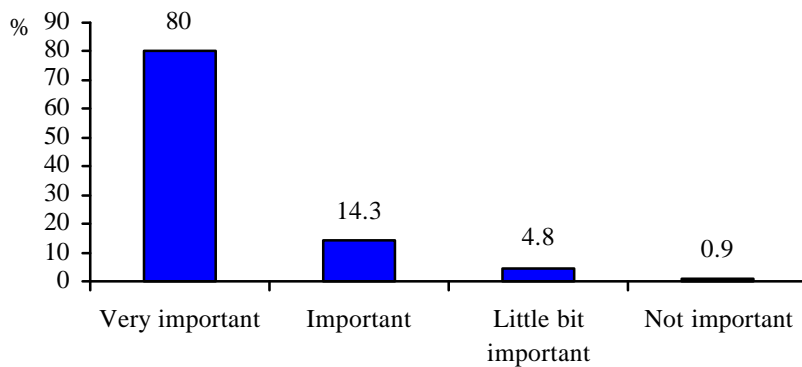
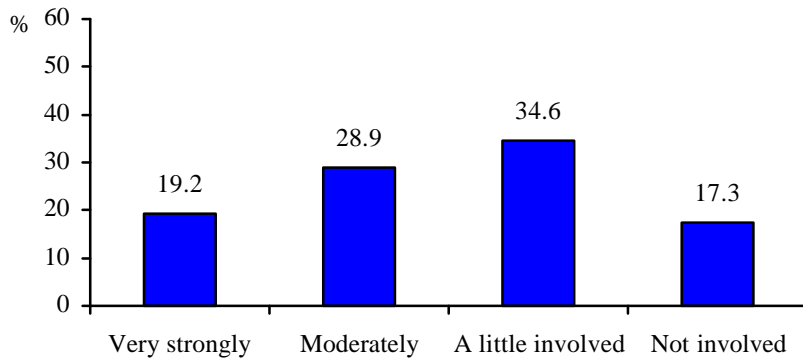


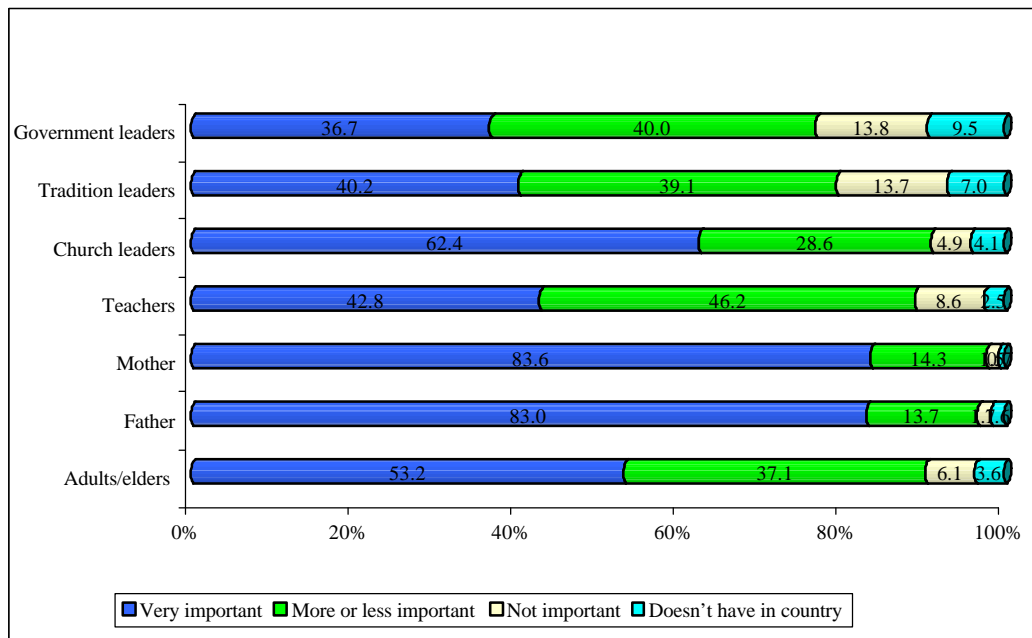
Figure 7.6.3 Perceived level of involvement in the community



7.7. Trust in adults and social institutions

This section examines self reported credibility and trust that these students had in a range of different adults and institutions in society. Figure 7.7.1 shows that the most credible or important perceived institutions were their mother or father, church leaders, followed by other adults. These were followed by teachers, tradition leaders or government leaders.

Figure 7.7.1 Perceived credibility of adults and social institutions



7.8 Physical injury, violence and bullying

This section describes physical injury and bullying. Half of the sample reported that they had an injury in the previous 12 months that required treatment. This was more often than the in school sample. The most common perpetrators of deliberate injury were fathers, followed by mothers, followed by their boyfriend or girlfriend or another person. The least prevalent responses were teachers or police. Overall a quarter of these young people reported any deliberate injury.

Table 7.8.2 shows the frequency of being bullied. This is somewhat difficult for the out of school sample as they were not regularly or definitively in school. Nonetheless 15% reported they had not been bullied in the previous three months, and around 15% reported they had been bullied at least once a week. A quarter of this sample reported they had not bullied any others in the previous three months and 12% reported that they had bullied others at least once a week.

Table 7.8.1 The frequency and causes of physical injury reported by students

	No.	%
<i>Times had a physical injury that needed treatment in last 12 months</i>		
Never	99	54.1
Once	45	24.6
2-5 times	19	10.4
More than 5 times	17	9.3
<i>Sources of deliberate injury*</i>		
Father	63	34.4
Mother	54	29.5
Teacher	29	15.9
Police	19	10.4
Boy/girl friend	44	24.3
Another person	42	23.2
<i>Suffering any deliberately inflicted injury</i>	111	68.5

*The missing cases were included in the numerator for the calculation of the percentages.

Table 7.8.2 Frequency of being bullied, deliberately ignored or bullying others in the past school term

Frequency of bullying	N	%
<i>Ever been bullied in school this term</i>		
I have not been bullied in the last 3 months	40	21.9
Once or twice	31	16.9
Sometimes	83	45.4
About once a week	12	6.6
Several times a week	15	8.2
<i>Frequency of taking part in bullying other students in school this term</i>		
I have not bullied others in the last 3 months	48	26.2
Once or twice	33	18.0
Sometimes	77	42.1
About once a week	5	2.7
Several times a week	19	10.4

7.9 Personal hygiene

This section relates to personal hygiene. Only half the sample reported that they brush their teeth more than once a day. Similarly, half of this sample reported that they washed their hands before eating, reporting always to this question. Almost two-thirds of this sample reported that they washed their hands after using the toilet. These reflect reasonably low levels of personal hygiene behaviours amongst these out of school adolescents, and rates that were lower than the in school sample for all three hygiene behaviours.

Table 7.9.1 Frequency of tooth brushing and hand washing among students

	No.	%
<i>How often do you brush your teeth?</i>		
More than once a day	117	63.2
Once a day	33	17.8
At least once a week but not daily	14	7.6
Less than once a week	19	10.3
Never	1	0.5
<i>How often do you wash your hands before eating?</i>		
Always	52	55.3
Sometimes	42	45.2
Never	1	1.0
<i>How often do you wash your hands after using the</i>		

toilet?

Always	65	61.9
Sometimes	38	36.2
Never	2	1.9

7.10 Sexual behaviours

Questions about sexual behaviour were also asked of these young people. Of the 78 boys, more than 80% reported they had ever had sex, but this was reported by only half of the 26 girls. The number of times that they had had sex during the previous year is shown in figure 7.10.2, which shows that a small number of them reported sex more than 10 times. Figure 7.10.3 shows the age at which they reported having had their first kiss, which showed a peak at around 14 years of age. Table 7.10.2 also shows data on the age of first sexual intercourse, with a median around 15 years of age, amongst those that responded to this question. Table 7.10.3 shows risk factors surrounding sexual behaviour. Of the people that reported that they had had sex, 26 of them indicated they had sex with four or more people. 42 of these responders indicated they had sex when they were drunk or high, and 58 had not used a condom. Of those that had used a condom most of them had done so rarely or never. Figure 7.10.4 shows the access ability of condoms, which were generally obtained from public health clinics or from pharmacies.

The last table, table 7.10.5 indicates some of the risk situations, and shows that 25 boys and 3 girls would not be able to say no when exposed to a request for sex. 22 boys and 5 girls indicated that they had been forced to have sex. Amongst those forced to have sex, 9 boys and 2 girls said it was with their boyfriend or girlfriend, and 16 boys and 4 girls said it was with somebody else, usually another adult.

Table 7.10.1 The prevalence of have had sex and by gender

	Boy n	%	Girl N	%	Total n	%
Ever had sex						
Yes	103	85.8	38	60.3	141	77.01
No	17	14.2	24	38.1	41	22.4

Figure 6.11.2 Number of sexual partners of sexually active boys and girls

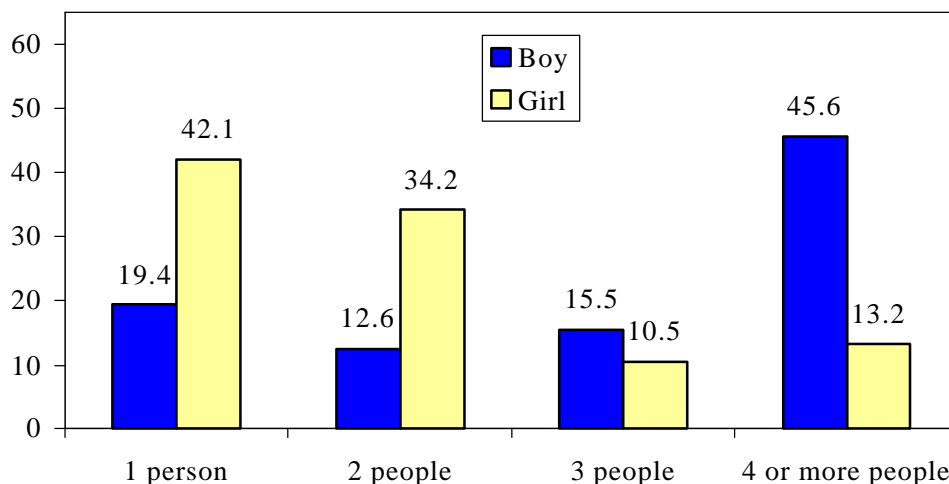


Figure 6.11.3 Proportion of sexually active students reporting unwanted sex when drunk or high on drugs

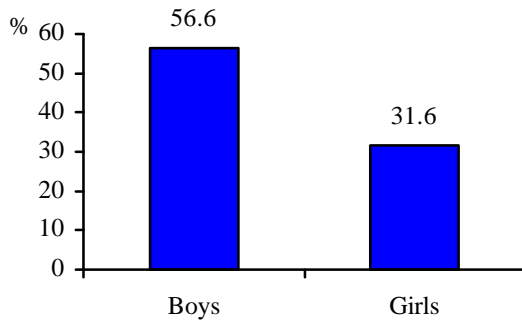
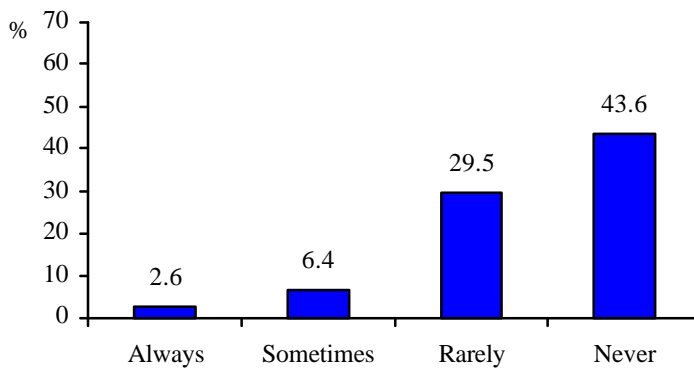


Figure 6.11.4 Use of condoms by sexually active students*



*these results only pertain to the second OOSY sample (n=108)

Figure 7.10.4. Places where they obtained condoms

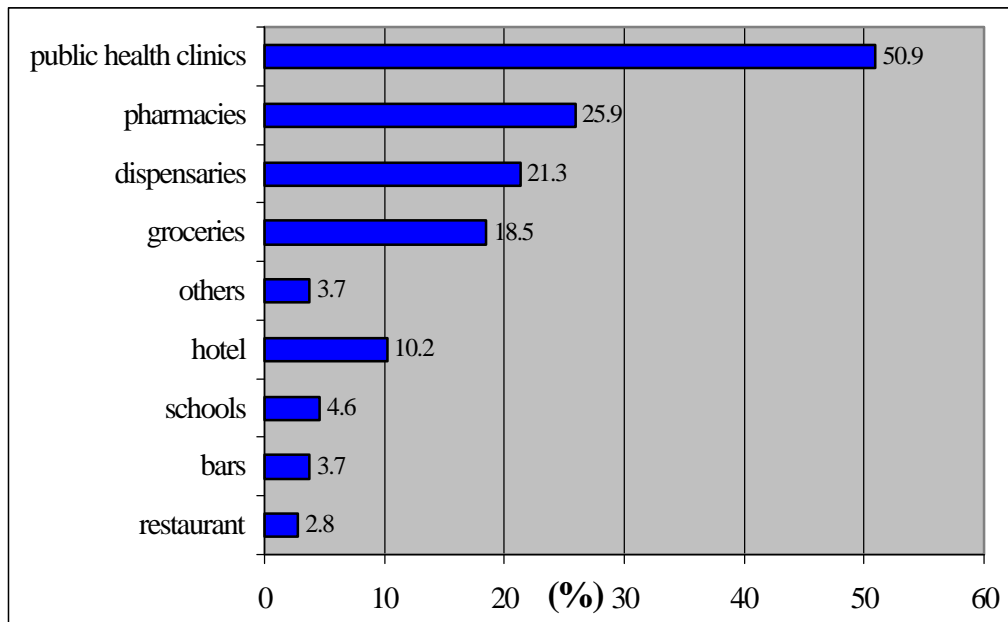


Table 7.10.4 The prevalence of saying no to sex when requested by boy/girl friend*

	Total	
	No	%
Can say no to boyfriend/girlfriend for sex request		
This would not happen to me	20	25.6
I would definitely be able to say no	19	24.4
I would probably be able to say no	11	14.1
Maybe I would not be able to say no	14	17.9
I would not be able to refuse	7	9.0
Been pressured to have sex		
Yes	22	28.2
No	53	67.9
Who pressured you to have sex		
A man or a woman I don't know	5	15.6
My boyfriend or girlfriend	8	25.0
A member of my family	3	9.4
A group of people	2	6.3
A group of males	2	6.3
Another person	7	21.9

*these results only pertain to the second OOSY sample (n=108)

Section 8

Summary and conclusions

8.1 Summary of main findings

This survey of health and lifestyle behaviours of young people in Pohnpei State FSM is a major step forward in efforts to address the needs of youth in this nation, and is especially important given the limited information available to guide policy and program development in this country. These data have an immediate application in identifying priorities to be addressed in the life skills program for young people in FSM that are being funded and facilitated by UNICEF Pacific. They may also be of benefit to the work the other agencies in identifying needs, providing a baseline from which programs can be evaluated and, more broadly, in fostering an understanding of the life context of young people in FSM.

The data about substance use by young people in Pohnpei identified several areas for concern. The prevalence of chewing betel nut was high, with about two-thirds of students reporting that they did this at least weekly. While chewing betel nut has only mild psychoactive effects, the long term use of this has been recognised as greatly increasing the risk of oral cancer. These data indicate that young people are establishing the habit of betel nut use and, consequently, that this may be an important public health issue in Pohnpei in future. Tobacco chewing was the next most common type of substance use that was reported by subjects on a weekly or more regular basis, reflecting the fact tobacco and betel are usually chewed together. A concern about the prevalence of tobacco chewing in Pohnpei is that it may lead to a nicotine addiction that in turn leads to tobacco smoking. Just under one in five students reported smoking at least weekly. The experience of drunkenness was also quite common, with almost half of students reporting that they had been drunk at least twice in the past, and one in five reporting being drunk more than 10 times. The data indicate higher use of all substances by boys than girls and an increase in the levels of exposure to these from age 14 onwards.

The levels of consumption of sugary foods and fibre were the most notable features of the data concerning dietary habits. Soft drinks were the most frequently consumed drink after water, with just over 30% reporting that they consumed these more than once per day. The levels of soft drink consumption were higher among girls than boys. About one quarter of students reported that they ate sweets more than once per day, and this was again more common among girls than boys. In addition to this there were substantial proportions of students, between one third to two fifths, who reported seldom or never consuming important sources of fibre like fresh fruit and vegetables and white bread. These data suggest that a proportion of the Pohnpei population may be establishing poor dietary habits at a young age.

Physical inactivity is at high levels among young people in Pohnpei. There was a relatively small proportion of students, about one in five, who reported four or more sessions of physical activity per week or a total of two or more hours of activity per

week. Girls were less likely to be active than boys. About one quarter of students spent considerable time, four or more hours, watching television or videos. This was more common among boys than girls.

Friends were most frequently identified by students as people that they could turn to in times of difficulty. Apart from friends, female relatives like mothers and sisters were major sources of social support. Those in formal positions, like youth workers and clergy, did not feature prominently among the people identified by students as easy to approach when they were in need of support.

The finding that almost two in five students reported not feeling happy at present indicates that were a substantial proportion dealing with at least some level of mental stress. There were far lower proportions who reported feeling lonely or lacking confidence, indicating that these factors may not have been strongly associated with the levels of unhappiness that were reported. There was a considerable proportion (almost one quarter) who experienced sadness or depression at a level that was almost more than they could take in the past six months. Girls were more likely to report this than boys, and were also more likely to report not feeling happy at present. It may have been, however, that these gender differences reflected a greater willingness by girls to report that they had been affected by sadness. It was most common for students who reported experiencing severe sadness or depression to state that they did not have anyone to turn to for support at these times, and this was particularly the case among boys. Friends featured more prominently than family members among those that students felt that they could turn when experiencing severe sadness or depression.

While there were indications of mental stress reported by a substantial proportion of students the vast majority of students felt optimistic about their potential to obtain a job when they leave school.

The data revealed that students generally viewed their teachers and peers at school positively. On the other hand, students had more divided views about the school environment overall. There were roughly equal proportions of students who held opposite views about whether the rules at school were too strict. In addition there were substantial proportions of students (about two in five) who did not consider their school to be clean or safe.

Students were most likely to feel comfortable to express their views among their parents and their friends. A smaller proportion felt encouraged to express their views in church while over half did not feel such encouragement in the community context. Girls were more likely than boys to feel comfortable to express their views in the private sphere, that is, among family and friends, while boys were more comfortable in public contexts like church and the community.

The vast majority of students rated their community as important to them. On the other hand, only one in five felt strongly involved in their community. Boys were more likely

than girls to consider their community to be important to them and to feel strongly involved in their community.

The results concerning the perceptions of students about their social environment revealed marked differences in the level of credibility that they ascribed to figures in the private and public spheres. Parents and siblings were regarded as the most credible figures in the social environments of students. These were followed in ratings of credibility by church leaders and teachers. Traditional leaders and government leaders were least often considered to be credible.

The findings indicated that injuries were a major problem confronting young people in FSM. Over two in five students reported that they had suffered an injury that required treatment in the last 12 months. It was a particular concern that a similar proportion reported that they had suffered an injury deliberately inflicted by another person in this period. Males were more likely to report being injured than females. Young males were most at risk with three in five 14 year old males reporting at least one injury requiring treatment in the past 12 months and almost three quarters reporting a deliberately inflicted injury. Among the most frequent sources of deliberate injury identified were mothers, unidentified "other people", boyfriends/girlfriends and fathers.

While there were substantial proportions of students who had been bullied or bullied others at least once in the past school term there was little evidence of regular bullying. Only small proportions of students reported being bullied or bullying others on a weekly or more regular basis.

Most students, and particularly girls reported good levels of personal care and hygiene, such as regular tooth brushing and hand washing. However, there was still almost one quarter of students who reported not brushing their teeth two or more times per day, one in five who did not always wash their hands after using the toilet and over one third who did not always wash their hands before eating.

Given the finding that over three in five students reported having sex in the past there is a strong indication that sexual health issues are of importance to young people in Pohnpei. Boys were revealed to be particularly sexually active, with more than 80% reporting sex at least once in the past, and of this group, more than half reported sex with four or more people in the past. On the other hand, among the four in five girls who reported having sex the majority reported having only one sexual partner. Another notable difference between the sexual behaviours of boys and girls was that boys were much more likely to report having sex at younger ages (14 and 15 years). In addition to this information there were several clear indicators of sexual health risk among both boys and girls in Pohnpei. A substantial proportion of the sexually active young people, three in five boys and almost one third of girls, reported having unwanted sex when they were drunk or high on drugs in the past. About 45% of sexually active students reported that they had been pressured to have sex in the past, with similar prevalences of this among boys and girls. This pressure was identified as coming primarily from boyfriends or girlfriends or others known to the students. Discussion with young people in Pohnpei since the completion of the HBPLY survey indicate that this pressure is manifest primarily through the prompting

and expectation of their peers, which indicates that there are social norms about sexual activity that are influencing the behaviours of young people in this State. It was also a serious concern that about three in five girls and two in five boys who reported having sex said that they never used condoms. While the majority of students were aware that they could obtain condoms from public health clinics there were still over two in five who did not indicate an awareness of this. There were lower proportions of students who were aware that condoms could be obtained from pharmacies, dispensaries and other venues.

8.2 Conclusions

The HBLPY survey in Pohnpei State FSM has provided valuable insights into issues related to the well-being of young people in this nation, and further demonstrated the potential to obtain population measures of health needs and risks among youth in the Pacific nations.

The survey was able to be carried out in a manner comparable with the methods used in the HBSC surveys that have been conducted in several countries in Europe. However, the HBLPY survey in FSM differed from its European counterparts in several ways. One of these was that participants in the HBLPY were not aged below 13 years because formative research revealed that general literacy levels of young people below this age in Pohnpei would not be adequate for completion of the survey. In the HBSC surveys participants are aged 11, 13 and 15 years of age. Another distinctive feature of this study was that, unlike the HBSC which are administered to students in years six (aged 11-12), eight (aged 13 -14) and ten (aged 15-16), the HBLPY was carried out with whole school populations aged 13 years and over. This was necessary to ensure that there would be adequate samples of students from the key age groups given the variation in the ages of students in each year at different schools in Pohnpei. Because of the small size of the Pohnpei population it was also possible to conduct the survey with a higher proportion of in-school youth than has been the case in the HBSC surveys in Europe. In fact the sample of students aged 13 years and over in the HBLPY in Pohnpei approached a universe, which has enhanced the accuracy of the prevalence estimates obtained. A further difference between the HBLPY survey in Pohnpei and the HBSC surveys was the inclusion of additional questions which were identified as being relevant and important by young people and key stakeholders during the survey development process. These included questions about the use of particular substances (eg. betel nut, chewed tobacco), consumption of foods and drinks common in the local setting, perceptions of the credibility of figures in their social environment and sexual behaviours.

Developing survey instruments for use in countries and cultures where little previous research has been conducted about youth health and lifestyle presents a number of challenges. The process of developing the survey before applying it in the field showed, however, that the language and cultural factors that may affect the validity of the data collected can be addressed. Initial pilot testing of the survey instrument helped to ensure that it addressed the health needs and concerns of young people in Pohnpei, and feedback from field staff conducting this pilot work indicated a good level of comprehension of survey questions. Careful attention to translation and back-translation of the final survey

instrument helped to ensure that the meaning of the questions was accurately portrayed in the local languages.

One of the distinctive and important features of the HBLPY survey in Pohnpei was the involvement of local young people in the design and implementation of the survey. The willingness of local youth to participate in focus groups and interviews helped in the identification of health and lifestyle issues that needed to be addressed in the survey. A number of youth identified by the Pohnpei Youth Council and the Pohnpei Health Department also undertook training conducted by the UNICEF Pacific Youth Officer and were involved in implementing the survey in schools and other locations, then later participated in data entry training. This participatory research approach was intended to increase the relevance to, and ownership of, the whole survey process for young people. It also provided an opportunity to enhance youth research capacity and general life skills. Apart from such immediate benefits, the development of local capacity in this manner will increase the potential for such surveys to be sustained and successfully implemented in future.

Aside from local youth, the range of organisations who collaborated in the planning and implementation of the study was critical for its success. This included the national Ministry of Health, Education, and Social Affairs in FSM, Pohnpei Youth Council, Peace Corps FSM, and other agencies. UNICEF Pacific played the critical role of overseeing and managing all aspects of the HBLPY survey, while the carried out the technical support functions of data analysis and report writing.

While these data highlight some key health issues among young people, the methodological limitations which may have some impact upon their validity should be acknowledged. The first of these concerns the reliance upon self-report to obtain information related to the health of the respondents. This has the potential for bias as a result of young people not accurately recalling their recent behaviours or even deliberately misrepresenting their behaviours in order to present themselves in a more socially desirable way. However, steps were taken in the study to minimise such possible effects. An important one of these was careful piloting of the instrument, including interviewing young people after they had completed the surveys to examine the accuracy of their responses. Others were thorough training of field staff in survey implementation and ensuring that there were adequate numbers available to provide any clarifications that young people needed about the questions while they were completing the surveys. In addition to this, when introducing the survey to young people these field staff highlighted the confidentiality of the information that would be provided to put respondents at ease about giving honest answers. While the possible effect of bias cannot be ruled out, even when such steps are taken, the use of self-report measures offered some important strengths for this study. These included its usefulness in efficiently gaining information at the population level, and its value in measuring factors that are very difficult or impossible to study using biological or observational techniques.

Another methodological limitation of the study concerned the collection of data about out-of-school youth by means of a small convenience sample. Consequently these

findings can only be treated as indicative, rather than representative, of health needs and risks among this population group.

This study has further demonstrated that it is feasible to collect quality data about youth health in developing countries and report on it at low cost and without the need for substantial funding. This has extended the body of information collected about health and lifestyle issues among young people in the Pacific island nations through the HBLPY surveys already conducted in Vanuatu and Tonga. Apart from the value of this data for the planning of programs to address youth needs in FSM, the process has served to further develop partnerships between multilateral agencies and key Ministries and youth organisations in FSM that will strengthen the basis for future action.

It is essential that youth health and development programs in developing countries are based on local country data, rather than extrapolations from the regular health behaviour surveys that are carried out with young people in developed nations. In this case data that are unique to Pohnpei State FSM have been collected and can be applied in policies and programs planning to address the needs of young people. An important role that periodic implementation of such surveys can play is in monitoring the extent to which health and lifestyle gains are being made among youth in Pacific island nations and to provide a source of monitoring and surveillance of emerging youth issues.