

College Lifestyle and Attitudinal National (CLAN) Survey

Dr. Ann Hope, Health Promotion Unit, Department of Health and Children
Cindy Dring, National University of Ireland - Galway
John Dring, National University of Ireland - Galway



Background

The social and academic life on college campus can be enriched by a college environment that supports and encourages students to make choices conducive to positive health and well being. The National Working Group on Alcohol in Higher Education, while addressing the specific issue of alcohol, also recognised the need for a holistic and integrated approach for student well-being. The genesis for the College Lifestyle and Attitudinal National (CLAN) survey came from implementing the *Framework Document for Developing a College Alcohol Policy* and was in keeping with the Health Promoting College Model. The concept underpinning the Health Promoting College Model is that the university can support and facilitate healthy choices for students and staff by creating a healthy working, learning and living environment.

The Higher Education Authority, the Department of Education and Science and the Consultative Group on Health Promoting Colleges supported this important initiative and encouraged college participation. The Health Promotion Unit of the Department of Health and Children provided the expertise to guide and co-ordinate the process, the funding for the survey development and questionnaire, central data input, data analysis and the production of the final report. The only cost to each college was the distribution and collection of the questionnaire among their students. The CLAN survey was conducted on the understanding that no college comparisons would take place, as the purpose was to establish a national student profile of lifestyle habits and to utilise this evidence in planning for student needs.



Executive Summary

The Department of Health and Children and 21 third level colleges in Ireland undertook a national lifestyle survey (CLAN) among undergraduate full-time students during the academic year 2002/2003. The aims of the CLAN survey were to establish a national student profile of lifestyle habits, to use the information in planning for student needs, and as a baseline to monitor trends and changes. A summary of the main findings is outlined below.

INCOME AND LIVING PATTERNS

The two main sources of income for students were from family and paid employment. Two-thirds of all students received on average €266 per month from family. Over half of students earned €300 per month from employment. Female students received a higher amount of income from family and male students generated a higher amount from work. One-quarter of students received on average €224 per month from state grants. The highest average monthly expenditure for students was on accommodation (€273), followed by alcohol (€110) and food (€109), with males spending more on alcohol and food and females spending more on accommodation. During the college term, the average time spent each week in the classroom was 21 hours and on study 10 hours. Female students studied for a longer number of hours than males and study time increased from first to third year. Over half (56%) of all full-time undergraduate students were involved in paid employment during the college term, working on average 15 hours per week. In comparison to a national student survey in 2000¹ this study shows that student income has increased, in particular from family. At the same time, student expenditure on accommodation has also increased (about 18%), while the expenditure on alcohol has doubled. The average hours spent on study for full-time students has decreased, while the average hours in paid employment has doubled.

GENERAL HEALTH

Over half of all students (54%) perceived their general health as excellent or very good. Two-thirds were satisfied with their health and the vast majority (87%) thought their quality of life was very good/good. Female students rated their quality of life higher than their male counterparts, while male students perceived their general health as better than females. The three main sources where students accessed information about health were from their family GP,

friends and the media. Despite most students having access to the internet in colleges and universities, it was interesting to observe how few students (4%) used the internet to source health information. The College Health Unit was an important access point for some students (16%), with twice as many females as males using it as a source of information, which grew for both males and females during their years in college. When compared to the 18-34 age group in the national lifestyle survey (SLÁN), the student population had a less optimistic view of their general health (CLAN 54% vs SLÁN 65%), while the three main sources for health information were similar².

MENTAL HEALTH

The vast majority (85%) of students rated their mental health as good or very good. However, almost one in twenty perceived their mental health as poor or very poor, which was twice to three times higher than the number of students who rated their quality of life or general health as poor. Students were asked how they would respond to feeling very anxious or depressed. The more positive and health promoting responses included; talking to someone (69%), finding information about the situation (24%) and praying (21%), but very few said they would go to the hospital or health centre (3%). However, poor coping strategies were very evident, where over half (55%) of all students said they would sort it out alone, one-third (35%) would try to ignore it, one in ten would take drugs or get drunk and one in twenty would do nothing. Male students were less likely to seek help and more likely to try to sort it out alone, to take drugs or get drunk or do nothing - all poor coping strategies. First and second year male students were the most likely to try and ignore it or do nothing about feeling very anxious or depressed in comparison to other students. A report on men's health also found that three out of four men reported adopting strategies of avoidance or silence as their way of managing emotional or mental health issues³.

Students identified their social network as the key group they would turn to if they wanted to talk to someone. By far the most important contact for undergraduate students was a friend their own age (83%). Female students were more likely than males to use their social network of friends, parents or other relatives than males. Again, a higher number of males in comparison to females would not talk to anyone. First year students were the least likely to want to talk to anyone and this was especially the case for first year males, where 15% indicated they would not talk to anyone. Good social networks, peer contacts and religious affiliation have been identified as important protective factors against mental health problems⁴.

The main source of stress for about two-thirds of students was from demands of college studies (exams, subjective specific demands and studies in general), which was higher among females than males. Financial situation was also a stress factor for some (43%) students. For about one in five students,

relationships, work outside college and their living situation were regular sources of stress. The only item where male students reported experiencing stress more often was in relation to their sexuality. Other researchers have also found academic concerns, financial pressures and relationship problems among college students as important contributors to mental health symptoms^{5, 6, 7}.

DIETARY HABITS

One in five of all students were on a special diet, with females more than twice as likely to report such a practice. Weight-reduction diet was the most common, where 15% of females compared to 2% males reported such a practice. These figures were similar to a comparative group in the national lifestyle survey². One-third of students reported using food supplements on a regular basis. The most common foods consumed on a daily basis among students were: bread (80%), meat (56%), cooked vegetables (50%), fruit (42%) and sweets (39%). More male students had bread, meat and milk at least daily and more female students ate fruit and salads. Salads and cooked vegetables were more popular among third year students. Among the less healthy foods, sweets (39%) and fizzy drinks (27%) were the most popular on a daily basis. A higher number of males used fizzy drinks, cakes/biscuits, crisps and fast foods in comparison to females. These foods were more popular among first year students. Fizzy drinks (40%) and crisps (26%) were most popular among first year male students. Males drank more milk than females in all years, and consumption declined over the three years for both genders. Just 6% of students did not drink milk at all. Females were nearly twice as likely to use low fat or skimmed milk in comparison to males.

EXERCISE HABITS

Almost 70% of students described themselves as fairly to very physically active, with male students more physically active than females. Six percent of students were not physically active at all. Regular moderate exercise was more common among females (56%) and strenuous exercise was more common among males (42%). Exercise levels in the student population were much higher than in a comparative group in the national lifestyle survey². Half of all the students participated in sport, with twice as many males participating as females (71% to 36%). The highest sport participation rates were among first and second year male students. Among females, first year students had the highest numbers participating in sport. Of those who participated in sport, half did so at their college or university. Forty three percent of students attended a gym or leisure centre and of those, 60% indicated that it was at a college facility.

ACCIDENTS AND INJURY

One in four of all students reported that they had sustained an injury requiring medical treatment during the past 12 months. Twice as many males reported

being injured in comparison to females (39% males, 18% females). Taking the most serious injury, students were asked to report where the injury happened and what activity caused the injury. For male students the most serious injury occurred at a sports facility (49%). Among females, the most serious injury occurred at home (26%) or on the street (23%). Across year in college, a higher number of first and second year students reported an injury at a sports facility, while a higher number of third years reported more injuries on the street. This is not surprising, given that the highest sports participation rates were among first and second year students. Sports training was the main activity which caused the most serious injury to occur, followed by walking/running, working, driving, biking and fighting. More male students sustained an injury while participating in an organised activity/league, while more female students sustained an injury while walking/running. The prevalence of serious injury was higher in the student population than in the general population although the circumstances and causes of the injury were similar².

The vast majority of students complied with the road safety measures of always using a seat belt (82%) when in the front seat of a car and wearing a helmet (86%) when riding a motorbike. However, only a quarter of students always used a seatbelt in the rear of a car and only one in ten always wore a helmet when cycling. In fact, the vast majority of cyclists rarely used helmets (83% males; 75% females). Given that 71% of male and 45% of female students reported using a bicycle, helmet use when cycling was very low.

SEXUAL HEALTH

Almost three-quarters of all students were sexually active with more males than females. The majority of students were 17 years or older when they first had sexual intercourse. More female students delayed the onset of sexual intercourse in comparison to their male counterparts. Students who were sexually active were asked to identify what method they used to prevent pregnancy when they last had sexual intercourse. By far the most common method was condom use (71%), followed by the contraceptive pill (45%). One in twenty students (5%) reported using withdrawal as a method to prevent pregnancy and a further 4% used nothing. A higher number of male students used condoms in comparison to females. Among female students who were sexually active, 42% reported that they had used the morning after pill, an emergency contraceptive. To protect themselves from a sexually-transmitted infection (STIs), the majority of students used a condom (76%), while others reported having one constant partner (40%) and some (3%) used no protection at all. Again, as in pregnancy prevention, more males than females used condoms while a higher number of female students said they had one constant partner as the method to protect them against STIs. Among sexually active students, 4% reported that they have been medically diagnosed as having a sexually-transmitted infection.

There were many reasons why students did not always use condoms. The six most common reasons reported were; don't plan, single partner, loss of sensation, impaired judgement due to alcohol, prefer other methods and loss of spontaneity. Availability and cost were also issues for some. Comparing the reasons between males and females, a higher number of female students said single partner or preferred other methods were reasons for non-use of condoms. A higher number of males stated they don't plan and that availability and cost were reasons for non-use of condoms. The rate of sexual activity in this study was similar to the 20-24 age group in the national lifestyle survey. Binge drinking was also found to be a factor in unprotected sex⁸.

TOBACCO

One in four (27%) of all students were current smokers, smoking on average seven cigarettes per day, with males smoking more than females. While the average age when students started to smoke and drink was similar (15 years), a higher number were smoking by 14 years in comparison to drinking (40% vs 19%). A higher number of first and second year students started smoking before they were 14 years old in comparison to third year students (46%, 44%, 33%). This was especially the case for female students, where over half of first year female students had begun smoking before they were 14 years old. Of particular interest is that one-quarter of all students who had smoked in the past were no longer smokers. Three-quarters of all smokers had tried to stop smoking and nearly all wanted to quit. When asked to identify what would help them quit smoking, the four most important factors were: more will power, less stress, a price increase on tobacco and more confidence to stop. The prevalence of smoking was lower in the student population in comparison with a similar group in the general population².

ILLEGAL DRUGS

Cannabis was the most common illegal drug used by students, with over one-third (37%) reporting they had used it in the past 12 months and one in five (20%) had used cannabis in the past 30 days. A higher number of male students reported using cannabis both in the last year (45%) and in the last 30 days (30%) in comparison to female students. Ecstasy was the second most used illegal drug, although at a much lower level (8% in past 12 months) than cannabis. Drug use in the student population was much higher than in the national drug prevalence survey⁹. Cannabis use in the past 12 months was 11% among a similar age group (15-24 years) in the national survey and ecstasy use was 3%.

ALCOHOL

The reasons why most students usually consumed alcohol were for sociability, enjoyment and relaxation. However, one in ten students used alcohol to forget worries and one in twenty used alcohol when anxious or depressed. Although low, more males drank because they were lonely or to be polite, in

comparison to females. Almost three-quarters (73%) of all students agreed that anyone might become violent if they have too much to drink. However, over one-third (39%) of students thought that when someone is drunk, they should not be considered as responsible for their actions as when they are sober. One in five students (19%) thought that it doesn't matter how much you drink as long as you don't show the effects. This perception was more evident among males and in first and second year students.

The average age when students started to drink was 15 years. A higher number of male students had started drinking before the age of 14 in comparison to female students. More third year students had delayed the onset of drinking until 17 years or older in comparison to first and second year students. The proportion of non-drinkers among students was 5%, which was less than a similar age group in the Irish drinking pattern survey¹⁰. Male students drank nearly twice as much as female students. The total volume of alcohol consumed per head of student was 18.3 litres of pure alcohol for males and 10.8 litres for females. When compared to the 18-29 age group in the Irish drinking pattern survey, the reported total alcohol consumption was higher among students¹⁰. Beer was the preferred drink among male students, similar to the general population. Female students were more divided between beer and spirits.

Binge drinking at least once a week, defined as drinking at least 4 pints of beer or a bottle of wine or equivalent in a single session, was common among males students (61%). For females, 44% of students reported at least weekly binge drinking, compared with 26% in the drinking pattern survey¹⁰. Among males, first year students had the highest number of binge drinkers and among females, second year students were the highest. When the frequency of binge drinking occasions were related to the overall number of drinking occasions, the results showed that out of every 100 drinking occasions, 76 ended up in binge drinking for male students and 60 for female students. These figures indicate that this pattern of high-risk drinking is the norm among college students with more male than female binge drinkers. However, the number of student female bingers was nearly twice (60% vs 33%) that of a similar age group in the drinking pattern survey, when measured on binging per 100 drinking occasions¹⁰. The men's health report also found that binge drinking was highest among young men (18-29 age group). Such patterns of excessive drinking, according to the report, were adopted by young men as a sign of their masculinity which was reinforced by alcohol advertising connecting alcohol and masculinity with sexual prowess and the achievement of optimum performance in elite sport³.

ALCOHOL RELATED HARM

Not surprisingly, given such high levels of drinking among students, in terms of the total amount of alcohol consumed and the frequency of binge drinking, there was a high level and range of harm/problems experienced by college

students. As a result of their alcohol use, students experienced harms such as regretted things said or done after drinking (62%), felt effects of alcohol while at class/work (50%), missed school/work days (44%) and harmed studies/work (28%). A higher number of male students experienced these forms of harms in comparison to their female counterparts. Male students were twice as likely to have been in a fight, in an accident and had unprotected sex in comparison to female students. One in four male students and one in five female students experienced money problems as a result of their drinking. First and second year students were more likely to have been in an accident or fight or experienced financial problems and thought they should cut down on their drinking in comparison to third year students. The prevalence of all the adverse consequences was higher for all student groups in comparison to a similar group in the drinking pattern survey¹⁰.

As a result of someone else's drinking, the most often cited consequences experienced by male students were verbal abuse, passenger with a driver who had taken alcohol, arguments with friends and family about drinking, property vandalised and physically assaulted. For female students, the most common negative consequences, as a result of someone else's drinking were; verbal abuse, arguments with friends, relationship difficulties and passenger with a driver who had taken alcohol. The sexual assault rate, although low, was twice the rate among first year female students in comparison to second and third year students. A higher number of first and second year students experienced verbal abuse, physical abuse, unprotected sex and property damage in comparison to third year students, as a result of someone else's drinking.

PROFILE OF STUDENTS WITH HIGH-RISK DRINKING PATTERNS

High risk drinking is a pattern of drinking that is likely to increase the risk of harm for the drinker and for others. Binge drinking, a form of high risk drinking, was the norm among college students. To assess to what extent high risk drinking increases the risk of harm among college students, the dynamics of binge drinking with a number of key student well-being and welfare indicators were examined using underlying perceptions about alcohol, student living conditions, general health, risk-taking behaviours and coping skills.

Students who were regular binge drinkers, defined as binge drinking at least weekly, were two to three times more likely to experience a range of adverse consequences as a result of their drinking in comparison to students who were binge drinking less frequently or non-binge drinkers. Regular binge drinkers were twice as likely to miss school/work (61% vs 27%), felt alcohol effects while at class/work (64% vs 28%), reported their studies/work were harmed (38% vs 18%) and thought they should cut down on their drinking (43% vs 19%) in comparison to other student drinkers. Money problems, fights, unprotected sex and accidents were three times more likely to occur among students who engaged in regular binge drinking. A higher number of regular binge drinkers in comparison to other drinkers, perceived that the

amount of alcohol consumed didn't matter, provided the individual did not show the effects and that when an individual was drunk they should not be considered as responsible for their actions as when sober. A higher proportion of regular binge drinkers drank for enjoyment and sociability in comparison to other drinkers. A higher proportion of regular binge drinkers also drank to forget worries (15% vs 10%) when anxious or depressed, or lonely, or felt they needed to drink.

Regular binge drinkers spent fewer hours per week on study during college term and a higher amount of time working in comparison to other students who drank. Consequently, regular binge drinkers had a higher average income from work in comparison to others, although they had a similar income from family and grants. Regular binge drinkers spent less on accommodation, spent a similar amount on food, but spent twice as much on alcohol per month (€148) in comparison to other student drinkers (€69).

A higher number of students who drank alcohol but did not binge drink on a regular basis were more satisfied with their health and perceived their general health as excellent or very good in comparison to regular binge drinkers. However, there was no difference in quality of life or perceived mental health. A higher number of regular binge drinkers participated in sport in comparison to others. Exams, studies in general and relationships were contributing sources of stress for both groups. However, for regular binge drinkers, their financial situation and work outside of college were higher sources of stress.

Regular binge drinkers were more likely to engage in other risk taking behaviours. They were twice as likely to be smokers and cannabis users and were more sexually active than other student drinkers. A higher number of binge drinkers were involved at an earlier age in smoking, drinking and sexual activity. Methods used to prevent pregnancy were similar for both groups in relation to condom use, although regular binge drinkers were less likely to use the contraceptive pill. Half of female binge drinkers had used the morning after pill, an emergency contraception in comparison to one-third of other drinkers. The findings of this study support the men's health report which showed that binge drinkers were more likely to engage in impulsive risk taking behaviours³.

Those who were regular binge drinkers were less likely to consider positive responses to cope with anxiety and depression such as talk to someone or look for information. However, similar responses were reported for both groups in relation to poor coping strategies of not wanting to share problems with others or to try and ignore the problem. A higher number of binge drinkers reported they would take drugs or get drunk (14%) in comparison to other drinkers (4%) to cope with anxiety and depression.

CONCLUSIONS

The results of this study suggest that there are three inter-related issues of main concern: more work and less study while at college, poor coping skills linked to mental health and high levels of alcohol related harm. These issues impact on student well-being and welfare and have the potential to undermine the student's academic performance. The most vulnerable students are those in first and second years.

1. **Work versus Study:** The fact that many full-time undergraduate students spend more time working than on study during the college term reflects the reliance and importance of paid employment as a source of income for students during their college years. Given that similar amounts of money are spent on food (an essential) and alcohol (a non-essential) and that work and money are sources of stress, one of the challenges for students is to create a healthier balance and better management of their income during the college term.
2. **Coping Skills:** Students' ability to cope with the growing pressure of modern life and college life, both internal and external, is of critical importance to their overall wellbeing. The results from this study demonstrate that students' coping mechanisms are not very conducive to positive mental health. The student population's vulnerability was evident in that many students were unable or unwilling to reach out for support and assistance, would deny the existence of their problems or would respond with behaviours that would further increase their risk of problems and harm. Of particular concern was the high number of poor coping strategies especially among first and second year males. Young males have been identified as a high risk group for suicide¹¹ and this study again confirms their vulnerability. The findings of this study provide insights in to the potential for change and improved personal coping by developing student social networks and in particular their same age friends as a key point of support.

The encouraging signs of healthy lifestyle among students are that many take regular exercise. The provision of college sports and leisure facilities enhances student participation. However, female participation in sport could be improved. The fact that fewer students smoke than in the general population and one in four who were previous smokers had already quit are all positive signs. There is the potential to improve student eating habits by encouraging more fruit and less sweets. While the majority of students do practice safe sex, one in ten do not. The use of helmets when cycling among the student population was very low and increases the risk of severe head injuries. Drug use, in particular cannabis use, was high in the student population.

3. Alcohol related harm: The extent of alcohol related harm experienced by college students was particularly high and of major concern. High risk drinking was very common among college undergraduate students both in terms of total alcohol consumption and of binge drinking. Although binge drinking was highest among males, the rate of binge drinking among female students was almost twice that of a similar age group in the general population. The likelihood of college students experiencing problems and harm increased with more frequent binge drinking episodes. The results from this study show that the drinking pattern among college undergraduate students clearly has the potential to interfere with their academic performance, given that many students missed days, reported their study/work was harmed from drinking and also felt the effects of drinking while at class/work. The physical well being and welfare of students was also compromised due to the risk of fights, accidents, high risk sexual activity, which was also compounded with financial and relationship problems. Students themselves recognised they needed to cut down on their drinking and felt their drinking was harming their health. In addition, regular binge drinkers spent less time in study and more time in work, and spent more money on alcohol. They were also more likely to be involved in other risk taking behaviours and were less likely to use positive coping strategies when dealing with anxiety and depression.

Recommendations

A range of immediate actions are required to ensure that the college environment is more conducive to the positive health and well-being of all students at third level.

1. Ensure that the Health Promoting College Network be established to provide a mechanism and structure for a settings based approach to progress health promotion in the college setting **and** as a forum in which to address the over-arching determinants of health for the entire college community.
2. Based on the findings of this CLAN Survey, health promotion structures and frameworks should give priority to mental health promotion and reducing alcohol related harm.
3. Colleges should establish relevant partnerships with service providers and community organisations at a local level to address health and welfare issues.
4. Gender analysis should be built into the current and future work of colleges in the health promotion field to ensure that programmes and interventions are developed to meet the different needs of male and female students.
5. A programme of on-going research should be agreed to allow for monitoring of trends and evaluation of programmes and interventions.
6. Colleges should consider ways to build social networks for first year students. For example through a mentoring system which supports the transition and challenges of the new college environment. The mentoring system could also include supports for students in second level schools prior to college entry.
7. Colleges should be encouraged to develop and implement an action plan for mental health promotion with emphasis on enhancing the protective factors including circle of friends as key contacts and reducing risk factors such as alcohol related harm.
8. Colleges should be encouraged to implement all five elements of the college alcohol policy framework. Priority should be given to the training and delivery of brief intervention in the college health centres and other early intervention strategies as a matter of urgency.
9. College Clubs and Societies should seek opportunities to promote positive health with strategies to promote mental health and low risk drinking.
10. Colleges should seek to address sexual health needs and links should be developed with Service Providers for STI screening.

3

Methodology

A national lifestyle survey among undergraduate full-time students was undertaken in 21 third level colleges in Ireland during the academic year 2002/2003. The colleges included the seven universities, twelve institutes of technology and two colleges of education, giving a total undergraduate student population of over 100,000 (Annex 1). A national sample size was calculated using a 3% precision and a 95% degree of confidence, with a breakdown for the colleges based on each college population. A detailed protocol was provided. Each college was required to generate a random sample from the computerised enrolment list of their full-time undergraduate students, to distribute the questionnaire by mail and to collect the completed questionnaires by either mail or drop off points on campus. A national prize draw was provided as an incentive to return questionnaires.

The questionnaire contained several sections including student living conditions, general health, mental health, dietary habits, exercise habits, accidents and injuries, sexual health and substance use - tobacco, illegal drugs and alcohol. The questions were based on existing items used in similar international, national and college surveys on lifestyle issues. The national survey of SLÁN was used for items on general health, dietary habits, physical activity, tobacco and drug use and for some of the alcohol items². The items on accidents and injuries were from HBSC survey as were a few of the sexual health questions^{12,13}. The mental health section was from two sources, a college and school survey^{14,15}. The international ECAS survey was used for items on drinking patterns¹⁰, the Trinity College survey for sexual health¹⁶ and the Higher Education Authority European Student Survey for questions on student income and expenditure¹.

Data were analysed using the SPSS-X statistical package. The analysis examined differences between gender and across year in college. All of the gender analyses were reported in this study and the statistically significant ($p < .01$) variables across year in college were also reported.

4

Results

4.1 DEMOGRAPHICS

The overall response rate to the CLAN survey was 50% with a sample of 3,259 full-time undergraduate students participating from across the third level sector. The sample represented 62% female and 38% male students (Table 1). The average age of the students sampled was 21 years. The age distribution of the respondents was similar between males and females with 65% under 21 years, 28% aged 21 to 24 years and the remaining 7% were 25 years and over. Of the total sample, 33% were in first year, 30% were in second year and 37% were in third year or higher. However, there was a difference in gender distribution across years with a higher representation of first year male and third year female undergraduate students. Education of parents had a similar spread between males and females.

Table 1: Demographics - age, year in college and education of parents by gender

No. of respondents	Males	Females	Total
	N=1232	N=2027	N=3259
	%	%	%
Gender	37.8	62.2	100
Age category			
Under 21 years	63.5	65.2	64.6
21-24 years	29.3	28.1	28.5
25 +	7.3	6.7	6.9
Year in college			
1st year	44.3	26.4	33.1
2nd year	36.5	25.9	29.9
3rd year plus	19.2	47.7	37.0*
Education of parents			
Primary/Group Cert	23.2	26.6	25.3
Leaving Cert	35.6	34.0	34.6
Third level	41.2	39.5	40.1

*significant between gender ($p < .01$)

4.2 LIVING CONDITIONS – INCOME, EXPENDITURE, TIME ALLOCATION

4.2.1 Income

Full-time undergraduate students derived their income from three main categories; their family, earnings from employment and different types of grants, assistance or loans. The highest amount of average monthly income for students was €301 from paid employment, €266 from parents and €224 from State grants (Table 2). Female students received on average a higher amount of income from family and males generated a higher amount from work. Two-thirds (66%) of all students received income from family, over half (58%) raised it from working and one quarter (26%) received local authority or state grants. Social welfare, bank loans and fellowships/scholarships were a source of income for a minority of students, 6%, 5% and 4% respectively.

Table 2: Average Monthly Income of Students by gender

Monthly income from			Males	Females	Total
	N	(%)	€	€	€
Employment	1878	(58%)	321	289	301*
Family	2161	(66%)	250	276	266*
State Grants	861	(26%)	216	228	224
Bank Loan	166	(5%)	203	177	188
Scholarships	115	(4%)	144	179	167
Social welfare	193	(6%)	135	147	144

*significant between gender ($p < .01$)

4.2.2. Expenditure

The single largest monthly expenditure for students was on accommodation averaging €273 per month, with females paying more for accommodation than males (Table 3). The next two highest expenditure items were on alcohol (€110) and food (€109) with males spending higher amounts on these items than females. Male students also spent more on entertainment and female students spent a greater amount on clothing and toiletries. A quarter of students spent on average €60 on tobacco per month and €27 on medical expenses. A very small number (2%) of students paid on average €54 per month for grinds. Three-quarters of all students spent €33 per month on study books and materials, while 85% of students spend €110 on alcohol and €52 on entertainment per month.

Table 3: Average Monthly Expenditure of Students by gender

Monthly spend on			Males	Females	Total
	N	(%)	€	€	€
Accommodation	1916	(59%)	261	279	273*
Alcohol	2727	(84%)	128	99	110*
Food	2929	(90%)	118	102	109*
Transport	2755	(85%)	65	62	63
Tobacco	742	(23%)	60	60	60
Clothing & toiletries	2676	(82%)	47	60	56*
Grinds	51	(2%)	43	64	54
Entertainment	2623	(80%)	57	48	52*
Regular Bills (ESB etc)	1621	(50%)	49	43	45
Study books & materials	2401	(74%)	31	34	33
Medical expenses	806	(25%)	27	27	27

*significant between gender ($p < .01$)

4.2.3 Time allocation in college

Overall, the reported average time spent during college term in the classroom each week was 21 hours. The vast majority (76%) of students reported at least sixteen hours of classroom contact each week during term time (Table 4). However, there were a small number of students (2%) who did not attend class at all and a further 7% attended for ten hours or less.

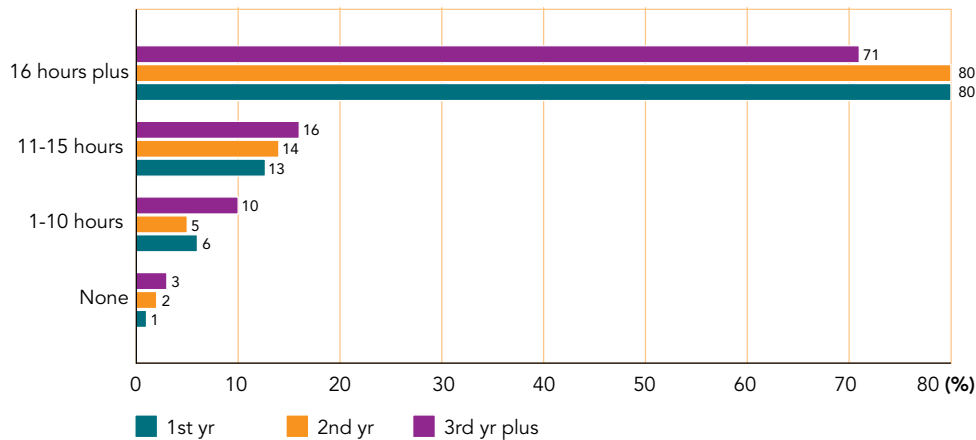
Table 4: Weekly student time allocation during term time by gender

Weekly time to	Males	Females	Total
	%	%	%
Classroom			
None	1.6	1.8	1.7
1-10 hours	7.0	7.7	7.3
11-15 hours	12.4	15.5	14.3
16 hours and over	78.9	75.1	76.5*
Study			
None	7.0	5.4	5.9
1-10 hours	63.9	60.8	62.1
11-15 hours	13.2	14.8	14.2
16 hours and over	15.9	19.0	17.8*
Employment			
None	44.9	43.0	43.7
1-10 hours	19.4	22.0	21.0
11-15 hours	12.7	15.3	14.3
16 hours and over	23.0	19.7	21.0

* Significant between gender ($p < .01$)

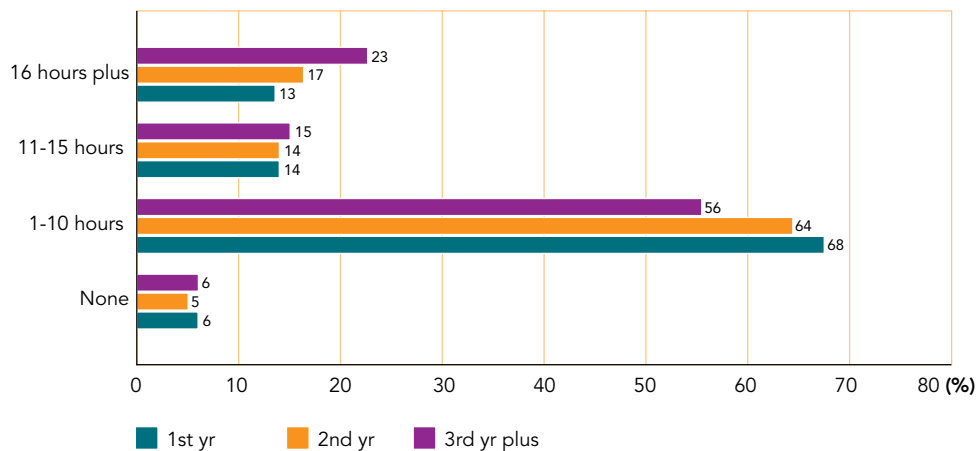
There was a significant difference across year in college. Third year students had less contact classroom hours in that 71% reported 16 hours or more in comparison to 80% of first and second year students (Figure 1).

Figure 1: Weekly student time allocation to CLASSROOM across year in college



The average number of hours allocated to study each week during term was 10 hours. Almost two-thirds (62%) of all students reported weekly study time of one to ten hours. There was a significant difference between males and females with a higher proportion of female students (19%) studying for a longer number of hours than males (16%). There was a significant increase in the time allocated to study between first year to second year and up to third year (Figure 2).

Figure 2: Weekly student time allocation to STUDY across year in college

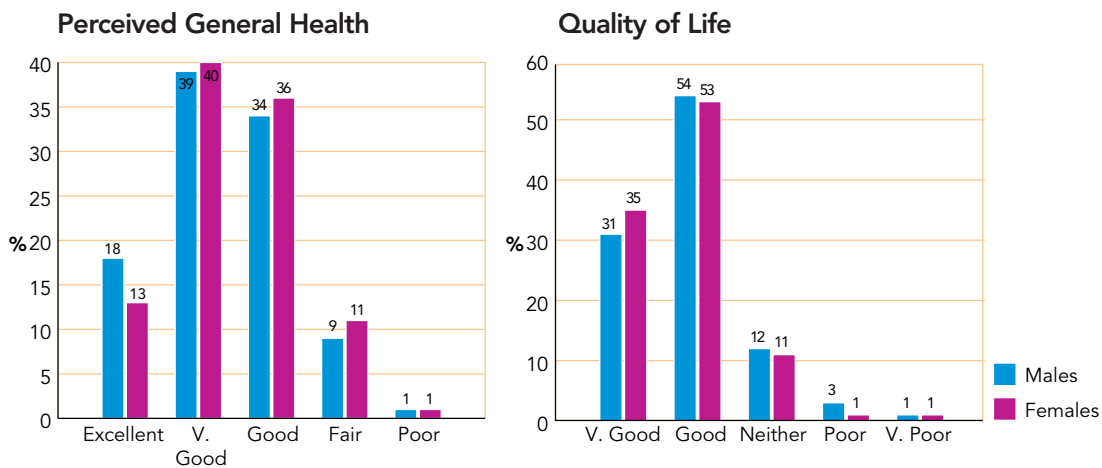


For those who held a part-time job during term, the average time worked was 15 hours per week. Over half (56%) of all full time undergraduate students engaged in paid employment during term time. One in five (21%) worked over 16 hours per week (Table 4). There was no significant difference between males and females or across year in college.

4.3 GENERAL HEALTH

Students were asked to rate their general health on a scale from 1 to 5 on three different measures; perceived general health, satisfaction with health and quality of life. Overall, 54% of the undergraduate students perceived their general health as excellent or very good, a further 33% said good, 11% fair or poor. Nearly two thirds (63%) were satisfied with their health and 11% were dissatisfied. For quality of life, 87% thought their quality of life was very good or good, while 2% rated it as poor. There were significant gender differences with female students rating their quality of life higher than their male counterparts while male students perceived their general health as better than females (Figure 3).

Figure 3: General Health and Quality of Life by gender



There were three main sources where students accessed information about their health - the family GP, friends and the media. Significantly more female students used these three sources than their male counterparts (Table 5). Despite most students having access to the internet in colleges only 4% of students used the internet to source health information.

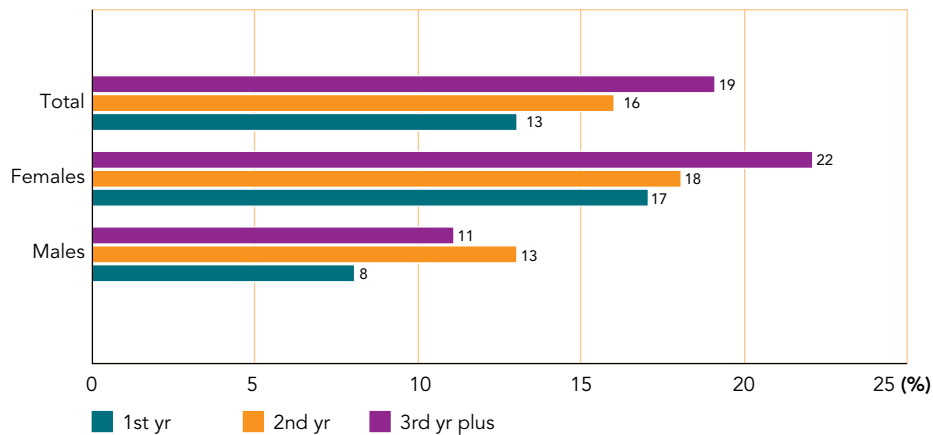
Table 5: Source of Health Information by gender

Source of information about health	Males	Females	Total
	%	%	%
Family GP	57.3	65.1	62.2*
Friends	50.4	61.2	57.1*
Media	37.6	50.0	45.3*
Family	18.2	18.8	18.6
College Health Unit	10.3	19.6	16.1*
Students Union	7.4	9.1	8.4
Health Promotion/Health Board	5.0	7.1	6.3
Department of Health	4.3	5.4	5.0
Internet	4.5	3.9	4.2

*significant between gender ($p < .01$)

The College Health Unit was an important access point for some students with twice as many females in comparison to males using it as a source of information about health. The use of the College Health Unit increased for both males and females from first year to third year (Figure 4).

Figure 4: College Health Unit as Source of Information by gender & year in college



4.4 MENTAL HEALTH

The vast majority (85%) of students rated their mental health as good or very good. However, 4% perceived their mental health as poor or very poor, which was higher than the number of students who rated their general health (1.1%) or quality of life (2.4%) as poor. Students were asked how they would respond to feeling very anxious or depressed. The more positive and health promoting responses included; talking to someone (69%), finding information about the situation (24%), praying (21%) and going to the hospital or health centre (3%). However, the less positive responses were very evident, where over half (55%) of the students said they would sort it out alone, one-third (35%) would try to ignore it, one in ten would take drugs, drink or get drunk and 6% would do nothing. Male students were less likely to seek help and more likely to try to sort it out alone, take drugs or get drunk or do nothing than females students (Table 6).

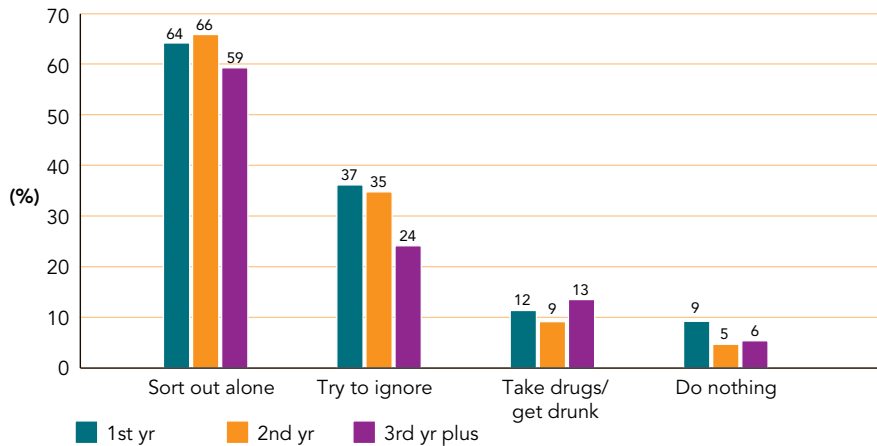
Table 6: Response to feeling very anxious and depressed – by gender

Dealing with anxiety/depression	Males	Females	Total
	%	%	%
Positive responses			
Talk to someone	55.4	77.7	69.3*
Find information	24.8	24.3	24.5
Pray	16.6	23.1	20.7*
Go to hospital/health centre	2.2	3.8	3.2*
Negative Responses			
Sort out alone	63.7	49.6	54.9*
Try to ignore	33.8	37.1	35.8
Take drugs or get drunk	11.0	7.4	8.7*
Can't imagine feeling that way	6.2	2.7	4.0*
Do nothing	6.9	4.7	5.5*
Not sure	3.5	2.1	2.6

*Significant between gender ($p < .01$)

Third year students were more likely to talk to someone and less likely to try and sort it out alone. First and second year male students were more likely to try and ignore it or do nothing about feeling very anxious or depressed in comparison to third year male students (Figure 5).

Figure 5: Dealing with anxiety and depression – Male students across year in college



If students wanted to talk to someone about feeling very anxious or depressed there were two main sources used - their social networks and professional services. For the majority of students their social networks of friends, parents and relatives were the people to whom they would turn for help. The use of professional services such as doctor, counsellor, lecturer, clergy, or help line were mentioned only by a minority of students (Table 7).

By far the most important contact for undergraduate students was a friend their own age with 83% saying they would discuss with friends feelings of anxiety and depression (Table 7). Female students were more likely to use their social network of friends, parents or other relatives than males. A higher proportion of males in comparison to females would not talk to anyone. First year students were less likely to want to talk to anyone and this was especially the case for first year males where 15% indicated that they would not talk to anyone. Third year males, in comparison to their first year male counterparts, were more likely to talk to a doctor (11% vs 4%) and first year males were more likely to discuss with parents.

Table 7: Coping Skills for anxiety and depression by gender

Talk to someone for help	Males	Females	Total
	%	%	%
Social networks			
Friend own age	77.8	85.7	82.7*
Parent	39.5	48.1	44.9*
Older friend	23.5	25.0	24.4
Other relative	18.2	24.4	22.1*
No one	11.9	6.3	8.4*
Professional services			
Doctor	6.6	7.8	7.3
Counsellor	4.4	6.8	5.9*
Lecturer	2.0	1.2	1.5
Clergy	2.2	1.0	1.4*
Help line	1.2	0.5	0.7

*Significant between gender ($p < .01$)

The issues which currently contributed to feeling stressed on a regular basis (very often/often) were clustered by means of factor analysis, into three main factors – college studies, living conditions and personal/interpersonal issues (Table 8). Overall, the highest factor as a source of stress related to demands of college studies. A higher proportion of female students in comparison to male students reported experiencing stress on a regular basis from study demands and exams as well as finance, family situation, circle of friends and illness. The only item where males reported experiencing stress more often was in relation to their sexuality.

Table 8: Sources of Regular Stress by gender

Sources of Regular Stress	Males	Females	Total
	%	%	%
College studies			
Exams	57.9	73.0	67.4*
Subject specific demands	53.8	67.2	62.1*
Studies in general	50.6	64.9	59.6*
Living Conditions			
Financial situation	39.5	45.5	43.3*
Work outside college	18.9	22.3	21.0
Family situation	14.9	22.5	19.7*
Living situation	17.7	20.5	19.4
Personal & Interpersonal			
Relationships	23.3	23.3	23.3
Competition at college	14.7	19.0	17.4
Anonymity at college	14.2	11.9	12.7
Circle of friends	10.6	11.7	11.2*
Illness	8.2	11.9	10.4*
Sexuality	6.8	3.2	4.4*

*Significant between gender ($p < .01$)

4.5 DIETARY HABITS

Overall, one in five students were on a special diet, females were more than twice as likely as males to report being on a special diet (Table 9). The greatest gender difference was seen in the weight-reduction diet category, with 15% of females compared to 2% males reporting such a practice. A vegetarian or vegan diet was the choice for 2% of the males and 9% of the females. Regular consumption of supplements was reported by 35% of females in comparison to 28% of males.

Table 9: Special dietary habits by gender

	Males	Females	Total
	%	%	%
Special diets	12.4	26.6	21.4*
Weight Loss	2.3	14.6	10.1*
Vegetarian	2.5	8.6	6.2*
Low cholesterol	2.1	2.9	2.6
Gluten Free	0.4	0.8	0.6
Diabetic	0.2	0.3	0.3
Food supplements – regular [†] use	27.8	35.3	32.5*

[†]regular=daily or several times a week *Significant between gender ($p < .01$)

The most popular foods to be consumed on a daily basis were bread, meat, cooked vegetables, with at least 50% of students eating these foods. Among the more healthy foods, a higher proportion of male students had bread (85%), meat (71%) and milk (50%) at least daily and more female students eat fruit (46%) and salads (33%) (Table 10). Among the less healthy foods, butter (41%), sweets (39%) and fizzy drinks (27%) were the most popular on a daily basis. A higher proportion of males used the less healthy foods on a daily basis including butter and hard margarine, fizzy drinks, cakes/biscuits, crisps and fast foods in comparison to females.

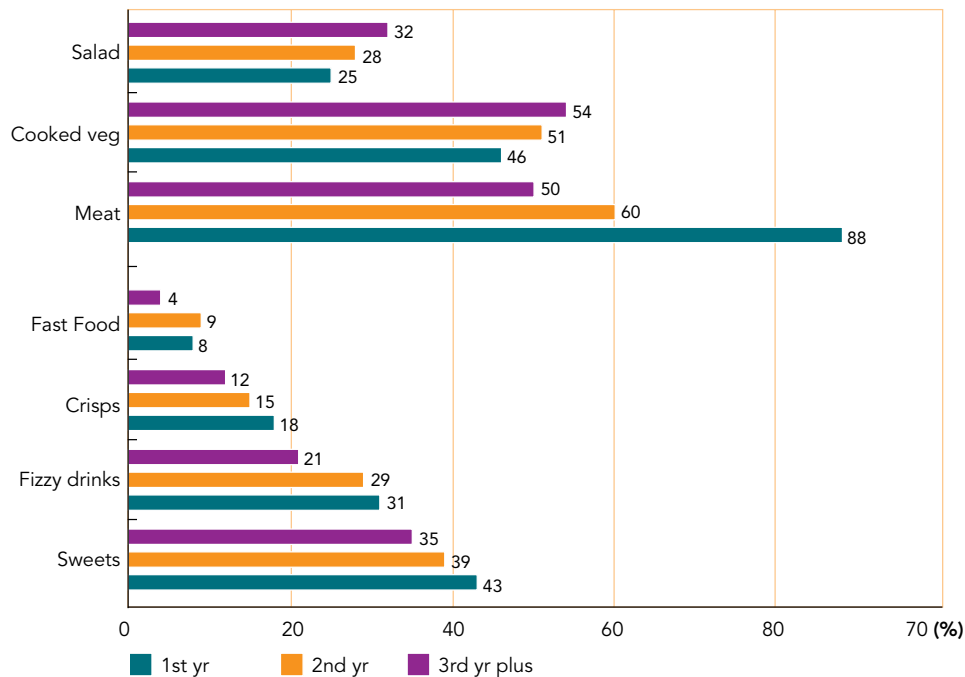
Table 10: Food intake – at least daily by gender

At least Daily intake of -	Males	Females	Total
More healthy	%	%	%
Bread	84.6	77.7	80.3*
Fruit	35.6	45.6	41.6*
Salad	21.8	32.7	28.6*
Cooked vegetables	48.1	51.9	50.4
Pint of milk	50.1	24.1	33.9*
Meat	71.0	46.2	55.6*
Fish	4.6	3.5	3.9*
Low fat spread	19.7	27.8	24.8*
Vegetable oil	16.2	12.6	13.9
Less healthy			
Cakes/biscuits	21.5	14.3	17.0*
Sweets	40.3	37.7	38.7
Crisps	17.3	13.0	14.6*
Fast food	9.9	3.8	6.1*
Fizzy drinks	36.4	20.6	26.6*
Butter/hard marg	50.0	36.3	41.5*
Usually add salt to table food	40.0	34.6	36.7*

*Significant between gender ($p < .01$)

A higher proportion of first year students had sweets (43%), fizzy drinks (31%), crisps (18%) and fast foods (8%) at least daily, while a greater number of third year students had salads and cooked vegetables (Figure 6). Fizzy drinks (40%) and crisps (26%) were more popular among first year male students than any other group.

Figure 6: Food intake at least daily across year in college

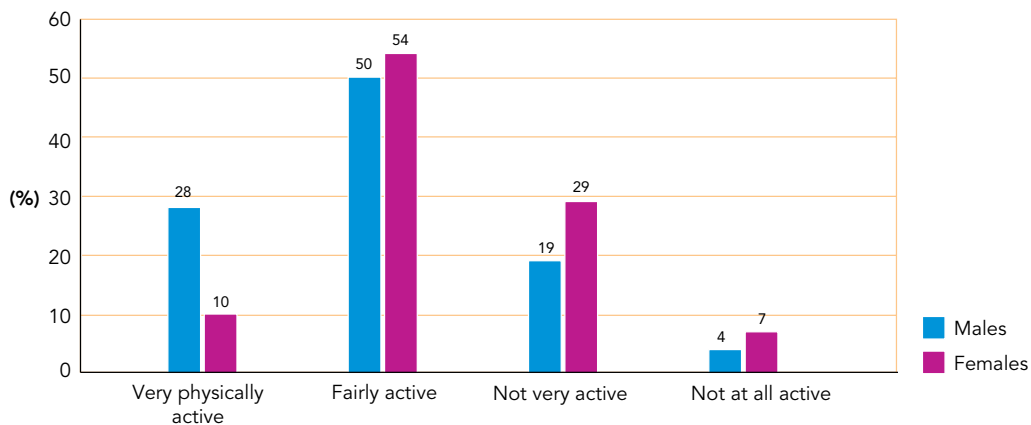


Nearly three-quarters of male students and half of female students used full fat milk. Females were nearly twice as likely to use low fat or skimmed milk in comparison to males. Males drank more milk than females in all years, and consumption declined over the three years for both genders. About half of the male students and a quarter of the female students consumed a pint or more of milk per day. Overall, just over 6% of students reported that they did not drink milk at all.

4.6 EXERCISE HABITS

Almost 70% of students described themselves as fairly to very physically active. Male students were more physically active than females (Figure 7). Over half of the students participated in at least 20 minutes of moderate exercise 3 or more times a week, which was a more common practice among females than males (Table 11). One in four students engaged in strenuous exercise 3 or more times a week, with twice as many males to females. Regular strenuous exercise was more prevalent among first and second year students than among third year students. Thirteen per cent of students took no regular exercise.

Figure 7: Rating of Physical Activity Level of Students by gender



Half of all the students participated in sport, with twice as many males participating as females, 71% to 36%. The highest sport participation rates were among first year (72%) and second year (74%) male students. Among females, first year students had the highest numbers (42%) engaged in sport participation. Of those who participated in sport, half did so at their college or university. Forty three percent of students attended a gym or leisure centre and of those, 60% indicated that it was at a college facility.

Table 11: Exercise Habits by gender

	Males	Females	Total
Regular Physical activity	%	%	%
Engaged in 20 mins of Strenuous exercise at least 3 times per week	42.4	17.3	27.0*
Engaged in 20 mins of Moderate exercise at least 3 times per week	49.9	56.4	54.0*
Engaged in Mild exercise at least 4 times per week	42.2	43.2	42.8
Sport participation - Yes	71.3	36.2	49.4*
3 or more times per week	56.1	40.7	49.1*
College sport	50.3	47.9	49.2
Attendance at gym - Yes	47.8	40.4	43.2*
3 or more times per week	42.8	31.6	36.3*
College gym	64.5	55.3	59.2*

*Significant between gender ($p < .01$)

4.7 ACCIDENTS AND INJURIES

4.7.1 Injuries

One in four (26%) of all students reported that they had sustained an injury during the past 12 months that required medical treatment. Twice as many males reported being injured in comparison to females (39% males, 18% females). Among male students, 4% reported being injured four or more times in the past year. Taking the most serious injury, students were asked to report on where the injury happened and what activity caused the injury. For the male students who were injured, the most serious injury occurred at a sports facility (49%), 15% said at home or on the street and 13% said at college (Table 12). Among females the most serious injury occurred at home (26%), on the street (23%), at a sports facility (19%), at college (17%) or in a business area (10%) such as a restaurant, shopping mall or cinema. Across year in college, a higher proportion of first and second year students reported an injury at a sports facility, while a greater number of third years reported that more injuries occurred on the street.

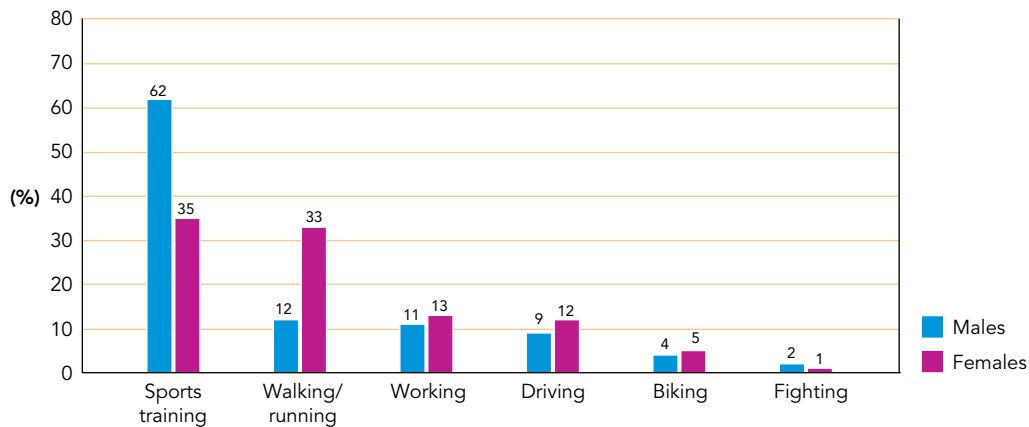
Table 12: Where most serious injury occurred by gender

	Males	Females	Total
	%	%	%
At sports facility	48.8	19.3	37.1*
On street	15.2	22.9	18.3*
At home	15.0	25.8	19.3*
At college	13.1	17.1	14.7*
In business area	5.5	10.2	7.3*
In countryside	2.4	4.7	3.3*

*Significant between gender ($p < .01$)

Sports training was the main activity which caused the most serious injury to occur followed by walking/running, working, driving, biking and fighting. There were significant gender differences in the activities which caused the injury. A higher proportion of the male students sustained an injury while participating in an organised activity, league or club (62% vs 35%). A higher proportion of female students (33%) sustained an injury while walking/running in comparison to male students (12%) (Figure 8). As a result of a serious injury sustained by students, two-thirds of the students lost at least one day of college or usual activity.

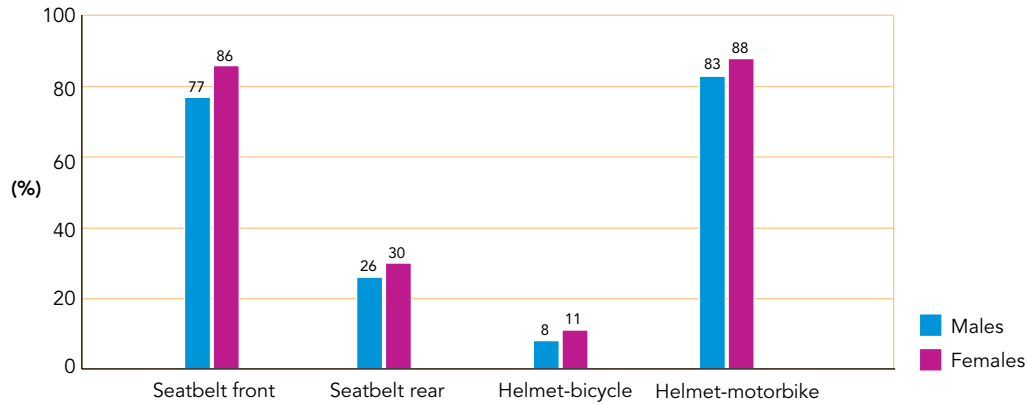
Figure 8: Activity Resulting in Injury by gender



4.7.2 Road Safety

The vast majority of students were compliant with the road safety measures of always using a seat belt when in the front seat of a car (82%) and wearing a helmet (86%) when riding a motorbike. First year students were less inclined to wear a seatbelt while in the front seat of a car in comparison to third year students. However, only a quarter of students always used a seatbelt in the rear of a car. Given that over half (55%) of all the students reported using a bicycle (71% male; 45% female), the personal safety measure of wearing a helmet when cycling was very low with only 10% compliant. In fact the vast majority of cyclists rarely used helmets (83% males; 75% females). Although helmet use was low, third year students were more compliant with helmet use than first or second year students. Female students had a greater proportion who were compliant with all of the road safety measures in comparison to male students (Figure 9).

Figure 9: Road Safety Compliance by gender



4.8 SEXUAL HEALTH

Almost three-quarters of all students were sexually active with significantly more males than females (75% vs 70%). The majority of students were 17 years or older when they first had sexual intercourse (Table 13). A higher proportion of female students (76%) were 17 years or older when they had their first act of sexual intercourse in comparison to their male counterparts (70%). The number of different sexual partners in their lifetime differed significantly between gender and across year in college with male students having more sexual partners than females (Table 13) and third year students having more partners than first or second year students.

Table 13: Age of sexual onset & No. of sexual partners in lifetime by gender

	Males	Females	Total
Age at first sexual intercourse	%	%	%
Under 14	3.4	1.8	2.4
15-16 years	26.8	21.9	23.8
17 or older	69.8	76.3	73.7*
Number of sexual partners			
1-3 people	58.0	71.3	66.1
4-5 people	14.6	13.7	14.1
6 or more people	27.4	15.0	19.9*

*Significant between gender ($p < .01$)

Students who were sexually active were asked to identify what method they used to prevent pregnancy when they last had sexual intercourse. By far the most common method was condom use (71%) followed by the contraceptive pill (45%) (Table 14). One in twenty students (5%) reported using withdrawal as a method to prevent pregnancy and a further 4% used nothing. Other methods such as natural family planning, cap, injection were around or below 1%.

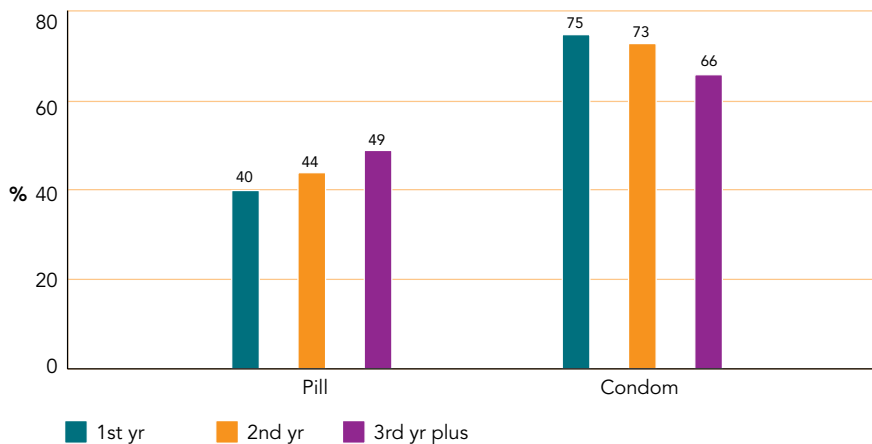
Table 14: Method to prevent pregnancy by gender

	Males	Females	Total
	%	%	%
Condom Use	74.3	68.1	70.5*
Contraceptive Pill	33.8	51.6	44.6*
Withdrawal	5.4	4.1	4.6
None	5.4	3.7	4.4
Injection	1.2	2.3	1.9
Family planning	0.3	1.5	1.0
Coil	0.3	1.0	0.7
Diaphragm	0.2	0.2	0.2

*Significant between gender ($p < .01$)

A higher proportion of male students used condoms in comparison to female students (74% vs 68%), while female students had a higher proportion reporting the use of the contraceptive pill (52% vs 34%). The use of the pill significantly increased across year in college with the highest use among third years (49%) (Figure 10). The reverse was true for condom use with the highest numbers in first year (75%) and lowest in third year (66%).

Figure 10: Method to prevent pregnancy across year in college



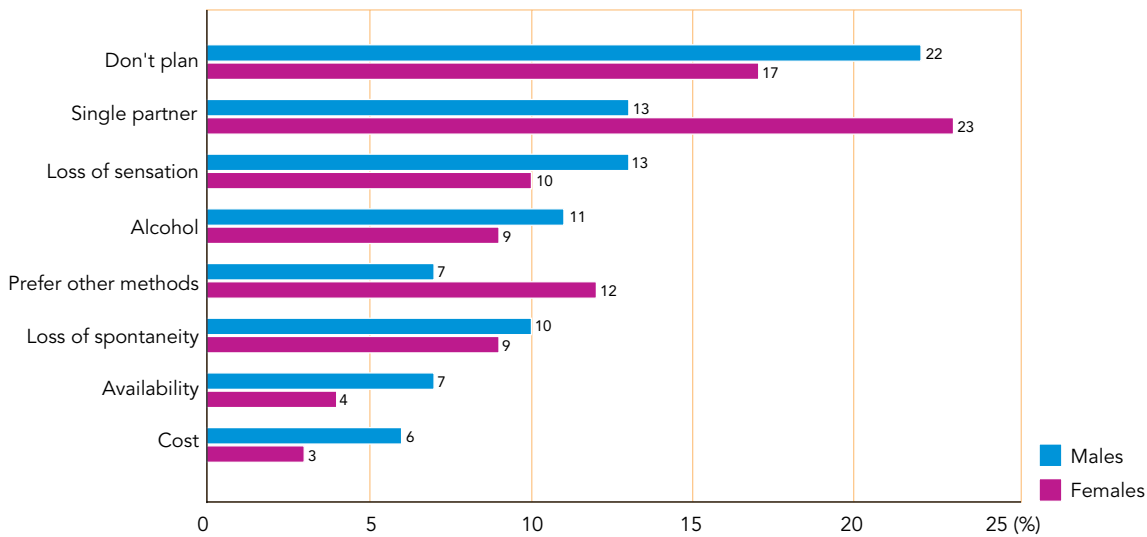
A separate question was asked to identify the number of female students who had used the morning after pill, an emergency contraceptive. Among female students who were sexually active, 42% reported that they had used the morning after pill with no significant difference across year in college.

To protect themselves from a sexually-transmitted infection (STIs) the majority of students used a condom (76%), others reported having one constant partner (40%) and some (3%) used no protection at all. About 2% of students expected their partner to have STI screening for protection. Again, as in pregnancy prevention, a higher proportion of male students used condoms in comparison to female students (82% vs 72%), while a

greater number of female students said they had intercourse with only one constant partner as the method to protect them against STIs (47% vs 28%). Among sexually active students, 4% reported that they have been medically diagnosed as having a sexually-transmitted infection.

There were many reasons why students did not always use condoms. The six most common reasons reported were; don't plan, single partner, loss of sensation, impaired judgement due to alcohol, prefer other methods and loss of spontaneity. Availability and cost were also issues for some. Comparing the reasons between males and females, a higher proportion of female students in comparison to male students said single partner or preferred other methods were reasons for non-use of condoms (Figure 11). A higher proportion of males in comparison to females stated they don't plan, that availability and cost were reasons for non-use of condoms.

Figure 11: Reasons for Non-use of Condoms by gender



4.9 SUBSTANCE USE – TOBACCO, ILLEGAL DRUGS, ALCOHOL

4.9.1. Tobacco

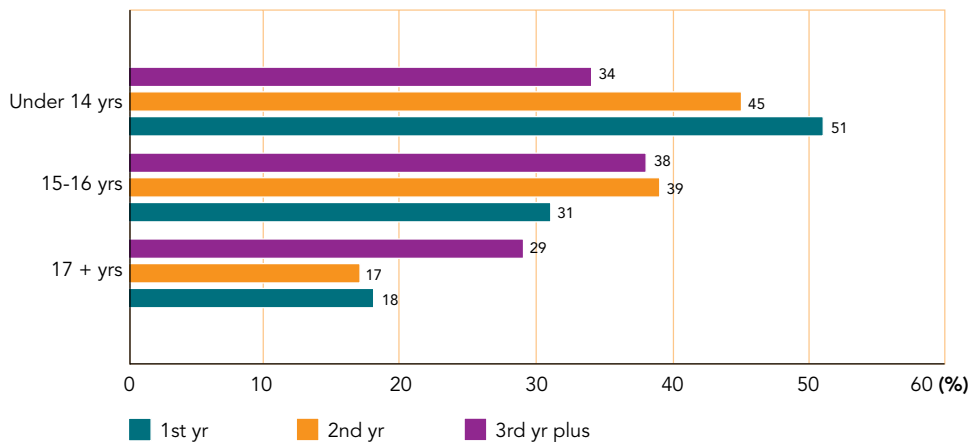
One in four (27%) students reported smoking regularly or occasionally. The average number of cigarettes smoked was seven cigarettes per day with males smoking more than females and second years smoking more than other years. The average number of years as a smoker was five years, with male students smoking for a longer period of time than females and third year male students smoking longer than others. The average age when students started to smoke was 15 years. However, one in four students waited until they were 17 years or older to start smoking (Table 15).

Table 15: Age at onset of smoking by gender

Age at start of smoking	Males	Females	Total
	%	%	%
Under 14	39.9	40.8	40.5
15-16 years	32.3	36.5	34.9
17 or older	27.7	22.7	24.6

There was a significant difference across year in college for the onset of smoking. A higher proportion of first and second year students started smoking before they were 14 years old in comparison to third year students (46%, 44%, 33%). This was particularly the case for female students where over half of first year female students had begun smoking before they were 14 years old (Figure 12). Of particular interest is that one-quarter of all students who had smoked in the past were no longer smokers.

Figure 12: Age at onset of smoking for females across year in college



Three-quarters of all current smokers had tried to stop smoking and nearly all wanted to quit with more females (97%) than males (90%). When asked to identify what would help them quit smoking, personal, social and environmental factors were mentioned. Having more will power was mentioned by two-thirds of students as a key to quitting smoking, where more females than males reported it (Table 16). Other personal issues mentioned were less stress (41%) and more self-confidence (21%). Of the environmental factors, pricing was considered the most important with 25% of students saying an increase in the price of cigarettes would act as an aid to stop smoking. Support from family and friends were identified by 15% as an aid to stop smoking and a similar number said nicotine replacement therapy would help them. Of less importance to students was medical advice and stop smoking groups.

Table 16: Help to stop smoking by gender

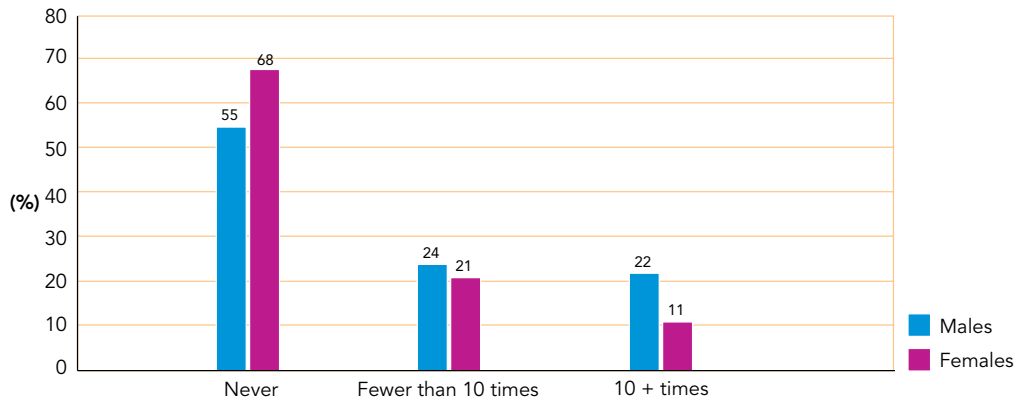
Help to stop smoking	Males	Females	Total
	%	%	%
Personal factors			
More will power	57.5	68.2	64.3*
Less stress	35.1	43.8	40.6
More confidence to stop	21.3	21.5	21.4
Know of damage to health	19.1	18.1	18.5
Environmental factors			
Price increase in tobacco	29.4	22.9	25.3
No smoking policy	10.1	13.1	12.0
Social factors			
Support from family/friends	13.7	16.2	15.3
Nicotine replacement therapy	14.7	14.0	14.3
Stop smoking group	6.0	5.8	5.9
Medical advice	6.6	3.1	4.4

*Significant between gender ($p < .01$)

4.9.2 Illegal Drugs

Cannabis was the most common illegal drug used by students with over one-third (37%) reporting they have used it in the past 12 months and 20% had used cannabis in the past 30 days. There were significant differences between gender, in that a higher proportion of male students reported using cannabis both in the last year (49%) and in the last 30 days (30%). Twice as many male students (22%) used cannabis ten or more times in the past 12 months in comparison to female (11%) students (Figure 13). There was no difference across year in college. In the past 30 days, 9% of males and 3% of females used cannabis ten or more times.

Figure 13: Cannabis Use in past 12 months by gender



Ecstasy was the second most used illegal drug (8%), although at a much lower level than cannabis. This was followed by cocaine, magic mushrooms and amphetamines. Male students were much more likely to use these illegal drugs than female students (Table 17).

Table 17: Illegal Drug use in past 12 months by gender

	Males	Females	Total
	%	%	%
Cannabis	45.4	32.4	37.3*
Ecstasy	10.6	6.4	8.0*
Cocaine	9.0	3.9	5.8*
Magic Mushrooms	8.0	3.1	4.9*
Amphetamine	5.6	3.8	4.5
Solvents	5.4	1.5	2.2*
LSD	2.3	1.4	1.7
Tranquillisers	1.3	1.3	1.3
Heroin	0.4	0.3	0.4

*Significant between gender ($p < .01$)

4.9.3 ALCOHOL

4.9.3a Attitudes to Alcohol

The reasons why students usually consumed alcohol were for sociability, enjoyment and relaxation. Gender differences emerged with a higher proportion of male students choosing sociability and relaxation and a higher proportion of female students choosing enjoyment (Table 18). One in four students reported having a drink with a meal, more females than males reported such a practice. However, one in ten students used alcohol to forget worries and one in twenty used alcohol when anxious or depressed. Just 2% of students felt they needed to drink. Although low, a higher proportion of males (5%) drank because they were lonely or to be polite in comparison to females.

Table 18: Reasons for drinking by gender

Reasons for drinking	Males	Females	Total
	%	%	%
More positive			
Sociable	71.0	65.8	67.8*
Enjoy it	69.1	74.5	72.5*
Relax	49.4	44.6	46.4*
Drink with meal	17.1	28.7	24.3*
More negative			
Forget worries	11.8	12.4	12.2
Anxious/depressed	4.7	4.7	4.7
Lonely	5.0	2.3	3.3*
Be polite	5.4	2.2	3.4*
Need to	2.2	1.4	1.6

* significant between gender ($p < .01$)

To evaluate attitudes and perceptions about alcohol, students were asked to respond to four statements using a scale from strongly agree to strongly disagree and don't know. The statement with the highest agreement was "anyone can become alcohol dependent" where 82% agreed. Almost three-quarters (73%) of all students were in agreement that "anyone might become violent if they have too much to drink". Over one-third (39%) of students thought that "when someone is drunk, they should not be considered as responsible for their actions as when they are sober". One in five students (19%) thought that "it doesn't matter how much you drink as long as you don't show the effects."

Female students were more likely to agree that violence can result from too much drink and that anyone can become alcohol dependent in comparison to their male counterparts (Table 19). A higher proportion of male students (23%) were more likely to agree that the amount of alcohol an individual drinks doesn't matter provided you don't show the effects. This perception was more evident in first and second year students.

Table 19: Attitudes to alcohol by gender

	Response	Males	Females
		%	%
It doesn't matter how much you drink as long as you don't show the effects	Agree	22.9	16.2*
	Disagree	72.2	79.6
	Don't know	4.9	4.2
Anyone might become violent if they have too much to drink	Agree	69.2	75.1*
	Disagree	29.4	23.2
	Don't know	1.4	1.7
When someone is drunk, they should not be considered as responsible for their actions as when they are sober.	Agree	39.4	39.0
	Disagree	59.6	58.6
	Don't know	1.0	2.4
Anyone can become alcohol dependent.	Agree	78.0	85.2*
	Disagree	18.7	12.2
	Don't know	3.3	2.6

*Significant between gender ($p < .01$)

4.9.3b. Drinking Habits

The proportion of non-drinkers among students was 5%. The average age when students started to drink was 15 years. There were significant differences between gender and across year in college. A higher proportion of male students had started drinking before the age of 14 in comparison to female students (Table 20). A higher proportion of third year students (36%) started drinking when they were 17 years or older in comparison to first years (31%) and second year (32%) students.

Table 20: Age at onset of drinking by gender

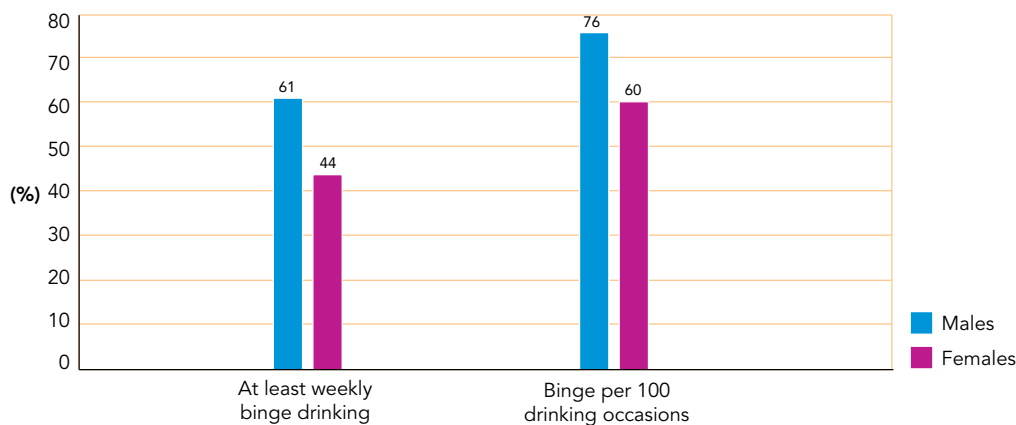
Age at onset of drinking	Males	Females	Total
	%	%	%
Under 14	21.4	17.3	18.9*
15-16 years	46.9	48.6	48.0
17 or older	31.7	34.0	33.1

*Significant between gender ($p < .05$)

Beer was the preferred drink among 87% of male students. Female students were more divided between beer (47%) and spirits (36%). Wine was more popular among female students (17%) than male students (4%). Third year students had a higher preference for wine and a lower preference for beer in comparison to first and second year students. Third year female students were less inclined to drink spirits in comparison to first and second year female students.

The total volume of alcohol consumed per head of student (based on the total sample of students) was 18.3 litres of pure alcohol for males and 10.8 litres for females. While very few students drank daily, 74% of male students and 70% of female students drank at least once a week. Binge drinking at least once a week, defined as drinking at least 75 grams of pure alcohol per occasion (at least 4 pints of beer or a bottle of wine or equivalent), was reported by 61% of male students and 44% of female students. Overall, third year students had fewer regular binge drinkers. Among males, first year students had the highest proportion of weekly binge drinkers (64%). Among females, second year students (49%) were the highest binge drinkers. When the frequency of binge drinking occasions were related to the overall number of drinking occasions, the results showed that out of every 100 drinking occasions 76 ended up in binge drinking for male students and 60 for female students (Figure 14).

Figure 14: High Risk Drinking by gender



4.9.3c. Experience of Adverse Consequences

There was a high level and range of harm/problems experienced by students as a result of their drinking. Three-quarters (74%) of male students and two-thirds of female students (65%) experienced at least one harm during the last 12 months as a result of their alcohol use. There was a high prevalence of adverse consequences relating to their drinking such as “regretted things said or done after drinking” (62%), “felt effects of alcohol while at class/work” (50%), “missed school/work days” (44%) and “harmed studies/work” (28%). A higher proportion of male students experienced these harms in comparison to their female counterparts (Table 21). Male students were twice as likely to have been in a fight, in an accident and had unprotected sex in comparison to female students. One in four male students and one in five female students experienced money problems as a result of their own drinking.

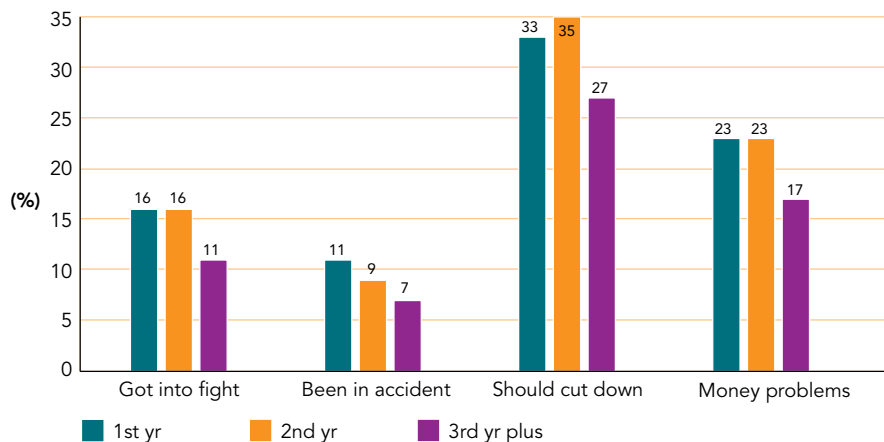
Table 21. Experience of adverse consequences as a result of own alcohol use by gender

Harms	Males	Females	Total
	%	%	%
Harm related to academic performance			
Felt effects of alcohol while at class/work	54.5	47.9	50.4*
Missed school/work days	47.9	41.7	44.0*
Harmed studies/work	34.3	24.9	28.4*
Acute harm			
Regretted things said or done	62.9	61.0	61.8
Got into fight	20.6	10.3	14.2*
Been in accident	12.9	6.4	8.9*
Personal Harm			
Money problems	24.5	18.6	20.8*
Unintentional sex	19.3	11.4	14.4*
Unprotected sex	16.7	9.2	12.0*
Chronic harm			
Should cut down	36.3	27.9	31.1*
Harmed health	27.8	17.8	21.6*
Social Harm			
Harmed friendships	14.8	8.9	11.1*
Harmed relationship / home-life	13.6	8.7	10.6*

*Significant between gender ($p < .01$)

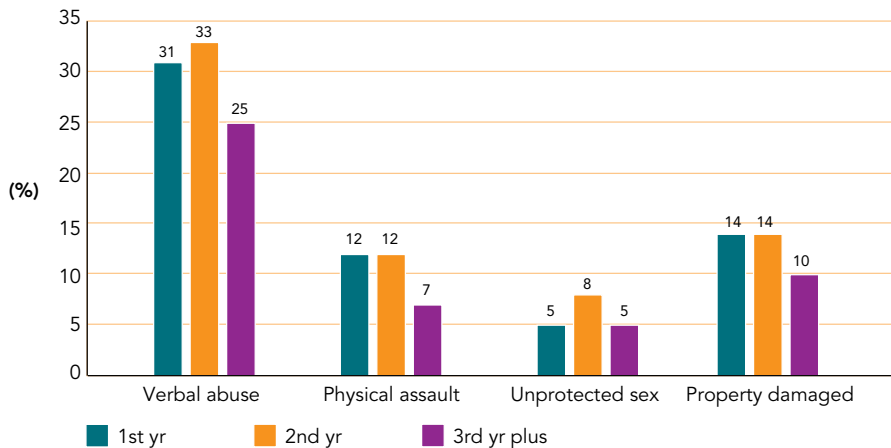
There were significant differences across year in college for four of the adverse consequences (Figure 15). First and second year students were more likely to have been in an accident or fight or experienced financial problems and thought they should cut down on their drinking in comparison to third year students.

Figure 15: Experience of adverse consequences of own alcohol use across year in college



As a result of someone else’s drinking, two-thirds of male students and over half (55%) of female students reported that they had experienced at least one harm. The most often cited consequences experienced among male students were; verbal abuse (37%), passenger with a driver who had taken alcohol (22%), arguments with friends and family about drinking (20%), property vandalised (19%), physically assaulted (18%) and relationship difficulties (13%). For female students, the most common adverse consequences, as a result of someone else’s drinking were; verbal abuse (25%), arguments with friends (21%), relationship difficulties (16%), passenger with a driver who had taken alcohol (15%) and had property vandalised (8%). Sexual assault rate, although very low, was twice the rate among first year female students (2.4%) in comparison to second (1.2%) or third year students (0.8%).

Figure 16: Experiences of harm as a result of someone else’s drinking across year in college.



Four of the harms experienced as a result of someone else’s drinking were significantly different across year in college (Figure 16). A higher proportion of first and second year students experienced verbal abuse, physical assault, unprotected sex and property damage in comparison to third year students.

4.10 Profile of Students with High Risk Drinking Patterns

High risk drinking are patterns of drinking that are likely to increase the risk of harm for the drinker and for others. Binge drinking is a term used to describe a single occasion of excessive drinking, defined as drinking at least 75 grams of pure alcohol per occasion (at least 4 pints of beer or a bottle of wine or equivalent). This pattern of high risk drinking was the norm among college students in this study, where out of every 100 drinking occasions, 76 were binge drinking occasions for male students and 60 for female students.

This section examines the hypothesis - does high risk drinking increase the risk of harm for the drinker and if so to what extent? The dynamics of binge drinking with a number of key student well-being and welfare indicators are also explored using underlying perceptions about alcohol, student living conditions, general health, risk-taking behaviours in general and coping skills. The non-drinkers (5%) in the study were excluded from these analyses.

The likelihood of students experiencing adverse consequences from their own drinking increased with more frequent binge drinking episodes. Students who were regular binge drinkers, defined as binge drinking at least weekly, were two to three times more likely to experience a range of adverse consequences as a result of their drinking in comparison to students who were binge drinking less frequently, or were non-binge drinkers (Table 22). Two-thirds of students who were regular binge drinkers felt the affect of alcohol while at class/work in comparison to 27% of other drinkers. Regular binge drinkers were twice as likely to miss school/work (61% vs 27%), reported their studies/work were harmed (38% vs 18%) and thought they should cut down on their drinking (43% vs 19%) in comparison to students who were binge drinking less frequently. Money problems, fights, unprotected sex and accidents were three times more likely to occur among students who engaged in regular binge drinking.

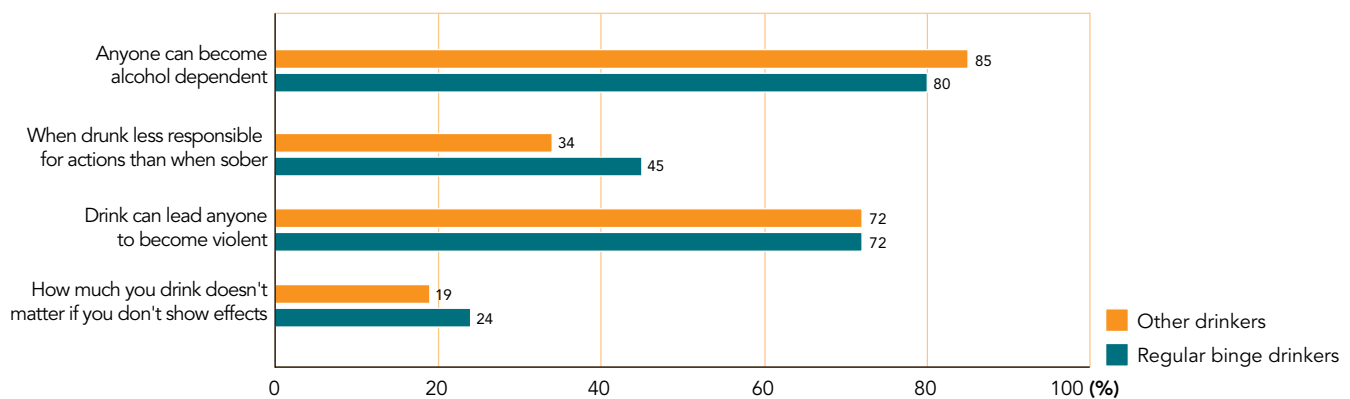
Table 22: Experiences of adverse consequences by high risk drinking

Harms Experienced	Regular binge drinkers	Less frequent binge or non-binge drinkers
	%	%
Regretted things said or done	75.8	48.1*
Felt alcohol effects while at class/work	63.8	27.5*
Missed school/work days due to alcohol	61.2	27.3*
Should cut down	43.2	19.2*
Harmed work/studies	38.5	18.5*
Money problems	31.7	9.8*
Harmed health	28.0	15.0*
Got into fight	22.0	6.1*
Unintended sex	21.0	7.8*
Unprotected sex	18.5	5.5*
Harmed friendships	15.9	6.6*
Harmed relationship / home-life	14.8	6.2*
Been in accident	13.4	4.2*

*significant between drinking pattern ($p < .01$)

A significantly higher proportion of regular binge drinkers, in comparison to other drinkers, perceived that the amount of alcohol consumed didn't matter provided the individual did not show the effects and that when an individual was drunk they should not be considered as responsible for their actions as when sober (Figure 17). While the vast majority of students believed that anyone can become alcohol dependent, significantly fewer regular binge drinkers agreed.

Figure 17: Attitudes to alcohol by high risk drinking



A higher proportion of regular binge drinkers drank for enjoyment and sociability in comparison to other drinkers. A higher proportion of regular binge drinkers also drank to forget worries (15% vs 10%) when anxious or depressed, or lonely, or felt they needed to drink. (Table 23).

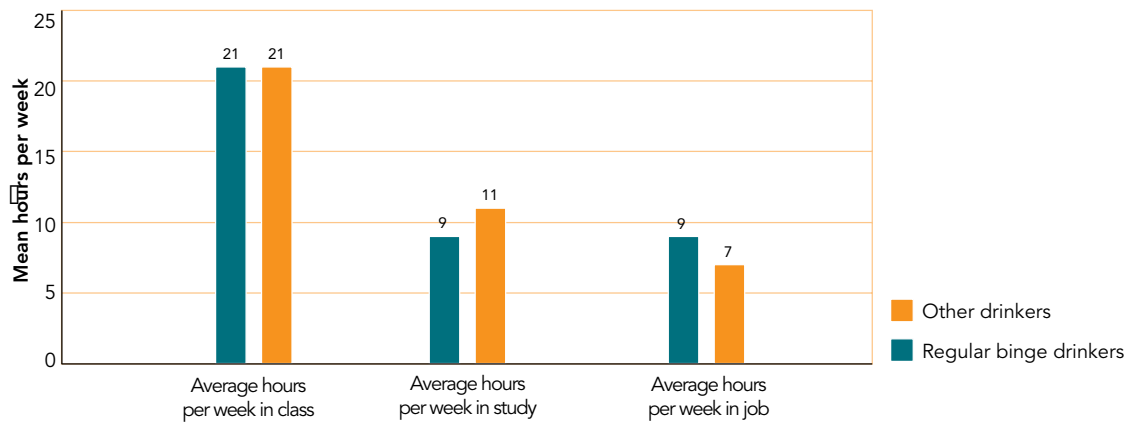
Table 23: Reasons for drinking by high risk drinking

Reasons for drinking	Regular binge drinkers	Less frequent or non-binge drinkers
More positive	%	%
Sociable	70.3	65.8*
Enjoy	82.6	63.3*
Relax	49.8	43.8
Drink with meal	21.1	28.2*
More negative		
Forget worries	14.9	9.7*
Anxious/depressed	6.3	3.3*
Lonely	4.1	2.5*
Be polite	2.9	3.8
Need to	2.6	0.7*

*significant between drinking pattern ($p < .01$)

Student living conditions were examined across high risk drinking patterns and showed that the average source of income from family and from grants were similar for both groups. However, students who were regular binge drinkers had a higher average income from work in comparison to others (Table 24). Regular binge drinkers spend less on accommodation, spend a similar amount on food, but spend twice as much on alcohol per month than other drinkers, €148 in comparison to €69. The average time allocated to classroom per week was 21 hours for both groups. However, regular binge drinkers spent fewer hours per week on study during term time and a greater amount of time working in comparison to other students who drank (Figure 18).

Figure 18: Weekly student time allocation in college by high risk drinking



A significantly higher proportion of those who drank alcohol but did not binge drink on a regular basis were more satisfied with their health and perceived their general health as excellent or very good in comparison to regular binge drinkers. There was no difference in quality of life or perceived mental health. Two thirds of both groups were fairly physically active and a higher number of regular binge drinkers participated in sport in comparison to others. Exams, studies in general and relationships were contributing sources of stress for both groups. However, financial situation and work outside of college were sources of regular stress for a higher proportion of regular binge drinkers, while stress from subject demands was less significant.

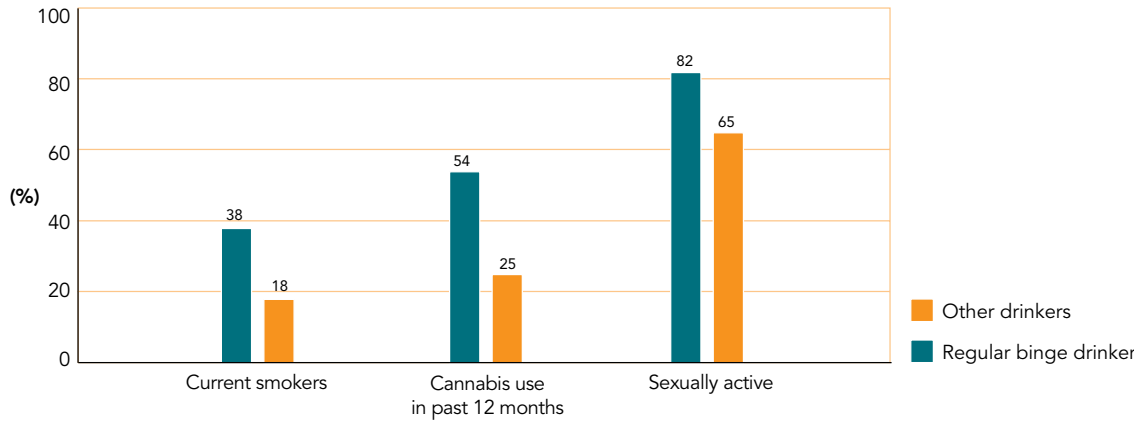
Table 24: Student Living Conditions and General health by high risk drinking

	Regular Binge drinkers	Less frequent or non-binge drinkers
Income – average		
Family	€270	€265
Work	€318	€286*
Grants	€230	€224
Expenditure – average		
Accommodation	€258	€283*
Alcohol	€148	€69*
Food	€107	€110
General Health	%	%
Perceived general health (exc/v. good)	51.4	57.4*
Satisfaction with health (satisfied)	60.3	66.1*
Quality of Life (v.good/good)	86.5	86.9
Perceived mental health (v.good/good)	85.4	85.4
Physical Activity		
Physical activity level (very/fairly active)	67.9	68.5
Sports participation	51.8	46.1*
Sources of Stress (regular stress)		
Exams	67.1	67.1
Specific subjects demands	60.3	64.5*
Studies in general	59.2	60.0
Financial situation	47.0	40.9*
Relationships	25.2	21.8
Work outside of college	22.4	19.7*

*significant between drinking pattern ($p < .01$)

To explore if binge drinking was part of a wider risk taking behaviour pattern, behaviours across substance use and sexual activity were examined. Results showed that regular binge drinkers were more likely to engage in other risk taking behaviours. A higher proportion of binge drinkers were involved at an earlier age in smoking, drinking and sexual activity than other drinkers (Table 25). Regular binge drinkers were twice as likely to be smokers and cannabis users. A greater number of regular binge drinkers were also sexually active (Figure 19).

Figure 19: Risk Taking Behaviours by high risk drinking



Methods used to prevent pregnancy were similar for both groups in relation to condom use, withdrawal or using no protection. However, regular binge drinkers were less likely to use the contraceptive pill. Half of female binge drinkers had used the morning after pill, an emergency contraception in comparison to one-third of other drinkers (Table 25).

Table 25: Risk Taking Behaviours and Coping Skills by high risk drinking

	Regular binge drinkers	Less frequent or non-binge drinkers
Risk taking behaviours	%	%
Age onset of smoking (under 14 years)	43.4	34.2*
Age onset of drinking (under 14 years)	25.3	12.5*
Age onset of first sex (under 16 years)	30.7	20.7*
Pregnancy prevention		
Condom use	71.0	69.9
Contraceptive Pill	41.0	49.6*
Withdrawal	4.5	4.7
None	4.9	3.5
Morning after pill (females only)	49.1	36.4*
Coping with anxiety/depression		
More positive		
Talk to someone	66.2	73.0*
Find information	20.7	28.2*
Pray	16.4	22.9*
More negative		
Sort out alone	55.1	54.6
Try to ignore	37.4	35.5
Take drugs or get drunk	14.5	3.9*

*significant between drinking pattern ($p < .01$)

Coping skills were examined in relation to how a person would cope with anxiety or depression. Those who were regular binge drinkers were less likely to talk to someone, find information or pray – considered more positive and appropriate responses. However, similar responses were reported for both groups in relation to the more negative responses of not wanting to share problems with others (sort out alone) or to try and ignore the problem. A greater number of regular binge drinkers reported they would take drugs or get drunk (14%) in comparison to other drinkers (4%) to cope with anxiety or depression.