

YOUNG PEOPLE, ALCOHOL AND DRUGS

Dr. Deirdre Palmer,
Health Service Executive - South.

Dr. Gary O' Reilly,
School of Psychology, University College Dublin.





YOUNG PEOPLE, ALCOHOL AND DRUGS

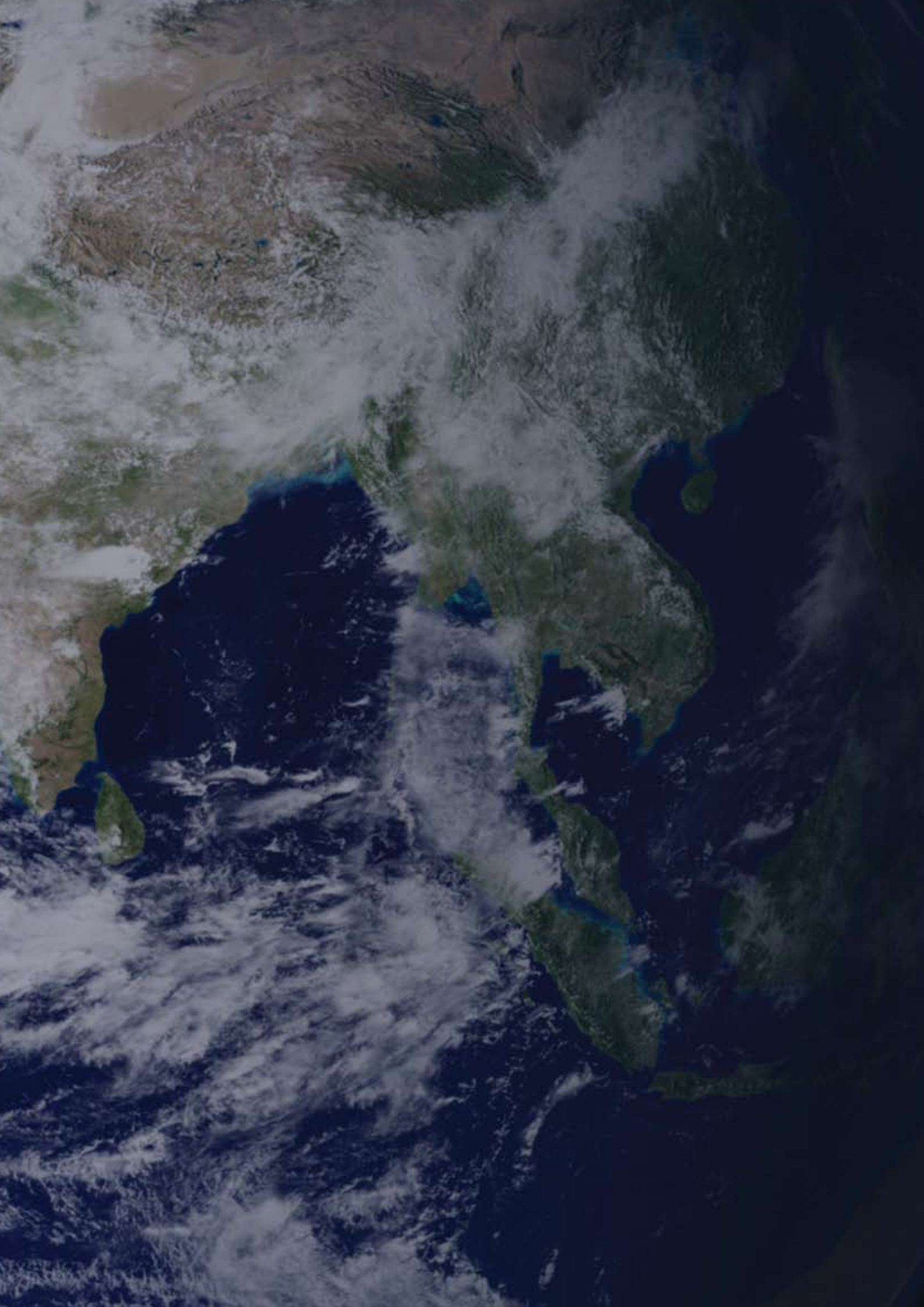
Dr. Deirdre Palmer,
Health Service Executive - South.

Dr. Gary O' Reilly,
School of Psychology, University College Dublin.

Published by:
Juvenile Mental Health Matters, Dublin, Ireland.
May 2008.



Juvenile
Mental Health Matters



Research Team

This research was conducted by Dr. Deirdre Palmer and Dr. Gary O' Reilly.

Dr Deirdre Palmer is a Clinical Psychologist with the Health Service Executive - South. She has a dual qualification in Clinical Psychology and Counselling Psychology. She is currently working in a Child and Adolescent Psychiatry Service. Her primary research and practice interests include family functioning and co morbid mental health difficulties among young people with substance use problems and the development of effective interventions for young people with substance use disorders and co existing difficulties.

Dr Gary O' Reilly is a Senior Lecturer and Acting Director of the Doctoral

Programme in Clinical Psychology at University College Dublin. He is also a Principal Clinical Psychologist at the Children's University Hospital, Temple Street, Dublin. His current research and clinical interests include understanding young people who engage in offending behaviour, the development of Cognitive Behavioural Therapy interventions for children and adolescents, and human intelligence. He has co-edited a number of books including *The Handbook of Clinical Intervention with Young People who Sexually Abuse* (2004) and *The Handbook of Intellectual Disability and Clinical Psychology Practice* (2007) both published by Brunner-Routledge.

Juvenile Mental Health Matters is a voluntary philanthropic society co-founded by Dr Gary O' Reilly and Dr Jennifer Margaret Hayes. Our aim is to conduct high quality scientific research and develop high quality intervention programmes that promote mental health and well-being in all young people. Please visit our website - www.juvenilementalhealthmatters.com - to access our previous research and a free Cognitive Behaviour Therapy Workbook for Children and Adolescents. We make all of our resources available free of charge. Our society receives no funding.

na KOL 10

RE
& A

WIT

IS-LO

COLO

Contents

Abstract	07	■
Acknowledgements	09	■
Chapter One Methodology	11	■
Chapter Two Alcohol Use	17	■
Chapter Three Drug Use	29	■
Chapter Four Defining a Continuum of Substance Use in the Community Group	41	■
Chapter Five Continuum of Use Categories, Clinical Group and Demographic and Substance Use Related Variables	47	■
Chapter Six Continuum of Use Categories, Clinical Group, and Psychological Variables	57	■
Chapter Seven Addiction and Mental Health Status of Young People Attending Residential Intervention for Substance Misuse	63	■
Chapter Eight Qualitative Study with Young People Attending the Residential Programme for Substance Misuse	69	■
Chapter Nine Research Implications - Addressing Substance Use Among Young People	79	■
Appendix	87	■
References	91	■

Abstract

The current research compared a community group of adolescents (n = 462) to a similar aged clinical group of adolescents in residential treatment for substance misuse (n = 30) in the South and South East of Ireland on substance use behaviour, coping style, motivations for alcohol and drug use and family functioning. The community group reported a comparable level of alcohol use to previous research but a higher rate of drug use. Six different categories of substance use were generated based on substance use index scores and the substance use behaviour endorsed by the community group. The six categories reflected a continuum of substance use behaviour ranging from no substance use, to alcohol use only, to both alcohol and drug use, and from no use to moderate/experimental use, to heavier

more problematic use. The six groups were as follows: non substance users (n = 62); moderate drinkers (n = 41); regular binge drinkers (n = 59); binge drinkers who experiment with drugs (n = 57); regular drug users (n = 34); problem substance users (n = 45). The regular drug user and problematic substance user groups were comparable to the clinical group on some substance use behaviours. The clinical group were demarcated from the community groups by lower task focused coping and higher use of alcohol and drugs to cope. No clear pattern on general coping style was evident among the community group according to level of substance use. The clinical group and community groups who reported both alcohol and drug use reported more family dysfunction in comparison to non substance users.

The most problematic substance users in the community sample and the clinical group indicated poorer family functioning relative to some less problematic substance user groups. A qualitative study with adolescents in the clinical group on aetiological factors in the development of their substance misuse problem indicated findings consistent with quantitative results. The majority of adolescents in treatment for substance misuse presented with both alcohol and substance dependent disorders with reported early onset. A high level of co existing psychological problems was evident among the clinical group. Implications of the current findings for service development, policy development and future research are discussed.



Acknowledgements

Dr. Palmer and Dr. O'Reilly would like to express their gratitude to the following people who contributed to this research.

- All the young people who participated in this research.
- Staff at the treatment centre involved in this study.
- Schools and colleges who permitted access to students.
- Sylva Langford and Bairbre Nic Aongusa from the Office of the Minister for Children who provided funding for the publication of the report.
- Colleagues and friends from the School of Psychology U.C.D. and from the HSE-S.

This report was launched at an International Conference. Young People, Alcohol and Drugs: A World of Solutions, by Juvenile Mental Health Matters and the School of Psychology UCD. This conference was made possible thanks to the support received from the following sources and we would like to express our gratitude:

- The Office for the Minister for Children.
- The University College Dublin Funding Scheme.
- The Children's Act Advisory Board
- The College of Human Sciences University College

DOM
CONSPI

M

CHAPTER ONE

Methodology

SUMMARY

The methodology employed in the present study will be outlined in this chapter. It will describe the participants in the study who were drawn from a regular community population and a group of young people attending a residential substance misuse intervention programme based in the South East region of Ireland. The psychometric instruments and procedure used will also be described.

PARTICIPANTS

Four hundred and ninety two people participated in the present study. There were two groups of participants. Group one were a community group containing 462 adolescents aged 14-19 selected from five mainstream secondary schools and two Post Leaving Certificate (PLC) colleges in the South and South-East region of Ireland. Group two were a group of 30 adolescents aged 15-19 years who had entered a six-week

residential intervention programme for substance misuse, also located in the South East region.

GROUP ONE: COMMUNITY GROUP

The community group included 208 male and 254 female adolescents (14-19 years; Mean 16.29 yrs, SD 1.21 years) drawn from transition year, fifth year and sixth year in schools and from Post Leaving Certificate (PCL) Colleges. Five secondary schools: two co-educational schools, one female only school and two male only schools were involved. Students were recruited from four secondary schools in an urban area of the South East of Ireland and one secondary school in Cork city. One of the schools was characterised as disadvantaged by the Department of Education and Science. The schools selected constituted a sample of convenience. Four hundred and ninety eight secondary school students were invited to participate

in the research and 81.52% (n = 406) agreed to do so. Eight questionnaires were removed from the school data set as they were obviously invalid with 398 cases remaining. Students were also recruited from two PLC Colleges in the South East of Ireland. Access was granted to all students in one PLC College but the number of those of eligible age was small (n = 20) and to students from two courses in the second PLC College (n = 44). All students approached agreed to participate (n = 64).

GROUP TWO: SUBSTANCE MISUSE TREATMENT GROUP

Thirty adolescents aged between 15-19 years entering a residential treatment centre for young people with substance misuse problems comprised the clinical group. They had a mean age of 17.43 years (SD = 1.25 yrs). Adolescents are referred to this treatment centre from different regions of Ireland. This centre

does not provide a detoxification service. In total 36 individuals were approached to take part in the research. However, six ultimately declined. This left a final group of 30 of whom 20 were male and 10 were female. Ten individuals from the clinical group also participated in qualitative interviews: three females and seven males. Every third individual in the clinical group was selected for this and all those approached agreed to the interview.

DEMOGRAPHIC CHARACTERISTICS

In order to determine parental socioeconomic status (SES), parental occupational status was used (the highest ranking occupation of parents was taken). In the community group, 6.2% of young people's parents fell in the higher professional SES category while 13.3% of the substance misuse treatment group had parents who fell in this category. In the substance misuse treatment group, 13.3% of participants' parents were unemployed while 5.5% of the community group reported that parents were unemployed.

In the community group, 17.6% of participants indicated that their parents were separated compared to 46.7% of the clinical group. The largest proportion of the community group were fifth year students (38.1%). A number of the substance misuse treatment group were still in school or attending a PLC course (26.7%, $n = 8$) while most were unemployed (60%, $n = 18$).

INSTRUMENTS

The following instruments were administered in the current study:

1. Demographic Questionnaire.
2. Alcohol and Illicit Drug Use Questionnaire.
3. Motives for Drinking and Drug Taking (Adapted from Cooper, 1994).
4. Coping Inventory for Stressful Situations-Adolescent Version (Second Edition; CISS-A, Endler & Parker, 1999).
5. Family Assessment Device (FAD; Epstein, Baldwin & Bishop, 1983).
6. Cohesion and Conflict subscales from

the Family Environment Scale (3rd Edition; FES-III; Moos & Moos, 2002).

7. Parental Control (Stattin & Kerr, 2000).

8. Parental Monitoring and Knowledge (Fletcher, Steinberg and Wheeler, 2004).

9. The Adolescent Psychopathology Scale (APS; Reynolds, 1998).

10. The Diagnostic Interview Schedule for Children Version-IV (DISC-IV; National Institute for Mental Health, 2000).

DEMOGRAPHIC QUESTIONNAIRE

The demographic questionnaire was specifically designed for the present study and gathered data on gender, age, level of education, family composition, and parental occupational status. It was administered to all participants.

ALCOHOL AND ILLICIT DRUG USE QUESTIONNAIRE

This measure was compiled for the current study and was administered to both community and clinical groups. It assesses (A) the frequency and quantity of alcohol use; (B) the frequency of use of a range of illicit drugs; and (C) problems/consequences associated with use, substance use related behaviour and some indicators of substance dependence. Items on consequences of substance use and substance dependence were selected on the basis of their consistency with diagnostic criteria from the DSM-IV-TR (APA, 2000) for substance abuse and dependence. The tendency of some adolescents to pretend that they have used some drugs, "faking bad", can pose a threat to validity. To test for this, a non-existent dummy drug "neratine" was included among real drugs in the questionnaire. There is also a risk of adolescents making a socially desirable response, by "faking good" or underreporting their substance use. Again a question was included in the measure that attempted to address this by asking respondents if they felt free to endorse items concerning their alcohol and drug use behaviour while completing the questionnaire.

The questionnaire was constructed after reviewing other similar survey questionnaires: Adolescent Alcohol Involvement Scale, (Mayer and Fildes, 1979); Substance Abuse Subtle Screening Inventory, (Miller, 1990); Adolescent Drug Involvement Scale, (Moberg and Hahn, 1991), and the European School Project on Alcohol and other Drugs questionnaire (ESPAD; Hibell et al., 2004). It was anticipated that the behaviours endorsed by young people in the community sample would be of a range that would allow us to sub-classify the community group based on their alcohol and drug use and its related consequences in their lives. This, indeed turned out to be possible and the rationale and sub-groups within the community sample are described in detail in the relevant results chapter.

MOTIVES FOR DRINKING AND DRUG TAKING (ADAPTED FROM COOPER, 1994)

Two five item subscales were used to measure coping and conformity motives for alcohol and drug use separately. These items were adapted from a measure of drinking motives for use with adolescents compiled by Cooper (1994). Coping as a motive is defined as drinking and or drug taking to reduce or regulate negative emotions. Conformity as a motive is defined as drinking and or drug taking to avoid social censure or rejection. Cooper's measure of drinking motives was developed using a sample of 1,243 adolescents. Cooper reported very good internal consistency for the coping and conformity subscales. These subscales were administered to all participants.

COPING INVENTORY FOR STRESSFUL SITUATIONS- ADOLESCENT VERSION (SECOND EDITION; CISS-A, ENDLER & PARKER, 1999)

This 48 item self-report questionnaire measures dispositions to cope in particular ways. It yields scores for task-focused coping, emotion focused coping and avoidance coping. Subscale scores are also derived for distraction and social diversion, which together

comprise the avoidance coping domain. For each item, respondents indicate the frequency with which they cope with difficult, stressful or upsetting situations in the way specified in the item on a five point likert scale ranging from (1) "not at all" to (5) "very much".

Endler and Parker (1999) report research that found that task oriented coping and avoidance oriented coping were unrelated to the various psychopathology subscales from the Youth Self Report (YSR) (Achenbach and Edelbrock, 1987). However, the CISS emotion oriented coping scale was moderately related to almost all of the YSR subscales in both males and females. The results were found with a younger (13-15 years, n = 305) and older (16-18 years, n = 485) group of adolescents.

The CISS-A was developed with a normative sample of 313 13 to 15 year old adolescents and 504 16 to 18 year old adolescents (Endler and Parker, 1999). The researchers reported good reliability and validity for the CISS subscales. The CISS-A was administered to both community and clinical groups.

The following family and parenting measures were administered to all participants.

FAMILY ASSESSMENT DEVICE (FAD; EPSTEIN, BALDWIN & BISHOP, 1983)

The FAD offers a 60-item comprehensive measure of family functioning based on the McMaster Model of Family Functioning (MMFF). It consists of six subscales, which examine different dimensions of family life: problem solving; affective responsiveness; affective involvement; behavior control; communication; and roles and a general family functioning subscale. The FAD has good internal consistency (Kabacoff, Miller, Bishop, Epstein and Keitner, 1990) and test retest reliability (Miller, Epstein, Bishop and Keitner, 1985).

FAMILY ENVIRONMENT SCALE (3RD EDITION; FES-III; MOOS & MOOS, 2002)

Two subscales from the FES-III were also administered to participants in the

present study. These were the Conflict and Cohesion subscales. Conflict was designed to measure the amount of openly expressed conflict and anger among family members. Cohesion seeks to measure the degree of commitment, help and support family members provide for one another. This instrument has good reliability (Moos, 1990) and validity (Oliver, Handal, Enos and May, 1988).

PARENTAL CONTROL (ADAPTED FROM STATTIN & KERR, 2000)

The six-item measure compiled by Stattin and Kerr (2000) to measure parental control was administered to both groups in the present study. The operational definition of parental control is whether parents require their children to obtain their permission before going out and insist on being informed about their children's whereabouts, activities and associates. Items are completed from the young person's perspective. Stattin and Kerr (2000) report very good reliability for this measure.

PARENTAL MONITORING AND KNOWLEDGE (FLETCHER, STEINBERG AND WHEELER, 2004)

The five-item Parental Monitoring subscale assesses whether parents try to obtain information about their child's activities, whereabouts and friends. The measure of parental knowledge is parallel to the measure of parental monitoring but assesses the extent to which parents are accurate in their knowledge of adolescents' whereabouts, activities and friends. It was administered to both groups. Responses were measured on a scale from 1 (don't try to know/don't know) to 3 (try to know a lot/know a lot). The parental monitoring and knowledge subscales were completed from a youth perspective in the current study. Fletcher et al. reported good internal consistency for these scales.

THE ADOLESCENT PSYCHOPATHOLOGY SCALE (APS; REYNOLDS, 1998)

The APS was developed to evaluate

symptoms of psychological disorders and distress in adolescents. It consists of 40 scales (319 items) that measure: Clinical Disorders (20 scales), Personality Disorders (5 scales), Psychosocial Problem Content areas (11 scales), and Response Style Indicators (4 scales). Not all the scales are reported in the results. The APS is designed to assess the symptoms associated with specific DSM-IV clinical and personality disorders but it does not provide formal diagnoses of these disorders. The APS was only administered to the clinical group to provide an indication of the types of co-morbid psychological difficulties reported by young people in substance misuse treatment.

This instrument has good reliability, content and convergent validity (Reynolds, 1998). The APS development samples of adolescents were obtained from school based and clinical settings.

Raw scores for all APS scales are converted to standard T-scores with a mean of 50 and a standard deviation of 10. T-scores below 60 correspond to raw scores that are no more than 1.0 standard deviations above the normative mean and are considered to fall within the normal range of symptom endorsement. Scores in the 60T to 64T indicate a sub clinical level of symptom severity (sd range: 1.00 to 1.49). Scores in the 65T to 69T (sd range: 1.50 to 1.99) range represent mild clinical severity of symptoms. Scores in the 70T to 79T (2.00 to 2.99) indicate moderate clinical severity and scores at or above 80T (sd range ≥ 3) indicate severe clinical symptomatology.

THE DIAGNOSTIC INTERVIEW SCHEDULE FOR CHILDREN VERSION-IV (DISC-IV; NATIONAL INSTITUTE OF MENTAL HEALTH, 2000)

The subscales of the DISC-IV, which assess alcohol, marijuana, and other substance abuse and dependence disorders, were administered to adolescents in the clinical group to determine the type and extent of substance use disorders. The DISC-IV is a structured diagnostic interview based on criteria specified in the DSM-IV, DSM-III-R and ICD-10. It is the most extensively tested and widely

used child and adolescent diagnostic interview (Wasserman et al., 2004) and has been shown to have adequate test re-test reliability (Shaffer, Fisher, Lucas, Dulcan & Schwab-Stone, 2000).

QUALITATIVE INTERVIEW

Qualitative interviews were conducted with ten young people from the clinical group.

RESEARCH QUESTIONS

A semi structured interview format containing open-ended questions followed by probes was used for the interview schedule.

The interview schedule covered the following areas:

- Adolescents' views on the factors which led to their initial substance use
- Adolescents' view on the factors which contributed to problematic substance use
- Their typical coping approach
- The best and difficult aspects of their relationship with their mother and father
- Their views on whether issues in their relationships with parents had a role in the development or maintenance of their substance use problem
- Any role of parents in the treatment of their substance use problem

PROCEDURE

Ethical approval was sought and granted by the Health Service Executive - South and University College Dublin. Permission to conduct the research was obtained from the Director and Board of Management at the residential treatment programme and from the schools and PLC Colleges who participated in the research. Informed consent was obtained from all participants and their parents.

Students in the community group completed the questionnaire during one 40-minute class period. Instructions were provided and the researcher remained in the classroom during administration of the questionnaires to answer any queries, which arose. Students were seated apart to help ensure that they would not be influenced

by their peer group in their responding. Participants were assured of confidentiality and informed that the results would not be traced back to a particular school.

Each adolescent in the clinical group met with the researcher for three approximately 45-minute periods. As literacy difficulties are an issue for some adolescents in this population, the researcher was present to explain any item, which were problematic for the young person. All items on the DISC-IV, which involves a computerised administration format, were read out to participants. A brief report was completed on each adolescent outlining their results on the APS, which was given to their key worker and/or senior counsellor. Each adolescent also received this feedback in oral format from the researcher. Qualitative interviews were conducted with youth on the penultimate day of treatment. Interviews ranged in duration from ten to twenty minutes.

ANALYSIS PLAN

The raw data were entered into SPSS for Windows Version 11. Totals for questionnaires were computed as per their standardised instructions. In order to minimise data loss pro-rated totals were computed for participants who were missing less than ten percent of items for any given scale. Internal reliability (Cronbach's Alpha) was calculated for each measure. Appropriate parametric and non-parametric analysis were applied to the data-set in order to address the research questions. The community sample (n=462) were further sub-divided into smaller groups reflecting their alcohol and drug use in order to facilitate further pre-planned analysis. The approach taken to this will be outlined fully in the relevant chapters. The qualitative data were analysed using a content analysis method.

ORE

15.30

680

CHAPTER TWO

Alcohol Use

CHAPTER OVERVIEW

This chapter begins the presentation of findings from the current study. It outlines the nature, frequency, and consequences of alcohol use reported by a community sample of 462 adolescents aged between 14 and 19 years resident in the South and South East of the Republic of Ireland.

HOW MANY YOUNG PEOPLE DRINK ALCOHOL?

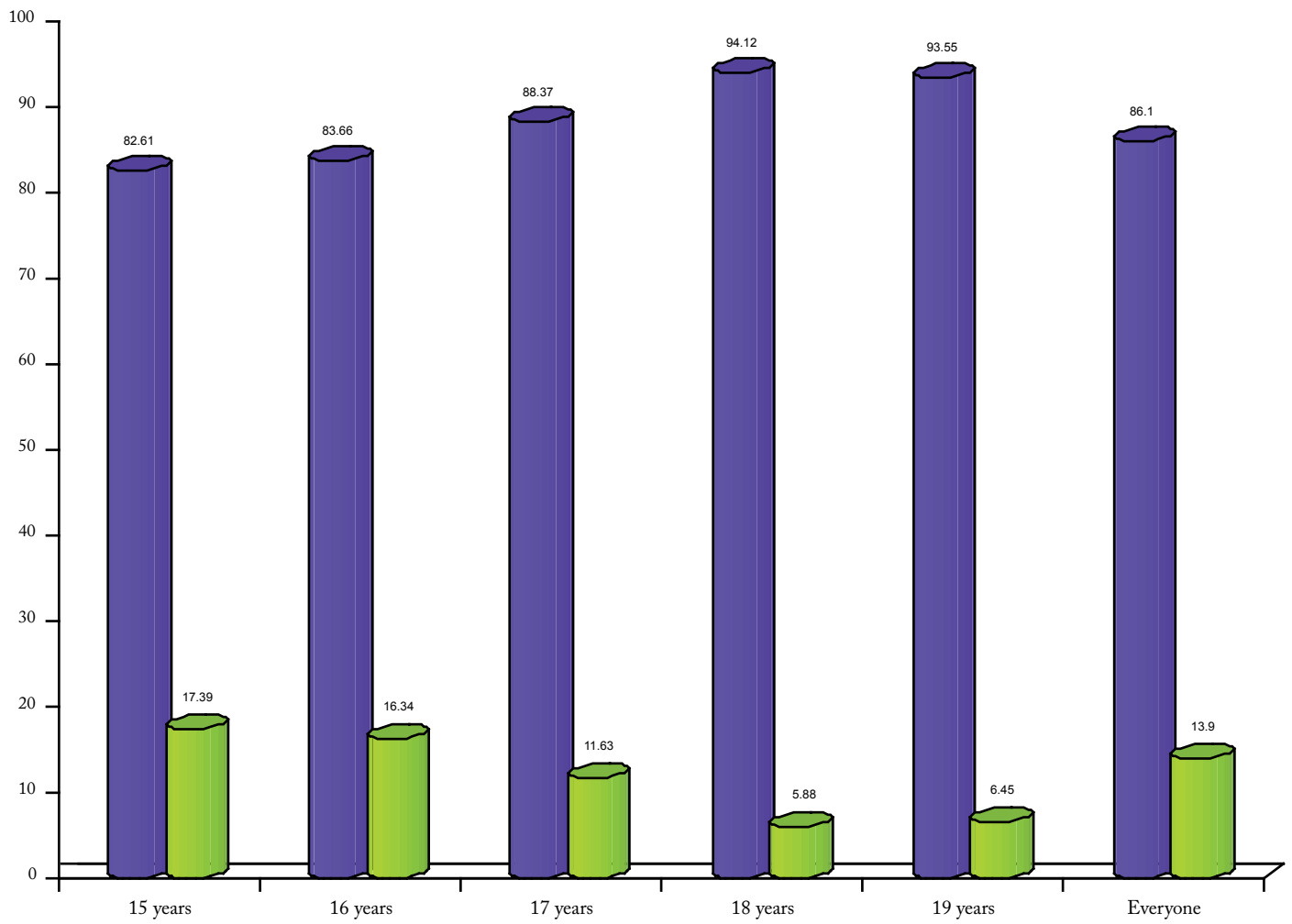
As indicated in table 2-1 and figure 2-1 13.9% of young people in the community sample reported that they do not drink, while 86.1% indicated that they do consume alcohol. There was no difference between males and females. The average age of first alcohol use for all participants was 13.42 years (SD = 1.52). Both males (13.47 years; SD = 1.59) and females (13.39 years; SD = 1.47) reported first alcohol consumption at the same average age ($t=0.51$; $p>.05$).

HOW MUCH ALCOHOL DO YOUNG PEOPLE TYPICALLY CONSUME?

The average number of drinks consumed on a typical drinking occasion was 5.75 drinks (SD = 2.92). On average males reported drinking more than females (6.25:5.36 drinks respectively per typical occasion). As young people move through adolescence the amount of alcohol they consume on a typical drinking occasion increases from 4.14 drinks at 15 years to 7.36 drinks at 19 years of age (see figure 2-2).

Figure 2-1.

Percentage of young people in the community who consume alcohol



■ Drink
■ Don't Drink

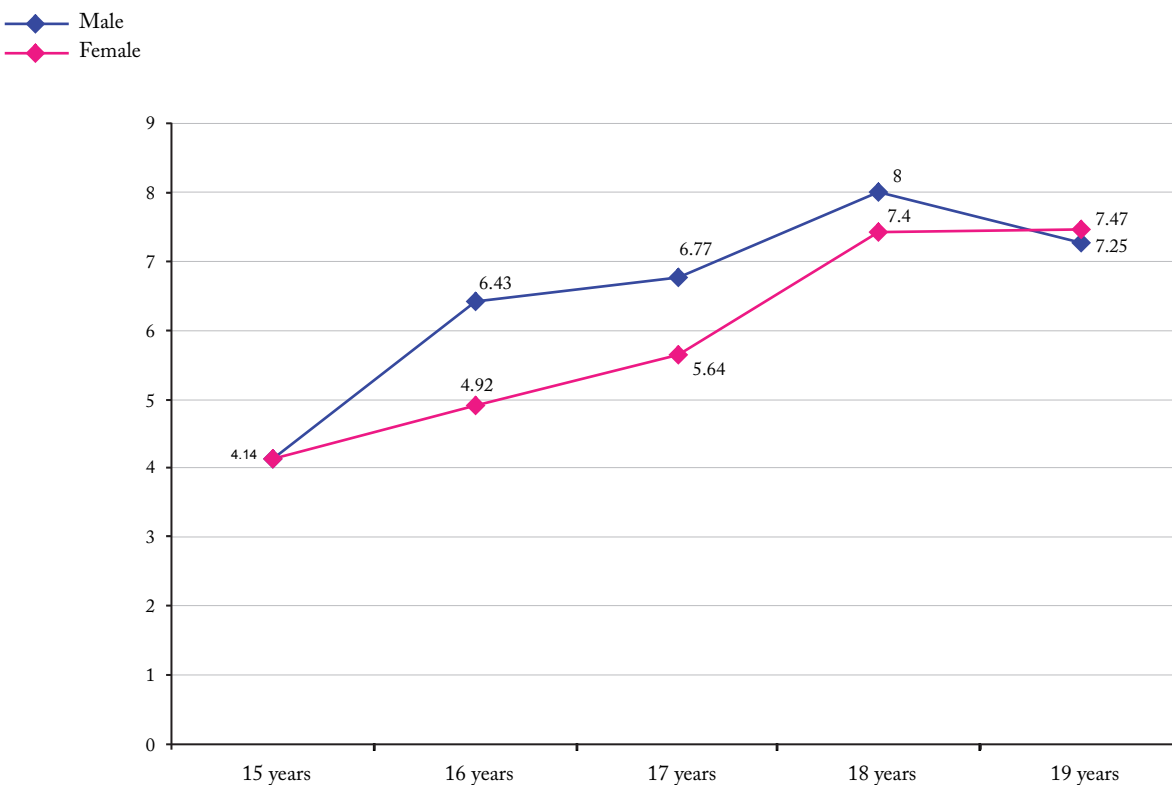
Table 2-1. Breakdown of number of young people in the community sample who consume alcohol

Use of Alcohol	14 years		15 years		16 years		17 years		18 years		19 years		Total Sample		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	All
Yes	1	2	50	64	65	72	37	39	23	25	8	21	175	223	398
	-	-	81.96%	83.11%	84.84%	82.75%	82.22%	95.12%	88.46%	100%	88.88%	95.45%	84.13%	87.79%	86.10%
No	0	0	11	13	10	15	8	2	3	0	1	1	33	31	64
	-	-	18.04%	16.89%	15.16%	17.25%	17.78%	4.88%	11.54%	0%	11.12%	4.55%	15.87%	12.21%	13.90%
Gender difference in number reporting alcohol use?	No $\chi^2 = 1.28$														
Average number of drinks typically consumed?	1	5.5 (0.70) ^a	4.79 (2.59) ^a	4.14 (2.51) ^a	6.43 (2.97) ^a	4.92 (2.30) ^a	6.77 (3.00) ^a	5.64 (2.69) ^a	8.00 (2.69) ^a	7.40 (2.79) ^a	7.25 (3.10) ^a	7.47 (2.92) ^a	6.25 (3.02) ^a	5.36 (2.78) ^a	5.75 (2.92) ^a
Gender difference in number of drinks consumed?			m=f (t=1.33)		m>f (t=3.10)**		m=f (t=1.72)		m=f (t=0.75)		m=f (t=0.18)		m>f (t=3.03)*		
Numeric range of drinks typically consumed	1	5-6	1-11	1-10	2-12	1-12	1-12	1-10	2-15	3-14	3-12	3-12	1-15	1-14	1-15

*Note: χ^2 = Observed value from Chi-square test; ^a = Standard Deviation; t = observed value from independent t-test; m = male; f = female; * = p<.05; ** = p<.01.

Figure 2-2.

Increasing average number of drinks consumed per typical drinking occasion among young people in the community group aged 15-19 years.



HOW OFTEN DO YOUNG PEOPLE DRINK?

Figure 2-1 outlines the frequency of alcohol use among the community group. The graph includes those young people who reported no alcohol use in order to present the frequency of alcohol use as a percentage of all young people surveyed rather than the sub-population of young people who consume alcohol.

Alcohol consumption ranged from less than once a year (3.5%) to several times a week (5%). Weekly was the most commonly reported level of alcohol use by the community group (29%).

Table 2-2 outlines the frequency of drinking according to gender and age among those young people who reported alcohol use (frequencies were calculated

as a percentage of male and female drinkers). Males and females did not differ overall in their frequency of drinking ($\chi^2 = 2.68$). As outlined in figure 2-4 there is a pattern of more frequent drinking with increasing age for males and females. At 15 years of age 12% of males and 20.3% of females reported they drink weekly or more. At 19 years 50% of males and 66.7% of females reported they drink at this frequency.

Figure 2-3.

Frequency (%) of alcohol consumption among young people in the community

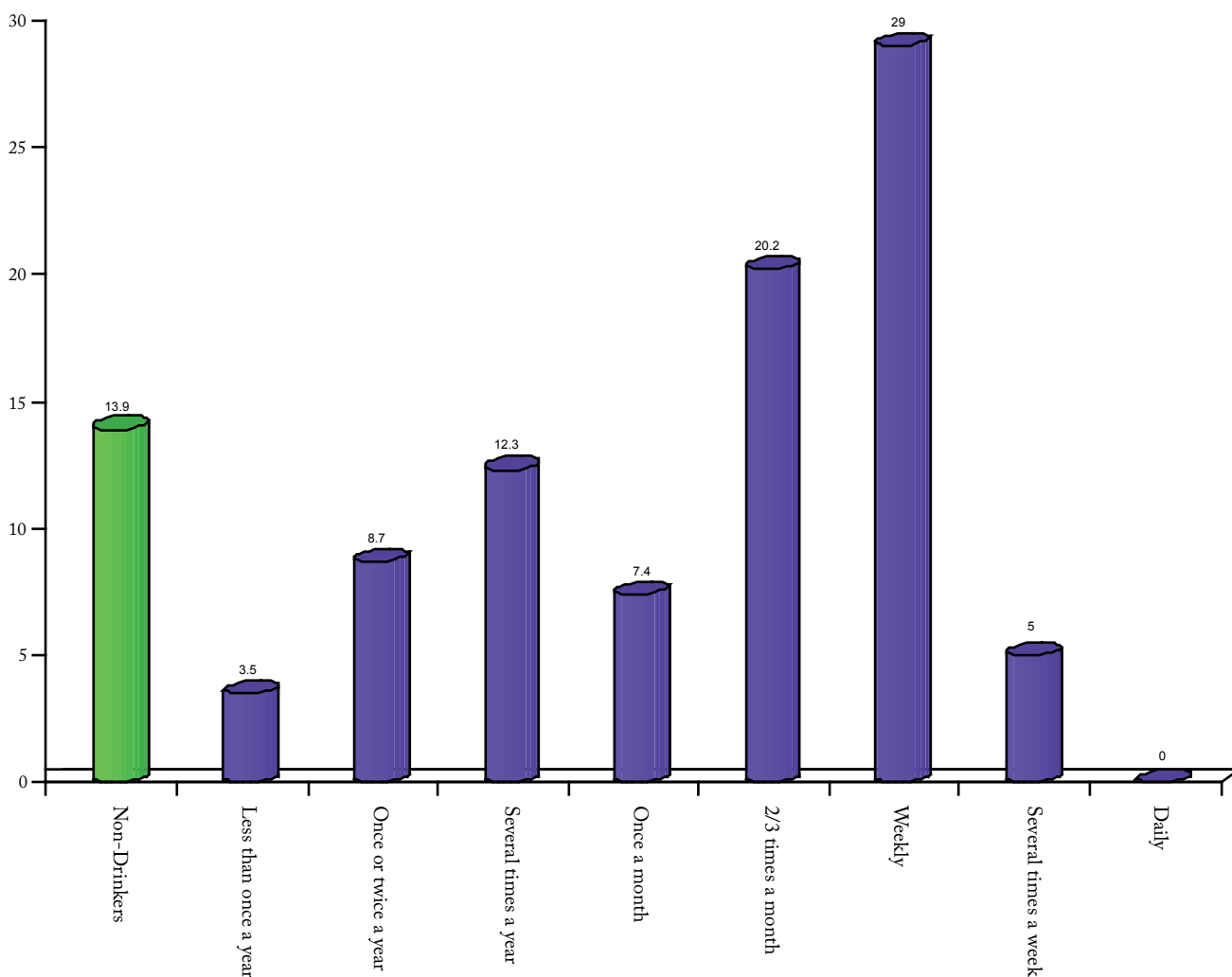
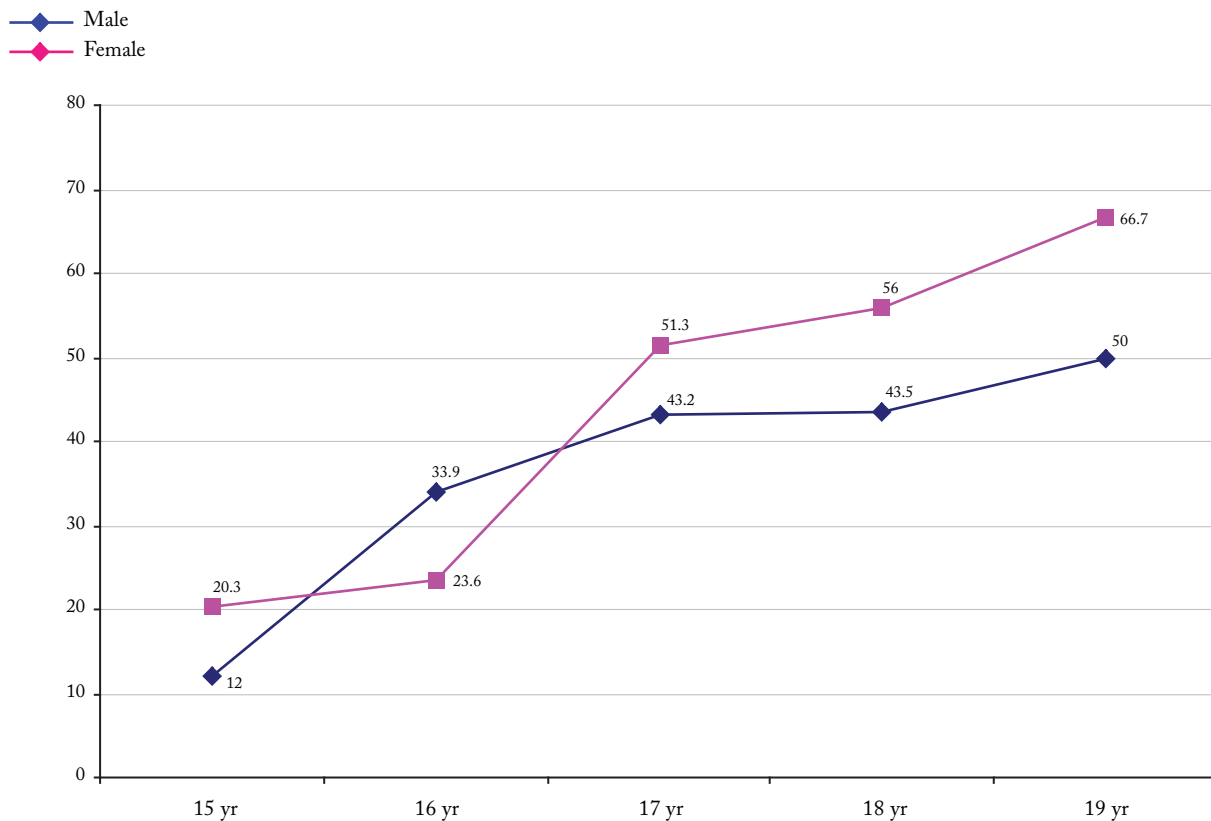


Table 2-2: Frequency of alcohol consumption according to gender and age among young people in the community

Use of Alcohol	14 years		15 years		16 years		17 years		18 years		19 years		Total Sample		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	All
Less than once a year	-	-	6 (12%)	5 (7.8%)	1 (1.8%)	3 (4.2%)	0 (0%)	0 (0%)	0 (0%)	1 (4%)	0 (0%)	0 (0%)	7 (4%)	9 (4%)	16 (3.5%)
Once or twice a year	1 (100%)	-	9 (18%)	12 (18.8%)	5 (8.9%)	4 (5.6%)	3 (8.1%)	5 (12.8%)	0 (0%)	0 (0%)	1 (12.5%)	0 (0%)	19 (10.9%)	21 (9.4%)	40 (8.7%)
Several times a year	-	-	9 (18%)	8 (12.5%)	10 (17.9%)	17 (23.6%)	5 (13.5%)	5 (12.8%)	2 (8.7%)	1 (4%)	0 (0%)	0 (0%)	26 (14.9%)	31 (13.9%)	57 (12.3%)
Once a month	-	-	6 (12%)	8 (12.5%)	2 (3.6%)	7 (9.7%)	2 (5.4%)	1 (2.6%)	2 (8.7%)	2 (8%)	1 (12.5%)	3 (14.3%)	13 (7.4%)	21 (9.4%)	34 (7.4%)
Two/three times a month	-	1 (50%)	12 (24%)	17 (26.6%)	14 (25%)	21 (29.2%)	8 (21.6%)	7 (17.9%)	6 (26.1%)	4 (16%)	2 (2%)	2 (9.5%)	42 (24%)	52 (23.1%)	94 (20.2%)
Weekly	-	1 (50%)	6 (12%)	13 (20.3%)	19 (33.9%)	17 (23.6%)	16 (43.2%)	20 (51.3%)	10 (43.5%)	14 (56%)	4 (50%)	14 (66.7%)	55 (31.4%)	79 (35.4%)	134 (29%)
Several times a week	-	-	2 (4%)	1 (1.6%)	5 (8.9%)	3 (4.2%)	3 (8.1%)	1 (2.6%)	3 (13%)	3 (12%)	0 (0%)	2 (9.5%)	13 (7.4%)	10 (4.5%)	23 (5%)

Figure 2-4.

Increasing frequency (%) of young people in the community consuming alcohol on at least a weekly basis.



WHAT DO YOUNG PEOPLE DRINK?

Figure 2-5 illustrates the type of drinks most commonly consumed by young people in the community group. Frequencies were calculated as a percentage of all young people surveyed. Obviously, some participants indicated they consume more than one type of drink. Spirits (53.7%) were the most popular alcoholic beverage among all of the community group participants (i.e., consumed by 53.7% of all young people surveyed including drinkers and non-drinkers), followed by alcopops (46.8%), cider (42%), and beer (38.7%). Wine (11.3%) and stout (3.5%) were consumed the least.

Table 2-3 breaks-down type of alcohol preferences according to the age and gender of participants. In this table frequencies were calculated as a percentage of all male and female drinkers (thus non-drinkers are excluded from these figures). Gender differences were apparent in each type of alcohol. Spirits were the most popular form of alcohol. They were consumed by 62.6% of all young people who drink and had a significantly higher preference among female drinkers (70.6%) compared to males (52.6%). The second most popular type of drink were alcopops (consumed by 54.5% of young people who drink) and had a higher female (72.4%) rather than

male drinker (32%) preference. Cider had the third highest preference (49% of those who drink) and was consumed by significantly more males (63.4%) than females (30.8%). Beer was consumed by 45.2% of young people who drink and was also significantly more popular among males (63.4%) compared to females (30.8%). Wine consumption was reported by 13.1% of young people who drink, with a higher female (16.7%) rather than male preference (8.6%). Finally, stout was the least popular type of alcohol consumed by young people who drink (4%), and was significantly more popular among male (6.3%) compared to female drinkers (2.3%).

Figure 2-5.

Types of alcohol consumed by young people (%).

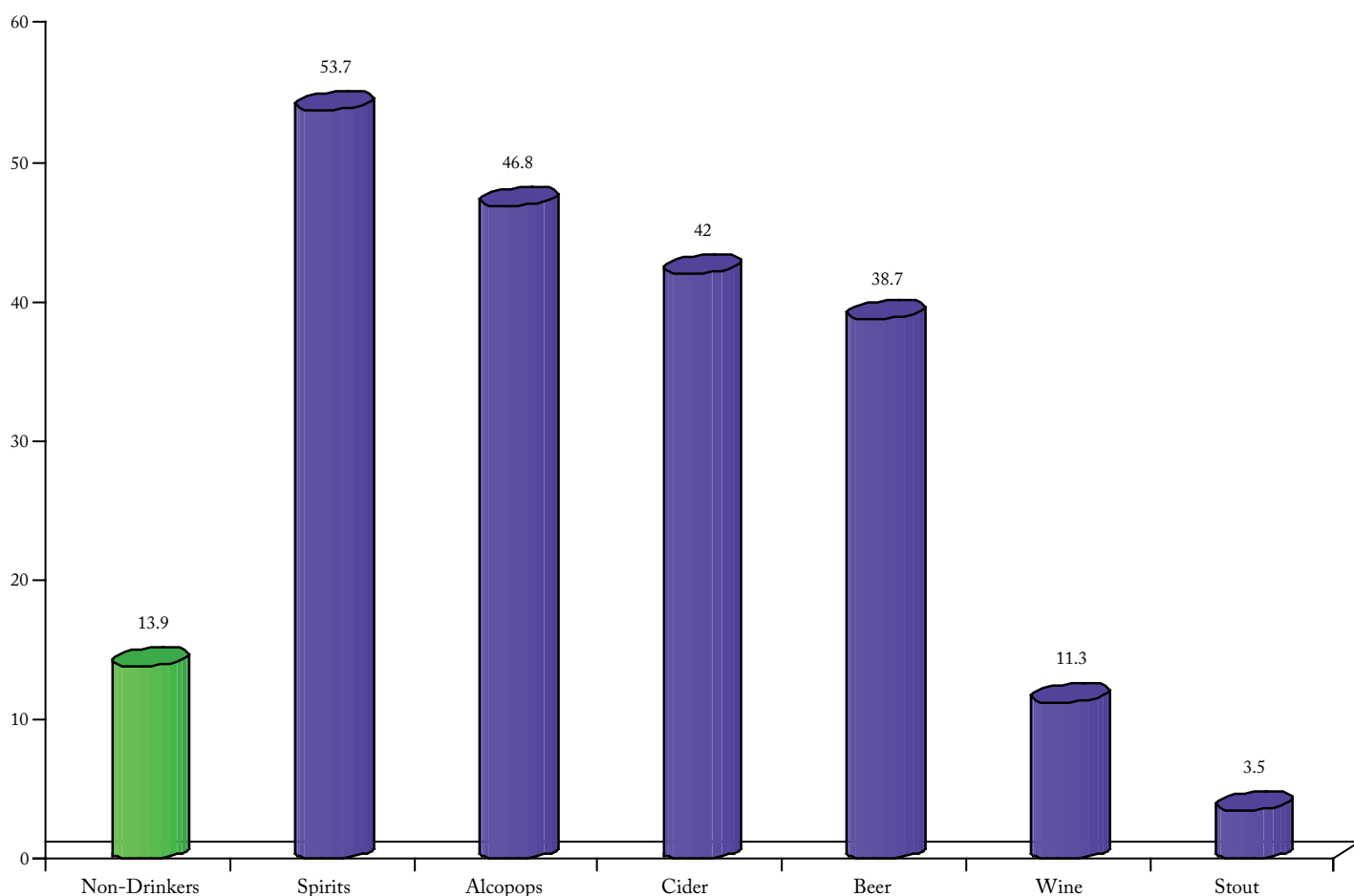


Table 2-3: Types of alcohol consumed according to age and gender.

Use of Alcohol	14 years		15 years		16 years		17 years		18 years		19 years		Total Sample		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	All
Spirits															
Yes	1 (100%)	2 (100%)	26 (52%)	24 (48%)	25 (44.6%)	49 (68.1%)	21 (56.8%)	28 (71.8%)	14 (60.9%)	22 (88%)	5 (62.5%)	17 (81%)	92 (56.2%)	156 (70.6%)	248 (62.6%)
No	0	0	24 (48%)	24 (38.3%)	31 (55.4%)	23 (31.9%)	16 (43.2%)	11 (28.2%)	9 (39.1%)	3 (12%)	3 (37.5%)	4 (19%)	83 (47.4%)	65 (29.4%)	148 (37.4%)
Gender Difference	--	--	0.97		7.08*		1.87		4.70*		0.29		13.54***		
Alcopops															
Yes	--	1 (50%)	24 (48%)	46 (74.2%)	17 (30.4%)	61 (84.7%)	8 (21.6%)	27 (69.2%)	7 (30.4%)	17 (68%)	0 (0%)	8 (38.1%)	56 (32%)	160 (72.4%)	216 (54.5%)
No	1 (100%)	1 (50%)	26 (52%)	16 (25.8%)	39 (69.6%)	11 (15.3%)	29 (78.4%)	12 (30.8%)	16 (69.6%)	8 (32%)	8 (100%)	13 (61.9%)	119 (68%)	61 (27.6%)	180 (45.5%)
Gender Difference	--		8.10**		39.11***		17.32***		6.76*		4.20*		64.28***		
Cider															
Yes	--	2 (100%)	30 (60%)	22 (35.5%)	35 (62.5%)	34 (47.2%)	17 (45.9%)	15 (38.5%)	13 (56.5%)	12 (48%)	6 (75%)	8 (38%)	101 (57.5%)	93 (42.1%)	194 (49%)
No	1 (100%)	--	20 (40%)	40 (64.5%)	21 (37.5%)	38 (52.8%)	20 (54.1%)	24 (61.5%)	10 (43.5%)	13 (52%)	2 (25%)	13 (61.9%)	74 (42.3%)	128 (57.9%)	202 (51%)
Gender Difference	--		6.68*		2.95		0.43		0.34		3.16		9.55**		
Beer															
Yes	--	--	25 (50%)	13 (21%)	36 (64.3%)	34 (47.2%)	28 (75.7%)	9 (24.3%)	18 (78.3%)	7 (28%)	4 (50%)	5 (23.8%)	111 (63.4%)	68 (30.8%)	179 (45.2%)
No	1 (100%)	2 (100%)	25 (50%)	49 (79%)	20 (35.7%)	38 (52.8%)	9 (23.1%)	30 (76.9%)	5 (21.7%)	18 (72%)	4 (50%)	16 (76.2%)	64 (36.6%)	153 (69.2%)	217 (54.8%)
Gender Difference	--		10.40**		3.70		21.02***		12.12***		1.85*		42.05***		
Wine															
Yes	--	--	5 (10%)	8 (12.9%)	4 (7.1%)	14 (19.4%)	6 (16.2%)	5 (12.8%)	0 (0%)	6 (24%)	0 (0%)	4 (19%)	15 (8.6%)	37 (16.7%)	52 (13.1%)
No	1 (100%)	2 (100%)	45 (90%)	54 (87.1%)	52 (92.9%)	58 (80.6%)	31 (83.8%)	34 (87.2%)	23 (100%)	19 (76%)	8 (100%)	17 (81%)	160 (91.4%)	184 (83.3%)	344 (86.9%)
Gender Difference			0.22		3.94*		0.17		6.30*		1.76		5.71*		
Stout															
Yes	--	--	2 (4%)	2 (3.2%)	3 (5.4%)	3 (4.2%)	4 (10.8%)	0 (0%)	1 (4.3%)	0 (0%)	1 (12.5%)	0 (0%)	11 (6.3%)	5 (2.3%)	16 (4%)
No	1 (100%)	2 (100%)	48 (96%)	60 (96.8%)	53 (94.6%)	69 (95.8%)	33 (89.2%)	39 (100%)	22 (95.7%)	25 (100%)	7 (87.5%)	21 (100%)	164 (93.7%)	216 (97.7%)	380 (96%)
Gender Difference			0.05		0.10		4.45*		1.11		2.71		4.07*		

Note: Gender difference = Observed value from χ^2 test; *= $p < .05$; **= $p < .01$.

DO YOUNG PEOPLE BINGE DRINK?

“Binge Drinking” is defined in the current study as consuming five or more alcoholic beverages on one drinking occasion (see Hibell et al, 2000). As reported above the average number of drinks consumed by participants was 5.75 drinks on a typical drinking occasion (SD = 2.92). Figure 2-6 shows the frequency of consuming five or more drinks among the community group. In total 13.9% of the sample do not drink. A further 13.9% reported they never consume as many as five drinks.

Twenty-one percent of young people reported infrequent consumption of five or more drinks (less than once a year, once or twice a year, or several times a year). Regular binge drinking is defined as consuming five or more drinks once a month or more. It was reported by 51.2% of the total sample. Two-three times a month was the most commonly reported rate of binge drinking among the community group (20.1%). A further 19% engaged in binge drinking on a weekly basis, while 3.9% reported a frequency of several times per week.

Overall, males and females engage in binge drinking at a similar level. Table 2-4 further breaks-down the frequency of binge drinking among males and females in the different age groups surveyed. Frequencies in this table were calculated as a percentage of males and females who drink. There appears to be a pattern of increased binge drinking with increasing age for both males and females. This is illustrated in figure 2-7 which presents the increasing frequency of weekly binge drinking among male and female participants as they get older.

Figure 2-6.

Frequency (%) of “binge drinking” in the community group.

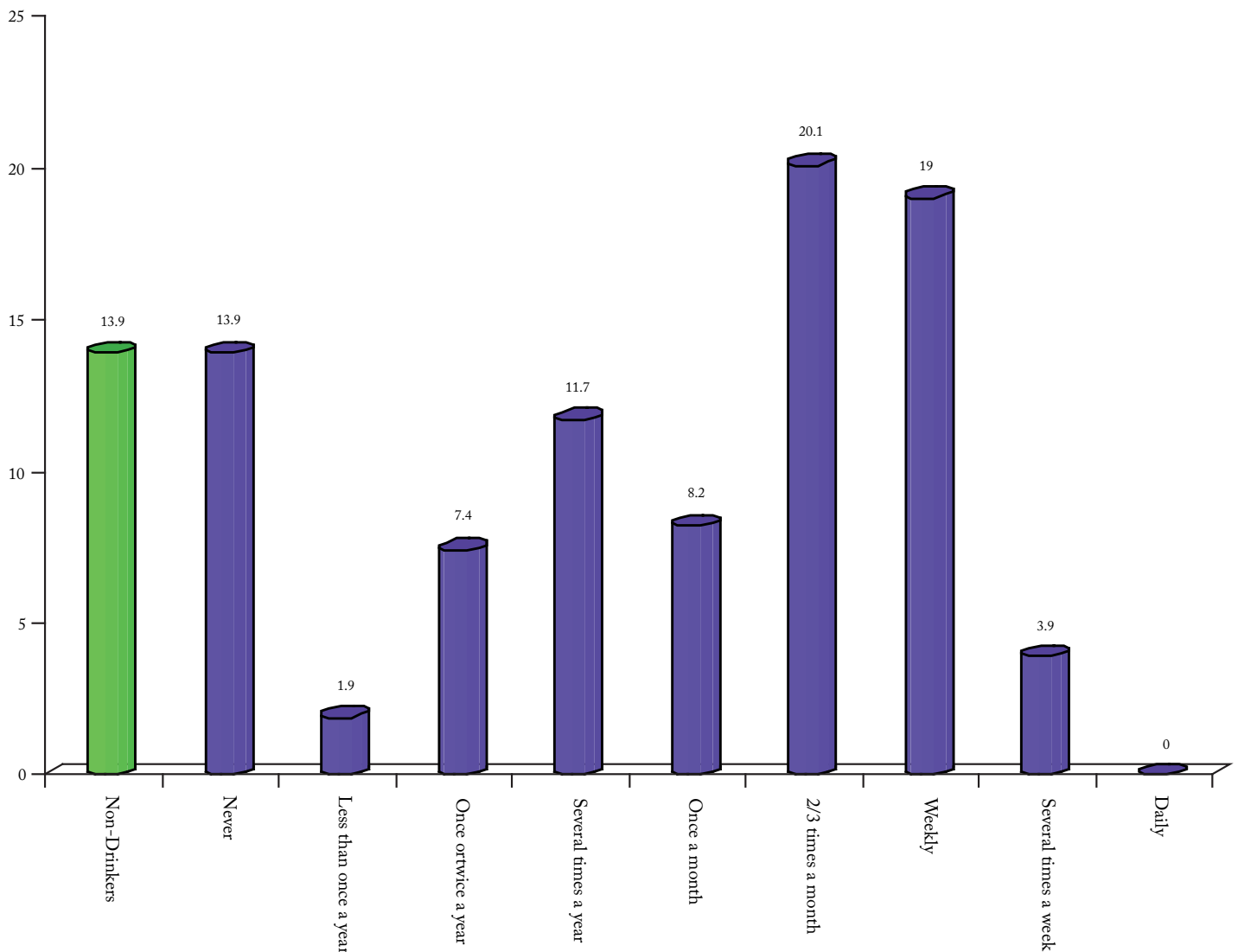
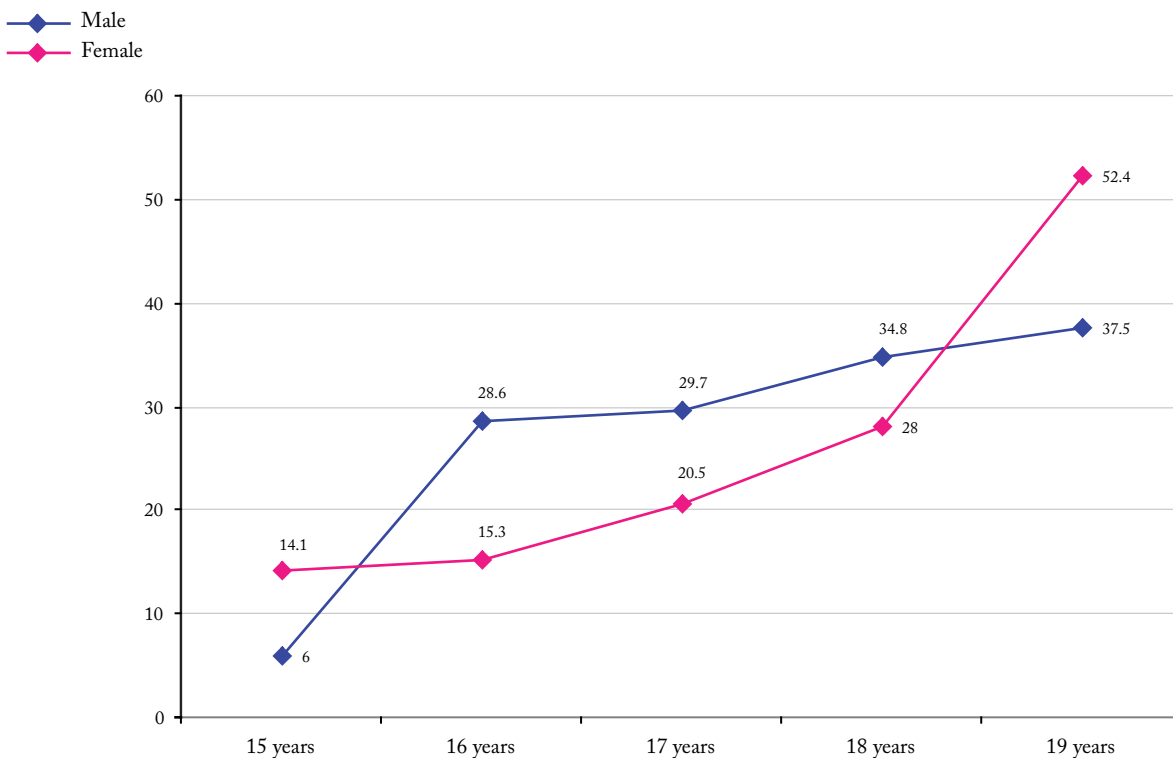


Table 2-4: Frequency of “binge drinking” according to gender and age among young people in the community.

Use of Alcohol	14 years		15 years		16 years		17 years		18 years		19 years		Total Sample		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	All
Never	1 (100%)	--	16 (32%)	21 (32.8%)	5 (8.9%)	7 (9.7%)	3 (8.1%)	8 (20.5%)	1 (4.3%)	1 (4.0%)	1 (12.5%)	--	27 (15.4%)	37 (16.6%)	64 (13.9%)
Less than once a year	--	--	1 (2%)	2 (3.1%)	1 (1.8%)	5 (6.9%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (1.1%)	7 (3.1%)	9 (1.9%)
Once or twice a year	--	--	4 (8%)	2 (3.1%)	9 (16.1%)	7 (9.7%)	5 (13.5%)	3 (7.7%)	0 (0%)	1 (4%)	1 (12.5%)	2 (9.5%)	19 (10.9%)	15 (6.7%)	34 (7.4%)
Several times a year	--	--	5 (10%)	11 (17.2%)	7 (12.5%)	18 (25%)	4 (10.8%)	2 (5.1%)	3 (13%)	3 (12%)	0 (0%)	1 (4.8%)	19 (10.9%)	35 (15.7%)	54 (11.7%)
Once a month	--	--	8 (16%)	3 (6%)	2 (3.6%)	11 (15.3%)	3 (8.1%)	4 (10.3%)	2 (8.7%)	0 (0%)	2 (25%)	3 (14.3%)	17 (9.7%)	21 (9.4%)	38 (8.2%)
Two/three times a month	--	1 (50%)	11 (22%)	15 (23.4%)	12 (21.4%)	12 (16.7%)	9 (24.3%)	12 (30.8%)	7 (30.4%)	11 (44%)	1 (12.5%)	2 (9.5%)	40 (22.9%)	53 (23.8%)	93 (20.1%)
Weekly	--	1 (50%)	3 (6%)	9 (14.1%)	16 (28.6%)	11 (15.3%)	11 (29.7%)	8 (20.5%)	8 (34.8%)	7 (28%)	3 (37.5%)	11 (52.4%)	41 (23.4%)	47 (21.2%)	88 (19%)
Several times a week	--	--	0 (0%)	0 (0%)	4 (7.1%)	1 (1.4%)	2 (5.4%)	2 (5.1%)	2 (8.7%)	2 (8%)	0 (0%)	2 (9.5%)	10 (5.7%)	8 (3.6%)	18 (3.9%)

Figure 2-7:

Increasing frequency (%) of young people “binge drinking” on a weekly basis according to age and gender.



WHAT CONSEQUENCES OF ALCOHOL USE DO YOUNG PEOPLE REPORT?

The consequences of alcohol use experienced by the community group are illustrated in figure 2-8. Frequencies were calculated as a percentage of all young people surveyed. In total 48.1% (222/462) of young people reported that they drink but have not experienced any significant consequences. Some consequences of alcohol use were reported by 38% of participants (176/462). Getting into an argument was the most frequently endorsed consequence of alcohol use, experienced by 20.1% of young people (93/462). Trouble at home was reported as the next most frequent consequence of alcohol use (17.7%, 82/462). Thirteen per cent (60/462) of the community group

reported that alcohol use had led to an accident or injury. A physical fight resulting from alcohol use was also indicated by 13% (60/462) of participants. Alcohol related damage to property was reported by 12.6% of the young people in the community group (58/462). Ten percent (46/462) reported that alcohol use resulted in getting into trouble with the police. Consequences related to school/work were reported less often. Performance effected at school/work was indicated by 6.9% (32/462). Trouble at school/work as a result of alcohol use was reported by 3.9% (18/462).

Table 2-5 presents a break-down of information on the consequences of alcohol use according to the age and

gender of participants. In this table frequencies were calculated as a percentage of all male and female drinkers (thus non-drinkers are excluded from these figures except for the "Total Sample - All" column). Among young people who drink males and females were equally likely to experience no consequences to their alcohol use. Males and females were also equally likely to report that alcohol use had lead to an argument, had resulted in an accident or injury, had effected performance at school/work, or had lead to trouble at school/work. Females were more likely than males to report that alcohol use had resulted in trouble at home. Males were more likely than females to report that alcohol use had lead to a physical fight, had lead to damage to property, and had resulted in trouble with the police.

Figure 2-8.

Consequences of alcohol use reported by young people in the community group (%).

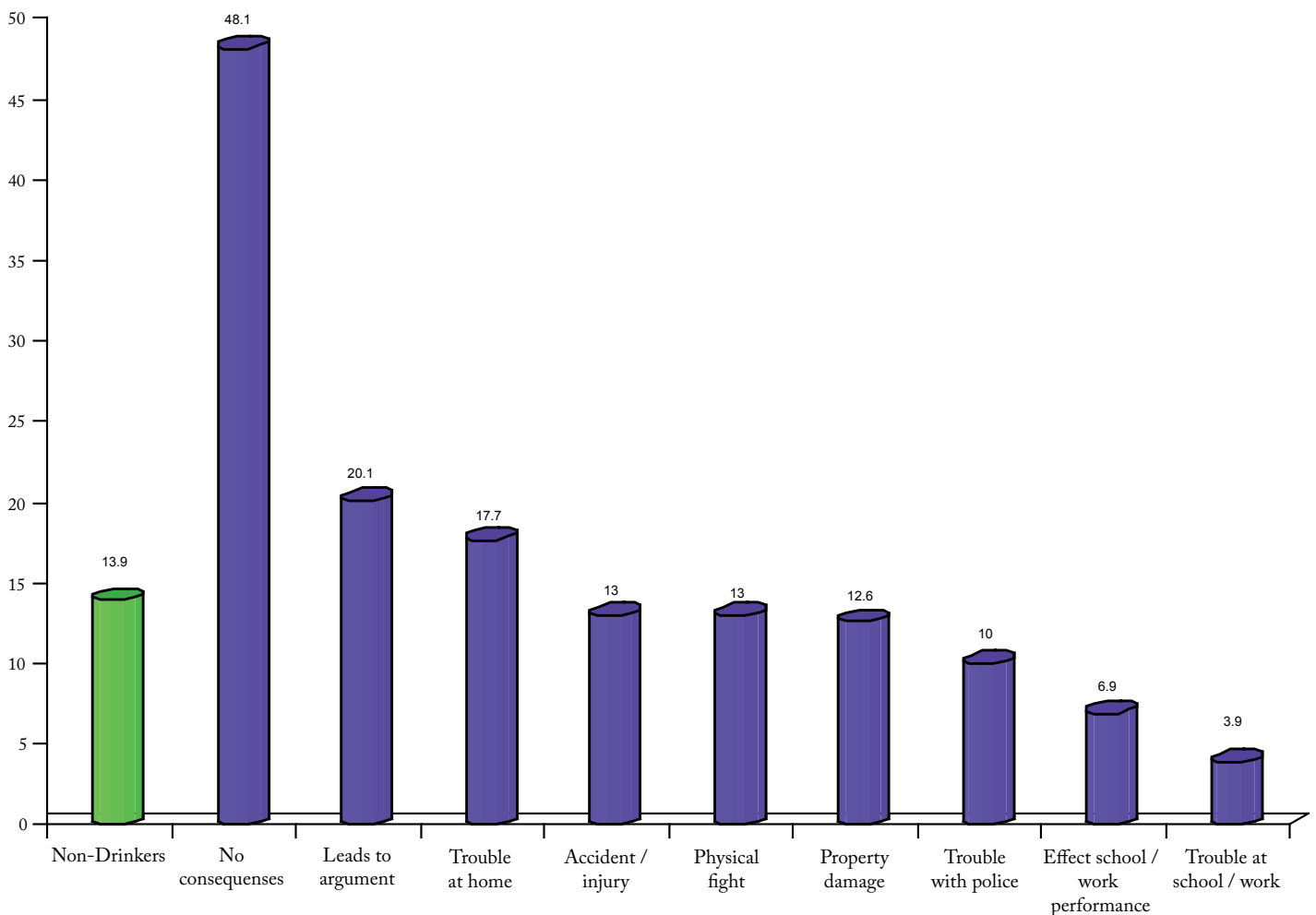


Table 2-5: Consequences of drinking according to gender and age among young people in the community

Use of Alcohol	14 years		15 years		16 years		17 years		18 years		19 years		Total Sample		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	All
Experienced no consequences															
Yes	1 (100%)	1 (50%)	32 (64%)	37 (58.7%)	32 (58.2%)	29 (40.3%)	22 (61.1%)	25 (64.1%)	10 (43.5%)	13 (56.5%)	5 (62.5%)	9 (42.9%)	102 (59%)	120 (54.1%)	222 (48.1%)
No	0	1 (50%)	18 (36%)	26 (41.3%)	23 (41.8%)	43 (59.7%)	14 (38.9%)	14 (35.9%)	19 (76.5%)	6 (24%)	3 (37.5%)	12 (57.1%)	71 (41%)	102 (45.9%)	240 (51.9%)
Gender Difference	--	--	0.32		4.00*		0.07		5.29*		0.89		0.95		
Lead to argument															
Yes	0	1 (50%)	7 (14%)	14 (22.2%)	12 (21.8%)	21 (29.2%)	10 (27.8%)	6 (15.4%)	7 (30.4%)	5 (20%)	2 (25%)	8 (38.1%)	38 (22%)	55 (24.8%)	93 (20.1%)
No	1 (100%)	1 (50%)	43 (86%)	49 (77.8%)	43 (78.2%)	51 (70.8%)	26 (72.2%)	33 (84.6%)	16 (69.6%)	20 (80%)	6 (75%)	13 (61.9%)	135 (78%)	167 (75.2%)	369 (79.9%)
Gender Difference	--		1.24		0.87		1.71		0.69		0.44		0.42		
Lead to trouble at home															
Yes	--	--	4 (8%)	17 (27%)	9 (16.4%)	26 (36.1%)	6 (16.7%)	7 (17.9%)	3 (13%)	4 (16%)	2 (25%)	4 (19%)	24 (13.9%)	58 (26.1%)	82 (17.7%)
No	1 (100%)	2 (100%)	46 (92%)	46 (73%)	46 (83.6%)	46 (63.9%)	30 (83.3%)	32 (82.1%)	20 (87%)	21 (84%)	6 (75%)	17 (81%)	149 (86.1%)	164 (73.9%)	380 (82.3%)
Gender Difference	--		6.64*		6.09*		0.02		0.08		0.12		8.87**		
Lead to an accident or injury															
Yes	--	--	9 (18%)	8 (12.7%)	7 (12.7%)	15 (20.8%)	3 (8.3%)	5 (12.8%)	7 (30.4%)	3 (12%)	1 (12.5%)	2 (9.5%)	27 (15.6%)	33 (14.9%)	60 (13%)
No	1 (100%)	2 (100%)	41 (82%)	55 (87.3%)	48 (87.3%)	57 (79.2%)	33 (91.7%)	34 (87.2%)	16 (69.6%)	22 (88%)	7 (87.5%)	19 (90.5%)	146 (84.4%)	189 (85.1%)	402 (87%)
Gender Difference	--		0.61		1.43		0.39		2.46		0.05*		0.04		
Lead to a physical fight															
Yes	--	1 (50%)	7 (14%)	6 (9.5%)	8 (14.5%)	12 (16.7%)	11 (30.6%)	2 (5.1%)	7 (30.4%)	5 (20%)	1 (12.5%)	0 (0%)	34 (19.7%)	26 (11.7%)	60 (13%)
No	1 (100%)	1 (50%)	43 (86%)	57 (90.5%)	47 (85.5%)	60 (83.3%)	25 (69.4%)	37 (94.9%)	16 (69.6%)	20 (80%)	7 (87.5%)	21 (100%)	139 (80.3%)	196 (88.3%)	402 (87%)
Gender Difference	--		0.54		0.10		8.44**		0.69		2.71		4.76*		
Lead to property damage															
Yes	--	--	9 (18%)	7 (11.1%)	10 (18.2%)	10 (13.9%)	9 (25%)	1 (2.6%)	7 (30.4%)	1 (4%)	3 (37.5%)	1 (4.8%)	38 (22%)	20 (9%)	58 (12.6%)
No	1 (100%)	2 (100%)	41 (82%)	56 (88.9%)	45 (81.8%)	62 (86.1%)	27 (75%)	38 (97.4%)	16 (69.6%)	24 (96%)	5 (62.5%)	20 (95.2%)	135 (78%)	202 (91%)	404 (87.4%)
Gender Difference	--		1.08		0.43		8.15**		6.02*		5.22*		13.02***		
Lead to trouble with the police															
Yes	--	1 (50%)	8 (16%)	5 (7.9%)	6 (10.9%)	7 (9.7%)	8 (22.2%)	1 (2.6%)	7 (30.4%)	1 (4%)	2 (25%)	0 (0%)	31 (17.9%)	15 (6.8%)	46 (10%)
No	1 (100%)	1 (50%)	42 (84%)	58 (92.1%)	49 (89.1%)	65 (90.3%)	28 (77.8%)	38 (97.4%)	16 (69.6%)	24 (96%)	6 (75%)	21 (100%)	142 (82.1%)	207 (93.2%)	416 (90%)
Gender Difference	--		1.78		0.04		6.85*		6.02*		5.63*		11.77**		
Effected performance at school / work															
Yes	--	--	4 (8%)	6 (9.5%)	2 (3.6%)	4 (5.6%)	4 (11.1%)	4 (10.3%)	3 (13%)	1 (4%)	0 (0%)	4 (19%)	13 (7.5%)	19 (8.6%)	32 (6.9%)
No	1 (100%)	2 (100%)	46 (92%)	57 (90.5%)	53 (96.4%)	68 (94.4%)	32 (88.9%)	35 (89.7%)	20 (87%)	24 (96%)	8 (100%)	17 (81%)	160 (92.5%)	203 (91.4%)	430 (93.1%)
Gender Difference	--		0.08		0.25		0.01		1.28		1.76		0.14		
Lead to trouble at school / work															
Yes	--	--	2 (4%)	2 (3.2%)	0 (0%)	2 (2.8%)	2 (5.6%)	2 (5.1%)	2 (8.7%)	2 (8%)	1 (12.5%)	3 (14.3%)	7 (4%)	11 (5%)	18 (3.9%)
No	1 (100%)	2 (100%)	48 (96%)	61 (96.8%)	55 (100%)	70 (97.2%)	37 (94.9%)	37 (94.9%)	21 (91.3%)	23 (92%)	7 (87.5%)	18 (85.7%)	166 (96%)	211 (95%)	444 (96.1%)
Gender Difference	--		0.05		1.55		0.00		0.00		0.01		0.18		

Note: χ^2 = observed value from chi square test; * $p < .05$, ** $p < .01$, *** $p < .001$



CHAPTER THREE

Drug Use

CHAPTER OVERVIEW

This chapter continues the presentation of findings from the current study. It outlines the nature, frequency, and consequences of drug use reported by a community sample of 462 adolescents aged between 14 and 19 years resident in the South, and South and South East of the Republic of Ireland.

HOW MANY YOUNG PEOPLE USE DRUGS?

As indicated in figure 3-1 50.2% (232/462) of the community group reported that they have never taken drugs. The remaining 49.8% (230/462) reported lifetime use (ever used) of illicit drugs (including inhalants). Overall there was no significant difference

between males and females reporting drug use.

WHAT AGE DO YOUNG PEOPLE REPORT FIRST DRUG USE?

The average age of first drug use was 14.46 years (SD = 1.41). Both males and females reported their first drug use at the same average age ($t = 1.87$; $p > .05$; males = 14.23 years (SD = 1.60); females = 14.64 years (SD = 1.23)).

WHAT TYPES OF DRUGS DO YOUNG PEOPLE CONSUME?

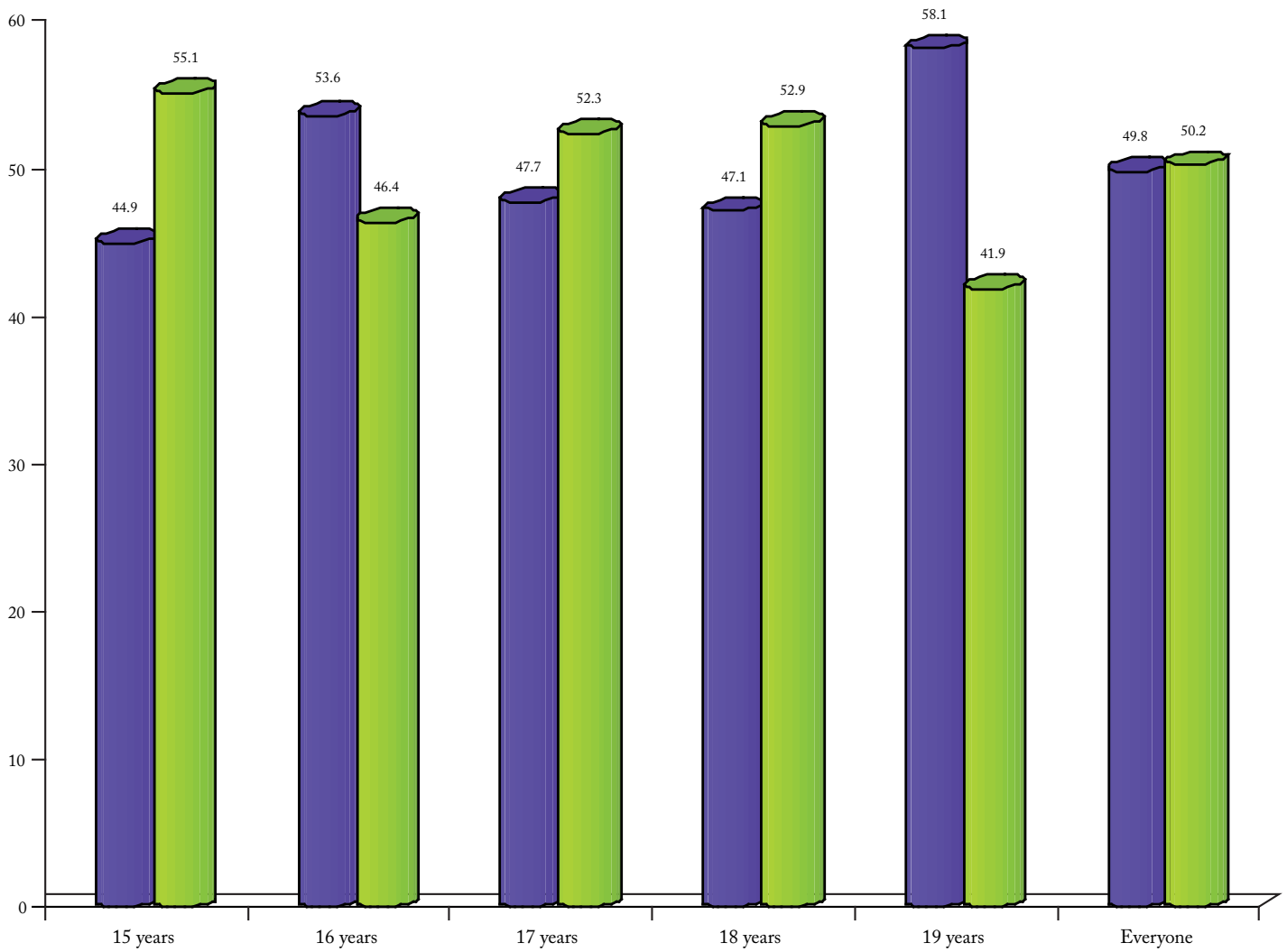
Figure 3-2 indicates that cannabis was the most commonly reported drug used by the community group (41.1%). This was followed by inhalants (29.7%),

poppers (16.7%), cocaine (11%), tranquilizers / sedatives (10.8%), amphetamines (9.3%), ecstasy (8.9%), hallucinogens (6.5%), and opiates (1.9%). No use of heroin or the dummy drug, neratine was reported.

Table 3-1 provides a breakdown of the reported use of each of these types of drug by the age and gender of participants. Frequencies in this table were calculated as a percentage of male and female drug users. With regard to gender differences in the community group overall, females were found to indicate a significantly higher rate of lifetime use of cannabis compared to males. No gender differences were found in lifetime use of each of the other types of drugs.

Figure 3-1.

Percentage of young people in the community who report lifetime (ever used) drugs



■ Use of Drugs
■ Don't Use Drugs

Figure 3-2.

Lifetime drug use (ever used) among young people in the community group (%).

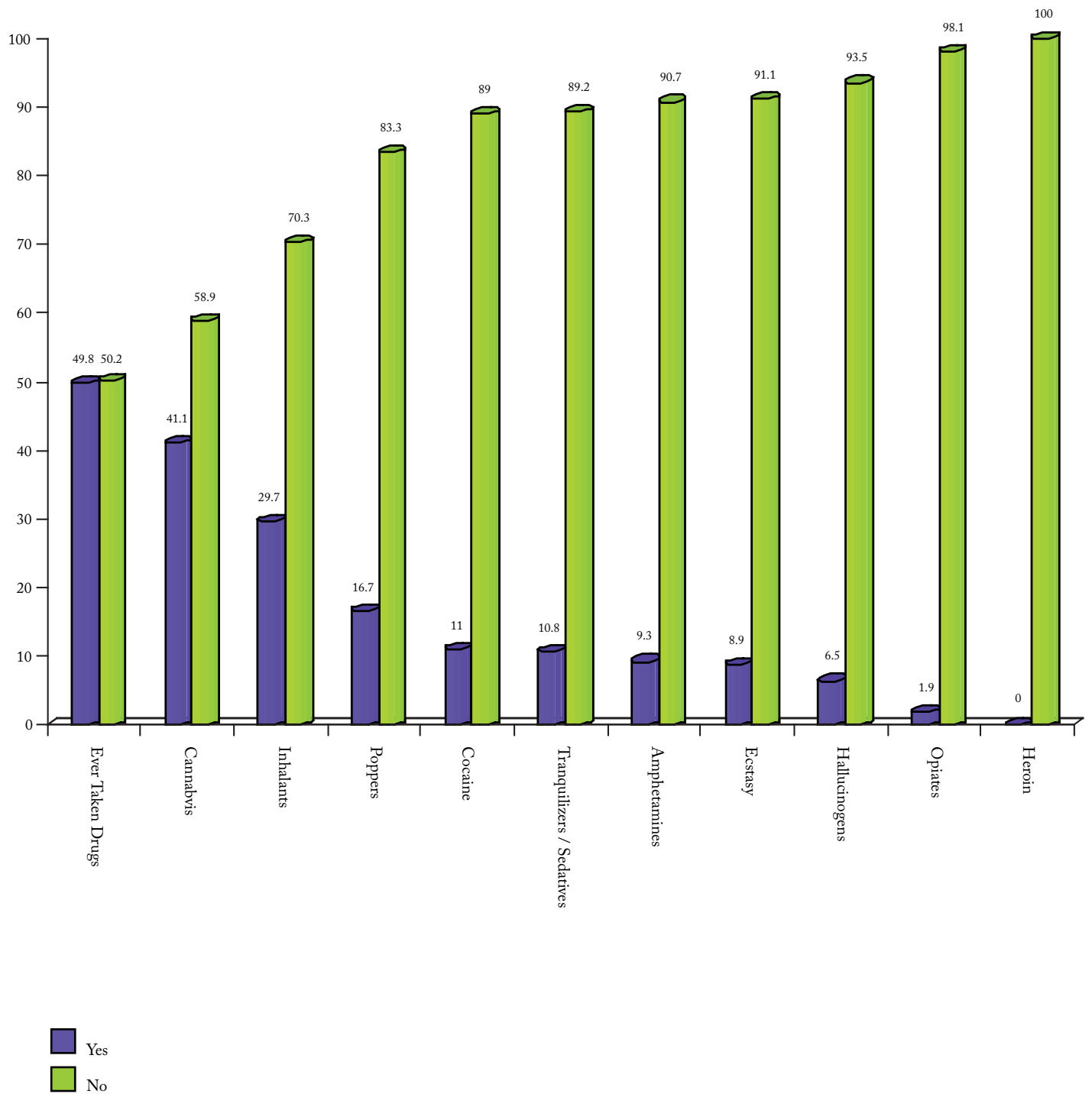


Table 3-1: Breakdown by age and gender of drug use by young people in the community.

Drug Use?	14 years		15 years		16 years		17 years		18 years		19 years		Total Sample		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	All
Ever used drugs?															
Yes	1 (100%)	--	28 (45.9%)	34 (44.2%)	39 (59.1%)	43 (49.4%)	22 (48.9%)	19 (46.3%)	12 (46.2%)	12 (48%)	3 (33.3%)	15 (68.2%)	105 (54.1%)	125 (49.2%)	230 (49.8%)
No	0	2 (100%)	33 (45.1%)	43 (55.8%)	27 (40.9%)	44 (50.6%)	23 (51.1%)	22 (53.7%)	14 (53.8%)	13 (52%)	6 (66.7%)	7 (31.8%)	102 (45.9%)	129 (50.8%)	232 (50.2%)
Gender Difference	--	--	0.04		1.41		0.05		0.01				0.07		
Ever used cannabis?															
Yes	--	2 (100%)	19 (67.9%)	26 (76.5%)	32 (82.1%)	35 (81.4%)	19 (86.4%)	19 (100%)	8 (66.7%)	12 (100%)	3 (100%)	15 (100%)	81 (77.1%)	109 (87.2%)	190 (41.1%)
No	1 (100%)	--	9 (32.1%)	8 (23.5%)	7 (17.9%)	8 (18.6%)	3 (13.6%)	0 (0%)	4 (33.3%)	0 (0%)	0 (0%)	0 (0%)	24 (22.9%)	16 (12.8%)	40 (8.7%)
Gender Difference	--		0.57		0.00		--		--		--		4.01*		
Ever used inhalants?															
Yes	--	2 (100%)	19 (67.9%)	24 (70.6%)	26 (66.7%)	27 (26.8%)	11 (50%)	7 (36.8%)	7 (58.3%)	3 (25%)	0 (0%)	11 (73.3%)	63 (60%)	74 (59.2%)	137 (29.7%)
No	1 (100%)	0 (0%)	9 (32.1%)	10 (29.4%)	13 (33.3%)	16 (37.2%)	11 (50%)	12 (63.2%)	5 (41.7%)	9 (75%)	3 (100%)	4 (26.7%)	42 (40%)	51 (40.8%)	93 (20.1%)
Gender Difference	--		0.05		0.13		0.71		0.71		--		0.01		
Ever used poppers?															
Yes	--	2 (100%)	5 (17.9%)	15 (44.1%)	17 (43.6%)	16 (37.2%)	8 (36.4%)	2 (10.5%)	5 (41.7%)	2 (16.7%)	2 (66.7%)	4 (26.7%)	37 (35.2%)	40 (32.0%)	77 (16.7%)
No	1 (100%)	--	23 (82.1%)	19 (55.9%)	22 (56.4%)	27 (62.8%)	14 (63.6%)	17 (89.5%)	7 (58.3%)	10 (83.3%)	1 (33.3%)	11 (73.3%)	68 (64.8%)	85 (68.0%)	153 (33.2%)
Gender Difference	--		4.84*		0.34		--		--		--		0.26		
Ever used cocaine?															
Yes	--	--	3 (10.7%)	5 (14.7%)	9 (23.1%)	4 (9.3%)	7 (31.8%)	4 (21.1%)	3 (25%)	8 (66.7%)	1 (33.3%)	7 (46.7%)	23 (21.9%)	28 (22.4%)	51 (11.0%)
No	1 (100%)	2 (100%)	25 (89.3%)	29 (85.3%)	30 (76.9%)	39 (90.7%)	15 (68.2%)	15 (78.9%)	9 (75%)	4 (33.3%)	2 (66.6%)	8 (53.3%)	82 (78.1%)	97 (77.6%)	179 (38.7%)
Gender Difference	--		--		2.90		0.66		4.19*		--		0.00		
Ever used tranquilizers/sedatives?															
Yes	1 (100%)	--	4 (14.3%)	11 (32.4%)	10 (25.6%)	9 (20.9%)	6 (27.3%)	2 (16.7%)	2 (16.7%)	3 (25%)	0 (0%)	2 (13.3%)	23 (21.9%)	27 (21.6%)	50 (10.8%)
No	--	2 (100%)	24 (85.7%)	23 (67.6%)	29 (74.4%)	34 (79.1%)	16 (72.7%)	17 (89.5%)	10 (83.3%)	9 (75%)	3 (100%)	13 (86.7%)	82 (78.1%)	98 (78.4%)	180 (39%)
Gender Difference	--		2.73		0.25		--		--		--		0.00		
Ever used amphetamines?															
Yes	--		3 (10.7%)	4 (11.8%)	7 (17.9%)	8 (16.6%)	6 (27.3%)	2 (10.5%)	3 (25%)	4 (41.7%)	--	5 (33.3%)	19 (18.1%)	24 (19.2%)	43 (9.3%)
No	1 (100%)	2 (100%)	25 (89.3%)	30 (88.2%)	32 (82.1%)	35 (81.4%)	16 (72.7%)	17 (89.5%)	9 (75%)	7 (58.3%)	3 (100%)	10 (66.7%)	86 (81.9%)	101 (80.8%)	187 (40.5%)
Gender Difference	--		--		0.00		--		--		--		0.07		
Ever used ecstasy?															
Yes	--	--	4 (14.3%)	4 (11.8%)	5 (12.8%)	5 (11.6%)	8 (36.4%)	2 (10.5%)	2 (16.5%)	4 (33.3%)	1 (33.3%)	6 (40%)	20 (19%)	21 (16.8%)	41 (8.9%)
No	1 (100%)	2 (100%)	24 (84.7%)	30 (88.2%)	34 (87.2%)	38 (88.4%)	14 (63.6%)	17 (89.5%)	10 (83.3%)	8 (66.7%)	2 (66.7%)	9 (60%)	85 (81%)	104 (83.2%)	189 (40.9%)
Gender Difference	--		--		--		--		--		--		0.19		
Ever used hallucinogens?															
Yes	--	1 (50%)	3 (10.7%)	3 (8.8%)	5 (12.8%)	4 (9.3%)	5 (22.7%)	0 (0%)	2 (16.7%)	3 (25%)	0 (0%)	4 (26.7%)	15 (14.3%)	15 (12%)	30 (6.5%)
No	1 (100%)	1 (50%)	25 (89.3%)	31 (91.2%)	34 (87.2%)	39 (90.7%)	17 (77.3%)	19 (100%)	10 (83.3%)	9 (75%)	3 (100%)	11 (73.3%)	90 (85.7%)	110 (88%)	380 (82.3%)
Gender Difference	--		--		--		--		--		--		0.26		

Table 3-1 Continued

Drug Use?	14 years		15 years		16 years		17 years		18 years		19 years		Total Sample		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	All
Ever used opiates?															
Yes	--	1 (50%)	2 (66.7%)	1 (2.9%)	1 (2.6%)	2 (4.7%)	0 (0%)	0 (0%)	1 (8.3%)	0 (0%)	0 (0%)	1 (6.7%)	4 (3.8%)	5 (4%)	9 (1.9%)
No	1 (100%)	1 (50%)	26 (92.9%)	33 (97.1%)	38 (97.4%)	38 (95.3%)	22 (100%)	19 (100%)	11 (91.7%)	12 (100%)	3 (100%)	14 (93.3%)	101 (96.2%)	120 (96%)	221 (47.8%)
Gender Difference	--		--		--		--		--		--		--		
Ever used heroin?															
Yes	--	--	0 (0%)	0 (90%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
No	1 (100%)	2 (100%)	28 (100%)	34 (100%)	39 (100%)	40 (100%)	22 (100%)	19 (100%)	12 (100%)	12 (100%)	3 (100%)	21 (100%)	105 (100%)	125 (100%)	230 (100%)
Gender Difference	--		--		--		--		--		--		--		
Ever used neratine?															
Yes	--	--	0 (0%)	0 (90%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
No	1 (100%)	2 (100%)	28 (100%)	34 (100%)	39 (100%)	40 (100%)	22 (100%)	19 (100%)	12 (100%)	12 (100%)	3 (100%)	21 (100%)	105 (100%)	125 (100%)	230 (100%)
Gender Difference	--		--		--		--		--		--		--		

Note: χ^2 = Observed value from Chi-square test; *= $p < .05$; **= $p < .01$; ***= $p < .001$.

HOW OFTEN DO YOUNG PEOPLE USE DRUGS?

Frequency of use of the various drugs among the community group is reported in table 3-2. The drugs are presented from most to least frequently used (life time use). The five most frequently used drugs (cannabis, inhalants, poppers, cocaine and tranquilizers) are considered further here.

CANNABIS

It can be seen from table 3-2 that cannabis is used less than once a year by 37 (8.0%) young people, once or twice a year by 54 (11.68%) participants, and several times a year by 34 (7.35%). Fourteen (3.03%) participants reported monthly use, 19 (4.11%) young people indicate use 2/3 times a month, and 10 (2.16%) reported use once a week. Ten (2.16%) young people indicated cannabis use several times a week and a further 10 (2.16%) reported daily use. Regular use of cannabis, defined here as consumption at a frequency of once a month or more, was reported by 13.62% of the total sample.

INHALANTS

Forty-one (8.87%) young people reported use of inhalants less than once a year, 46 (9.95%) respondents reported use once or twice a year, and 21 (4.54%) indicated use several times a year. Monthly use of inhalants is reported by seven (1.51%) young people, eight (1.73%) participants indicated use at a frequency of 2/3 times a month, and eight (1.73%) reported weekly use. Four (0.86%) people reported use at a frequency of several times a week, and one person (0.21%) reported daily use. Regular use of inhalants, defined here as consumption at a frequency of once a month or more, was reported by 6.04% of the total sample.

POPPERS

Thirteen (2.81%) young people reported use of poppers less than once a year, 31 (6.70%) participants indicated use once or twice a year, and 12 (2.59%) reported use several times a year. Four (0.86%) young people reported use of poppers at a frequency of once a month, eight (1.73%) respondents indicated use 2/3

times a month, and two (0.43%) reported weekly use. Two (0.43%) young people reported use several times a week, and four (0.86%) indicated daily use. Regular use of poppers, defined here as consumption at a frequency of once a month or more, was reported by 4.31% of the total sample.

COCAINE

Regarding cocaine use, nine (1.94%) young people reported a rate of use of less than once a year, 24 (5.19%) respondents indicated use once or twice a year, and 11 (2.38%) reported use a several times a year. No one reported monthly use, four (0.86%) young people indicated use at a frequency of 2/3 times a month, and one (0.21%) person (0.21%) reported weekly use. One (0.21%) person indicated use at a frequency of several times a week and no one reported daily use. Regular use of cocaine, defined here as consumption at a frequency of once a month or more, was reported by 1.28% of the total group.

TRANQUILIZERS/SEDATIVES

Six (1.29%) young people reported use of tranquilizers less than once a year, 24 (5.19%) participants indicated use once or twice a year, and 11 (2.38%) reported use several times a year. Four (0.86%) young people indicated use of tranquilizers at a frequency of once a month, one (0.21%) person reported use 2/3 times a month, and no one reported weekly use. Two (0.43%) young people reported use several times a week, and two (0.43%)

reported daily use. Regular use of tranquilizers/sedatives, defined here as consumption at a frequency of once a month or more, was reported by 1.93% of the total group.

Frequency of use of various drugs among males and females is reported in table x-3. Frequencies were calculated as a percentage of male and female drug users. It can be seen from table x-3 that males and females generally reported a

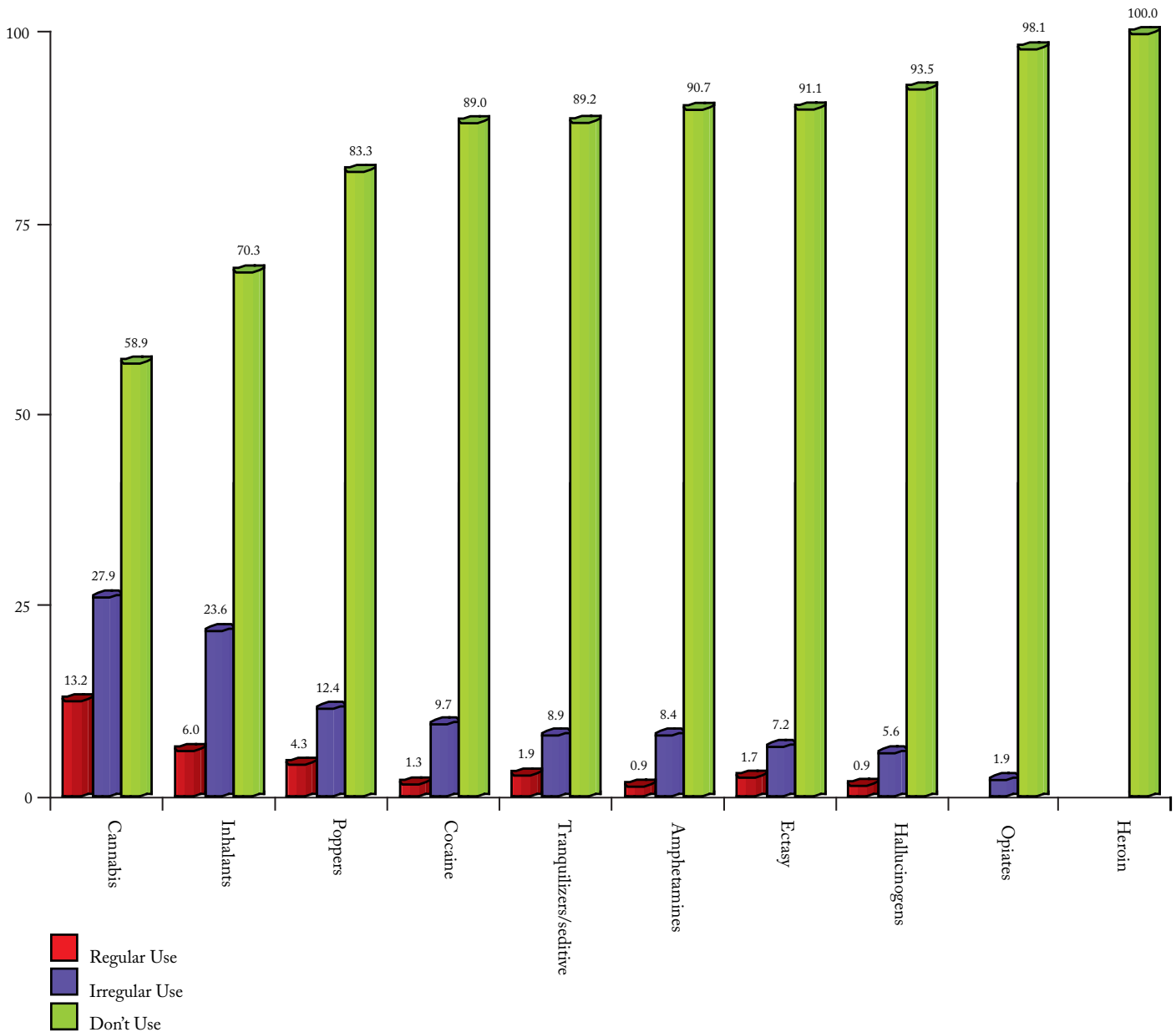
similar frequency of use for most drugs. However, a trend is apparent of males reporting more frequent use of cannabis (weekly use: males = 8.7%, females = 0.8%; several times a week: males = 6.7%, females = 2.4%; daily use: males = 7.7%, females = 1.6%). A larger sample of young people who use drugs would be required to analyse these trends in gender differences in eight different frequencies of use in a statistically meaningful manner.

Table 3-2: Frequency of drug use reported by the community group.

Drug	Non-Drug Users n (%)	Use drugs but never this one n (%)	Less than once a year n (%)	Once or twice a year n (%)	Several time sa year n (%)	Once a month n (%)	2/3 times a month n (%)	Once a week n (%)	Several times a week n (%)	Daily n (%)
Cannabis	232 (50.2%)	40 (8.7%)	37 (8.0%)	54 (11.7%)	34 (7.4%)	14 (3.0%)	19 (4.1%)	10 (2.2%)	10 (2.2%)	10 (2.2%)
Inhalants	232 (50.2%)	93 (20.1%)	41 (8.9%)	46 (10.0%)	21 (4.5%)	7 (1.5%)	8 (1.7%)	8 (1.7%)	4 (0.9%)	1 (0.2%)
Poppers	232 (50.2%)	153 (33.1%)	13 (2.8%)	31 (6.7%)	12 (2.6%)	4 (0.9%)	8 (1.7%)	2 (0.4%)	2 (0.4%)	4 (0.9%)
Cocaine	232 (50.2%)	179 (38.7%)	9 (1.9%)	24 (5.2%)	11 (2.4%)	0 (0%)	4 (0.9%)	1 (0.2%)	1 (0.2%)	0 (0%)
Tranq/ Sedatives	232 (50.2%)	180 (39.0%)	6 (1.3%)	24 (5.2%)	11 (2.4%)	4 (0.9%)	1 (0.2%)	0 (0%)	2 (0.4%)	2 (0.4%)
Amphetamines	232 (50.2%)	187 (40.5%)	11 (2.4%)	15 (3.2%)	13 (2.8%)	0 (0%)	2 (0.4%)	1 (0.2%)	0 (0%)	1 (0.2%)
Ecstasy	232 (50.2%)	190 (41.1%)	7 (1.5%)	15 (3.2%)	10 (2.1%)	3 (0.6%)	3 (0.6%)	2 (0.4%)	0 (0%)	0 (0%)
Hallucinogens	232 (50.2%)	200 (43.3%)	4 (0.9%)	14 (3.0%)	8 (1.7%)	3 (0.6%)	1 (0.2%)	0 (0%)	0 (0%)	0 (0%)
Opiates	232 (50.2%)	221 (47.8%)	2 (0.4%)	5 (1.1%)	2 (0.4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Heroin	232 (50.2%)	230 (49.8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Figure 3-3

Frequency of regular drug use in the community group (once a month or more).



WHAT CONSEQUENCES OF DRUG USE DO YOUNG PEOPLE REPORT?

Figure 3-4 shows the frequency of drug use consequences reported by the community group (as a percentage of all young people surveyed). No consequences from drug use were indicated by 38.3% (n = 177) of the total community group. Consequences of drug use were reported by 11.4% of the total group

(n = 49 which comprised 23% of those who reported any drug use). In contrast to consequences of alcohol use, performance effected at school/work was reported most often as a consequence of drug use (6.9%, n = 32). Getting into an argument (4.1%, n = 19) and trouble at home (3.2%, n = 15) which were the two most commonly reported consequences of alcohol use were indicated as the next two most frequently reported consequences of drug

use. An accident or injury, trouble with the police, property damage, physical fight and trouble at school/work were reported as consequences of drug use by 2.6% (n = 12), 2.2% (n = 10), 2.2%, 1.9% (n = 9) and 1.9% of the community group respectively. Table 3-4 outlines frequency of drug use consequences reported according to gender and age (frequencies are calculated as a percentage of male and female drug users).

Table 3-3: Frequency of drug according to gender.

Drug	Use drugs but never this one n (%)	Less than once a year n (%)	Once or twice a year n (%)	Several time sa year n (%)	Once a month n (%)	2/3 times a month n (%)	Once a week n (%)	Several times a week n (%)	Daily n (%)
Cannabis									
Male	24 (23.1)	15(14.4)	22(21.2)	8(7.7)	5(4.8)	6(5.8)	9(8.7)	7(6.7)	8(7.7)
Female	16(12.9)	22(17.7)	32(25.8)	26(21)	9(7.3)	13(10.5)	1(0.8)	3(2.4)	2(1.6)
Inhalants									
Male	42(40)	20(19)	26(24.8)	9(8.6)	1(1.0)	3(2.9)	1(1.0)	3(2.9)	0(0)
Female	51(41.1)	21(16.9)	20(16.1)	12(9.7)	6(4.8)	5(4.0)	7(5.6)	1(0.8)	1(0.8)
Poppers									
Male	68(64.8)	6(5.7)	17(16.2)	8(7.6)	2(1.9)	1(1.0)	1(1.0)	1(1.0)	1(1.0)
Female	85(68.5)	7(5.6)	14(11.3)	4(3.2)	2(1.6)	7(5.6)	1(0.8)	1(0.8)	3(2.4)
Cocaine									
Male	82(78.8)	5(4.8)	10(9.6)	4(3.8)	-	2(1.9)	1(1.0)	-	-
Female	97(77.6)	4(3.2)	14(11.2)	7(5.6)	-	2(1.6)	-	1(0.8)	-
Tranq/Sedatives									
Male	82(78.1)	4(3.8)	11(10.5)	7(6.7)	-	-	-	1(1.0)	-
Female	98(78.4)	2(1.6)	13(10.4)	4(3.2)	4(3.2)	1(0.8)	-	1(0.8)	2(1.6)
Amphetamines									
Male	86(81.9)	6(5.7)	4(3.8)	7(6.7)	-	1(1.0)	1(1.0)	-	-
Female	101(80.8)	5(4.0)	11(8.8)	6(4.8)	-	1(0.8)	-	-	1(0.8)
Ecstasy									
Male	85(81)	4(3.8)	6(5.7)	5(4.8)	2(1.9)	2(1.9)	1(1.0)	-	-
Female	105(84)	3(2.4)	9(7.2)	5(4.0)	1(0.8)	1(0.8)	1(0.8)	-	-
Hallucinogens									
Male	90(85.7)	3(2.9)	7(6.7)	4(3.8)	1(1.0)	-	-	-	-
Female	110(88)	1(0.8)	7(5.6)	4(3.2)	2(1.6)	1(0.8)	-	-	-
Opiates									
Male	101(96.2)	1(1.0)	3(2.9)	-	-	-	-	-	-
Female	120(96)	1(0.8)	2(1.6)	2(1.6)	-	-	-	-	-

Figure 3-4.

Consequences of drug use reported by young people in the community group (%).

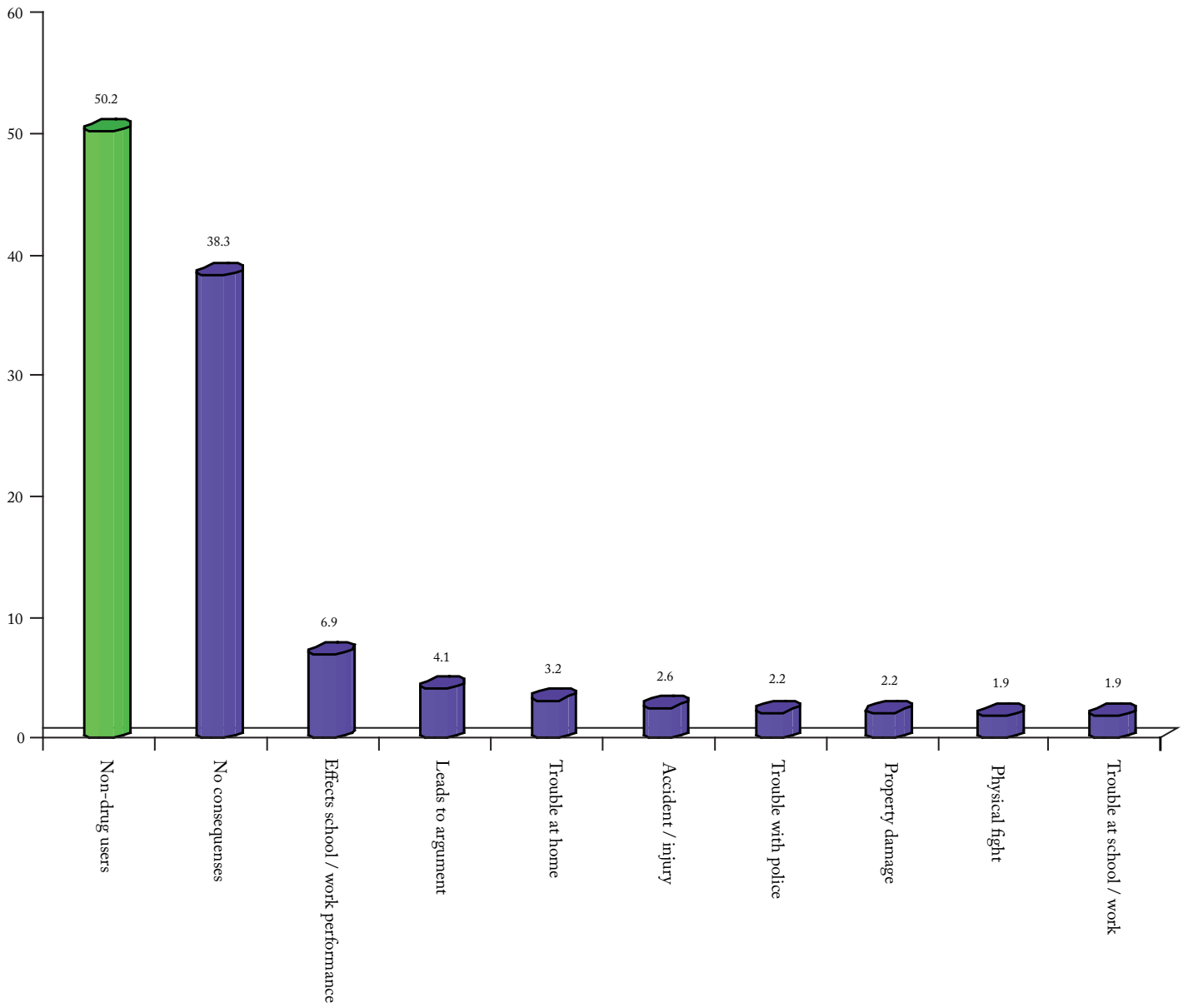
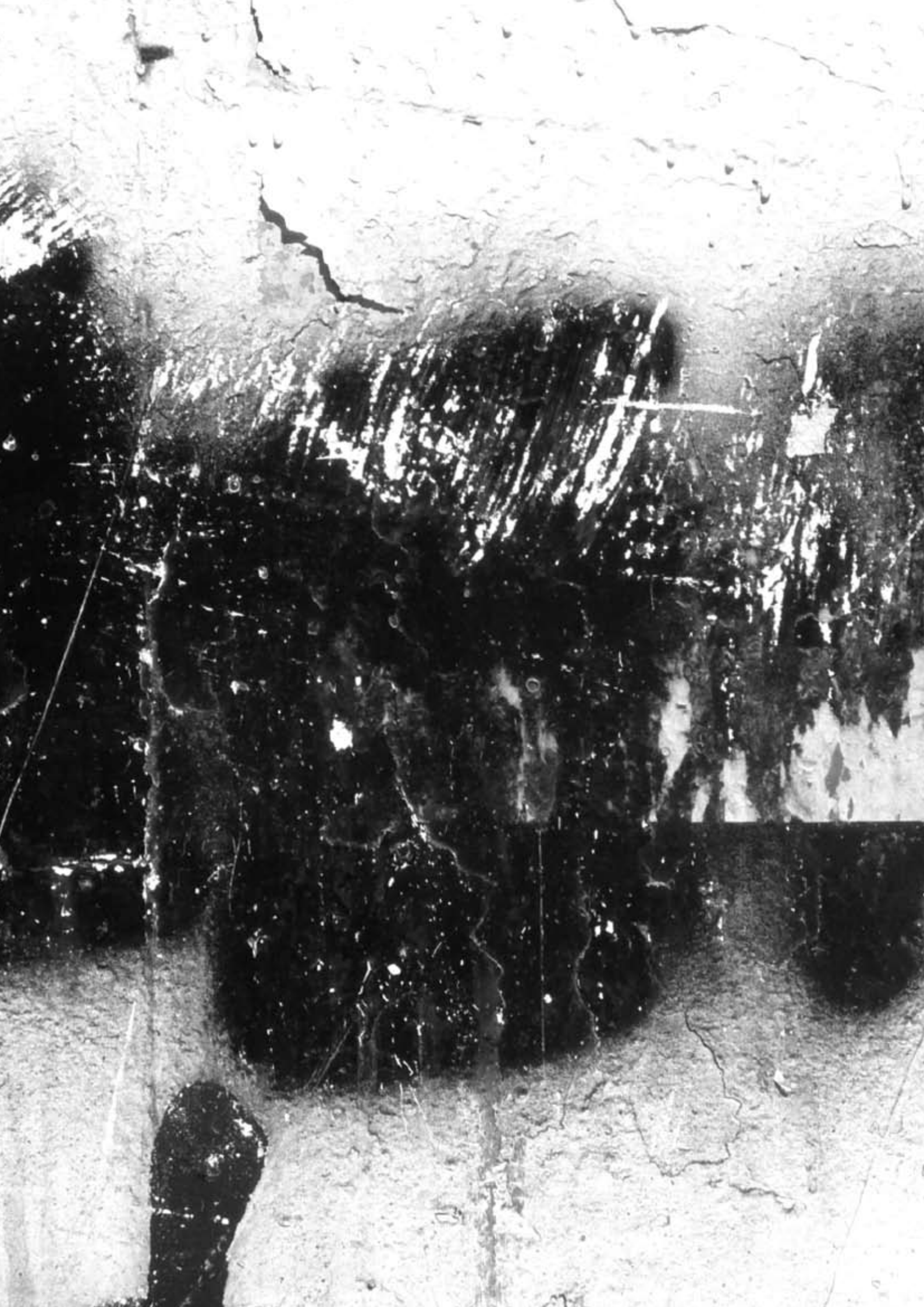


Table 3-4: Consequences of drug use presented by age and gender

Consequences of Drug Use	14 years		15 years		16 years		17 years		18 years		19 years		Total Sample		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	All
Experienced no consequences															
Yes	1	--	24	26	30	33	16	18	9	8	2	8	82	93	175
	(100%)		(85.7%)	(78.8%)	(83.3%)	(76.7%)	(72.7%)	(94.7%)	(75%)	(66.7%)	(66.7%)	(53.3%)	(80.4%)	(76.2%)	(37.9%)
No	0	--	4	7	6	10	6	1	3	4	1	7	20	29	49
			(14.3%)	(21.2%)	(16.7%)	(23.3%)	(27.3%)	(5.3%)	(25%)	(33.3%)	(33.3%)	(46.7%)	(19.6%)	(23.8%)	(10.6%)
Effectuated performance school/work															
Yes	0	--	4	6	5	3	3	0	1	3	1	6	14	18	32
			(14.3%)	(18.2%)	(13.9%)	(7%)	(13.6%)	(100%)	(8.3%)	(25%)	(33.3%)	(40%)	(13.7%)	(14.5%)	(6.9%)
No	1	--	24	27	31	40	19	19	11	9	2	9	88	106	194
	(100%)		(85.7%)	(81.8%)	(86.1%)	(93%)	(86.4%)	(100%)	(91.7%)	(75%)	(66.7%)	(60%)	(86.3%)	(85.5%)	(42%)
Lead to an argument															
Yes	--	--	2	2	1	6	3	0	1	2	0	2	7	12	19
			(7.1%)	(6.1%)	(2.8%)	(14%)	(13.6%)	(0%)	(8.3%)	(16.7%)	(0%)	(13.3%)	(6.9%)	(9.7%)	(4.1%)
No	1	--	26	31	35	37	19	19	11	10	3	13	95	112	207
	(100%)		(92.9%)	(93.9%)	(97.2%)	(86%)	(86.4%)	(100%)	(91.7%)	(83.3%)	(100%)	(86.7%)	(93.1%)	(90.3%)	(44.8%)
Lead to trouble at home															
Yes	--	--	2	2	0	4	0	0	1	3	0	2	3	9	12
			(7.1%)	(6.1%)	(0%)	(9.3%)	(100%)	(0%)	(8.3%)	(25%)	(0%)	(13.3%)	(2.9%)	(7.3%)	(2.6%)
No	1	--	26	31	36	39	22	19	11	9	3	13	99	113	212
	(100%)		(92.9%)	(93.3%)	(100%)	(90.7%)	(100%)	(100%)	(91.7%)	(75%)	(100%)	(86.7%)	(97.1%)	(92.7%)	(45.9%)
Lead to an accident or injury															
Yes	--	--	2	1	0	4	0	0	1	2	0	2	34	26	60
			(7.1%)	(3%)	(0%)	(9.3%)	(0%)	(0%)	(8.3%)	(16.7%)	(0%)	(13.3%)	(19.7%)	(11.7%)	(13%)
No	1	--	26	32	36	39	22	19	11	10	3	13	139	196	402
	(100%)		(92.9%)	(97%)	(100%)	(90.7%)	(100%)	(100%)	(91.7%)	(83.3%)	(100%)	(86.7%)	(80.3%)	(88.3%)	(87%)
Lead to trouble with police															
Yes	--	--	2	2	1	1	0	0	7	2	0	1	5	5	10
			(7.1%)	(6.1%)	(2.8%)	(2.3%)	(0%)	(0%)	(30.4%)	(16.7%)	(0%)	(6.7%)	(4.9%)	(4%)	(2.7%)
No	1	--	26	31	35	42	22	19	16	10	3	14	97	117	214
	(100%)		(92.9%)	(93.9%)	(97.2%)	(97.7%)	(100%)	(100%)	(69.6%)	(83.3%)	(100%)	(93.3%)	(95.1%)	(91%)	(46.3%)
Lead to property damage															
Yes	--	--	2	2	0	1	2	0	2	1	0	1	6	4	10
			(7.1%)	(6.1%)	(0%)	(2.3%)	(9.1%)	(0%)	(16.7%)	(4%)	(0%)	(6.7%)	(5.9%)	(3.2%)	(2.7%)
No	1	--	26	31	36	42	20	19	10	24	3	14	96	118	214
	(100%)		(92.9%)	(93.9%)	(100%)	(97.9%)	(90.9%)	(100%)	(83.3%)	(96%)	(100%)	(93.3%)	(94.1%)	(96.8%)	(46.3%)
Lead to a physical fight															
Yes	--	--	1	3	0	2	1	0	0	2	0	0	2	7	9
			(3.6%)	(9.1%)	(0%)	(4.7%)	(4.5%)	(0%)	(0%)	(16.7%)	(0%)	(0%)	(2%)	(5.6%)	(2%)
No	1	--	27	30	36	41	21	19	12	10	3	15	100	115	215
	(100%)		(96.4%)	(90.9%)	(100%)	(95.3%)	(95.5%)	(100%)	(100%)	(83.3%)	(100%)	(100%)	(98%)	(94.4%)	(46.6%)
Lead to trouble school/work															
Yes	--	--	2	3	1	0	1	0	0	1	0	1	4	5	9
			(7.1%)	(9.1%)	(2.8%)	(0%)	(4.5%)	(0%)	(0%)	(8.3%)	(0%)	(6.7%)	(3.9%)	(4%)	(2%)
No	1	--	26	30	35	43	21	19	12	11	3	14	98	117	215
	(100%)		(92.9%)	(90.9%)	(97.2%)	(100%)	(95.5%)	(100%)	(100%)	(91.7%)	(100%)	(93.3%)	(96.1%)	(96%)	(46.6%)



CHAPTER FOUR

Defining a Continuum of Substance Use in the Community Group

INTRODUCTION

We next asked whether meaningful sub-categories of substance use could be defined, reflecting a continuum from non-use to heavier use, based on the behaviours endorsed by respondents in this study? That is, could the young people in the survey be divided into meaningful categories of alcohol and drug use reflecting the relative level of their substance use within the continuum of their responses.

In order to address this research question two different strategies were considered regarding how best to organise the reported alcohol and drug use behaviour of young people who participated in the study. Firstly, separate drug and alcohol indices were devised.

The alcohol use index was comprised of the following questions from the Alcohol and Illicit Drug Use Questionnaire (see Appendix A): Q2. Frequency of drinking – responses ranged from 0

(never) to eight (daily); Q3. Average number of drinks typically consumed when drinking – responses ranged from 0 to 15; Q4. Frequency of drinking five or more drinks in a single drinking session – response options ranged from 0 (never) to eight (daily); Q21 (a-j). Consequences of alcohol use – responses ranged from 0 (none) to eight (eight consequences endorsed). Scores on each of these items were aggregated to give a Total Alcohol Use Index score, which ranged from 0 to 35. Four sub-groups were formed reflecting differing points on the alcohol use index continuum of scores from 0-35.

A separate drug use index was also initially compiled with the following questions from the Alcohol and Illicit Drug Use Questionnaire (see Appendix A): Q 7(i) – 17(i) Life time use (ever used) of ten classes of drugs including inhalants – responses ranged from 0 (no life time use of any drug) to 10 (life time use of 10 drugs); Q 7(ii) – 17(ii)

Frequency of use of 10 classes of drugs – responses for each drug ranged from 0 (never) to eight (daily); Q 22(a) – (j) Consequences of drug use – responses ranged from 0 (none) to eight (eight consequences endorsed). Scores on each of these questions were aggregated to give a Total Drug Use Index. Scores on the drug use index had a range from 0 to 47. Again four groups were formed reflecting differing points on the drug use index continuum of scores from 0-47.

However, there was a concern that to separate alcohol and drug use into two different indices might lose the relationship between level of alcohol and level of drug use. That is, non-drinkers might also be non-drug users, and the heaviest alcohol users might also be the heaviest drug users. In order to investigate this a chi-square analysis was computed in order to establish the level of over-lap between low to high alcohol and drug use category membership. It revealed a significant over lap between groups on

the alcohol use and drug use indices ($\chi^2 = 139.05$; $df = 9$; $p < .001$). Consequently, a “substance use index” that converted the alcohol and drug indices into standardised scores allowing them to be combined with parity was settled upon as the most meaningful way to sort information from the survey. It is described below and ultimately produced a six sub-group snapshot of the continuum of behaviourally tied levels of alcohol and drug use among the young people from the community who participated in the study. The purpose of forming this continuum of groups was two-fold. Firstly to describe the different categories of substance use behaviour among young people living in the community, and secondly to form sub-groups across which the measures of family functioning and adolescent coping also administered to participants could be compared.

SUBSTANCE USE INDEX

The substance use index was ultimately used to classify the community group ($n = 462$) into different categories of substance use. Five groups were delineated initially on the basis that they each comprised approximately 20% of the sample with increasing substance use index scores (t-scores) from group one to group five. The initial groups were then modified according to the rationales provided below to more clearly distinguish between them. Table 4-1 outlines the six resulting groups, their composition and the criteria for group membership. Behavioural examples of substance use in each of the six groups are reported in Table 4-2. These six groups were felt to most meaningfully describe the alcohol and drug use behaviour of young people in the community sample.

GROUP 1: NON SUBSTANCE USERS

The group with the lowest substance use index scores, which initially comprised 18.38% of the sample, had 82 cases. As the vast majority of this group were complete life-time non-users of any substance it was decided to remove those who reported any alcohol ($n = 19$) or drug use ($n = 1$) even though it was very

minor in order to clearly distinguish this group as non-substance users. The remaining group was called group 1: non-substance users ($n = 62$) and comprised 14% of the community sample.

GROUP 2: MODERATE DRINKERS

The group ($n = 96$) with substance use index scores, which ranged from the 18.39th to the 39.9th percentile, comprised 21.52% of the sample. All cases reported alcohol use, which ranged from 2 drinks per drinking occasion less than once a year to five drinks per drinking episode several times a year. Some cases also indicated a low level of drug use ($n = 17$), which varied from less than once a year to once or twice a year. Within this range it was decided to form a group of moderate drinkers with no drug use. The 17 cases who reported drug use were removed. The minimum level of alcohol use was set at: three drinks per drinking occasion once or twice a year or two drinks per drinking session several times a year in order to distinguish this group from those who had only ever experimented with alcohol once or twice in their life-time. Those who reported alcohol use below this minimum level were removed ($n = 27$). Since five drinks per drinking session constitutes binge drinking, 11 cases who reported drinking five drinks per drinking episode several times a year were also excluded. The maximum level of alcohol use among these moderate drinkers was: four drinks per drinking episode once a month or three drinks per session two or three times a month or two drinks once a week. Ultimately this left 41 cases meeting the moderate drinkers criteria reflecting 9.2% of the community sample.

GROUP 3: REGULAR BINGE DRINKERS

Cases with substance use index scores, which ranged from the 40th to the 60th percentile comprised 20.17% of the sample ($n = 90$). All cases reported alcohol use and some ($n = 35$) also indicated drug use. Eleven cases reported drug use at a frequency of less than once a year; 21 reported drug use at a frequency of once or twice a year or several times a year; and three reported

drug use at a frequency of once a month or more often. As all drinkers who reported no drug use ($n = 55$) indicated binge drinking (five drinks or more per drinking episode), it was decided to form a group of binge drinkers with no drug use. Thus, those who reported drug use were excluded. It was decided to set the minimum frequency of binge drinking at once a month instead of several times a year in order to distinguish this group clearly from the moderate drinkers whose upper cut-off was four drinks per drinking episode on a monthly basis. Eleven cases were removed who reported drinking five drinks at a frequency of several times a year. Forty-four cases remained with an upper limit of eight drinks per drinking occasion weekly or nine drinks per drinking session two or three times a month. On examination of the data, it was decided to add fifteen cases from the 60th to 80th percentile range who reported alcohol use only to group three. These fifteen cases indicated higher alcohol use overall (ranged from six drinks to 12 drinks per occasion – drinking on a weekly basis) and a few cases indicated more consequences of alcohol use compared to those in the 40th to 60th percentile. Importantly none of the 15 reported drug use. Thus, 59 young people ultimately comprised the third group called “regular binge drinkers” which constituted 13.2% of the community sample.

GROUP 4: BINGE DRINKERS WHO EXPERIMENT WITH DRUGS

The group with substance use index scores which fell between the 60th and 80th percentile ($n = 89$) constituted 19.95% of the sample. The majority of cases in this percentile range reported alcohol and drug use ($n = 74$). The 15 cases who reported alcohol use only as outlined above were added to the group of regular binge drinkers. Given that most of the alcohol and drug users in the 60th to 80th percentile range reported binge drinking and a relatively low level of drug use it was decided to form a group of “binge drinkers who experiment with drugs”. Cases ($n = 45$) who reported drinking five drinks or more per session at a frequency of at least

several times a year and a level of drug use of either once or twice a year or several times a year comprised this group. Ten cases were not included as they reported drug use at a frequency of less than once a year. Eighteen cases were excluded because their drug use was more regular and one case was not included because their alcohol use did not meet the minimum criterion. It was decided to add cases from the 40th to 60th percentile to this group who indicated similar use: drug use at a frequency of once or twice a year or several times a year and binge drinking at a minimum of several times a year (n = 12). Cases from the 40th to 60th percentile indicated a similar number of consequences but a lower level of alcohol use overall compared to those in the 60th to 80th percentile. A total of 57 cases comprised group three, binge drinkers who experiment with drugs reflecting 12.8% of the community sample. The upper limit of alcohol use in this group was drinking on a weekly basis with ten drinks per episode.

**GROUP 5:
REGULAR DRUG USERS**

The remaining cases in the 60th to 80th percentile reported regular drug use at a frequency of once a month or more often (n = 18). Eight of these cases fell in

the 60th to 70th percentile range and 10 cases fell in the 70th to 80th percentile range. The best organisation of these cases was deliberated. Combining these 18 regular drug users with three regular drug users who fell in the 50th to 60th percentile was considered. However, this option was ruled out because the resulting group would have substance use index scores with a wide range from the 50th to the 80th percentile. It was decided to combine the ten regular drug users from the 70th to 80th percentile with 24 regular drug users from the 80th to 90th percentile as the two groups reported a similar level of drug use and number of drug consequences and fell within a relatively close percentile range: 70th to 90th. The remaining 20 cases in the 80th to 90th percentile range were removed in order to create a clear distinction between groups. The 24 regular drug users from the 80th to 90th percentile range all reported alcohol use but they indicated slightly higher use and more consequences from alcohol use compared to the regular drug users from the 70th to 80th percentile. The combined group of regular drug users (n = 34) reported regular use of one (n = 22), two (n = 11) or three drugs (n = 1). Most of this group reported no consequences of drug use with one or two consequences endorsed by six cases. The 34 regular drug users reported a

range of alcohol use from weekly drinking with three drinks per drinking session to weekly drinking with thirteen drinks per drinking episode. Ultimately, this fourth group with 34 participants were termed “regular drug users” and constituted 7.6% of the community sample.

**GROUP 6:
PROBLEM SUBSTANCE USERS**

It was decided to form a sixth group with the 45 cases in the 90th to 100th percentile who were defined as problem substance users by the extremity of where they fall in the distribution of substance use index scores. All 45 cases reported alcohol and drug use. Thirty-seven cases in this group indicated regular drug use of one (n = 11), two (n = 15), three (n = 3), four (n = 4) and five (n = 1) drugs. Alcohol use in this group ranged from weekly drinking with three drinks per drinking episode to 14 drinks per episode several times a week. Cases in this group indicated several consequences of alcohol and drug use. Cases in this group are less uniform than in other groups but this mixture is justified by the extremity of where their substance use index scores fall relative to the overall distribution of scores in the sample. They reflected 10.08% of the community sample.

Table 4-1 The Composition and Criteria for Membership of the Six Substance Use Index Groups

Group	n	Substance use index score percentile range	Criteria for group membership
1: Non substance users	62	0.1th to 18.38th	No alcohol or drug use
2: Moderate drinkers	41	18.39th to 39.9th	No drug use Min level of alcohol use: three drinks per drinking occasion once or twice a year / two drinks per drinking occasion several times a year Max level of alcohol use: four drinks per drinking occasion once a month / three drinks per drinking occasion two or three times a month / Two drinks once a week.
3: Regular binge drinkers	59	44 cases from: 40th to 60th 15 cases from 60th to 80th	No drug use Min level of alcohol use: five drinks per drinking occasion once a month Max level of alcohol use: Twelve drinks per drinking occasion on a weekly basis
4: Binge drinkers who experiment with drugs	57	12 cases from 40th to 60th 45 cases from 60th to 80th	Min level of alcohol use: five drinks per drinking occasion several times a year Max level of alcohol use: Ten drinks per drinking occasion on a weekly basis Min freq of drug use: Once or twice a year Max freq of drug use: Several times a year

Table 4-1 Continued

Group	n	Substance use index score percentile range	Criteria for group membership
5: Regular drug users	34	10 cases from 70th to 80th 24 cases from 80th to 90th	Min level of alcohol use: Four drinks per drinking occasion on a weekly basis Max level of alcohol use: Thirteen drinks per drinking occasion on a weekly basis Min level of drug use: Regular use of one drug (at a frequency of once a month or more often) Max level of drug use: Regular use of three drugs
6: Problem substance users	45	90th to 99.9th	Min level of alcohol use: Three drinks per drinking occasion on a weekly basis Max level of alcohol use: Fourteen drinks per drinking occasion several times a week Min level of drug use: Use of a number of drugs several times a year Max level of drug use: Regular use of five drugs

Table 4-2 Substance use behaviour in cases at the lower, mid and upper threshold in each group

Group	Group substance use index score range (T score)	Point in group range	Substance use index score (T score)	Behavioural example of substance use
Non substance users (n =62)	All 39.18	N/A	39.18	Non user of alcohol and drugs
Moderate drinkers (n = 41)	42.15 to 46.31	Lower end Mid point Higher end	42.15 43.93 45.72	Three drinks per drinking occasion once or twice a year. Four drinks per drinking occasion several times a year. Four drinks per drinking occasion once a month.
Regular binge drinkers (n = 59)	46.90 to 53.44	Lower end Mid point Higher end	46.90 50.47 52.26	Six drinks per drinking occasion once a month. Seven drinks per drinking occasion two or three times a month. Two consequences of alcohol use. Ten drinks per drinking occasion weekly.
Binge drinkers who experiment with drugs (n = 57)	47.48 to 56.40	Lower end Mid point Higher end	47.49 51.65 56.40	Six drinks per drinking occasion several times a year. Inhalant use once or twice a year. Five drinks per drinking occasion weekly. One consequence of alcohol use. Cannabis use once or twice a year. Ten drinks per drinking occasion weekly. Cannabis use several times a year. Cocaine use once or twice a year.
Regular drug users (n = 34)	53.43 to 62.30	Lower end Mid point Higher end	53.43 58.16 62.30	Eight drinks per drinking occasion two or three times a month. Cannabis use once a month. Nine drinks per drinking occasion two or three times a month. Inhalant use several times a week. Cannabis use two or three times a month. Five drinks per drinking occasion two or three times a month. One consequence of alcohol use. Inhalant use once a week. Cannabis use once a month. Use of amphetamines, tranquilizers and poppers once or twice a year. Two consequences of drug use.
Problem substance users (n = 45)	62.31 to 80.67	Lower end Mid point Higher end	62.89 71.20 80.09	Five drinks per drinking occasion two or three times a month. Two consequences of alcohol use. Daily use of poppers. Inhalant use once a week. Cannabis use two or three times a month. Seven drinks per drinking occasion weekly. Six consequences of alcohol use. Use of cannabis and poppers two or three times a month. Use of tranquilizers once a month. Inhalant use several times a year. Cocaine and opiate use once or twice a year. Two consequences of drug use. Ten drinks per drinking occasion several times a week. Six consequences of alcohol use. Daily cannabis use. Weekly use of cocaine. Use of ecstasy two or three times a month. Use of amphetamines and hallucinogens several times a year. Use of tranquilizers once or twice a year. Four consequences of drug use.



CHAPTER FIVE

Continuum of Use Categories, Clinical Group and Demographic and Substance Use Related Variables

This chapter addresses the question: How do the groups generated from the substance use index compare to each other and to the group of young people who attended the residential treatment programme (the clinical group) on demographic and substance use related variables?

DEMOGRAPHIC CHARACTERISTICS OF COMMUNITY SUBSTANCE USE AND CLINICAL GROUPS

SOCIO ECONOMIC STATUS

Chi square analysis revealed a significant difference between groups in relation to parental socio economic status (SES) (as outlined in Table 5-1). The parent with the highest occupational status was the index used for each participant. SES categories from the Irish census based social class scale (O'Hare, Whelan and Commins, 1991) were collapsed from six to three as follows: "higher and lower professional"; "skilled manual, semi skilled manual and unskilled manual"; "other non-manual" and "Unemployed" was included as an additional category. Analysis indicated that parents of

non-substance users were significantly more likely to fall in the category of "higher and lower professional". Parents of cases in the clinical group were significantly more likely to fall in the "other non-manual" SES category.

PARENTAL SEPARATION

As reported in table 5-1 parents of moderate drinkers were significantly less likely to be separated while parents of young people from the clinical group were significantly more likely to be separated.

GENDER

Chi square analysis revealed no significant difference between groups on gender (see table 5-1).

AGE

A one-way ANOVA indicated a significant difference between groups on age (as reported in Table 5-1). Planned post hoc comparisons showed that the regular binge drinkers and the clinical group were older than the non-substance users, the moderate drinkers and the regular drug users. The binge drinkers who experiment with drugs were older than

the non-substance users. There was no difference in the age of the clinical group, the regular binge drinkers, the binge drinkers who experiment with drugs and the problem substance users. The non-substance users, the moderate drinkers, the regular drug users and the problem substance users did not differ on age. And there was no difference observed between the moderate drinkers, the binge drinkers who experiment with drugs, the regular drug users and the problem substance users.

COMPARISONS BETWEEN COMMUNITY SUBSTANCE USE AND CLINICAL GROUPS ON SUBSTANCE USE VARIABLES

AGE OF FIRST DRINK

A one-way ANOVA revealed a significant difference between groups on age of first drink (see Table 5-2). Post hoc analyses indicated the following differences: The regular drug users reported taking their first drink at a younger age than the moderate drinkers and the regular binge drinkers. The problem substance users and the clinical

group indicated a younger age of first drink compared to the moderate drinkers, the regular binge drinkers and the binge drinkers who experiment with drugs. The moderate drinkers, regular binge drinkers and binge drinkers who experiment with drugs did not differ on age of first drink. There was no difference seen between the regular drug users, the problem substance users and the clinical group on age of first drink.

AGE OF FIRST DRUG USE

A significant difference was also seen between groups on age of first drug use (as outlined in Table 5-2). The regular drug users and members of the clinical group reported a younger age of first drug use than the binge drinkers who experiment with drugs. The problem substance users reported a younger age of first drug use compared to the binge drinkers who experiment with drugs and the regular drug users. The regular drug users and the clinical group did not differ on age of first drug use and the problem substance users did not differ on age of first drug use in comparison to the clinical group.

CONSEQUENCES OF ALCOHOL USE

Groups differed significantly on number of consequences reported from alcohol use (as indicated in Table 5-2). The regular drug users and the binge drinkers who experiment with drugs reported more consequences than the

moderate drinkers. The problem substance users reported more consequences than all the other groups with the exception of the clinical group. The clinical group reported more consequences than all other groups. Groups two and three did not differ on number of consequences from alcohol use and no difference was seen either between groups three, four and five.

CONSEQUENCES OF DRUG USE

The problem substance users reported more consequences from drug use than the binge drinkers who experiment with drugs and the regular drug users who did not differ (see Table 5-2). The clinical group reported more consequences from drug use compared to all other groups.

TYPICAL NUMBER OF DRINKS

Groups differed on typical number of drinks consumed per drinking session (as outlined in Table 5-2). The regular binge drinkers, the binge drinkers who experiment with drugs and the regular drug users did not differ and all reported a higher number of typical drinks compared to the moderate drinkers. The problem substance users indicated consuming more drinks than the moderate drinkers and the regular binge drinkers. No difference was observed between the problem substance users, the binge drinkers who experiment with drugs and the regular drug users on typical number of drinks consumed. The clinical

group reported a greater number of typical drinks per drinking episode compared to all other groups.

NUMBER OF TIMES HUNG OVER FROM ALCOHOL USE PER MONTH

A one-way anova revealed a significant difference was observed between groups on number of times hung-over from alcohol use per month (reported in Table 5-2). The regular binge drinkers and the binge drinkers who experiment with drugs reported a greater number of hang-overs than the moderate drinkers. The regular drug users reported more hang-overs than the moderate drinkers and the binge drinkers. The problem substance users indicated a greater number of times hung-over than groups two, three and four. The clinical group reported being hung-over more often than all other groups with the exception of the problem substance users.

NUMBER OF "COME DOWNS" FROM DRUG USE PER MONTH

"Come down" is a term used to describe the aversive physical and psychological after effects of using a drug. A one-way anova indicated a significant difference between groups on number of "comedowns" from drug use per month (see Table 5-2). Groups six and seven did not differ and reported a greater number of "come downs" from drug use per month than groups four and five.

Table 5-1 Demographic Characteristics of Six Substance Use Groups and the Clinical Group

Variable	Group 1 Non substance users (n=62) mean (SD)	Group 2 Moderate drinkers (n=41) mean (SD)	Group 3 Regular binge drinkers (n=59) mean (SD)	Group 4 Binge drinkers who experiment with drugs (n=57) mean (SD)	Group 5 Regular drug users (n=34) mean (SD)	Group 6 Problem Substance users (n=45) mean (SD)	Group 7 Clinical group (n=30) mean (SD)	Chi Square or F observed	Interpretation	
PARENTAL SOCIO ECONOMIC STATUS										
Higher and lower professional										
	38 (63.3%)	21 (51.2%)	28 (48.3%)	25 (46.3%)	11 (32.4%)	12 (27.3%)	8 (26.7%)	$\chi^2 = 30.57^*$		
Other non manual										
	7 (11.7%)	6 (14.6%)	7 (12.1%)	6 (11.1%)	7 (20.6%)	8 (18.2%)	9 (30%)			
Skilled manual, semi-skilled manual and unskilled manual										
	11 (18.3%)	12 (29.3%)	22 (37.9%)	20 (37%)	13 (38.2%)	19 (43.2%)	9 (30%)			
Unemployed										
	4 (6.7%)	2 (4.9%)	1 (1.7%)	3 (5.6%)	3 (8.8%)	5 (11.4%)	4 (13.3%)			
Parents separated										
Yes	9 (14.8%)	2 (4.9%)	8 (14%)	13 (23.2%)	9 (26.5%)	10 (22.7%)	14 (46.7%)	$\chi^2 = 22.85^{**}$		
No	52 (85.2%)	39 (95.1%)	49 (86%)	43 (76.8%)	25 (73.5%)	34 (77.3%)	16 (53.3%)			
Gender										
Male	32 (51.6%)	15 (36.6%)	27 (45.8%)	28 (49.1%)	16 (47.1%)	20 (44.4%)	20 (66.7%)	$\chi^2 = 7.03$		
Female	30 (48.4%)	26 (63.4%)	32 (54.2%)	29 (50.9%)	18 (52.9%)	25 (55.6%)	10 (33.3%)			

Table 5-1 Continued

Age									
	16.00 (1.00)	16.14 (1.06)	16.91 (1.32)	16.61 (1.09)	16.00 (1.25)	16.71 (1.39)	17.43 (1.25)	7.92***	3,7>1,2,5 4>1 7=3=4=6 1=2=5=6 4=2=5=6

Note: SD: Standard deviation; Group sizes vary slightly across variables; *p<.05, **p<.01, ***p<.001. Result in relation to parental unemployment needs to be interpreted with caution as more than 20% of cells had expected count less than 5.

Table 5-2 Comparison Between the Six Substance Use and Clinical Groups on Substance Use Related Variables

Variable	Group 1 Non substance users (n=62) mean (SD)	Group 2 Moderate drinkers (n=41) mean (SD)	Group 3 Regular binge drinkers (n=59) mean (SD)	Group 4 Binge drinkers who experiment with drugs (n=57) mean (SD)	Group 5 Regular drug users (n=34) mean (SD)	Group 6 Problem Substance users (n=45) mean (SD)	Group 7 Clinical group (n=30) mean (SD)	F observed	Interpretation
Age of first drink									
	N/A	14.22 (1.49)	14.05 (1.52)	13.52 (1.53)	12.67 (1.12)	12.17 (1.11)	12.40 (1.63)	16.16***	5<2,3 6<2,3,4 7<2,3,4 2=3=4 5=6=7
Age of first drug use									
	N/A	N/A	N/A	15.13 (1.48)	14.31 (0.96)	13.50 (1.51)	13.26 (2.33)	10.73***	5<4 6<4,5 7<4 5=7 6=7
Consequences of alcohol use									
	N/A	0.26 (0.50)	0.62 (1.14)	1.10 (1.45)	1.44 (1.67)	3.42 (2.23)	6.23 (1.86)	77.03***	4>2 5>2 6>2,3,4,5 7>2,3,4,5,6 2=3 3=4=5
Consequences of drug use									
	N/A	N/A	--	0.08 (0.28)	0.26 (0.56)	1.95 (1.94)	5.13 (2.60)	81.40***	6>4,5 7>4,5,6 4=5
Typical number or drinks									
	N/A	3.04 (0.86)	6.76 (1.69)	7.0 (1.85)	6.85 (2.48)	8.31 (2.77)	12.53 (4.22)	58.55***	3>2 4>2 5>2 6>2,3 7>2,3,4,5,6 3=4=5 4=5=6
Number of times hungover from alcohol use per month									
	N/A	0.53 (0.97)	1.53 (1.39)	2.08 (1.99)	2.88 (2.01)	4.68 (3.84)	8.73 (7.82)	27.03***	3>2 4>2 5>2,3 6>2,3,4 7>2,3,4,5 3=4, 5=4, 5=6, 6=7
Number of "come downs" from drug use per month									
	N/A	N/A	N/A	0.05 (0.29)	0.23 (0.69)	3.31 (6.54)	7.86 (8.47)	19.06***	6>4,5 7>4,5 4=5 6=7

Note: SD: Standard deviation; Group sizes vary slightly across variables; *p<.05, **p<.01, ***p<.001.

COMPARISON BETWEEN COMMUNITY SUBSTANCE USE AND CLINICAL GROUPS ON SUBSTANCE DEPENDENT BEHAVIOUR

ALCOHOL DEPENDENT BEHAVIOUR

As reported in Table 5-3 chi square analyses revealed that groups differed significantly on the following variables: the amount of time spent organising their next drinking session; taking more alcohol to avoid the withdrawal symptoms of being physically

uncomfortable or sick and tolerance defined by needing to drink more to get the same effect. Group two (moderate drinkers) were less likely to report spending much time organising their next drinking session. Group two were significantly less likely to report having to drink more to get the same effect. Group two were also less likely to report having taken more alcohol to avoid being physically uncomfortable or sick. Groups six (problem substance users) and seven (clinical group) were both more likely to report taking more alcohol to avoid being physically uncomfortable or sick.

DRUG DEPENDENT BEHAVIOUR

Chi square analyses also indicated group differences on the same variables in relation to drug use (see Table 5-3). Group four (binge drinkers who experiment with drugs) were less likely to report spending much time organising their next drug taking session, taking more drugs to get the same effect and taking more drugs to avoid being physically uncomfortable or sick. Conversely, group seven (clinical group) were more likely to report spending much time organising their next drug taking session, taking more drugs to get the same effect and taking more drugs to avoid being physically uncomfortable or sick.

Table 5-3: Substance Dependent Behaviour

Variable	Group 1 Non substance users (n=62) mean (SD)	Group 2 Moderate drinkers (n=41) mean (SD)	Group 3 Regular binge drinkers (n=59) mean (SD)	Group 4 Binge drinkers who experiment with drugs (n=57) mean (SD)	Group 5 Regular drug users (n=34) mean (SD)	Group 6 Problem Substance users (n=45) mean (SD)	Group 7 Clinical group (n=30) mean (SD)	Chi Square observed
Alcohol dependent behaviour								
Spend a lot of time organising next drinking session								
Yes	N/A	5 (12.5%)	19 (32.2%)	22 (39.3%)	17 (50%)	22 (48.9%)	13 (43.3%)	$\chi^2 = 16.69^{**}$
No		35 (87.5%)	40 (67.8%)	34 (60.7%)	17 (50%)	23 (51.1%)	17 (56.7%)	
Have taken more alcohol so not sick								
Yes	N/A	1 (2.6%)	8 (13.6%)	7 (12.3%)	13 (38.2%)	18 (40%)	18 (60%)	$\chi^2 = 48.15^{***}$
No		38 (97.4%)	51 (86.4%)	50 (87.7%)	21 (61.8%)	27 (60%)	12 (40%)	
Have to drink more to get the same effect								
Yes	N/A	7 (17.5%)	31 (52.5%)	42 (73.7%)	26 (76.5%)	33 (73.3%)	24 (80%)	$\chi^2 = 48.50^{***}$
No		33 (82.5%)	28 (47.5%)	15 (26.3%)	8 (23.5%)	12 (26.7%)	6 (20%)	
Drug dependent behaviour								
Spend a lot of time organising next drug taking session								
Yes	N/A	N/A	N/A	0 (0%)	1 (2.9%)	10 (22.2%)	18 (60%)	$\chi^2 = 54.91^{***}$
No				56 (100%)	33 (97.1%)	35 (77.8%)	12 (40%)	
Have taken more drugs so not sick								
Yes	N/A	N/A	N/A	2 (3.6%)	4 (11.8%)	8 (17.8%)	21 (70%)	$\chi^2 = 55.28^{***}$
No				54 (96.4%)	30 (88.2%)	37 (82.2%)	9 (30%)	
Have taken more drugs to get the same effect								
Yes	N/A	N/A	N/A	4 (7.1%)	6 (17.6%)	17 (37.8%)	25 (83.3%)	$\chi^2 = 56.58^{***}$
No				52 (92.9%)	28 (82.4%)	28 (62.2%)	5 (16.7%)	

Note: SD: Standard deviation; Group sizes vary slightly across variables; *p<.05, **p<.01, ***p<.001.

SENSE OF CONTROL OVER SUBSTANCE USE

This set of questions for alcohol and drug use (four for each) was not a forced choice response format and cases could endorse a number of responses, one to four. Chi square analyses indicated that the clinical group were less likely to endorse that their alcohol use was not a problem or that they were able to control their alcohol use. It can be seen from Table 5-4, that most of the clinical group either reported that they felt bad about their alcohol use (30%) or needed help to control it (56.7%). In comparison, relatively few members of the other groups reported this. Interestingly, few of the problem substance users who were comparative to the clinical group in some features of their alcohol use reported feeling bad about their alcohol use (15.6%) or that they needed help to control it (2.2%).

SENSE OF CONTROL OVER DRUG USE

Results of chi square analyses showed that the clinical group were less likely to indicate that drugs were no problem (see table 5-4). Group four, binge drinkers who experiment with drugs were more likely to report that drugs were no problem. Group four were also less likely to endorse that they could control their drug use and set limits on themselves. This response implies more drug use than the response that drug use is no problem, which might explain why group four who had a lower level of drug use endorsed it less often.

The response: "I often feel bad about my drug use" was endorsed by three cases in the regular drug use group (8.8%), nine (20%) members of the problem substance user group and five cases (16.7%) in the clinical group. Most of the clinical group reported that they needed help to control their drug

use (63.3%) while relatively few of the other groups including the problem substance users endorsed this response.

EVER SEEN PROFESSIONAL BECAUSE OF A PROBLEM WITH ALCOHOL/DRUG USE?

Chi square analyses indicated that the clinical group were more likely to report that they had seen a professional regarding their alcohol or drug use while the moderate drinkers, the regular binge drinkers and the binge drinkers who experiment with drugs were less likely to indicate same. One member (1.7%) of the regular binge drinker group, two cases (3.5%) from the binge drinkers who experiment with drugs, four (11.8%) of the regular drug users, six (13.3%) of the problem substance users and all of the clinical group reported having seen a professional over a problem with alcohol/drug use (see Table 5-4).

Table 5-4 Sense of Control Over Substance Use

Sense of control over	Group 1 Non substance users (n=62) mean (SD)	Group 2 Moderate drinkers (n=41) mean (SD)	Group 3 Regular binge drinkers (n=59) mean (SD)	Group 4 Binge drinkers who experiment with drugs (n=57) mean (SD)	Group 5 Regular drug users (n=34) mean (SD)	Group 6 Problem Substance users (n=45) mean (SD)	Group 7 Clinical group (n=30) mean (SD)	Chi Square observed χ^2
Sense of control over alcohol use								
Alcohol use is no problem at all								
Yes	N/A	17 (41.5%)	21 (35.6%)	24 (42.9%)	16 (47.1%)	17 (37.8%)	2 (6.7%)	14.602*
Can control alcohol use and set limits								
Yes	N/A	27 (65.9%)	42 (71.2%)	35 (62.5%)	17 (50%)	23 (51.1%)	5 (16.7%)	27.894***
Feel bad about my alcohol use								
Yes	N/A	2 (4.9%)	5 (8.5%)	3 (5.4%)	2 (5.9%)	7 (15.6%)	9 (30%)	
Need help to control alcohol use								
Yes	N/A	0 (0%)	0 (0%)	1 (1.8%)	0 (0%)	1 (2.2%)	17 (56.7%)	
Sense of control over drug use								
Drug use is no problem at all								
Yes	N/A	N/A	N/A	52 (91.2%)	19 (55.9%)	22 (48.9%)	4 (13.3%)	52.141***
Can control drug use and set limits								
Yes	N/A	N/A	N/A	5 (8.8%)	13 (38.2%)	15 (33.3%)	5 (16.7%)	14.411**
Feel bad about my drug use								
Yes	N/A	N/A	N/A	0 (0%)	3 (8.8%)	9 (20%)	5 (16.7%)	
Need help to control drug use								
Yes	N/A	N/A	N/A	1 (1.8%)	0 (0%)	1 (2.2%)	19 (63.3%)	
Seen professional because of a problem with alcohol/drug use								
Yes	N/A	0 (0%)	1 (1.7%)	2 (3.5%)	4 (11.8%)	6 (13.3%)	30 (100%)	162.386***
No		41 (100%)	58 (98.3%)	55 (96.5%)	30 (88.2%)	39 (86.7%)	0 (0%)	

Note: SD: Standard deviation; Group sizes vary slightly across variables. Chi square statistics were not computed for variables which had more than 20% of cells with expected counts less than five.

COMPARISON BETWEEN COMMUNITY SUBSTANCE USE AND CLINICAL GROUPS ON FREQUENCY OF DRINKING, LIFE TIME RATE OF DRUG USE AND FREQUENCY OF DRUG USE

FREQUENCY OF DRINKING

As outlined in Table 5-5, a frequency

count revealed that six (20%) of the clinical group reported drinking daily while no members from the other groups indicated this frequency of alcohol use. The majority of the clinical group (76.7%) reporting drinking several times a week. Thirteen (28.9%) of the problem substance users, three (8.8%) of the regular drug users, and one (1.8%) of the binge drinkers who

experiment with drugs reported drinking several times a week. Drinking on a weekly basis was the most frequent level of use reported by cases from groups three (45.8%), four (45.6%), five (52.9%) and six (62.2%). Drinking several times a year was the most frequent level of use indicated by members of group two (43.9%).

Table 5-5 Frequency of Drinking

Frequency of drinking	Group 1 Non substance users (n=62) mean (SD)	Group 2 Moderate drinkers (n=41) mean (SD)	Group 3 Regular binge drinkers (n=59) mean (SD)	Group 4 Binge drinkers who experiment with drugs (n=57) mean (SD)	Group 5 Regular drug users (n=34) mean (SD)	Group 6 Problem Substance users (n=45) mean (SD)	Group 7 Clinical group (n=30) mean (SD)
Once or twice a year	N/A	4 (9.8%)	0 (0%)	0 (0%)	1 (2.9%)	0 (0%)	0 (0%)
Several times a year	N/A	18 (43.9%)	0 (0%)	6 (10.5%)	0 (0%)	0 (0%)	0 (0%)
Once a month	N/A	10 (24.4%)	6 (10.2%)	3 (5.3%)	2 (5.9%)	0 (0%)	0 (0%)
2/3 times a month	N/A	8 (19.5%)	26 (44.1%)	21 (36.8%)	10 (29.4%)	4 (8.9%)	0 (0%)
Weekly	N/A	1 (2.4%)	27 (45.8%)	26 (45.6%)	18 (52.9%)	28 (62.2%)	1 (3.3%)
Several times a week	N/A	0 (0%)	0 (0%)	1 (1.8%)	3 (8.8%)	13 (28.9%)	23 (76.7%)
Daily	N/A	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	6 (20%)

Note: SD: Standard deviation. Chi square statistics were not computed for frequency of drinking because all variables had more than 20% of cells with expected counts less than five.

LIFETIME USE OF VARIOUS DRUGS

Chi square analyses indicated that the problem substance user and the clinical group were more likely to report lifetime use of ecstasy, amphetamines, cocaine and hallucinogens. The clinical group were more likely to indicate use of tranquilisers and problem substance users endorsed lifetime use of poppers and inhalants more frequently. Cases in the binge drinkers who experiment with drugs group were less likely to indicate

lifetime use of ecstasy, amphetamines, tranquilisers, cocaine, hallucinogens and poppers but not inhalants.

Cannabis was reported as the drug with the highest lifetime use (ever used) among all drug-using groups (see Table 5-6). The drugs with the next highest rates of lifetime use among groups are outlined. Among the clinical group, ecstasy (86.7%), cocaine (83.3%), tranquilizers (73.3%) and amphetamines (70%) had the highest rates of lifetime use.

Inhalants (80%), poppers (68.9%), cocaine (66.7%) and amphetamines (62.2%) had the highest rates of lifetime use among problem substance users. Inhalants (55.9%), poppers (44.1%), tranquilizers (29.4%) and both cocaine and amphetamines (20.6%) had the highest rates of lifetime use among regular drug users. Members of the binge drinkers who experiment with drugs group reported highest lifetime use of inhalants (50.9%), poppers (15.8%), cocaine (12.3%) and both amphetamines and ecstasy (3.5%).

Table 5-6 Life Time Use of Various Drugs

Type of drug	Group 1 Non substance users (n=62) mean (SD)	Group 2 Moderate drinkers (n=41) mean (SD)	Group 3 Regular binge drinkers (n=59) mean (SD)	Group 4 Binge drinkers who experiment with drugs (n=57) mean (SD)	Group 5 Regular drug users (n=34) mean (SD)	Group 6 Problem Substance users (n=45) mean (SD)	Group 7 Clinical group (n=30) mean (SD)	Chi Square observed χ^2
Ever used cannabis								
Yes	N/A	N/A	N/A	44 (77.2%)	31 (91.2%)	45 (100%)	30 (100%)	
Ever used ecstasy								
Yes	N/A	N/A	N/A	2 (3.5%)	7 (20.6%)	24 (53.3%)	26 (86.7%)	69.293***
Ever used amphetamines								
Yes	N/A	N/A	N/A	2 (3.5%)	7 (20.6%)	28 (62.2%)	21 (70%)	58.810***
Ever used tranquilizers								
Yes	N/A	N/A	N/A	1 (1.8%)	10 (29.4%)	22 (48.9%)	22 (73.3%)	52.470***
Ever used cocaine								
Yes	N/A	N/A	N/A	7 (12.3%)	7 (20.6%)	30 (66.7%)	25 (83.3%)	59.507***
Ever used heroin								
Yes	N/A	N/A	N/A	0 (0%)	0 (0%)	0 (0%)	4 (13.3%)	
Ever used opiates								
Yes	N/A	N/A	N/A	0 (0%)	1 (2.9%)	6 (13.3%)	7 (23.3%)	
Ever used hallucinogens								
Yes	N/A	N/A	N/A	1 (1.8%)	4 (11.8%)	19 (42.2%)	13 (43.3%)	34.043***
Ever used poppers								
Yes	N/A	N/A	N/A	9 (15.8%)	15 (44.1%)	31 (68.9%)	18 (60%)	32.844***
Ever used inhalants								
Yes	N/A	N/A	N/A	29 (50.9%)	19 (55.9%)	36 (80%)	16 (53.3%)	10.289*

Note: SD: Standard deviation. Chi square statistics were not calculated for variables which had more than 20% of cells with expected counts less than five

FREQUENCY OF DRUG USE

Frequency of use of the four most commonly used drugs: cannabis, inhalants, poppers and cocaine, by the drug using groups are outlined in this section (see Table 5-6).

twenty-seven cases (47.4%) reported cannabis use at a frequency of once or twice a year and twelve members of the group (21.1%) indicated use at a rate of several times a year

use at a frequency of 2/3 times a month. Twenty (35.1%) members of the binge drinkers who experiment with drugs group reported inhalant use at a rate of once or twice a year.

FREQUENCY OF CANNABIS USE

Twenty percent of problem substance users reported daily use of cannabis compared to 63.3% of the clinical group. Six (13.3%) problem substance users indicated cannabis use at a frequency of several times a week. Two (5.9%) regular drug users reported cannabis use at a frequency of several times a week and seven (20.6%) indicated use at a frequency of once a week. Among binge drinkers who experiment with drugs,

FREQUENCY OF INHALANT USE

One member of the clinical group (3.3%) and the regular drug user group (2.9%) reported daily use of inhalants. Two members (5.9%) of the regular drug user group and one member (2.2%) of the problem substance user group indicated inhalant use at a frequency of several times a week. Three cases from groups five (8.8%), six (6.7%) and seven (10%) all reported inhalant use at a frequency of once a week. Seven (15.6%) problem substance users indicated inhalant

FREQUENCY OF POPPERS USE

Four (8.9%) of the problem substance users indicated daily use of poppers compared to two members (6.7%) of the clinical group. Two (4.4%) members of group six reported use several times a week while this level of use was indicated by one (3.3%) clinical group member. Six (13.3%) of the problem substance users reported use of poppers at a frequency of 2/3 times a month. Two (5.9%) regular drug users indicated weekly use of poppers while three cases

(8.8%) reported use at a frequency of once a month. Six cases (10.5%) from the binge drinkers who experiment with drugs group reported use once or twice a year and one (1.8%) case indicated use at a frequency of several times a year.

FREQUENCY OF COCAINE USE

Three (10%) of the clinical group reported daily use of cocaine. One (2.2%) problem substance user indicated use of cocaine at a frequency of several times a week compared to

nine (30%) cases that indicated this level of use in the clinical group. One problem substance user reported weekly cocaine use while three cases (10%) from the clinical group indicated this frequency of use. Four (8.9%) problem substance users reported cocaine use 2/3 times a month. No member of the regular drug user group reported cocaine use more frequently than several times a year. Three (8.8%) and two (5.9%) regular drug users reported cocaine use at a frequency of once or twice a year and

several times a year respectively. Six (10.5%) cases in group four indicated cocaine use at a frequency of once or twice a year.

While it was not possible to determine statistical significance, little difference was observed between the regular drug users, the problem substance users and the clinical group on frequency of inhalant and popper use while the clinical group seemed to report greater use of cannabis and cocaine.

Table 5-7: Comparison Between Groups on Frequency of Drug Use (Four Most Frequently Used Drugs)

Frequency of drug use	Group 1 Non substance users (n=62) mean (SD)	Group 2 Moderate drinkers (n=41) mean (SD)	Group 3 Regular binge drinkers (n=59) mean (SD)	Group 4 Binge drinkers who experiment with drugs (n=57) mean (SD)	Group 5 Regular drug users (n=34) mean (SD)	Group 6 Problem Substance users (n=45) mean (SD)	Group 7 Clinical group (n=30) mean (SD)
Cannabis							
Less than once a year	N/A	N/A	N/A	5 (8.77%)	1 (2.94%)	1 (2.22%)	0 (0%)
Once or twice a year	—	—	—	27 (47.4%)	1 (2.9%)	5 (11.1%)	2 (6.7%)
Several times a year	—	—	—	12 (21.1%)	2 (5.9%)	10 (22.2%)	4 (13.3%)
Once a month	—	—	—	0 (0%)	10 (29.4%)	4 (8.9%)	1 (3.3%)
2/3 times a month	—	—	—	0 (0%)	8 (23.5%)	8 (17.8%)	0 (0%)
Once a week	—	—	—	0 (0%)	7 (20.6%)	2 (4.4%)	2 (6.7%)
Several times a week	—	—	—	0 (0%)	2 (5.9%)	6 (13.3%)	2 (6.7%)
Daily	—	—	—	0 (0%)	0 (0%)	9 (20%)	19 (63.3%)
Inhalants							
Less than once a year	N/A	N/A	N/A	6 (10.52%)	5 (14.7%)	8 (17.77%)	6 (20%)
Once or twice a year	—	—	—	20 (35.1%)	0 (0%)	8 (17.8%)	2 (6.7%)
Several times a year	—	—	—	3 (5.3%)	3 (8.8%)	7 (15.6%)	3 (10%)
Once a month	—	—	—	0 (0%)	5 (14.7%)	2 (4.4%)	1 (3.3%)
2/3 times a month	—	—	—	0 (0%)	0 (0%)	7 (15.6%)	0 (0%)
Once a week	—	—	—	0 (0%)	3 (8.8%)	3 (6.7%)	3 (10%)
Several times a week	—	—	—	0 (0%)	2 (5.9%)	1 (2.2%)	0 (0%)
Daily	—	—	—	0 (0%)	1 (2.9%)	0 (0%)	1 (3.3%)
Poppers							
Less than once a year	N/A	N/A	N/A	2 (3.5%)	1 (2.94%)	6 (13.33%)	7 (23.33%)
Once or twice a year	—	—	—	6 (10.5%)	6 (17.6%)	10 (22.2%)	4 (13.3%)
Several times a year	—	—	—	1 (1.8%)	3 (8.8%)	6 (13.3%)	3 (10.0%)
Once a month	—	—	—	0 (0%)	3 (8.8%)	1 (2.2%)	0 (0%)
2/3 times a month	—	—	—	0 (0%)	0 (0%)	6 (13.3%)	1 (3.3%)
Once a week	—	—	—	0 (0%)	2 (5.90%)	0 (0%)	0 (0%)
Several times a week	—	—	—	0 (0%)	0 (0%)	2 (4.4%)	1 (3.3%)
Daily	—	—	—	0 (0%)	0 (0%)	4 (8.9%)	2 (6.7%)

Table 5-7: Continued

Frequency of drug use	Group 1 Non substance users (n=62) mean (SD)	Group 2 Moderate drinkers (n=41) mean (SD)	Group 3 Regular binge drinkers (n=59) mean (SD)	Group 4 Binge drinkers who experiment with drugs (n=57) mean (SD)	Group 5 Regular drug users (n=34) mean (SD)	Group 6 Problem Substance users (n=45) mean (SD)	Group 7 Clinical group (n=30) mean (SD)
Cocaine							
Less than once a year	N/A	N/A	N/A	1 (1.75%)	2 (5.88%)	3 (6.66%)	1 (3.33%)
Once or twice a year	—	—	—	6 (10.5%)	3 (8.8%)	13 (28.9%)	4 (13.3%)
Several times a year	—	—	—	0 (0%)	2 (5.9%)	8 (17.8%)	5 (16.7%)
Once a month	—	—	—	—	—	—	—
2/3 times a month	—	—	—	0 (0%)	0 (0%)	4 (8.9%)	0 (0%)
Once a week	—	—	—	0 (0%)	0 (0%)	1 (2.2%)	3 (10%)
Several times a week	—	—	—	0 (0%)	0 (0%)	1 (2.2%)	9 (30%)
Daily	—	—	—	0 (0%)	0 (0%)	0 (0%)	3 (10%)

Note: SD: Standard deviation. Chi square statistics were not computed for frequency of drug use because all variables had more than 20% of cells with expected counts less than five

SUMMARY

Some significant differences were observed between substance use groups on demographic variables. Regarding parental SES, parents of non substance users were more likely to fall in the category of “higher and lower professional” while parents of the clinical group fell in the category of “other non manual” more frequently. Parents of the moderate drinker group were less likely to be separated while parents of the clinical group were more often separated. No difference was observed between groups on gender. The clinical and regular binge drinker groups were older than the non-substance user, the moderate drinker and the regular drug user groups. The binge drinkers who experiment with drugs were also older than the non-substance users.

In relation to substance use variables, the clinical group were clearly demarcated from the community substance use groups on some variables while on other variables they overlapped with the regular drug user group and most often the problem substance user group.

The clinical group did not differ from the regular drug user or the problem substance user groups on age of first drink or age of first drug use. The clinical and problem substance user groups did not differ on

number of “hangovers” and “come downs” from alcohol and drug use per month. Regarding substance dependent behaviour, the clinical and problem substance user groups were both more likely to report withdrawal symptoms from alcohol. Interestingly, the clinical group were not more likely than other groups to indicate spending much time organising their next drinking session or tolerance (having to drink more to get the same effect).

In comparison to all other groups, the clinical group reported more consequences of alcohol and drug use and a greater number of typical drinks per drinking episode. They also appeared to report a higher frequency of alcohol use than the community groups although it was not possible to determine statistical significance. In relation to drugs, the clinical group alone were more likely to endorse spending much time organising their next drug taking session and symptoms of tolerance and withdrawal. With regard to sense of control over substance use, the clinical group were less likely to report that alcohol and drugs were no problem or that they could control their alcohol use.

Concerning lifetime use of drugs, both the problem substance user and clinical groups more frequently reported lifetime use of

ecstasy, amphetamines, cocaine and hallucinogens. The clinical group indicated lifetime use of tranquilisers more often and the problem substance user group endorsed lifetime use of inhalants and poppers more frequently. While it was not possible to determine statistical significance for frequency of drug use, it appeared that there was little difference between the regular drug users, the problem substance users and the clinical group on frequency of inhalant and popper use. However, there seemed to be a clearer distinction between the clinical group and the community substance use groups on frequency of cannabis and cocaine use with the clinical group appearing to indicate higher use.

Generally in terms of the profile of groups on substance use variables, groups higher up the continuum of substance use tended to be more similar and groups lower down the continuum were more alike. These findings indicate that the substance use groups generated in chapter four show substance use related behaviour which is consistent with their categorisation on the continuum of substance use. Thus, these group distinctions appear to be meaningful which supports the view that questions concerning differences between these groups on aspects of psychological functioning can be addressed in the next chapter with some confidence.



CHAPTER SIX

Continuum of Use Categories, Clinical Group, and Psychological Variables

This chapter addresses the question: How do the substance use index groups generated in research question two compare to each other and the clinical group on the the following aspects of psychological functioning: coping style, motivations for alcohol and drug use and family functioning?

A series of one way ANOVAs were computed to compare substance use index groups and the clinical group on coping and family functioning. Means, standard deviations, and results of one way ANOVA's for coping and family functioning variables are presented in Table 6-1. From this table it can be observed that significant main effects for groups occurred for all variables with the exception of "parental monitoring" and "drug using to conform". Planned post hoc analyses were conducted to explore the nature of these significant main effects. Scheffe multiple comparisons test was used when homogeneity of variance was observed. Dunnett's C

multiple comparisons were used to allow for inequality of variance which was observed in the case of the following nine variables: social diversion coping, distraction coping, problem solving, roles, general functioning, cohesion, drinking to cope, drinking to confirm and drug taking to cope.

Results regarding subscales on the Coping Inventory for Stressful Situations- Adolescent Version (CISS-A) are reported first followed by results concerning the subscales of the Family Assessment Device (FAD), subscales of the Family Environment Scale (FES), scales of parental knowledge and control and lastly scales of motives for drinking and drug taking.

COPING INVENTORY FOR STRESSFUL SITUATIONS - ADOLESCENT VERSION (CISS-A)

The CISS-A divides coping into "Task Focused" coping (which is considered

adaptive) Emotion focused coping (which is considered maladaptive) and "Avoidance" coping. Avoidance is sub-divided into "Social Diversion" and "Distraction" coping, which if used predominantly are also considered maladaptive but on occasion can be useful for a short period allowing time out from a stressful situation in order to marshal personal resources. (Endler and Parker, 1999). Higher scores indicate greater use of that coping approach.

On the maladaptive avoidance coping scales, some between group differences were observed as follows. Regarding social diversion coping, group three (regular binge drinkers) scored significantly higher than group one (non substance users). Groups three (regular binge drinkers) four (binge drinkers who experiment with drugs), five (regular drug users) and six (problem substance users) all had significantly higher scores on social diversion coping compared to group seven (clinical group). The clinical

group scored “slightly below average” (according to cut off scores cited by the test developers but within one standard deviation of the mean) at the 27th percentile of a normal adolescent population while all the community groups had social diversion scores in the average range compared to a normal adolescent population.

On distraction coping, regular binge drinkers (group three) scored significantly higher than non substance users (group one), moderate drinkers (group two), binge drinkers who experiment with drugs (group four), problem substance users (group six) and the clinical group (group seven) but did not differ from regular drug users (group five). However, all groups had scores in the average range compared to the scales normative data.

The regular binge drinkers (group three) were significantly higher than the non substance users (group one) and the moderate drinkers (group two) on avoidance coping. The regular binge drinkers (group three), binge drinkers who experiment with drugs (group four) and regular drug users (group five) also scored significantly higher than the clinical group (group seven) on avoidance coping. The regular binge drinkers scored “slightly above average” (according to cut off scores reported by the test developers but within one standard deviation of the mean) at the 79th percentile while all other groups scored in the average range.

On the emotion focused coping scale, a significant main effect was observed. However, post hoc analysis revealed no significant difference between groups. All community groups scored in the average range but the clinical group scored “slightly above average” at the 82nd percentile of a normal adolescent population.

On the adaptive task focused coping scale, all community groups (all scored in the average range) scored significantly higher compared to the clinical group who scored “much below average” (just over 1.50 standard deviations below the mean, mild clinical range) placing them at the 6th percentile of a normal adolescent population.

FAMILY ASSESSMENT DEVICE (FAD)

The FAD is based on the McMaster model of family functioning and consists of six subscales which measure different dimensions of family life and a general family functioning scale.

In terms of groups scoring on the FAD and FES subscales of family functioning, the “clinical range” refers to scoring at or above the cut off score of clinical families and the “non clinical range” refers to scoring below the cut off score for clinical families and in line with non clinical (normal) families from the normative data available on these measures.

On problem solving defined as a family’s ability to resolve affective and instrumental problems, the clinical group (group seven) reported more dysfunction than non-substance users (group one), regular binge drinkers (group three) and binge drinkers who experiment with drugs (group four). Problem substance users (group six) indicated lower problem solving in their families than non substance users (group one) and regular binge drinkers (group three). Using the cut off scores recommended by the McMaster group for distinguishing between non clinical and clinical families (Miller et al., 1990) groups one, three and four had scores which fell within the non clinical range while groups two, five, six and seven all scored within the clinical range.

A significant main effect was observed on the communication subscale which measures affective and instrumental communication but post hoc analysis did not reveal significant differences between groups. Groups four, five, six and seven all scored in the clinical range.

Compared to non substance users (group one) and regular binge drinkers (group three), problem substance users (group six) and the clinical group (group seven) both reported lower family functioning on family roles which measures the recurrent patterns of behaviour by which individuals fulfil routine family tasks. The problem substance users and the clinical group had scores which fell in the clinical range.

On affective responsiveness which is defined as the ability of a family to respond to a range of stimuli with the appropriate quality and quantity of feelings, the clinical group indicated lower family functioning than non substance users (group one) and regular binge drinkers (group three). The regular drug users, problem substance users and the clinical group all had scores which fell in line with clinical families from the normative data.

On affective involvement which refers to the extent to which the family as a whole shows interest in and values the activities and interests of individual family members, regular drug users (group five) and problem substance users (group six) reported lower family functioning compared to non substance users (group one). Groups four, five, six and seven all had scores which fell in the clinical range.

The clinical group reported lower family functioning than non substance users (group one) on behaviour control which assesses the extent to which a family maintains standards for behaviour. Groups four, five, six and seven all scored in line with clinical families from the normative data.

On general family functioning which measures the overall health of the family and consists of items which correlate highly with the six other subscales, regular drug users (group five), problem substance users (group six) and the clinical group (group seven) all indicated lower functioning compared to non substance users (group one). In addition, the problem substance user group (group six) reported lower general family functioning than the regular binge drinker group (group three). Groups five, six and seven scored in the clinical range.

FAMILY ENVIRONMENT SCALE (3RD EDITION, FES-III)

On the FES-III cohesion subscale, which measures the degree of commitment, help and support family members provide for one another, binge drinkers who experiment with drugs (group four), regular drug users (group five), problem substance users (group six) and the clinical group (group seven) all

indicated a lower level of cohesion in their families compared to non substance users (group one). On the basis of normative data reported by Moos and Moos (2002) for normal and clinical families, the problem substance user and the clinical group both scored in the clinical range.

The clinical group (group seven) scored higher on the FES-III conflict subscale which measures the amount of openly expressed conflict and anger among family members than non substance users (group one). Problem substance users (group six) reported higher family conflict than non substance users (group one) and regular binge drinkers (group three). However, all groups scored in line with normal families from the normative data.

PARENTAL MONITORING, KNOWLEDGE AND PARENTAL CONTROL

Groups did not differ on adolescent's perception of parental monitoring, that is their sense of the degree to which parents try to obtain information about their child's activities, whereabouts and friends.

Binge drinkers who experiment with drugs, regular drug users, problem substance users and the clinical group reported less parental knowledge operationalised as the extent to which parents are accurate in their knowledge of adolescents' whereabouts, activities and friends compared to non substance users. The problem substance user group also reported less parental knowledge than the regular binge drinker group. No normative data is available on this measure.

Parental control measures whether parents require their children to obtain their permission before going out and insist on being informed about their whereabouts, activities and associates. The problem substance users and the clinical group reported a lower level of parental control than the non substance user group. Problem substance users also indicated lower parental control in comparison to moderate drinkers. No normative data is available on this measure.

MOTIVES FOR DRINKING AND DRUG TAKING

A significant main effect was observed on drinking to cope, drinking to conform and drug using to cope. Planned post hoc comparisons revealed that the clinical group had significantly higher scores than all other groups (two, three, four, five and six) on drinking to cope which is defined as drinking to reduce or regulate negative emotions. The problem substance user group reported a higher level of drinking to cope than the moderate drinkers, the regular binge drinkers and the binge drinkers who experiment with drugs. Regular drug users indicated higher drinking to cope than the regular binge drinkers. Groups five and six scored in the borderline clinical range (their score was just over one standard deviation above the normative mean) while the clinical group scored in the severe clinical range (their score fell just over two standard deviations above the normative mean).

On drinking to conform which is defined as drinking to avoid social censure or rejection from peers, the moderate drinkers scored significantly higher than the clinical group. However, all groups scored in the average range.

The clinical group reported more drug taking to reduce or regulate negative emotions (to cope) than all other drug using groups (six, five and four). Problem substance users indicated more drug taking to cope than the regular binge drinkers who experiment with drugs and the regular drug users. The regular drug user group reported higher drug taking to cope than the binge drinkers who experiment with drugs. No normative data is available on the subscale drug taking to cope as it was adapted from drinking to cope for the purposes of the current study. However, if normative data on drinking to cope is considered for comparative purposes, the clinical group's score fell in the severe clinical range while group six, scored in the borderline clinical range and groups four and five had scores in the average range.

No difference was found between groups on drug taking to conform.

SUMMARY

The clinical group reported less use of social diversion and avoidance coping strategies compared to many of the community substance using groups. The regular binge drinkers tended to score higher than other groups on the avoidance coping scales in particular groups one, two and seven. Poorer task focused coping distinguished the clinical group from all community groups while groups did not differ on emotion focused coping.

The main trend in the results on family functioning was that groups four (binge drinkers who experiment with drugs), five (regular drug users), six (problem substance users), and seven (clinical group) who all reported alcohol and drug use, indicated poorer functioning on a number of variables compared to group one, the non-substance user group. Lower functioning was reported on an increasing number of variables relative to group one from group four to group seven. Between them, groups four, five, six and seven showed poorer functioning than group one on all variables measured (ten) with the exception of communication and parental monitoring on which none of the groups in the current study differed. Group two, the moderate drinkers and group three, the regular binge drinkers did not indicate lower family functioning than group one on any variables. Poorer functioning on a number of variables also distinguished the most problematic substance users, groups six and seven from groups with less problematic use. Observed less in the case of the moderate drinkers, the general pattern which emerged on family functioning variables was that groups further apart on the continuum of substance use showed most difference with those higher up the continuum, beginning at group four (binge drinkers who experiment with drugs) indicating poorer functioning.

Greater use of alcohol and drugs to cope relative to other groups characterised the clinical group in particular but also groups five and six. On conformity motives for substance use the only between group difference found was that the moderate drinker group reported drinking to conform more often than the clinical group.

Table 6-1: Differences Between Substance Use Index Groups and the Clinical Group on Coping and Family Functioning Variables

Variable	Group 1 Non substance users (n=62) mean (SD)	Group 2 Moderate drinkers (n=41) mean (SD)	Group 3 Regular binge drinkers (n=59) mean (SD)	Group 4 Binge drinkers who experiment with drugs (n=57) mean (SD)	Group 5 Regular drug users (n=34) mean (SD)	Group 6 Problem Substance users (n=45) mean (SD)	Group 7 Clinical group (n=30) mean (SD)	F observed	Interpretation
CISS-A Social Diversion									
	15.57 (5.36)	17.17 (5.33)	19.69 (3.75)	18.01 (4.29)	18.03 (4.56)	17.61 (4.75)	13.03 (5.72)	8.11***	3>1,7 4,5,6>7 2=3=4=5=6 1=2=4=5=6 1=2=7
Distraction									
	19.52 (5.70)	18.79 (4.84)	24.66 (5.03)	20.65 (7.18)	21.37 (5.24)	19.55 (4.84)	19.26 (6.20)	6.63***	3>1=2=4=6=7 3=5
Avoidance									
	46.45 (12.37)	47.69 (11.07)	58.50 (9.66)	51.27 (12.31)	52.43 (11.43)	50.97 (10.05)	41.53 (11.83)	10.00***	3>1,2,7 4,5>7 1=2=4=5=6 1=2=6=7 3=4=5=6
Emotion focused									
	40.26 (14.53)	41.67 (14.80)	43.98 (12.54)	44.47 (14.74)	44.90 (13.78)	46.50 (11.39)	50.90 (12.29)	2.53*	1=2=3=4=5=6=7
Task focused									
	49.95 (12.65)	49.23 (12.48)	53.47 (11.15)	49.81 (10.83)	44.65 (11.68)	46.35 (10.21)	32.80 (11.22)	12.00***	1=2=3=4=5=6>7
FAD Problem solving									
	2.12 (0.36)	2.38 (0.54)	2.19 (0.39)	2.28 (0.43)	2.44 (0.55)	2.50 (0.52)	2.71 (0.59)	7.50***	7>1,3,4 6>1,3 1=2=3=4=5 2=4=5=6 2=5=6=7
Communication									
	2.29 (0.37)	2.36 (0.45)	2.28 (0.40)	2.40 (0.38)	2.38 (0.38)	2.52 (0.45)	2.48 (0.41)	2.21*	1=2=3=4=5=6=7
Roles									
	2.17 (0.27)	2.24 (0.42)	2.17 (0.44)	2.29 (0.40)	2.35 (0.26)	2.47 (0.40)	2.48 (0.40)	5.05***	6,7>1,3 1=2=3=4=5 2=4=5=6=7
Affective Responsiveness									
	2.20 (0.50)	2.29 (0.66)	2.26 (0.53)	2.33 (0.57)	2.59 (0.54)	2.54 (0.59)	2.72 (0.67)	4.63***	7>1,3 1=2=3=4=5=6 2=4=5=6=7
Affective Involvement									
	2.07 (0.37)	2.24 (0.48)	2.23 (0.53)	2.38 (0.49)	2.50 (0.42)	2.48 (0.54)	2.37 (0.42)	4.98***	5,6>1 1=2=3=4=7 2=3=4=5=6=7
Behaviour Control									
	1.93 (0.32)	2.00 (0.36)	2.00 (0.43)	2.13 (0.36)	2.22 (0.38)	2.18 (0.39)	2.27 (0.44)	4.67***	7>1 1=2=3=4=5=6 2=3=4=5=6=7

Table 6-1 Continued

Variable	Group 1 Non substance users (n=62) mean (SD)	Group 2 Moderate drinkers (n=41) mean (SD)	Group 3 Regular binge drinkers (n=59) mean (SD)	Group 4 Binge drinkers who experiment with drugs (n=57) mean (SD)	Group 5 Regular drug users (n=34) mean (SD)	Group 6 Problem Substance users (n=45) mean (SD)	Group 7 Clinical group (n=30) mean (SD)	F observed	Interpretation
General Functioning									
	1.93 (0.33)	2.06 (0.53)	2.03 (0.51)	2.15 (0.53)	2.27 (0.50)	2.44 (0.60)	2.42 (0.59)	6.57***	7>1 6>1,3 5>1 1=2=3=4 2=3=4=5=7 2=4=5=6
FES Cohesion									
	7.26 (1.54)	5.92 (2.48)	6.53 (2.53)	5.82 (2.41)	5.53 (2.66)	4.90 (2.88)	4.86 (2.71)	5.90***	4,5,6,7<1 2=3=4=5=6=7 1=2=3
Conflict									
	2.59 (1.99)	3.50 (2.65)	3.01 (2.63)	3.79 (2.12)	4.04 (2.31)	4.81 (2.70)	4.83 (2.49)	5.59***	7>1 6>1,3 1=2=3=4=5 2=3=4=5=7 2=4=5=6=7
Parental Monitoring									
	11.95 (1.89)	12.35 (2.24)	12.28 (1.95)	11.74 (2.18)	11.31 (2.17)	11.02 (2.50)	11.93 (2.72)	2.03	1=2=3=4=5=6=7
Parental Knowledge									
	12.36 (2.09)	11.48 (2.69)	11.68 (2.47)	10.54 (2.15)	10.40 (2.12)	9.56 (2.68)	10.03 (3.10)	8.00***	4,5,6,7<1 6<3 1=2=3 2=3=4=5=7 2=4=5=6=7
Parental Control									
	3.60 (1.62)	3.26 (1.88)	2.58 (1.81)	2.56 (1.65)	2.51 (1.74)	1.79 (1.85)	1.76 (1.90)	6.63***	6,7<1 6<2 1=2=3=4=5 2=3=4=5=7 3=4=5=6=7
Motives for drinking Drinking to Cope									
	N/A	9.00 (4.12)	8.57 (3.53)	9.15 (3.31)	11.90 (4.75)	12.34 (5.33)	17.43 (6.37)	20.43***	7>2,3,4,5,6 6>2,3,4 5>3 2=3=4 2=4=5 5=6
Drinking to Conform									
	N/A	8.35 (4.69)	6.30 (2.47)	6.75 (3.61)	6.30 (2.37)	7.00 (3.59)	5.70 (1.64)	2.91**	2>7 2=3=4=5=6 3=4=5=6=7
Motives for drug using Drug using to cope									
	N/A	N/A	N/A	6.03 (2.17)	8.45 (4.84)	12.02 (6.28)	18.40 (5.49)	48.45***	7>6>5>4
Drug using to conform									
	N/A	N/A	N/A	5.38 (1.33)	6.72 (7.30)	7.28 (4.01)	6.43 (3.01)	1.82	4=5=6=7

Note: CISS-A: Coping inventory for stressful situations-adolescent version; FAD: Family assessment device; FES: Family environment scale; SD: Standard deviation; Group sizes vary slightly across variables. Higher scores on the FAD indicate unhealthy functioning; *p<.05, **p<.01, ***p<.001



CHAPTER SEVEN

Addiction and Mental Health Status of Young People Attending Residential Intervention for Substance Misuse

The extent to which young people attending the residential treatment centre for substance misuse met formal diagnostic criteria for alcohol and substance abuse disorders was investigated in the current study. In addition the level of other psychological problems among this group was also examined. These findings are presented here.

PROFILE OF SUBSTANCE USE DISORDERS

The subscales of the DISC-IV, which assess alcohol, marijuana, and other substance abuse and dependence disorders, were administered to adolescents in the clinical group to determine the type and extent of substance use disorders.

The DISC-IV is a structured diagnostic interview based on criteria specified in the DSM-IV, DSM-III-R and ICD-10. As can be seen from Table 7-1, four (13.3%) of the clinical group met criteria for an alcohol abuse disorder while 26 (86.6%) had an alcohol dependent disorder. Three (10%) had a cannabis abuse disorder and 19 (63.3%) met criteria for a cannabis dependence disorder. Twenty-five (83.3%) of the young people in the clinical group met criteria for other substance dependence while no one had a substance abuse disorder. Three (10%) of the clinical group had an alcohol use disorder (alcohol dependence) only while all others (27, 90%) in the group had both alcohol and

substance use disorders. It was possible to determine the age at which young people first met criteria for their current diagnosis (whole life diagnoses) in the case of alcohol and cannabis use disorders but not in the case of other substance use disorders. The mean age of the clinical group at the time of their participation in the study (and intervention) was 17.43 years ($SD = 1.25$ yrs). Their mean age at which they reported first retrospectively meeting criteria for their current alcohol use disorder (alcohol dependence in the main) was 15.33 years ($s.d. = 1.32$). The mean age at which they indicated first meeting criteria for their current cannabis use disorder (cannabis dependence mostly) was 14.09 years ($s.d. = 1.63$).

Table 7-1: Substance Use Disorders Among The Clinical Group (N=30).

Substance Use Disorder	N	%
Alcohol Use Disorders		
Alcohol Abuse Disorder	4	13.3
Alcohol Dependence Disorder	26	86.6
Substance Use Disorders		
Cannabis Abuse Disorder	3	10
Cannabis Dependence Disorder	19	63.3
“Other Substance” Abuse Disorder	-	-
“Other Substance” Dependence Disorder	25	83.3
Meeting Criteria for Alcohol Use Disorder Only	3	10
Meeting Criteria for Alcohol Use Disorder and Substance Use Disorder(s)	27	90
Age of First Problem with Alcohol Use (whole life diagnosis) (n=30)	Mean 15.33	S.D. 1.32
Age of First Problem Cannabis Use (whole life diagnosis) (n=22)	Mean 14.09	S.D. 1.63

Note: The DISC-IV was used to make alcohol and substance use diagnoses

While it was not possible to determine directly the substances on which young people with an “other substance” disorder were dependent, it was possible to identify the substances they used most often. The substances used most often (at a frequency of at least once or

twice a week) by those with “other substance” dependent disorders (not including cannabis) are outlined in Table 7-2. Ecstasy (16 (64%)) and cocaine (15 (60%)) emerged as the substances used most frequently (n = 25). The mean number of substances

used frequently by those with “other substance” dependent disorders was 2.36 (s.d. = 1.41). The minimum number of substances used frequently was one and the maximum number of substances used frequently was six.

Table 7-2 The substances used most often by those with other substance dependence disorders (n=25)

Substance	N (%)
Ecstasy	16 (64%)
Cocaine	15 (60%)
Tranquillisers	9 (36%)
Speed	8 (32%)
Inhalants	4 (16%)
Heroin	3 (12%)
Hallucinogens	1 (4%)
Poppers	1 (4%)

SUMMARY

It is apparent that the young people in residential treatment for substance misuse presented with poly drug use as the majority met criteria for an alcohol use disorder and a substance use disorder. Furthermore, most of these young people met criteria for alcohol and substance dependence as opposed to abuse, which indicates a more severe level of substance use. It is also evident that participants first met criteria for their current alcohol and cannabis use disorders at a very young age. Ecstasy and cocaine were the substances used more frequently by those young people with substance dependent disorders.

COEXISTING PSYCHOLOGICAL DIFFICULTIES

Table 7-3 presents results from the Adolescent Psychopathology Scale (APS) which includes externalising and internalising disorder scales, psychosocial problem content scales and response style indicator scales. Results on each scale in Table 7-3 are presented according to number of participants in the normal range (from least to most). A high level of co existing psychological difficulties is evident among the clinical group.

EXTERNALISING DISORDER SCALES

Young people in residential treatment for substance misuse scored quite high on all the externalising disorder scales. Not including substance abuse disorder, conduct disorder was the externalising clinical disorder scale on which participants in the clinical group scored highest (severe clinical range: 14, 46.7%; moderate clinical range: 9, 30%).

INTERNALISING DISORDER SCALES

Regarding the internalising clinical disorder scales, participants in the clinical group scored highest on the following scales: sleep disorder (severe clinical range: 6, 20%; moderate clinical range: 5, 16.7%), dysthymic disorder (severe clinical range: 4, 13.3%; moderate clinical range: 5, 16.7%) generalised anxiety disorder (severe clinical range: 4, 13.3%; moderate clinical range: 5, 16.7%), major depression (severe clinical range: 1, 3.3%; moderate clinical range: 7, 23.3%) and panic disorder (severe clinical range: 4: 13.3%; moderate clinical range: 3, 10%).

PSYCHOSOCIAL PROBLEM CONTENT SCALES

On the psychosocial problem content scales, not surprisingly young people in the clinical group scored highest on psychosocial substance use difficulties (severe clinical range: 27, 90; moderate clinical range: 2, 6.7%), followed by aggression (severe clinical range: 9, 30%; moderate clinical range: 9, 30%) and interpersonal problems (severe clinical range: 4, 13.3%; moderate clinical range: 10, 33.3%). On the suicide scale, two cases (6.7%) scored in the severe clinical range and four young people (13.3%) had scores in the moderate clinical range. High scores on the suicide scale do not necessarily imply current suicidal risk as questions refer to the last six months.

RESPONSE STYLE INDICATORS

Scoring on the lie response and the consistency response scales indicates that participants' responses were valid and consistent. Scores were elevated on the critical item endorsement scale, which is used to differentiate clinical from non-clinical samples. Higher scores are seen in clinical samples. Scores on the infrequency response scale were also elevated which can suggest endorsement of problems or presenting oneself in an overly negative light. High scores can also be caused by elevations on multiple APS scales.

Table 7-3: Scale Score Results from The Adolescent Psychopathology Scale

Scale	Normal range		Sub clinical range		Mild clinical range		Moderate clinical range		Severe clinical range	
	N	%	N	%	N	%	N	%	N	%
Externalising Clinical Disorder Scales										
Substance Abuse Disorder	--	--	2	6.7	2	6.7	4	13.3	22	73.3
Conduct Disorder	2	6.7	1	3.3	4	13.3	9	30	14	46.7
ODD	5	16.7	6	20	9	30	9	30	1	3.3
ADHD	8	26.7	7	23.3	7	23.3	7	23.3	1	3.3
Internalising Clinical Disorder Scales										
Dysthymic Disorder	8	26.7	7	23.3	6	20	5	16.7	4	13.3
Generalized Anxiety Disorder	12	40	6	20	3	10	5	16.7	4	13.3
Major Depression	13	43.3	5	16.7	4	13.3	7	23.3	1	3.3
Sleep Disorder	15	50	3	10	1	3.3	5	16.7	6	20
Panic Disorder	18	60	4	13.3	1	3.3	3	10	4	13.3

Table 7-3 Continued

Scale	Normal range		Sub clinical range		Mild clinical range		Moderate clinical range		Severe clinical range	
	N	%	N	%	N	%	N	%	N	%
Internalising Clinical Disorder Scales										
Somatization Disorder	19	63.3	5	16.7	1	3.3	2	6.7	3	10
Separation Anxiety Disorder	19	63.3	2	6.7	4	13.3	3	10	2	6.7
Social Phobia	20	66.7	5	16.7	3	10	1	3.3	1	3.3
Anorexia Nervosa	24	80	2	6.7	1	3.3	2	6.7	1	3.3
Bulimia Nervosa	25	83.3	1	3.3	1	3.3	1	3.3	2	6.7
Psycho Social Problem Content Scales										
Psycho Social Substance Use Difficulties	--	--	1	3.3	--	--	2	6.7	27	90
Aggression	4	13.3	1	3.3	7	23.3	9	30	9	30
Interpersonal Problems	5	16.7	4	13.3	7	23.3	10	33.3	4	13.3
Anger	8	26.7	8	26.7	3	10	8	26.7	3	10
Self Concept	11	36.7	6	20	7	23.3	5	16.7	1	3.3
Emotional Lability	11	36.7	5	16.7	6	20	6	20	2	6.7
Social Adaptation	12	40	10	33.3	4	13.3	4	13.3	--	--
Introversion	15	50	7	23.3	2	6.7	6	20	--	--
Suicide	17	56.7	4	13.3	3	10	4	13.3	2	6.7
Response Style Indicator Scales										
Critical Item Endorsement	10	33.3	5	16.7	2	6.7	6	20	7	23.3
Infrequency Response	16	53.3	4	13.3	3	10	3	10	4	13.3
Consistency Response	25	83.3	3	10	2	3.3	--	--	--	--
Lie Response	29	96.7	1	3.3	--	--	--	--	--	--

Note: ADHD: Attention Deficit Hyperactivity Disorder; ODD: Oppositional Defiant Disorder; PD.

SUMMARY

Findings from the APS indicate that the clinical group report a high level of co-existing psychological problems. The majority of the group are characterised by high scores on externalising disorder

scales particularly the conduct disorder scale. They also scored high on a range of internalising disorder scales. Besides psychosocial difficulties related to substance use the clinical group were characterised by high scores on the

aggression and interpersonal difficulties subscales. High scores on a number of scales is evident which indicates that this group of young people report many co-morbid difficulties.



CHAPTER EIGHT

Qualitative Study with Young People Attending the Residential Programme for Substance Misuse.

Ten young people from the clinical group also participated in a qualitative interview as part of the current study. Three were female and seven were male. Every third individual in the clinical group was selected for this and all those approached agreed to the take part. The questions addressed in the interview were as follows: What are the views of adolescents in residential treatment for substance misuse on the contributing factors to their substance misuse problem, their coping style and relationships with their parents? A qualitative content analysis of

interviews was conducted with ten young people. The interviews were conducted with the young person on the penultimate day of their treatment.

INTER-RATER RELIABILITY

In order to determine the reliability of the coding frame developed, a 20% sample of interviews was selected at random for coding by an independent rater. Inter-rater reliability was established by calculating the percentage agreement between the two independent

raters for each question. Levels of agreement were also adjusted to give Kappa coefficients. Percentage agreement ranges from 77% to 100% and kappa coefficients range from .75 to 1.0 indicating good rates of inter-rater reliability.

RESULTING THEMES

The themes and sub themes, which emerged from the analysis according to each question, are presented next. Table 8-1 reports the frequency of occurrence of these themes across participants.

Table 8-1 Continued: Frequency of Occurrence of Themes Among Interviews with Young People in Substance Misuse Treatment

Question	Theme identified	Frequency
1. What factors led to adolescent's initial substance use?	A Personal Factors	
	A1 Substance use as a coping strategy	6
	A1.1 Family functioning difficulties	(3)
	A1.2 Significant life stressors	(2)
	A1.3 Co-morbid problem	(1)
	A2 To increase confidence	2
	A3 Trouble at school	1
	B Environmental factors	
	B1 Family history of substance use	3
	B2 Friend's use	6
B3 Neighbourhood	1	
2. What factors led to adolescent's problematic level of substance use?	A Substance use as a coping strategy	8
	A1 Family functioning difficulties	(3)
	A2 Significant life stressors	(5)
	B Substance related factors	5
	B1 Love of substance use	(2)
	B2 Addiction cycle	(3)
	C Other factors	5
	C1 Immediate progression to problematic use	(1)
	C2 Trouble with the law	(4)
	3. What is adolescent's typical coping approach to problems/stress	A Using drink and drugs to cope
B Avoidant coping		9
C Emotion focused coping		3
4. Relationship with mother	A Best aspects of relationship with mother	
	A1 Close relationship	7
	A1.1 Current supportive relationship	(7)
	A1.2 Closer past relationship	(2)
	A2 None	3
	B Difficult aspects of relationship with mother	
	B1 Emotional factors	4
	Disengaged relationship	(2)
	Resentment towards mother	(2)
	B2 Substance use related problems	3
	B3 Unrealistic expectations	1
	B4 None	2
	C Role in development/maintenance of substance use problem	
	C1 Relationship difficulties	3
	C2 Enabling role	5
	C2.1 Enabling behaviour	(3)
	C2.2 Permissive attitude towards alcohol	(2)
	C3 None	4
	D Role in treatment	
D1 Essential supportive role	10	
5. Relationship with father	A Best aspects of relationship with father	
	A1 Close relationship	4
	A1.1 Current close relationship	(2)
	A1.2 Closer past relationship	(2)
	B Difficult aspects of relationship with father	
	B1 Emotional factors	6
	B1.1 Resentment	(2)
	B1.2 Conflict	(2)
	B1.3 Abuse	(1)
	B1.4 Difficulty with affective communication	(1)
	B2 None	2
	C Role in development/maintenance of substance use problem	
	C1 Emotional factors	5
	C2 Enabling role	4
	C2.1 Enabling behaviour	(2)
	C2.2 Permissive attitude towards alcohol	(2)
	C3 None	1
	D Role in treatment	
	D1 Supportive role	4
D2 Disengaged	4	

1. FACTORS, WHICH LED TO PARTICIPANTS' INITIAL USE OF ALCOHOL AND DRUGS

The first question participants were asked was: what factors did they feel had led to their initial use of alcohol and drugs. Two main themes with a number of sub themes emerged from participant's responses to this question. The two main over arching themes were: personal factors and environmental factors. Personal factors included three subcategories: substance use as a coping strategy, to increase confidence and trouble at school. Environmental factors involved another three sub themes: family history of substance use, friend's substance use and neighbourhood.

PERSONAL FACTORS SUBSTANCE USE AS A COPING STRATEGY

The first sub theme within personal factors, substance use as a coping strategy referred to participants' use of substances as a way to cope with difficulties experienced. Six participants mentioned this theme. Three further sub themes were developed within this theme: using substances to cope with family functioning difficulties, significant life stressors and a co-morbid problem. It is interesting that using substances to cope emerged as a theme in the initial stage of participants' use.

Three participants mentioned using alcohol and drugs to cope with family functioning difficulties. One participant commented: "Family problems, there was always fights at home and I just wanted to get away from it all". Another participant said: "An escape cause I'd a shit time with my Mum who I was living with at the time".

Two participants mentioned using substances to cope with significant life stressors which for one entailed the death of his father and for the other the break up of his relationship with his girlfriend. The latter individual said: "My ex girlfriend I suppose, breaking up and I started drinking then, I started drugging heavy, doing pills everything. It was a difficult time. I was using drink and drugs to forget about it".

One participant identified that she used substances to cope with unresolved issues underlying her anorexia when she came out of hospital, who said: "Basically after I came out of hospital with anorexia. I was never really talked to about the feelings behind why I stopped eating. I just went from having one addiction onto to having another".

Another sub theme developed within personal factors was using substances to increase confidence. Two individuals identified that they began using alcohol and drugs to increase their confidence. One participant relayed: "I started off using drink because I'd no confidence before a disco. I'd have a few cans to try and get confidence, to meet a girl or something".

The third sub theme developed within personal factors was: Trouble at school which was mentioned by one participant as an influential factor in the initial stage of his substance use. He said: "I used always have problems at school like, just constantly fighting in school, getting picked on. Then it got to a stage where I was picking them back. The trouble in school leads to substance use cause it leads to your wildness and then eventually you don't want to go to school".

ENVIRONMENTAL FACTORS

Friends' substance use emerged as a theme within the super ordinate category environmental factors. Six participants mentioned friends' use of alcohol and drugs as an influential factor in their initial use. One participant said: "Basically the friends I was hanging around with were smoking hash so I just wanted to try it" Another response was: "I just done it cause my friends did it, everyone was doing it, that's what got me started".

A family history of substance use was the second sub theme within environmental factors which was mentioned by three participants as a contributing factor to their initial substance use. One participant said: "Well my mother and father were alcoholics. Looking at them for so many years drinking that it just brought me to a stage where I just drank and wanted to use".

Neighbourhood was the third sub theme developed within Environmental factors but interestingly was only identified by one individual as contributing to the onset of their substance use. He commented: "Where I came from, drugs were basically all around, every day of the week. The neighbourhood that I lived in was just constantly full of drugs. The place where I live isn't a good place to live like. I wouldn't recommend it for anyone".

2. FACTORS WHICH LED TO PROBLEMATIC SUBSTANCE USE

Participants were asked how their use developed to a problematic level. Three main themes emerged from participants' responses: substance use as a coping strategy, substance related factors and other factors. Within the first theme, substance use as a coping strategy, two sub themes were identified: significant life stressors and family functioning difficulties. Two sub themes comprised the category of substance related factors: love of substance use and addiction cycle. Other factors included the sub themes immediate progression to problematic use and trouble with the law.

SUBSTANCE USE AS A COPING STRATEGY

Five participants referred to the theme of using substances to cope with significant life stressors. Interestingly none of these five participants made reference to this theme in the first section on factors contributing to initial substance use where it also emerged. Two female participants identified having been raped as a significant life stressor, which they had attempted to cope with through drink or drugs. One participant relayed: "I started drinking every day this year and that was because I was raped so that contributed a lot to it, it's just a mechanism for blocking things out at the end of the day I think". In terms of other life stressors, death of an Uncle was identified by one individual, a relationship break up was mentioned by another participant and problems at school was referred to by another young person. The latter individual said: "The weekends, I'd go out and I'd drink and I'd use more because of the trouble in

school and getting worried about the exam”.

Using alcohol and drugs to cope with family functioning difficulties was mentioned by three participants. One participant described this theme as follows: “Me Da was always fighting with me Ma, smashing the house up. He used to be hitting me all the time when I was younger. Me Da made me angry and I resented him, I just hate him so I just went out and drank cause he used to roar at me, he’d put me down all the time so I’d just go out and forget about it. Drinking and taking drugs helped me forget about it”.

Another participant found it very difficult to cope with his mother being in a relationship with another man following the death of his father: “My mother going out with a guy, that’s what pushed me to drinking to that level”.

SUBSTANCE RELATED FACTORS

Two participants described a love of substance use as a contributing factor to a problematic level of substance use. One commented: “I just loved the drink itself” Another said: “The fact is I just loved it, every day of the week”.

Three participants made reference to the maintaining effect of the addiction cycle. One participant relayed: “To get the same effect you need more and more alcohol”. Another participant said: “Your sick Sunday morning and you go out again as a cure kind of thing”.

OTHER FACTORS

One participant identified an immediate progression to problematic use. He said, “When I started doing drugs I was into it straight away, I was taking lots of pills when I started”. Although this participant described immediate development of problematic substance use he identified in the earlier section on contributing factors to initial use that he began using substances to cope with a significant life stressor, the break-up of his relationship with his girlfriend.

Trouble with the law was identified as a factor, which had a part to play in

progression to more problematic substance use, by four individuals. A typical response was: “It starting getting to a stage where I had to start selling drugs to support my habit and I got into worse trouble with the guards”.

3. COPING APPROACH TO PROBLEMS/STRESS

Participants were asked how they usually cope with problems/stress. Three main themes were identified in participant’s responses: Using drink and drugs to cope, emotion focused coping and avoidant coping.

Using drink and drugs to cope emerged as a dominant theme. Nine of the ten participants mentioned that they primarily use drink and drugs to cope with problems. One participant commented: “Drinking would have been the first thing I’d do”. The self perpetuating nature of this coping strategy is conveyed by one individual: “When I did drink, say I did a stupid thing, as soon as I’d start to get sober and think about what I’d done, I’d think oh no and I couldn’t handle it so I’d drink on that again”.

Three individuals reported using emotion focused copings strategies, two young people indicated that they become aggressive as described by one participant: “I start boxing walls and putting my fists through windows and all” Another participant reported that she tended to worry: “I worry a lot about things I can’t really control”.

The majority of participants (nine) described an avoidant coping style. Seven participants said that they try to ignore their problems and do not talk about them. For example, one participant said: “Ignore it, same face for every emotion. Just keep saying everything’s fine, talking about it isn’t something I’d do”. Another individual mentioned focusing on work as a way of avoiding the problem. One participant outlined his own way of coping which was also essentially avoidant: “I have my own way of dealing with stuff, driving cars and just going down to the bog arse of no where”. It is interesting to note the distinct lack of a task/problem-focused approach to coping with problems/stress.

Participants were probed on specific issues regarding relationships with their mother and father: the best aspects, the difficult aspects, any role they had in the development or maintenance of their substance use problem and any role they had in their treatment.

4. PARTICIPANTS’ RELATIONSHIP WITH THEIR MOTHER

BEST ASPECTS OF RELATIONSHIP

Participants were asked what were the best aspects of their relationship with their mother.

Two categories emerged in response to this question: close relationship and none/don’t know. Two sub themes were developed within close relationship: current supportive relationship and closer past relationship. Seven participants described a supportive relationship with their mother at present. Typical responses were as follows: “She would always be there for me if I needed anything” and “No matter how bad I was she never turned her back on me”. Two of these participants reported a closer relationship with their mother when they were younger. One participant said: “The last year or two I never really had much involvement with my mother. When I was younger I was closer to her”. It is possible that this individual’s substance use has led to some disengagement in his relationship with his mother.

Three individuals said that they did not know or couldn’t find anything positive about their relationship with their mother. One participant relayed: “I don’t know, I haven’t talked to her in a long time”. One of these three participants said that there was nothing positive up until he entered the current residential treatment but that the relationship had improved as a result of treatment: “It’s gotten a lot better since I’ve done this”.

DIFFICULT ASPECTS OF RELATIONSHIP

Participants were also asked what if any were the difficult aspects of their relationship with their mother. Four themes were developed from responses to this question: emotional factors,

substance use related problems, unrealistic expectations and none. Two sub themes were identified within emotional factors: disengaged relationship and resentment towards their mother. Two participants made reference to disengagement from their mother.

For one participant, it was clear that the disengagement predated her substance use problem and had originated in her parent's acrimonious separation: "There was no talking, no communication. Hugh problems started when I was younger. Your Dad is telling you your Mum is crap and all these kind of things then your bound to believe it so that jeopardised the relationship hugely".

For the other participant, it is unclear whether or not the disengagement preceded his substance use problem: "I haven't talked to my mother in a long time".

Two individuals mentioned a resentment that they held towards their mother. One participant relayed: "I resented her for a long time for going out with a guy, I thought she was making a fool of my father like. I never talked to my mother for three years like". Another participant described how she was the youngest of the family and that her mother and her older siblings shared a bond because they experienced her father's alcoholism which she was too young to remember. As a result she felt as follows: "I had a resentment towards her, sometimes I felt that she didn't love me as much as the other brothers and sisters".

Three participants described substance use related problems with their mother, two of these referred to their own substance use while the other referred to his mother's substance use. One participant's response was: "When I'm drinking and using there's no relationship just fighting" In relation to his mother's substance use, the other participant said: "But if she was drinking like she was never around, she was more into her addiction so I got nothing from her".

One participant mentioned how his mother had unrealistic expectations of him in view of a co morbid problem: "She expects more of me like, before they found out I had ADD she always

thought that I was just too lazy to do homework and that".

Two participants indicated that there were no difficult aspects in their relationship with their mother.

ROLE IN DEVELOPMENT AND MAINTENANCE OF SUBSTANCE USE PROBLEM

Participants were also asked if they felt their mother had any role in the development and maintenance of their problem with substance use. Three main themes were formed from responses to this question: Relationship difficulties, enabling role and no role. Three of the participants indicated that relationship difficulties with their mother had a role to play in the development/maintenance of their substance use problem. These relationship problems involved resentments held towards their mother for two individuals and a disengaged relationship for another. The participant whose mother was in another relationship following the death of his father said: "I couldn't handle the fact that she was with him and I was drinking on that too, drinking heavy on that".

The young person whose parents had separated acrimoniously described the lack of relationship with her mother as contributing to her substance use problem: "Another void, why doesn't she care? I'd say it did play a factor".

Five individuals mentioned how their mother had an enabling role in relation to their substance use. Two sub themes were developed: enabling behaviour and permissive attitude towards alcohol use. Three participants described enabling behaviour and two reported a permissive attitude towards alcohol. Regarding enabling behaviour, one person said: "Sometimes I'd say to her if she found bottles under the bed, don't tell Dad and she wouldn't" Another participant reported: "She enabled my addiction by giving me money and lifts everywhere and looking after me and made life very comfortable". A permissive attitude to alcohol was conveyed in the response: "She didn't mind me drinking as long as I didn't get in any trouble".

Four participants said that their mother had no role in the development / maintenance of their substance use problem.

ROLE IN TREATMENT

Participants were asked if their mother had a role in the treatment of their substance use problem. Only one theme emerged in participants' responses: essential supportive role. All ten participants mentioned how the support of their mother was essential to their treatment. A typical response was: "Yeah very important because if she wasn't backing me up, I wouldn't be here". Even those participants who indicated that they had difficulties in their relationship with their mother previously endorsed this view. The young person who described a disengaged relationship with her mother following her parents' separation said that there had been a significant change in their relationship with treatment and that her mother had a vital role: "Huge role, she's been able to accept it more than my Dad. There's been a huge change in our relationship". It's important to note that all participants interviewed had remained in treatment for the duration of the six-week programme and those who dropped out of treatment early might view their mother's role in their treatment differently.

5. PARTICIPANTS' RELATIONSHIP WITH THEIR FATHER

BEST ASPECTS OF RELATIONSHIP

Participants were asked about the best aspects of their relationship with their father. Two themes emerged: close relationship and none. One participant did not know his father so could not respond to questions relating to father. Regarding close relationship, two sub themes were developed within it: current close relationship and closer past relationship. Four participants (three female) indicated a close relationship, two at present and two in the past (the father of one of these had died). One young person commented on her present relationship with her Dad: "I get on very well with my Dad he has always been there". The one male who indicated a

close relationship with his father (past) identified sharing an activity with his Dad as the best thing about their relationship: "Going to the matches, up to Cro park that was the best thing" For another participant, her relationship with her father had been close but deteriorated as a result of her drinking: "Up until a year ago, I would tell him anything and then my drinking increased and he asked me about it but I'd just push it away".

Five of the participants, all male did not describe anything positive about their relationship with their father. One participant commented: "We never had a relationship really". Another participant described the only relationship he had with his father as through drink. "The relationship I have with him now is just him ringing me to go to the pub. That's the only relationship, through drink and that's the only way we talk".

Participants were asked what were the difficult aspects of their relationship with their father. Two participants (both male) did not contribute to themes based on this question, one as mentioned previously whose father was unknown to him and the second made reference to difficulties with his father but chose not to talk about them. Two themes were developed from participant's responses to this question: emotional factors and none. The theme of Emotional factors was comprised of five sub themes: resentment, conflict, abuse and difficulty with affective communication.

EMOTIONAL FACTORS

Two participants mentioned a resentment that they had towards their father. The young person whose parents had separated referred to how her father had spoken badly of her mother which she felt had contributed to the resulting disengaged relationship with her mother: "I realised what he had done to impact my relationship with my Mum".

Two participants described conflict in their relationship with their father. In one case the anger of the young person was very apparent and he conveyed little in the way of a relationship with his father: "I don't get on with my father and

I can't stand the ground he walks on. He wouldn't even give me the time of day. The fact he never supported his family".

One young person described abuse from his father: "Up to 15 I was afraid of him like. He was always in the pub. He'd come home drunk then and he'd hit me or put me down".

One participant relayed that he had difficulty discussing his feelings with his father which was in the context of earlier physical and emotional abuse from his father: "I just can't say things I want to say to him, I find it impossible. I just can't show my feelings to him. He wouldn't show it back cause he has a funny way of showing it".

Two participants said that there was nothing difficult about their relationship with their father.

ROLE IN DEVELOPMENT AND MAINTENANCE OF SUBSTANCE USE PROBLEM

Participants were asked if they felt that their father had any role in the development and maintenance of their problem with substance use. Themes were developed on the basis of responses from nine individuals. Three themes emerged from participants' responses: emotional factors, enabling role and none. Five participants indicated that emotional issues related to their father had a role in the development of their substance use problem which ranged from coping with the death of their father, to coping with violence from their father, angry feelings towards him, a resentment towards him, and generally difficult relationship issues with him (not specified). For example, one person said: "I could blame being angry at him alright" Another response was: "My Dad died when I was thirteen that was one of the main reasons why I drank" and "Yeah definitely with the arguments and that, the violence at home".

Four participants reported an enabling role by their father, which was further divided into two sub themes: enabling behaviour and permissive attitude towards alcohol.

Enabling behaviour involved participant's father providing money or setting few limits which was mentioned by two participants. One young person commented: "Yeah big time cause that's where I got my money. I was able to say I'm not coming in tonight or if I didn't come in there would be no punishment for anything like that. I was given a lot of freedom and opportunities I suppose".

Two young people referred to the sub theme permissive attitude towards alcohol, one participant said: "He didn't mind me drinking".

One young person indicated that his father had had no role in the development and maintenance of his substance use problem.

ROLE IN TREATMENT

Participants were asked if they felt that their father had a role in their treatment. Themes were based on the responses of eight participants, as the question was not relevant to the young person whose father was unknown to him and the participant whose father had died. Two themes emerged: supportive role and disengagement. Four of the young people interviewed indicated that their father had a supportive role in their treatment. One participant's response was: "Yeah he has been fantastic, down all the time, just knowing that his there as well"

Four participants indicated that their father was not involved in their treatment. One young person described being let down by his father in terms of his involvement in treatment: "Not really no, he didn't even know I was here. He was meant to come up today and he didn't, that proves it".

SUMMARY

Content analysis of interviews revealed a number of interesting themes particularly in relation to contributory factors to adolescents' substance use. A range of personal and environmental factors were identified as influential in adolescents' initial substance use. Substance use as a coping strategy emerged as a dominant theme in both the early phase and problematic stage of substance use. In the

main, adolescents described an avoidant coping style and using drink and drugs to cope. There were similarities and differences between themes identified with regard to adolescents' relationships with

their mother and father. For many adolescents, their mother or father had a role in the development or maintenance of their substance use problem. However, the support of their mother especially was

seen as crucial to adolescent's success with treatment. Compared to mothers, on the whole, adolescents experienced more disengagement from their father in terms of involvement in their treatment.

Figure 8-1 Model of Results of Themes and Sub Themes Identified from Qualitative Analysis

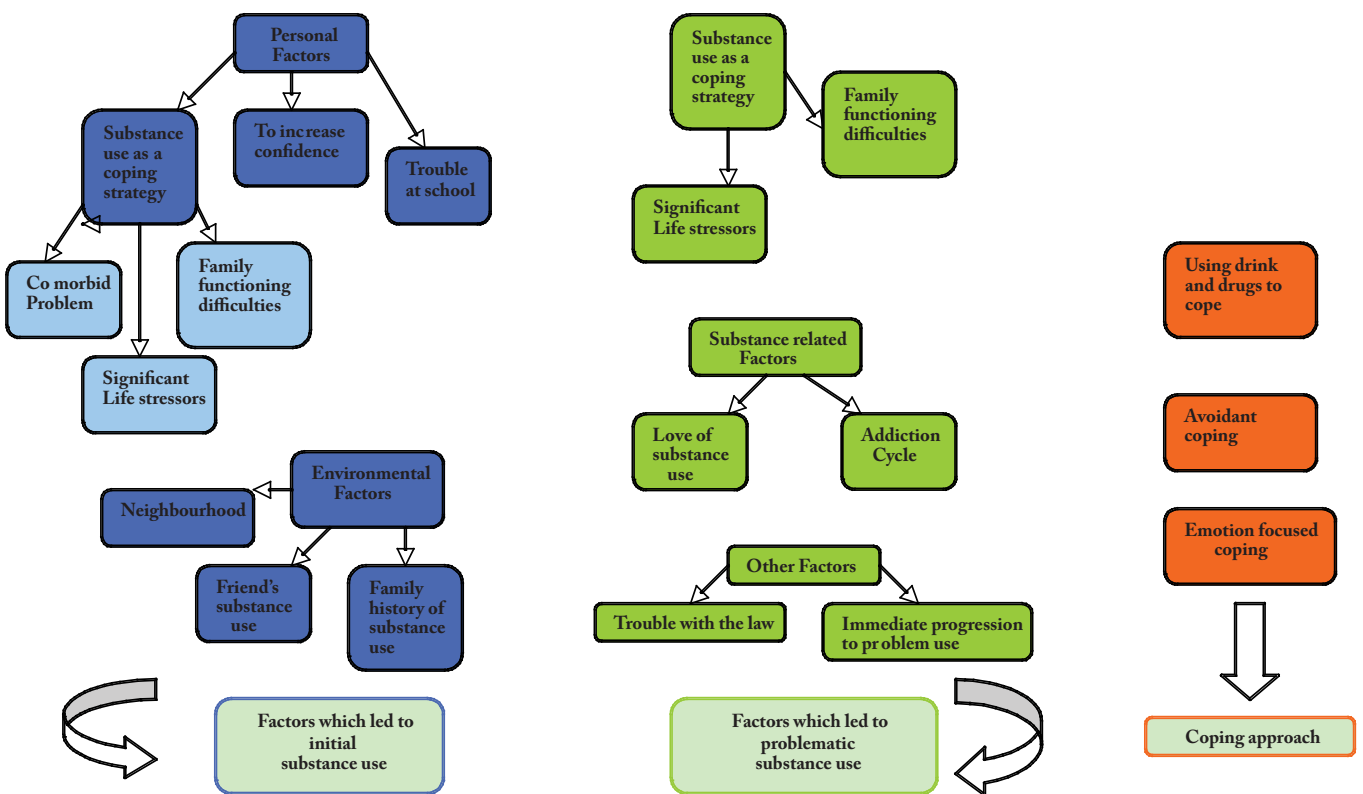
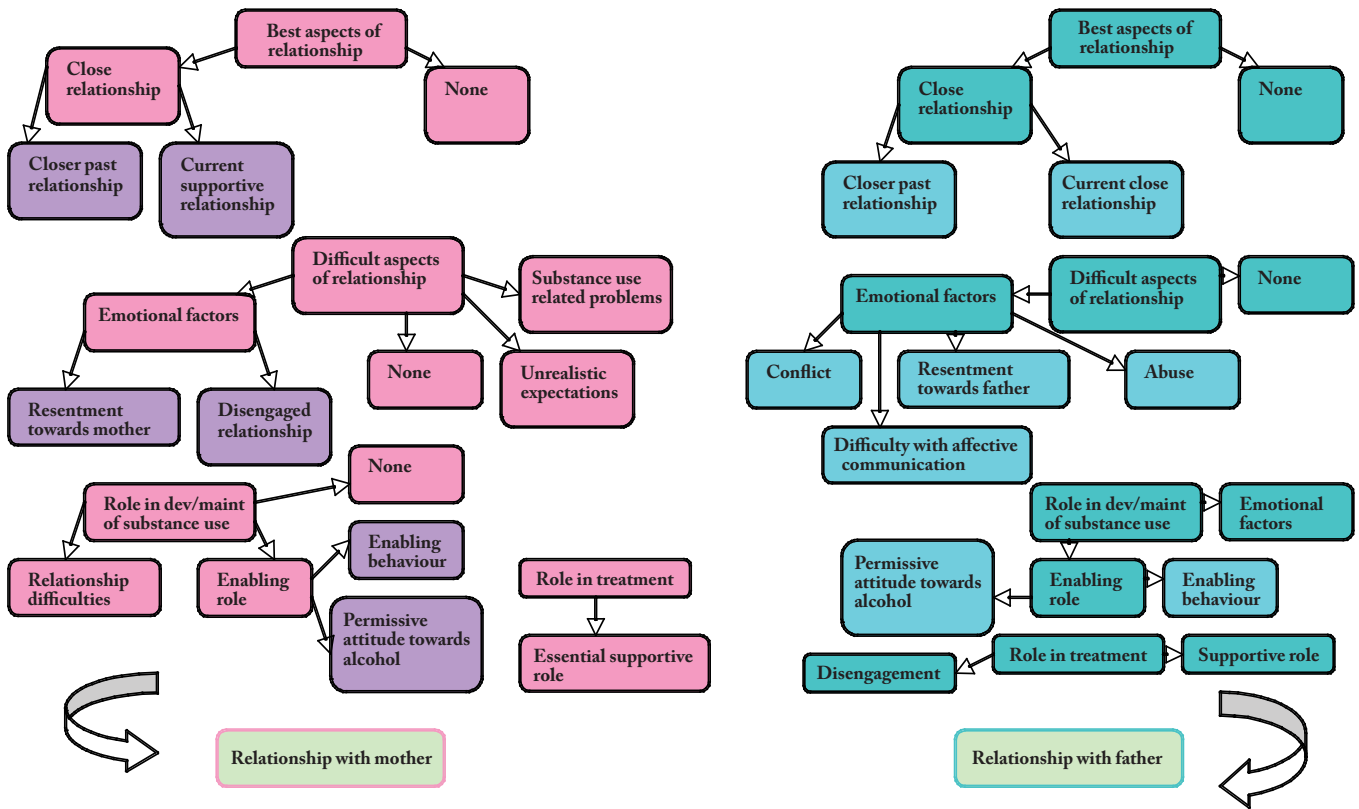


Figure 8-2 Continued: Model of Results of Themes and Sub Themes Identified from Qualitative Analysis





CHAPTER NINE

Research Implications- Addressing Substance Use Among Young People

INTRODUCTION

The current research advances our understanding of adolescent substance use with particular relevance to an Irish setting. This chapter begins by comparing the rates of alcohol and drug use in young people resident in the south and south east region of Ireland with previous Irish, European and USA data. It then outlines the main implications that the present research has for service development: prevention, early identification, assessment and intervention with youth who show varying levels of substance use involvement. It also summarises the implications that this research has for policy development and future research.

COMPARISON OF FINDINGS WITH MAJOR EUROPEAN AND US SURVEYS

A comparison can be made between the present study's findings and data from large scale drug and alcohol research in Europe and the USA. The European School Survey Project on Alcohol and

Other Drugs (ESPAD; Hibell et al., 2004) is a major survey of alcohol and drug use among 93,626 15-16 year olds (mean age = 15.8 years) in 35 European countries including Ireland (2,311 participants). The Monitoring the Future survey (MTF; Johnston et al., 2007), is a large scale national survey of substance use in 16,600 15-16 year olds in the United States of America. Comparative findings from the current study and these two major surveys are presented in Table 9-1.

The life time rate of alcohol use reported by the community group (14-19 years, Mean 16.29 yrs, SD 1.21 yrs) of the present study was 86.1% which is slightly lower than the Irish (92%) and European (90%) average life time rate from the ESPAD but considerably higher than the rate reported by 15-16 year old U.S. high school students (61.5%) in the MTF survey. Regarding frequency of alcohol consumption, 61.6% of the community sample in the

current study reported regular drinking with 51.2% indicating regular binge drinking. Regular drinking was defined as consuming alcohol at a frequency of once a month or more often. No gender differences were observed on frequency of drinking or frequency of binge drinking which is consistent with ESPAD findings (Hibell et al., 2004). The frequency of regular drinking observed in the current study is in line with the European average (63%) but below the ESPAD rate reported for Ireland (73%). Regarding frequency of regular binge drinking, the rate indicated in the present study is above the European average (41%) and a little below the ESPAD Irish rate (57%) which was ranked as the third highest among 36 European countries.

Thirty-eight percent of the community sample in the present study reported experiencing consequences related to their use of alcohol. Females (26.1%) were more likely to report that alcohol

led to trouble at home compared to males (13.9%). While males were more likely than females to report that alcohol resulted in them engaging in a physical fight (males: 19.7%, females: 11.7%), causing damage to property (males: 22%, females: 9%) and getting into trouble with the police (males: 17.9%, females: 6.8%). In the ESPAD study Ireland emerged as the second highest scoring country in Europe for alcohol related "delinquency problems" (physical fighting - 12%, and trouble with the police - 12%) and "individual problems" (poor performance at school/work - 5%, and alcohol related accident/injury - 12%). The current study confirms comparable rates for these consequences of alcohol use.

In the current study, half of the community group (49.78%) reported lifetime use of a drug. This is not only higher than the Irish ESPAD rate (40%) and the U.S. rate (40.1%) but more than twice as high as the European average rate (22%). The greater age spread of participants in the present study (14-19 years) compared with the ESPAD and MTF studies (15-16 years) may be an important factor in this regard. No gender difference on lifetime rate of drug use was observed in the community group in the present study. This is consistent with ESPAD findings. The mean age of first drug use was 14.46 (S.D. = 1.41) with no difference seen between males and females. No comparable data is available from the ESPAD and MTF surveys. With respect to lifetime use of various drugs in the current study, cannabis (41.10%) was the most commonly consumed drug followed by: inhalants (29.70%), poppers (16.79%), cocaine (11%), tranquilizers/sedatives (10.80%), amphetamines (9.30%), ecstasy (8.90%), hallucinogens (6.50%) and opiates (1.90%). Lifetime rates of drug use reported in the present study were considerably higher than rates reported for Ireland (with the exception of cannabis) and European average rates in the ESPAD study for all drugs. The current findings indicate that life time use of cannabis is twice as high in the South East of Ireland compared to the European average while life time use of inhalants, ecstasy and hallucinogens is three times the European average rate. The lifetime rate of cocaine and amphetamine use

indicated in the present study is five times the European average rate. A similar trend was seen in the Irish data from the ESPAD study with respect to much higher lifetime rates of cannabis and inhalants relative to other countries but the current findings indicate an even higher life time rate for inhalant use. Lifetime rates for drug use in the U.S. are somewhat higher than among their European counterparts but are still lower than the rates reported here with the exception of amphetamines and hallucinogens. Gender differences were observed in lifetime use of drugs in the present study. Females reported higher life time use of cannabis in the group overall; among 15 year olds, females indicated higher life time use of poppers and 18 year old females reported higher life time use of cocaine. These trends in gender differences were not evident in the ESPAD findings.

With regular use defined as use at a frequency of once a month or more often, cannabis (13.62%) was the most frequently used drug, followed by inhalants (6.04%), poppers (4.31%), tranquilizers/sedatives (1.93%), ecstasy (1.71%), cocaine (1.28%), hallucinogens (0.85%) and amphetamines (0.84%) in the present study. The rate of regular cannabis use reported in the current study is higher than the European average (9%), comparable to the U.S. average (14.2%) but below the Irish ESPAD rate (17%). The present study reports a rate of regular inhalant use (6.04%), which is twice as high compared to the Irish ESPAD rate (3%), and three times the European (2%) and U.S. (2.3%) average rates. Use of poppers was not measured apart from inhalant use in the ESPAD and MFS. Poppers were identified as the third most frequently used drug in the current study and the rate of regular use (4.31%) exceeded the average rate of regular use of all inhalants in Europe and the U.S. Rates of regular use of other drugs in the current study were generally comparable to the Irish ESPAD data, slightly higher than the European average and slightly lower than U.S. rates. Regarding consequences of drug use, 11.4% of the total community group in the current study reported consequences of drug use. The ESPAD did not report findings on drug use consequences as the rates found were so negligible which implies that the rates reported in the present study are considerably higher. Ireland emerged as one of the highest-

ranking countries in Europe on adolescent substance use in 2003 from the ESPAD report (Hibell et al., 2004) and the current findings are generally consistent with this rating. In fact, the present study indicates a considerably higher level of lifetime use of all drugs and a higher rate of regular inhalant use among adolescents in the South East of Ireland compared to ESPAD findings for Irish adolescents in 2003. However, while the current community sample had an average age of 16.29 years (SD = 1.21) it entailed an age range from 14 years to 19 years, which does not make for a perfectly equitable comparison to the ESPAD and MFT findings as both involved a group of same aged adolescents (15-16 years). In the past, there was a wide gap between the drug use of Irish adolescents and their American counterparts with the latter reporting considerably higher use (Grube and Morgan, 1989). As reflected in the current findings it seems that not only has the gap narrowed considerably but Irish youth are overtaking young people in the U.S. on some aspects of their drug use.

In addition the current study generated six different categories of young people based on their alcohol and drug related behaviour. The six categories reflected a continuum of substance use related behaviour ranging from no substance use, to alcohol use only, to both alcohol and drug use. It also reflected the continuum from no use, to moderate/experimental use, to heavier more problematic use. The six categories were as follows: non substance users (n = 62); moderate drinkers (n = 41); regular binge drinkers (n = 59); binge drinkers who experiment with drugs (n = 57); regular drug users (n = 34); and problem substance users (n = 45). The regular drug user and problematic substance user groups were comparable to the group of young people attending a residential intervention programme (30 young people aged 15-19 years referred to as the "clinical group") who also participated in the current study on some substance use behaviours. The clinical group were demarcated from the community groups by lower task focused coping and higher use of alcohol and drugs to cope. No clear pattern on general coping style was evident among the community group according to level of substance use. The clinical group and community groups who reported both alcohol and drug use reported more family dysfunction in comparison to non-substance users. The most problematic-substance users in the community sample and

the clinical group indicated poorer family functioning relative to some less problematic substance user groups. A qualitative study with adolescents in the clinical group was also included in the present study and reflected their thoughts on the contributing factors to their substance misuse problem, their coping

styles, and relationships with their parents. The majority of adolescents in treatment for substance misuse presented with both alcohol and substance dependent disorders with reported early onset. A high level of co-existing psychological problems were evident among the clinical group.

In the next section we will consider the implications of the current findings for service development (prevention, early identification, assessment and intervention with youth who show varying levels of substance use involvement), policy development, and future research.

Table 9-1 Comparison of Data from Current Study with ESPAD and MFT Findings

Substance Use Variable	Current Study	ESPAD findings for Ireland in 2003	ESPAD European average in 2003	MFT findings for 2006
Life time use of alcohol	86.1%	92%	90%	61.5%
Frequency of regular use of alcohol (once a month or more often)	61.6%	73%	63%	--
Frequency of regular binge drinking (once a month or more often)	51.2%	57%	41%	--
Consequences of alcohol use				
Performed poorly at school	6.9%	5%	3%	--
Accident/Injury	13%	12%	7%	--
Argument	20.1%	16%	12%	--
Problem in relationship with parents	17.7%	11%	8%	--
Fight	13%	12%	10%	--
Trouble with police	10%	12%	5%	--
Life time use of drugs				
Life time use of any drug	49.78%	40%	22%	40.1%
Life time use of cannabis	41.1%	39%	21%	31.8%
Life time use of inhalants	29.7%	18%	10%	13.3%
Life time use of poppers	16.79%	--	--	--
Life time use of ecstasy	9.3%	5%	3%	4.5%
Life time use of cocaine	11%	3%	2%	4.8%
Life time use of tranquilisers/sedatives	10.8%	2%	6%	7.2%
Life time use of amphetamines	10.8%	1%	2%	11.2%
Life time use of hallucinogens	6.5%	2%	2%	6.1%
Frequency of regular drug use (once a month or more often)				
Cannabis	13.6%	17%	9%	14.2%
Inhalants	6.04%	3%	2%	2.3%
Poppers	4.31%	--	--	--
Ecstasy	1.71%	2%	1%	1.2%
Cocaine	1.28%	1%	0	1.5%
Tranquilisers/sedatives	1.93%	0	0	2.4%
Amphetamines	0.84%	0	1%	3.5%
Hallucinogens	0.85%	0	0	1.5%

Note: ESPAD: European School Survey Project on Alcohol and Other Drugs (Hibell et al., 2004); MFT: Monitoring the Future survey (Johnston et al., 2007).

IMPLICATIONS OF THE CURRENT STUDY

WHY IS IT IMPERATIVE TO INTERVENE WITH YOUTH WHO DEMONSTRATE VARYING LEVELS OF PROBLEMATIC SUBSTANCE USE?

Habitual substance use in adolescence is a major public health concern given that it can have adverse effects on mental and physical health, educational and criminal status (Newcomb and Bentler, 1988). More problematic substance use in adolescence is associated with higher rates of suicide, homicide, accidental death, violence, teen pregnancy and elevated infant mortality (Wallace and Bachman, 1991).

Provision of early interventions to youth with substance misuse is warranted as it may prevent escalation to more severe use (Flanzer, 2006).

IMPLICATIONS FOR SERVICE DEVELOPMENT

In line with multiple risk factor theories (Hawkins, Catalano and Miller, 1992; Liddle & Dakof, 1995a) the quantitative and qualitative findings of the current study indicate that substance misuse arises in a context of family and peer substance use, problematic family relationships, neighbourhoods where drugs are freely available as well as individual risk factors such as coping skill deficits and co-existing psychological problems. These findings indicate a need to adopt a multi systemic approach to prevention, assessment and intervention with adolescent substance misuse.

IMPLICATIONS FOR IDENTIFICATION OF YOUTH WITH SUBSTANCE USE PROBLEMS

The present research findings indicate a high level of substance use among a community group of adolescents who are mainly school based. A significant proportion of these youth show problematic use, in particular the regular drug users and the problem substance users. Consideration needs to be given to

how best to detect and engage these young people. Schools constitute an important site for detection of substance using youth. They need to offer support for students and access to intervention and not just make a punitive response. Schools' response to substance use detection should be clearly delineated in their substance use policy. Teachers as well as social workers, nurses, physicians, police, youth workers who are all likely to be a first point of contact with substance using youth should have basic training in recognition of substance use involvement, provision of initial interventions such as support and accurate information giving concerning substance misuse. They should also have access to referral pathways to treatment services. Drug education officers could be involved in this training process.

As adolescents do not commonly identify themselves as problem substance users, pro-active screening and assessment could be implemented in settings where adolescents with substance use problems are likely to be present. The current findings indicate that a substantial proportion of youth have experienced an accident, injury and trouble with the police as a result of their drinking behaviour therefore, primary care clinics, accident and emergency and police/juvenile justice settings are potential sites for initial screening and assessment. Staff in these settings could be trained in the use of substance abuse screening instruments, which should be employed as standard across settings so that a common definition of problem substance use is adopted. In order to maximise the opportunity for youth engagement with treatment, staff in these settings could be trained in motivational enhancement, a brief intervention that has been shown to lead to increased treatment engagement (O'Leary Tevyaw and Monti, 2004).

Given the high level of co morbid psychological difficulties observed among adolescents in treatment for substance misuse in the current study, adolescents who present in community settings for psychological or psychiatric assessment should be routinely screened for problem substance use.

IMPLICATIONS FOR PREVENTION

Primary interventions can be used to reduce first use or prevent the transition from experimental use to more problematic use (Faggiano et al., 2005). Therefore adolescents who show an experimental level of substance use such as the moderate drinkers and the experimental drug users in the current study can also benefit from preventative interventions.

In view of the high level of substance use seen among the community group of adolescents in the current study who are mostly drawn from schools, it makes sense to deliver preventative programmes to youth in the school setting. The mean age of first alcohol and illicit drug use was 13 years and 14 years respectively among the community group. Therefore, preventative efforts need to be implemented at a younger age, in primary school or at the latest in the first year of secondary school.

In terms of school based prevention, there is empirical support for the efficacy of life skills based interactive programmes in increasing drug knowledge, decision making skills, self esteem, resistance to peer pressure and drug use among sixth class and first year secondary school students (Faggiano et al., 2005). The Walk Tall and On My Own Two Feet life skills based interactive programmes, are implemented as part of the Social, Personal and Health Education (SPHE) programme in primary and post primary schools in Ireland. The efficacy of these specific interventions should be evaluated and such programmes should be rolled out in all schools nationwide.

Provisional evidence has also been garnered for a family based preventative intervention. In a cochrane review of randomised controlled studies, Foxcroft, Ireland, Lister-Sharp, Lowe and Breen (2002) reported that The Strengthening Families Programme showed provisional evidence of long-term effectiveness in delaying the onset of alcohol use. The strengthening families programme is delivered within parent, youth and family sessions. Sessions with parents include a focus on developing skills to

support and discipline their children; intervention with youth teaches them to deal with stress and peer pressure while family sessions focus on developing communication skills and clarifying roles.

Foxcroft et al. (2002) also report preliminary evidence for the efficacy of a social marketing media based intervention in delaying the onset of alcohol use, but this requires further research.

Preventative interventions which combine school based skills training with community based parent training programmes should be embedded in a cooperative, multi agency and multi professional community wide network (Crome and McArdle, 2004).

IMPLICATIONS FOR ASSESSMENT

Once initial screening indicates significant substance use involvement adolescents require comprehensive assessment so that they can be provided with comprehensive needs based services. Youth should receive a multi disciplinary multi dimensional assessment. Assessment should be based on multiple sources of information, clinical interview, observation, archival records and valid and reliable assessment tools of drug use including diagnostic interviews to determine the presence of abuse or dependence. Behavioural patterns of substance use including the age of onset, duration of use, frequency of use, the range of substances and the amount used should be identified. Habitual drug users should receive a full physical examination and regular urinalysis for the duration of assessment (Carr, 2006).

Assessment should be developmentally sensitive and identify the key precipitating, predisposing and maintaining factors in the youth's development of problem substance use and protective factors which have prevented further deterioration. This process should lead to a formulation of the youth's difficulties into a coherent explanation for the aetiology and maintenance of the youth's substance use problem (Carr, 2006).

Findings of the current study indicated that adolescents in treatment for

substance misuse reported poor problem focused coping and among both community and clinical groups higher substance use involvement was associated with more reliance on alcohol and drug use to cope. In the present study, substance use involvement was also associated with more family functioning difficulties while family history of substance use, parent adolescent relationships and parental behaviour and attitude to substance use were identified by adolescents in substance misuse treatment as contributory factors to their substance use problem. Therefore assessment of adolescent substance use should include a focus on the adolescent's coping skills; family functioning with respect to problem solving, roles, rules, affective responsiveness; family history of substance misuse, parent adolescent relationships and parental behaviour and attitudes regarding adolescent substance use.

Co-morbid difficulties should be identified and their association with the drug problem explained (Carr, 2006). The findings of the current study indicate that adolescents in residential treatment for substance misuse report a very high level of co existing psychological problems. Adolescents who present with significant substance use problems should routinely receive a full comprehensive assessment for co-existing psychopathology. It is essential to take co-existing psychiatric problems among adolescents with substance use problems into account given the associated poorer prognosis for treatment outcome (Rowe, Liddle, Greenbaum and Henderson, 2004)

An aim of assessment is to establish whether the substance use problem reflects transient experimentation or a more severe level of drug use (Winters, 2006). There are clearly different degrees of substance use involvement and the categories generated in the current study could be useful as a reference point when assessing the nature of adolescent substance use among community groups of adolescents.

Formulation of the problem should inform the development of a comprehensive evidence based intervention which targets key maintaining factors whilst building on identified protective factors (Carr, 2006).

IMPLICATIONS FOR TREATMENT

The current study clearly shows that young people demonstrate different degrees of substance use involvement. A continuum of care is required, which meets the different needs of adolescents with varying levels of substance use involvement. The report produced by the working group for the treatment of under 18 year olds (2005) recommends a four tiered model of service delivery based on severity of substance use involvement which fits well with the current findings.

Tier one involves teachers, physicians, nurses, police, social workers whose role is to identify those who may need intervention at higher tiers for substance use problems. This tier may also be involved in the delivery of universal prevention programmes.

Tier two comprises services, which have professional expertise in either adolescent substance use or adolescent mental health but not both. The type of adolescent accessing a tier two service would be one who is abusing alcohol and/or drugs and experiencing some problems as a result. Intervention would involve basic short term counselling from a child and family service or substance use service delivered by an individual.

Findings of the current study indicate that a significant proportion of a community group of adolescents require a short-term intervention as they report a level of substance use which is associated with problem consequences. Evidence based intervention should be implemented with youth at this stage of substance use involvement such as CBT, motivational enhancement intervention, family based intervention. In general brief interventions can comprise from one to five sessions (Bien, Miller and Tonigan, 1993). Depending on individual need, multi systemic intervention may also be required at this level of substance misuse. Investment in services at this stage would prove worthwhile and cost effective as it could prevent escalation of substance use problems.

In the four-tiered model of service delivery, tier three should comprise services,

which have expertise in both adolescent substance use and adolescent mental health. These services entail multi disciplinary teams including psychiatrists, clinical psychologists, social workers, outreach workers and family therapists in order to meet medical needs and offer medical treatment options, assess for co morbid psychiatric problems, deal with child protection issues, provide outreach services for difficult to engage youth and deliver individual/group and family based psychotherapeutic interventions for adolescents. Adolescents accessing these services would have substantial problems as a result of substance abuse.

Tier four involves services which are comprised of a multi disciplinary team who have expertise in both adolescent substance use and adolescent mental health and provide high intensity treatment of short duration such as an inpatient setting or day hospital. Adolescents accessing these services would have severe problems as a result of substance dependence.

In terms of the recommended four tier model of service delivery, there are considerable gaps in the current provision of services in Ireland particularly regarding multi disciplinary team working at tier three. In reality, more severe substance users are often involved with multiple agencies and systems and providing quality treatment involves a collaborative approach between services (Kraft, Schubert, Pond & Aquirre-Molina, 2006).

Regarding evidence based interventions for more severe substance use, empirical studies provide support for the efficacy of individual (Kaminer, Burleson and Goldberger, 2002; Dennis et al., 2004) and group CBT (Waldron et al., 2001a; Dennis et al., 2004) for adolescent substance abuse. The current findings imply that treatment interventions should focus on enhancing problem solving coping in particular among adolescents with more severe substance use problems. Coping skills and problem solving are often incorporated within a multi component CBT approach.

The present research findings indicate a need to intervene at the familial level. Research demonstrates that systemic

engagement procedures for families reluctant to enter treatment lead to a higher level of engagement in treatment and lower drop out rates (Santisteban et al., 1996). Findings of the qualitative study indicate that fathers are less inclined to be involved in treatment so efforts to engage fathers in particular should be made. The present research findings indicate a need to intervene at the familial level. Multi dimensional family therapy is one of the most effective approaches for adolescent substance abuse (Liddle et al., 2001; Liddle, 2002). Multi dimensional family therapy is a developmental and ecologically oriented approach to reducing adolescent drug use and related problems by intervening in the multiple systems that maintain these problems e.g. individual, family, peer group, school, community.

Regarding treatment for co morbid difficulties, empirical support exists for CBT with adolescent disorders known to co occur with adolescent substance abuse (Whitmore and Riggs, 2006). Family based therapies which involve intervention in the multiple systems involved in the development of both drug use and psychiatric problems, are also among the most effective treatments for adolescent substance abusers with co morbid disorders (Liddle, 2002a in Rowe & Liddle, 2003).

POLICY DEVELOPMENT

Policies should guide prevention, assessment and intervention procedures, which are implemented regarding adolescent substance use. The National Drugs Strategy provides a single drugs policy framework in Ireland. This drug policy should specifically recommend the implementation of evidence-based interventions regarding prevention, assessment and treatment within the framework of the proposed four-tier model of service delivery. This will help ensure successful outcomes for clients and cost effectiveness as limited resources are put to the best use. A review mechanism within the context of the National Drugs Strategy is needed to report on the development of adolescent substance misuse services. Outcome measures should also be

implemented as mandatory in drug treatment services to evaluate treatment interventions.

IMPLICATIONS FOR FUTURE RESEARCH

There is a need for epidemiological studies of substance use among young people which involve comprehensive measures of substance use at a local level to understand the nature of the local drug situation in Ireland.

The findings of the present study indicate that adolescents in substance use groups higher up the continuum of substance use involvement generally report more maladaptation: poorer family functioning and more reliance on alcohol and drugs to cope. Future research could investigate further the psychological, social and educational/vocational functioning of these different groups of substance user. Longitudinal studies could be employed to track the alcohol and drug use behaviour of these different classes of substance user and any movement through the continuum in order to shed further light on the etiology of problematic substance use development.

Further research is required to evaluate the effectiveness of preventative interventions and to examine the efficacy of treatment interventions for adolescent substance misuse including long term follow up in an Irish context.



Appendix

Alcohol and Drug Use Survey

These questions refer to your use of alcohol and drugs. Please tick the boxes of the answers which best describe your use of alcohol/drugs in the last 12 months. Even if none of the answers seem exactly right, please pick the ones that come closest to being true. Please answer each item truthfully.

These following questions are about Alcohol (including beer, wine, spirits and alcopops)

What age were you when you first took an alcoholic drink (not just a sip)?
(a "drink" is a glass of wine, a bottle or can of beer, a bottle of alcopop, or a shot glass of spirits)

Never
Age of first drink _____

How often do you have a drink containing alcohol?

Never
Less than once a year
Once or twice a year
Several times a year
Once a month
2/3 times a month
Weekly
Several times a week
Daily

How many alcoholic drinks do you usually have when you are drinking?
(a "drink" is a glass of wine, a bottle or can of beer, a bottle of alcopop, a shot glass of spirits or mixed drink)

Don't drink
Number of drinks _____

How often do you have five or more alcoholic drinks on one occasion?

Never
Less than once a year
Once or twice a year
Several times a year
Once a month
2/3 times a month
Weekly
Several times a week
Daily

What do you drink when you drink alcohol? (tick all that apply to you)

Wine
Beer
Cider
Stout
Spirits (vodka, whiskey)
Alcopops e.g. bacardi breezer

The next questions ask about Drugs

What age were you when you first used a drug (other than alcohol) including cannabis, amphetamines, cocaine etc? Do not include drugs taken with a prescription from your doctor.

(a) Never
(b) Age _____

Please indicate how often you have used the following drugs if ever.

Hash/Cannabis

Have you ever used this drug?

Yes No

(ii) If Yes, how often have you used it in the last 12 months?

Not at all
Once or twice a year
Several times a year
Once a month
2/3 times a month
Once a week
Several times a week
Daily

Ecstasy (E, doves, Mitsubishis, MDMA)

Have you ever used this drug?

Yes No

(ii) If Yes, how often have you used it in the last 12 months?

Not at all
Once or twice a year
Several times a year
Once a month
2/3 times a month
Once a week
Several times a week
Daily

Amphetamines: speed (whizz, uppers), diet pills

(i) Have you ever used this drug?

Yes No

(ii) If Yes, how often have you used it in the last 12 months?

Not at all
Once or twice a year
Several times a year
Once a month
2/3 times a month
Once a week
Several times a week
Daily

Sedatives or tranquillisers: sleeping pills, sleepers, benzos, valium, Librium

(Do not include drugs prescribed for you from your doctor)

Have you ever used this drug?

Yes No

(ii) If Yes, how often have you used it in the last 12 months?

(a) Not at all
(b) Once or twice a year
(c) Several times a year
(d) Once a month
(e) 2/3 times a month
(f) Once a week
(g) Several times a week
(h) Daily

Cocaine

Have you ever used this drug?

Yes No

(ii) If Yes, how often have you used it in the last 12 months?

Not at all
Once or twice a year
Several times a year
Once a month
2/3 times a month
Once a week
Several times a week
Daily

Heroin

(i) Have you ever used this drug?

Yes No

(ii) If Yes, how often have you used it in the last 12 months?

Not at all
Once or twice a year
Several times a year
Once a month
2/3 times a month
Once a week
Several times a week
Daily

Opiates: codine, demerol, morphine, methadone

(i) Have you ever used this drug?

Yes No

(ii) If Yes, how often have you used it in the last 12 months?

Not at all
Once or twice a year
Several times a year
Once a month
2/3 times a month
Once a week
Several times a week
Daily

Hallucinogens: LSD, acid, mushrooms, DMT

(i) Have you ever used this drug?

Yes No

(ii) If Yes, how often have you used it in the last 12 months?

Not at all
Once or twice a year
Several times a year
Once a month
2/3 times a month
Once a week
Several times a week
Daily

Amyl nitrate: "poppers" "rush"

(i) Have you ever used this drug?

Yes No

(ii) If Yes, how often have you used it in the last 12 months?

Not at all
Once or twice a year
Several times a year
Once a month
2/3 times a month
Once a week
Several times a week
Daily

Neratine: sertine, neralin

(i) Have you ever used this drug?

Yes No

(ii) If Yes, how often have you used it in the last 12 months?

Not at all
Once or twice a year
Several times a year
Once a month
2/3 times a month
Once a week
Several times a week
Daily

Inhalants: glue, cleaning fluid, aerosol sprays, pain thinner, lighter fuel, petrol or paint

(i) Have you ever used this drug?

Yes No

(ii) If Yes, how often have you used it in the last 12 months?

Not at all
Once or twice a year
Several times a year
Once a month
2/3 times a month
Once a week
Several times a week
Daily

Have you used any other drug (s) not mentioned here

Write the name(s) here: _____

The following questions are about your use of alcohol and drugs.

How many times per month do you spend hung over from alcohol use?

Number of times per month _____ None

I spend a lot of time trying to organise my next drinking session.

True False

Not including the very first 3/4 times that I drank, I have noticed that I have to drink more alcohol to get the same effect.

True False

I have taken more alcohol so that I wouldn't feel physically uncomfortable or sick.

True False

How many times per month do you have a "come down" from drug use?

Number of times per month _____ None

I spend a lot of time trying to organise my next drug taking session.

True False

I have had to take more drugs to get the same effect.

True False

I have taken more drugs so that I wouldn't feel physically uncomfortable or sick.

True False

What effects has drinking alcohol had on your life?

(Tick all the answers that apply to you)

It doesn't apply as I don't drink alcohol
None
It has effected my performance at school or work
It has gotten me into trouble at home
It has gotten me into trouble at school or at work
It has resulted in an argument
It has resulted in a physical fight
It has resulted in the damage of property
It has gotten me into trouble with the police
It has resulted in an accident or injury

What effects has taking drugs (other than alcohol) had on your life?

(Tick all the answers that apply to you)

It doesn't apply as I don't take drugs
None
It has effected my performance at school or work
It has gotten me into trouble at home
It has gotten me into trouble at school or at work
It has resulted in an argument
It has resulted in a physical fight
It has resulted in the damage of property
It has gotten me into trouble with the police
It has resulted in an accident or injury

How do you feel about your use of alcohol?

(Tick all the answers that apply to you)

It doesn't apply as I don't drink alcohol
It is no problem at all
I can control it and set limits on myself
I often feel bad about my use
I need help to control myself

How do you feel about your use of drugs (other than alcohol)?

(Tick all the answers that apply to you)

It doesn't apply as I don't use drugs
It is no problem at all
I can control it and set limits on myself
I often feel bad about my use
I need help to control myself

Have you ever seen anyone because of a problem with alcohol/drugs, for example: Doctor, Counsellor, Psychologist?

Yes
No

(i) Did you feel that you could be honest about your use of alcohol in this questionnaire?

It doesn't apply as I don't use alcohol
Yes
No

(ii) Did you feel that you could be honest about how much alcohol you use in this questionnaire?

It doesn't apply as I don't drink alcohol
Yes
No

(i) Did you feel that you could be honest about your use of drugs in this questionnaire?

It doesn't apply as I don't use drugs
Yes
No

(ii) Did you feel that you could be honest about how much drugs you use in this questionnaire?

It doesn't apply as I don't use drugs
Yes
No



References

- Achenbach, T.M., and Edelbrock, C. (1987). *Manual for the youth self report and profile*. Burlington VT: University of Vermont, Department of Psychiatry.
- Bien, T. H. Miller, W.R., and Tonigan, J.S. (1993). Brief interventions for alcohol problems: a review. *Addiction*, 88, 315-336.
- Carr, A. (2006). *The handbook of child and adolescent clinical psychology: A contextual approach (2nd Edition)*. London: Routledge.
- Cooper, L. (1994). Motivations for alcohol use among adolescents: Development and validation of a four-factor model. *Psychological Assessment*, 6, 117-128
- Crome, I. and McArdle, P. (2004). Prevention programmes. In I. Crome, H. Ghodse, E. Gilvarry and P. McArdle (eds.), *Young People and Substance Misuse* (pp. 15-30). London: Gaskell.
- Dennis, M., Godley, S.H., Diamond, G., Tims, F.M., Babor, T., Donaldson, J., Liddle, H., Titus, J.C., Kaminer, Y., Webb, C., Hamilton, N. and Funk, R. (2004). The Cannabis Youth Treatment (CYT) Study: Main findings from two randomised trials. *Journal of Substance Abuse Treatment*, 27, 197-213.
- Endler, N.S. & Parker, J.D.A. (1999). *Coping inventory for stressful situations 2nd Edition* (CISS). Toronto, Canada: Multi Health Systems.
- Epstein, N.B., Baldwin, L.M. and Bishop, D.S. (1983). The McMaster Family Assessment Device. *Journal of Marital and Family Therapy*, 9, 171-180.
- Faggiano, F., Vigna-Taglianti, F.D., Versino, E., Zambon, A., Borraccino, A. and Lemma, P. School-based intervention for illicit drug's use. *The Cochrane Database of Systematic Reviews* 2005, Issue 2. Art. No.: CD003020. D01: 10.1002/14651858. CD003020. pub 2.
- Flanzer, J. (2006). Health services with drug abusing adolescents: the next frontier of research. In H. A. Liddle and C.L. Rowe (Eds.), *Adolescent Substance Abuse: Research and clinical advances* (pp. 204-220). Cambridge: Cambridge University Press.
- Fletcher, A., Steinberg, L. and Williams-Wheeler, M. (2004). Parental influences on adolescent problem behaviour: Revisiting Stattin and Kerr. *Child Development*, 3, 781-796.
- Foxcroft, D., Ireland, D., Lister-Sharp, D.J., Lowe, G, and Breen, R. Primary prevention for alcohol misuse in young people. *The Cochrane Database of Systematic Reviews* 2002, Issue 3. Art. No.: CD003024. D01: 10.1002/14651858. CD003024.
- Grube, J. and Morgan, M. (1990). *The development and maintenance of smoking, drinking, and other drug use among Dublin post primary pupils*. Dublin: The Economic and Social Research Institute.
- Hawkins, D., Catalano, R. and Miller, J. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*, 112, 64-105.
- Hibell, B., Andersson, B., Bjarnason, T., Ahlstrom, S., Balakireva, O., Kokkevi, A and Morgan, M. (2004). *The ESPAD report 2003. Alcohol and other drug use among students in 35 countries*. Modintryckoffset, AB: The Swedish Council for Information on Alcohol and Other Drugs (CAN) and the Pompidou Group at the Council of Europe.
- Kabacoff, R., Miller, I., Bishop, D., Epstein, N. and Keitner, G. (1990). A psychometric study of the McMaster family assessment device in psychiatric, medical, and non-clinical samples. *Journal of Family Psychology*, 3, 431-439.
- Kaminer, Y., Birleson, J. and Goldberger, R. (2002). Psychotherapies for adolescent substance abusers: short and long term outcomes. *Journal of Nervous and Mental Disease*, 90, 737-745.
- Kraft, K., Schubert, K., Pond, A. and Aquirre-Molina, M. (2006). Adolescent treatment services: the context of care. In H. A. Liddle and C.L. Rowe (Eds.), *Adolescent Substance Abuse: Research and clinical advances* (pp. 174-188). Cambridge: Cambridge University Press.
- Liddle, H. and Dakof, G. (1995). Efficacy of family therapy for drug abuse: promising but not definitive. *Journal of Marital and Family Therapy*, 21, 511-543.
- Liddle, H.A., Dakof, G.A., Parker, K., Diamond, G. S., Barrett, K. and Tejada, M. (2001). Multidimensional family therapy for adolescent drug abuse: Results of a randomised clinical trial. *American Journal of Drug and Alcohol Abuse*, 27, 651-688.
- Liddle, H.A. (2002) Advances in family-based therapy for adolescent substance abuse: Findings from the Multidimensional Family Therapy research program. In L. S. Harris (Ed.), *Research Monograph No. 182: Problems of Drug Dependence 2001* (pp. 113-115). Bethesda, MD: National Institute on Drug Abuse.
- Mayer, J. and Filstead, W. (1979). The adolescent alcohol involvement scale: An instrument for measuring adolescent use and misuse of alcohol. *Journal of Studies on Alcohol*, 40, 291-300.
- Miller, I., Epstein, N., Bishop, D. & Keitner, G. (1985). The McMaster Family Assessment Device: reliability and validity. *Journal of Marital and Family Therapy*, 11: 345-356.
- Miller, G. (1990). *The substance abuse subtle screening inventory- adolescent version*. Bloomington, IN: Substance Abuse Subtle Screening Inventory Institute.
- Moberg, P. & Hahn, L. (1991). The adolescent drug involvement scale. *Journal of Adolescent Chemical Dependency*, 2, 75-84.
- Moos, R. (1990). Conceptual and empirical approaches to developing family based assessment procedures: resolving the case of the family environment scale. *Family Process*, 29, 199-208.
- Moos, R. & Moos, B. (2002). *Family environment scale*, 3rd ed. Palo Alta, CA: Mind Garden.
- National Drugs Strategy 2001-2008 Progress Report (2004)*. Department of Community, Rural and Gaeltacht Affairs.
- Newcomb, M. and Bentler, P. (1988). Consequences of adolescent drug abuse: *Impact on the lives of young adults*. Newbury Park, CA: Sage.

- Oliver, J., May, M. and Handal, P. (1988). The factor structure of the family environment scale: Factors derived from subscales. *Journal of Clinical Psychology*, 44, 723-727.
- O'Leary Tevyaw, T. and Monti, P.M. (2004). Motivational enhancement and other brief interventions for adolescent substance abuse: Foundations, applications and evaluations. *Addiction*, 99, 63-75.
- Rowe, C., Liddle, H., Greenbaum, P. and Henderson, C. (2004). Impact of psychiatric comorbidity on treatment of adolescent drug abusers. *Journal of Substance Abuse Treatment*, 26, 129-140.
- Reynolds, W. (1998). *Adolescent psychopathology scale*. Florida: Psychological Assessment Resources, Inc.
- Santisteban, D., Szapocznik, J., Perez-Vidal, A., Kurtines, W., Murray, E. and LaPerriere, A. (1996). Efficacy of intervention for engaging youth and families into treatment Some variables that may contribute to differential effectiveness. *Journal of family Psychology*, 10, 35-44.
- Schaffer, D., Fisher, P., Lucas, C., Dulcan, M., Schwab-Stone, M. (2000). NIMH diagnostic interview schedule for children, version IV (NIMH DISC-IV): Description, differences from previous versions, and reliability of some common diagnoses. *Journal of American Academy of Child and Adolescent Psychiatry*, 39, 28-38.
- Stattin, H. and Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, 71, 1072-1085.
- Waldron, H. B. Slesnick, N., Brody, J.L. and Turner, C. (2001). Treatment outcome for adolescent substance abuse at 4 and 7 month assessments. *Journal of Consulting and Clinical Psychology*, 69, 5, 802-813.
- Wallace, J.M. and Bachman, J.G. (1991). Explaining racial/ethnic differences in adolescent drug use: The impact of background and lifestyle. *Social Problems*, 38, 333-357.
- Wasserman, G.A., McReynolds, L.S., KO, S.J., Katz, L. M., Cauffman, E., Haxton, W., and Lucas, C.P. (2004). Screening for emergent risk and service needs among incarcerated youth: comparing MAYSI-2 and Voice DISC-IV. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43 (5), 629-639.
- Whitmore, E.A. and Riggs P.D. (2006). Developmentally informed diagnostic and treatment considerations in co-morbid conditions. In H. A. Liddle and C.L. Rowe (Eds.), *Adolescent Substance Abuse: Research and clinical advances* (pp. 264-283). Cambridge: Cambridge University Press.
- Winters, K. (2006). Clinical perspectives on the assessment of adolescent drug abuse. In H. A. Liddle and C.L. Rowe (Eds.), *Adolescent Substance Abuse: Research and clinical advances* (pp. 223-240). Cambridge: Cambridge University Press.
- Working group on treatment of under 18 year olds. (2005). *Report of the working group on treatment of under 18 year olds presenting to treatment services with serious drug problems*. Dublin: Department of Health and Children.

Notes



Juvenile
Mental Health Matters

Design by Carl Antoni Gracie

+ 33 (0) 143 062 410

+ 44 (0) 7924 038 786

www.carlantonigracie.com

Earth photograph courtesy of NASA, <http://visibleearth.nasa.gov>