

RESEARCH ARTICLE

ADOLESCENT BOYS IN IRELAND: ALCOHOL, CANNABIS, SEXUAL ORIENTATION AND MOOD.

Robert Kerr, MA, MAppSc, MSc, MSc(St), MInstP, CPhys, HDipEd, CertTheol.

..... Manuscript Info Abstract Manuscript History A questionnaire survey of 303 adolescent boys in years 4 (Transition Year), 5 and 6 in secondary schools in counties in the east, southeast Received: 09 January 2018 and south of Ireland was conducted during the first term of the 2017-18 Final Accepted: 11 February 2018 academic year. It was found that 72% of the boys had tried alcohol, Published: March 2018 with 36% of these drinking at least once a month. Seven boys recorded drinking on several days a week, including two who drank every day. Keywords:-The most common age to start drinking alcohol was 14, with three boys Adolescent boys, alcohol, sexual starting by the age of 10. Drunkenness and hangovers were statistically orientation, mood disturbance. most likely to occur in pupils in fifth year ($\alpha = 0.01$ in each case). Common side-effects of drinking included getting into a heated argument or damaging something, again significantly more so in fifth year. There was strong support for the statements that boys drink to fit

in and because they like getting drunk. More than one in four boys (26.7%) had used cannabis, almost two-thirds of whom smoked it only occasionally. Use of other drugs was very small. Tests of the pupils' mood showed a definite trend for higher mood disorder with higher consumption of both alcohol and cannabis. This was significant at the 99% level. Those who gave their sexual orientation as other than heterosexual had higher mood disturbances. This was significant at the

Copy Right, IJAR, 2018,. All rights reserved.

.....

Introduction:-

Research published in 2013 found that a high proportion (93.5%) of sixth-year male students in Ireland had drunk alcohol at some stage, with 70.3% of them starting to drink by the age of 15 and with 68.0% of them drinking at least monthly (Kerr, 2013). Furthermore, in spite of wide variations within the group of 169 students, there was a weak correlation between total alcohol consumption and mood disturbance and a strong correlation between binge drinking and mood disturbance.

90% test level.

Reports of increasing levels of adolescent alcoholic consumption in most countries continue to appear (Murphy, et al., 2016) although a decline was identified in Canada (Fish, et al., 2017). However, gay and bisexual youth in Canada continued to show elevated rates of alcohol use compared with heterosexual youth. Elsewhere, the consumption of alcohol and cannabis has also been shown to be closely associated with homosexual selfidentification (Lhomond, et al., 2014). Gay men have shown somewhat higher alcohol use and significantly higher cannabis use than straight men (Gonzalez et al., 2017). Furthermore, those pupils who experience more frequent victimisation and homophobic name-calling at age 10 are more likely to abuse alcohol and/or cannabis at age 15 (Earnshaw, et al., 2017; Tucker, et al., 2016). Use of marijuana was found to be positively correlated with

frequency of gay sexual relations (Zhang and Wu, 2017), although that study did not compare gay youths with their straight contemporaries.

Mental health issues appear frequently in papers about gay or bisexual men. For example, self-defined bisexuals, with gay men second, have the highest risk of chronic or recent depression (Lhomond, *et al.*, 2014) and the levels of depression among gay/bisexual men is significantly higher than among straight men (Hatzenbuehler and McLaughlin, 2017; Scott, *et al.*, 2016). Boden and Fergusson (2011) found a strong link between alcohol use disorders and major depression, showing also that the alcohol abuse caused the depression, rather than *vice versa*. Internalised homophobia has been positively correlated with depression, and depression has been positively associated with recent drug use (Moody *et al.*, 2017). It has also been shown that coming out helps moderate or alleviate drug problems in gay adolescents.

This study examines the current situation with regard to alcohol use among adolescents, as well as use of cannabis and other drugs, and investigates any relationship between such use, their sexual orientation and mood disturbance.

Methodology:-

Participants:-

Contact was made with a number of schools in the Republic of Ireland via email, telephone calls and face-to-face meetings. Boys' secondary schools in Cork City, Dublin (Fingal), Dublin (Dun Laoghaire/ Rathdown), and Wexford chose to participate, some with just fourth year (Transition Year) and others with either or both of fifth and sixth years as well. This resulted in a convenience sample of 303 senior cycle boys ranging in age from 15 to 19 inclusive (see Tables 1 and 2). The mean age of the sample was 16 years and 5 months.

Year	4 (TY)	5	6	Total
Number of pupils	166	106	31	303

Table 1:-Number of respondents in each school year

Age	15	16	17	18	19	Blank	Total
Number of pupils	87	139	60	6	1	10	303

Table 2:-Number of pupils in each age group

The schools that took part in the research covered a wide variety of socioeconomic backgrounds, including working class, lower middle class and middle class. All the schools that took part were single-sex boys' schools and none of them included a boarding element.

Materials:-

Information was gathered via a questionnaire similar in style and content to that used in the 2013 study. The questionnaire was divided into a number of discrete sections asking about consumption of alcohol and attitudes to drinking, consumption of other (illegal) drugs, the participant's mood and feelings, and a final section asking for demographic details including sexual orientation. Included here was a small number of "dummy" variables such as being left- or right-handed, whether glasses were worn and colour of hair. There was no expectation that any of these might be correlated with the major variables in the study; rather, these were included to test for Type II errors, the failure to reject a false null hypothesis because of spurious statistics, by testing for unexpected links between any of the dummy variables and a major variable.

Procedure:-

On the day of administration the participants were thanked for volunteering to take part in the research. The questionnaires were then completed in silence while seated at separate desks. This took approximately fifteen minutes. Questions and comments that were taken after the completion of the questionnaire showed a good level of interest in the research. Following an initial analysis of the questionnaires a brief report was sent to each school concerning their own pupils. This was followed later by a copy of this full report. No issues were raised by teaching staff at any stage of the administration of this questionnaire.

Results:-

General:-

A majority of students completed all questions. However, some pupils left some questions blank. These were ignored in the analysis. No significant correlations were found for any of the dummy variables (handedness, place where you live, do you wear glasses and colour of hair) with any of the major variables concerning alcohol, cannabis and mood. Hence, these dummy variables were ignored in the analysis. Since many variables were nominal these were examined using χ^2 statistics using Excel 2013.

Alcohol:-

Of the total of 303 pupils, 228 (75.2%) had drunk alcohol, just one of whom had started at the legal age of 18. This means that three out of four senior secondary school boys had indulged in under-age drinking. The extent of the problem was even more apparent when consideration was given to the age at which the first alcohol drink was taken (see Table 3). This shows that the most common age for starting drinking was 14 and that 31 (10.2% of the total group) had started drinking by the age of 12, when most of them would still have been in primary school. Indeed, at least 62.8% of the cohort had started drinking by the time they were 15, when they would have been facing their Junior Certificate state examinations. However, drinking of itself does not imply getting drunk (see below).

Age started	<10	11	12	13	14	15	16	17	18	Totals
Age now										
15	1	0	5	5	37	16	-	-	-	64
16	0	0	15	5	47	23	18	-	-	108
17	2	1	7	1	14	4	17	3	-	49
18	0	0	0	0	1	0	3	2	0	6
19	0	0	0	0	0	0	0	0	1	1
Totals	3	1	27	11	99	43	38	5	1	228

Table 3:-Age at which participants starting drinking alcohol

This distribution, also shown in Figure 1, indicated that almost half (46.5%) of all the boys in this survey had started drinking before they sat their Junior Certificate examinations. (In this sample no pupil was under the age of 15.)

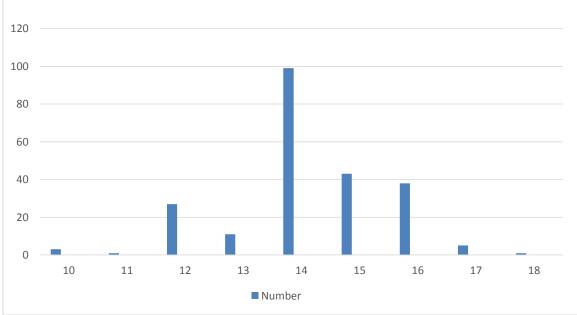


Figure 1:- Age at which boys started drinking alcohol

		Number of times per year drinking alcohol									
	0	0 5 10 20 50 100+ Totals Means									
Age											
15	29	31	11	9	5	2	87	13.7			
16	36	52	10	31	10	0	139	14.4			
17+	14	27	8	8	7	3	67	19.3			
Totals	79	110	29	48	22	5	293	15.9			

Table 4:-Frequency of drinking alcohol compared to age

The frequency with which pupils drank alcohol is given in Table 4. Ten pupils did not answer this particular question. Of those who did, 218 (74.4%) drank less than once a month or not at all. However, 27 (or 12.6% of those who drink) said they drank at least once each week, including one 17-year old who drank every day and another four (aged 15 or 17) who drank alcohol at least two or three times each week. Another respondent who failed to indicate his age also said he drank every day. The frequency of heavy drinking was significantly higher (at the 90% level of confidence) among the pupils from urban areas in the south of the country. The mean frequency of drinking was approximately once every three to four weeks. There was a substantial variation in frequency of drinking among the three school years, with sixth year pupils drinking over twice as often as those in fourth year, as shown in Table 5. This appears to indicate that a pupil's school year was more influential to his pattern of drinking that his own age group. This seems reasonable, given that far more time is spent with his own class contemporaries than with other pupils of the same age.

Year	Number of times per year for drinking alcohol								
	0	5	10	20	50	100+	Totals	Means	
4	50	60	15	29	10	2	166	10.73	
5	22	40	12	19	10	3	106	17.59	
6	9	15	2	1	2	2	31	23.55	
Totals	81	115	29	49	22	7	303	14.46	

Table 5:-Frequency of drinking alcohol compared to school year

The pattern of drinking in the week prior to the administration of the survey was more moderate, with just 53 (17.5%) saying they had taken a drink, though this included four boys who had been drinking on 4 or 5 days of that week and one (aged 17) who had been drinking every day. Most of these boys came from urban areas in the east of the country. The vast majority of the alcohol consumed was beer, generally from cans. For those who were drinking, the mean number of days drinking in the previous week was 1.6; for the entire sample the mean was 0.28 days, which is low.

Figure 2 shows that the frequency of getting drunk follows a broadly similar pattern for each age group. However, it is clear that the youngest pupils, aged 15, are more likely than older boys to get drunk about every two weeks. Furthermore, the frequency of getting drunk for each school year produced the following result: 4.55 times per year for fourth year, 6.30 times for fifth year and 5.77 times for sixth year pupils. Thus, boys in their fifth year of secondary school are more likely to get drunk than either of the other two years. This is significant at the 99% confidence level ($\chi^2 = 63.3$). A similar picture is true of those pupils aged 17 or more ($\chi^2 = 65.9$).

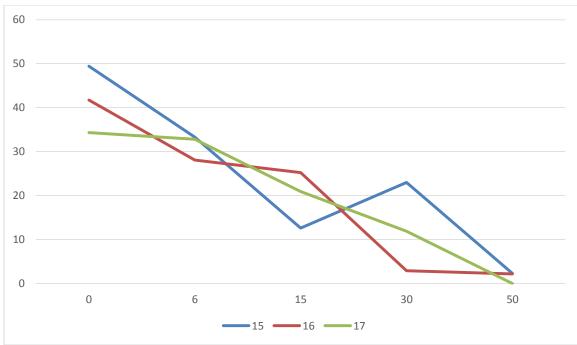


Figure 2:-Frequency of getting drunk for each age group

Almost three-fifths of the boys reported being drunk at least once during the previous year. The mean frequency of getting drunk for this sample is about 11 times per year or almost once every month, but this hides a huge variation with school year, whereby the mean for fourth year is 11 times per year, for fifth year it is 18 times and for sixth year it rises to 24 times, or about once every two weeks.

Hangovers	No. of	Blank	Net no. in	No. with	% of pupils with
School year	pupils	responses	year	hangovers	hangovers
4	166	2	164	63	38.4
5	106	2	104	48	46.2
6	31	0	31	9	29.0
Totals	303	4	299	120	40.1

Table 6:-Number of pupils who experienced hangovers in previous year

Table 6 shows the frequency of hangovers according to school year. A χ^2 test found that fifth-year students were significantly more likely (at the 99% confidence level) to have a hangover than either of the other two school years ($\chi^2 = 186.2$).

Anti-social behaviour:-

The students were asked about any antisocial behaviour they had exhibited while under the influence of alcohol. More than one in three had been involved in some form of antisocial behaviour, of which by far the most common were getting into a heated argument and damaging something. These results, shown in Table 7, find that fifth-year boys are significantly more likely to be involved in such behaviour than either of the other years ($\chi^2 = 12.2$). More than 10% of the drinkers had become involved in a fight and/or had missed school because of drinking. Twelve of the cohort who were either 15 or 16 reported having unprotected sex, meaning they were under-age. Some of the remaining six students, now 17, may also have been under-age at the time of having unprotected sex. More than one in five of the drinkers said he had been involved in at least two of these behaviours.

Year	Heated argument	Got into a fight	Damaged something	Missed school	Had unprotected sex	Totals
4	24	9	21	13	8	75
	(14.5%)	(5.4%)	(12.7%)	(7.8%)	(4.8%)	(45.2%)

5	28	14	28	5	8	83
	(26.4%)	(13.2%)	(26.4%)	(4.7%)	(7.5%)	(78.3%)
6	7	2	5	3	2	19
	(22.5%)	(6.5%)	(16.1%)	(9.7%)	(6.5%)	(61.3%)
Totals	59	25	54	21	18	177
	(19.5%)	(8.3%)	(17.8%)	(6.9%)	(5.9%)	(58.4%)

Table 7:-Frequency of antisocial behaviour in each year as a result of alcohol

Attitudes to alcohol:-

The respondents' attitudes towards why they thought other boys of their age drank alcohol were scored using ordinal numbers. These showed no significant variation across either age or year in school but the greatest support was found for the statement "They drink to fit in with their friends", followed closely by "They drink because they like getting drunk". The statement "They drink because it makes them feel more confident" also received considerable support. The questionnaire allowed the boys the opportunity to make other comments regarding alcohol, and 97 (32.0%) of them did so. A small number of these were either illegible or unclear. Of the remaining, the largest number (42) suggested that they drink because it was fun and helped them socialise. This included a few cases that specifically mentioned drinking as a means to meet or get to know girls. The second most frequently made comment, mostly from fourth year boys and 16-year-olds, referred to drinking as a way of dealing with personal problems: "To forget the past", "To forget a bad experience" or "To deal with the pain", for example. One student described drinking as "A way out of trouble".

Cannabis:-

The section on cannabis and drugs found that 26.7% of the cohort (81 boys) had smoked cannabis and 7.6% (23 boys) had used some other illegal but unspecified "street" drug. Of these 81, 50 had used cannabis "occasionally", 22 used it "fairly regularly" and 9 used it "all the time". Heavier use was associated mostly with fifth-year and 16-year-old students. A small number of pupils chose to make an extra comment about drugs, mostly expressing their fondness for cannabis. Two boys complained that it was too expensive for their age group, one said getting access to suppliers was too difficult, and one said that he used amphetamines at examination time. A chi-squared test comparing the boys who drink with those who smoke cannabis found that they were significantly related at the 99% significance level ($\chi^2 = 32.9$), meaning participants were significantly more likely to smoke cannabis if they also drank alcohol.

Mood:-

The section asking about mood originally (before the 2013 research) contained eight statements where participants were asked to say how much each statement had applied to them in the previous few weeks. The ratings ranged from "strongly agree" to "strongly disagree" and were scored from 5 down to 1 respectively. Following a pre-test of the questionnaire it was decided to reduce the number of statements to four owing to the poor discrimination levels of the deleted statements, where responses were uniformly either very high or very low. The retained statements referred to stress, energy levels, ability to concentrate, and patience. These were the same four items that had featured in the 2013 study by Kerr. This gives a maximum score of 20 (major mood disturbance) and a minimum of 4 (representing no mood change). The scores given were ordinal, indicating relative rather than absolute levels of mood disturbance. Pupils from the sixth year showed clearly (but not significantly) higher stress levels and lower energy levels than other pupils, and they had similar loss of patience to those in fourth year. Pupils from fourth year (transition year) scored lowest for stress levels and highest for retaining energy levels, and those in fifth year scored highest (i.e. worst) regarding ability to concentrate and being patient (Table 8). Pupils from smaller towns tended to score lower (less disturbance) on the mood questions than those who lived in cities.

Factor	More stress	Less energy	Can't	Less patience	Totals:
Year			concentrate		
4	2.45	2.70	2.81	2.76	10.7
5	3.23	3.10	2.92	2.84	12.1
6	3.77	3.23	2.84	2.74	12.6
Totals:	2.83	2.89	2.83	2.76	11.3

Table 8:-Mean scores for each year on each mood factor

It can be seen that those pupils in sixth year generally experience the greatest mood disturbance, with the greatest stress and least energy contributing to the highest total result. Conversely, transition year pupils score lowest overall, with fifth year being closer to sixth year than fourth. Whether this has anything to do with their higher drinking habits is not clear. What is apparent is that pupils in city schools drink more, get drunk more and engage in antisocial behaviour more than do those from schools in smaller towns. Some pupils made extra comments about stress here, such as "Everything started to fall apart recently", but without elaboration.

Feelings:-

The section on feelings originally contained six questions, but after the pre-test it was decided to eliminate one which asked if their interest in sex had reduced. Since fewer than 1% of the boys said it had reduced it was rejected as not providing any useful information. The remaining five questions had three optional answers, scoring 1 to 3, giving a maximum score of 15 (meaning major mood disturbance) and a minimum of 5. The statement that scored by far the highest total was "I tend to criticise myself for my mistakes and weaknesses". Support for that statement increased substantially with increasing year in school, and the overall level of mood disturbance also increased from fourth to fifth to sixth year. Other statements receiving substantial support referred to appetite change or simply feeling sad. Pupils aged 17 or over scored highest in each of the five categories and those aged 16 scored lowest in four of the five, coming second highest regarding self-criticism. A high level of consistency was found between the scores for Feelings and for Mood (Pearson's Correlation Coefficient, r = 0.54).

Total Mood:-

The two scores for mood and feelings were then added together to give an ordinal indication of the overall mood disturbance of the participants, called "total mood". Moderate correlations between total mood and school year (r = 0.16) and between total mood and age (r = 0.20) indicate that the boys become more stressed as they get older. The minimum score on this combined total was 9 and the maximum 35. The results, shown in Table 9, are that 176 (58.1%) of the total of 303 students score less than or equal to the mean score of 18.8. The mean is somewhat inflated by a small number of outliers who scored the maximum or almost maximum – one 17-year old student in year 6 scored 35 and two 17-year old boys in year 5 scored 34.

Total mood score	Blank	9 – 13	14 – 19	20 – 24	25 – 29	30 - 35	Total
Number of boys	6	34	136	83	35	9	303

Table 9:-Distribution of total mood scores

Of these high or very high total mood scorers (the nine who scored between 30 and 35), one was 18, seven were 17 and one was 15; three were in sixth year, five in fifth year and one in fourth. One boy (score 31) drank every day and got drunk several times a month; another (score 34) drank every week and also got drunk several times a month. However, the remainder recorded moderate drinking and drunkenness rates. Four of these nine participants smoked cannabis, including one who smoked it fairly regularly. These results showed no clear overall correlation between mood disturbance and any of the factors drinking, drunkenness or smoking cannabis.

Demographics:-

The demographic section showed that 86% of the sample were right-handed and 14% left-handed; 23% wore glasses and 77% did not; 55% had brown hair, 23% had black, and 22% had other coloured hair (fair/blond, red or dyed). None of these factors showed any significant difference in the frequency of drinking, frequency of getting drunk, having a hangover or total mood disturbance. However, location of home did have a clear effect on the boys' behaviour, as shown in Table 10.

Location of home	Proportion of students who drink	Frequency of drinking	Frequency of drunkenness	Proportion of smokers (cannabis)	Mean total mood disturbance	Number of pupils
City	0.80	15.8	6.8	0.4	19.7	126
Suburbs	0.76	12.7	6.5	0.6	18.8	84
Town	0.45	7.3	2.3	0.0	16.6	20
Village	0.79	11.7	4.5	0.5	19.6	24

Magna 0.75 12.0 5.0 0.4 10.1 20	Country	0.67	7.7	4.1	0.2	18.6	39
	Means	0.75	129	5.9	0.4	191	293

Table 10:-Variation of factors compared to student's home

It can be seen from this table that the pupils who were most likely to drink alcohol, who were most likely to drink more frequently, who were most likely to get drunk and who were most likely to have a higher mood disturbance were those who lived in a city. The only factor where they did not score highest was in smoking cannabis. On the other hand, the smallest group (20 students) who lived in a town were least likely to drink, they drank least frequently of all the sample, they got drunk less often, smoked cannabis much less and had lower scores on total mood disorder. Living in the countryside produced the second lowest scores in each category. Any interpretation of these would be highly speculative.

Sexual Orientation:-

The final category in the demographic section was sexual orientation. There were nine students who did not complete this question. Of the 294 others, 92.9% (273) said they were heterosexual, 2.0% (6) were homosexual, 4.4% (13) were bisexual and 0.7% (2) were "other". Thus, 7.1% of the cohort had alternative sexual orientation to the majority. Because the total number of non-heterosexuals is so small (21) meaningful statistics are impossible. However, there are some indications of possible trends, including the facts that the heterosexual participants were more likely to drink and to get drunk more frequently that the non-heterosexuals. The homosexual, bisexual and other boys in the group showed a higher level of mood disturbance (mean score = 22.80) than the heterosexuals (mean score = 18.87); this was more than 20% higher than that for the heterosexuals and was statistically significant at the 90% level. There was no difference in the likelihood of smoking cannabis; however, as already mentioned, the numbers here were small. Sexual orientation does not correlate with location of home, year in school, or age. Also, again because of the low numbers identifying as either homosexual or bisexual, it was impossible to either verify or disprove the apparent result that being open about one's sexual or bisexual than those from other schools.

Other comments:-

At the end of the questionnaire participants were given an opportunity to make any other written comments they wished. Only 26 (8.6%) chose to do so. These varied considerably in content, with a few saying they loved sex, alcohol or cannabis while others made more constructive comments such as "Focusing on your family will help your mood". A small number made suggestions about how particular questions could be improved and two wrote the name of specific drugs without further comment: "Heroin" and "MDMA". One boy said he had glasses but didn't wear them; he did not explain why not. About half of the comments referred to traumatic events in the boys' lives – a parent or grandparent dying, a parent or grandparent being seriously ill, death of a family pet, breaking up with a girlfriend, and parents splitting up. A foreign student, in addition to a close bereavement, said he missed his friends from home and a mixed-race student suffered from racist comments. One boy, who did not give any further details, said he had "underlying sad feelings" but that he "can't cry".

Discussion:-

Alcohol:-

The results from this study are not in easy agreement with the similar study carried out five years previously (Kerr, 2013). Whereas that study found 95% of students drinking, with three-quarters of them drinking at least once a month, this study found 75% drinking with 49% drinking at least once a month. The cohort in the earlier study was exclusively pupils from sixth year and the questionnaire was administered at a time of potentially higher stress shortly before their mock-Leaving Certificate examinations. However, comparison of the figures for the sixth year pupils in this current study – admittedly small in number – does not indicate a statistically significant excess in drinking rates in the senior pupils compared to those in years four or five. Another potentially important factor is that all the pupils in the earlier study came from one medium-sized town whereas this study includes a wider variety of locations. On the other hand, these current results found that those who lived in a medium-sized town had the lowest drinking rate, lowest drinking frequency, lowest frequency of drunkenness and use of cannabis of any group, even lower than those who lived in the countryside. This result cannot be explained easily.

This new picture might be taken to be more comforting, given that the rates of drinking and drunkenness are not as severe as had previously been found. This may be similar to the situation found in Canada (Fish, *et al.*, 2017)

though more research would be needed to confirm this. Nevertheless, it appears that just over three-quarters of the boys had drunk alcohol, 99.6% of whom had started drinking underage. Of these, about 10% had started drinking in primary school with another 50% joining them in their first couple of years in secondary school. Thus, more than 60% of the boys were drinking alcohol before the age of 15 and, although this is lower than the 70% reported previously for Ireland (Kerr, 2013), this is still high and cannot be helpful for the increase in brain development which occurs in mid-teens. The questionnaire in this study does not offer any clue as to how and why boys started drinking so early; perhaps this could be investigated in another study.

Sexual Orientation:-

The links between homosexual orientation and increased consumption of both alcohol and cannabis suggested by the literature were weakly supported by this study. However, the number of boys who identified as gay was very small indeed – just 5, of whom only one was openly gay – and the number of bisexuals was also low – only 13, of whom just three were open about their sexual orientation. This means that of these 18 boys, 14 (78%) were hiding their true sexual orientation. It is possible that this figure is even higher, with two boys describing their sexual orientation as "other" (of whom one said he was transgender) and 9 boys leaving that question blank, possibly due to uncertainty about their own orientation or possibly due to fear of lack of confidentiality with the questionnaires. If these responses are all taken together, there are 29 such boys or almost 10% of the cohort, of whom more than 86% felt unable to be open about their sexual orientation. This is a situation of some concern, given the reported link between mental ill-health and hidden sexual orientation (Hatzenbuehler and McLaughlin, 2017; Lhomond, *et al.*, 2014; Moody *et al.*, 2017; Scott *et al.*, 2016). More specific research would be required to establish any link between early homophobia and abuse of alcohol or cannabis, as reported by Earnshaw *et al.* (2017) and Tucker *et al.* (2016) or simply between being homosexual and use of cannabis (Zhang and Wu, 2017).

Mood Disturbance:-

The well-known effect of frequent drinking on mood disturbance (Boden and Fergusson, 2011; Kerr, 2013) is not very clear from this study. Of the students who scored the highest levels of mood disturbance, some of them either did not drink alcohol at all or only on special occasions, whereas others were drinking once or twice a month or, in one case, every day. The mean number of times a drinking student felt drunk in the previous year was 11 in this study, compared to 19 in the 2013 survey. However, this neither proves nor disproves Murphy's contention that drinking rates are continuing to rise (2016). Possible relevant factors here again include the time of year of the survey and an extrapolation of recent less-indulgent activity to a whole year, but these suggestions cannot be confirmed from this study alone. A further possibility is that the reduced set of mood disturbance questions used in this present study may have removed the overall ability of the questionnaire to discriminate.

One result which stands out clearly is the difference between fifth year students and either fourth or sixth year. The fifth-year boys, who comprised 35% of the total group, were found to be more likely to drink alcohol, more likely to get drunk, more likely to have a hangover, more likely to engage in antisocial activities (in particular having heated arguments, fighting, damaging something and having unprotected sex) and more likely to use cannabis than pupils in either of the other two years. These results, significant at the 99% level, remain unexplained, but they might reflect an attitude on the part of fifth-year boys whereby they see themselves as more grown up and able to indulge in illegal activities but without the extra pressures of the Leaving Certificate examinations.

One major finding that causes concern is the comments from some pupils that they drank to forget about some unpleasant experience. At the administration of the questionnaire the boys in one school were asked to include at the end anything they thought might have affected their responses. More than one-quarter of them did so, and, of these, almost 70% referred to major traumas such as a family bereavement, although those who had recently lost a parent or grandparent did not show greater mood disturbance. This may well indicate that most of the mood disturbance is not reactive (i.e. stemming from a reaction to a situation of high stress) but is endogenous (i.e. originating from a chemical imbalance in the brain); unfortunately the latter type carries by far the greater stigma and so is often not treated.

Dealing with Stress:-

Most secondary schools nowadays seem to have anti-bullying and anti-homophobia policies in place but it is much more difficult to ask schools to deal with pupils who realise there is something wrong with their mood but who cannot identify a cause. Such pupils need to be able to talk to an understanding adult in confidence. However, if a level of concern of mood disturbance is set (arbitrarily) at 25 (out of the maximum 35) there are fewer than 15% of

these respondents who fall into that category. It is unclear from these results whether any or all of these boys would be prepared to talk to an adult about any issues or problems they might have, but encouraging this among schoolboys would be very positive, since drinking alcohol does not help deal with problems.

The high level of self-criticism among the respondents for their mistakes is not healthy and could form the basis of future research. That this increases from fourth to fifth to sixth year is even more troublesome. Possible lines of enquiry include whether this attitude is in any way related to boys' desires to become more manly, feeling negatively towards themselves whenever they fail in their own eyes. Another matter of concern is the fact that homosexual, bisexual and other non-heterosexual boys show more than 20% higher levels of mood disorder than their heterosexual classmates. Clearly, boys who are not straight are suffering from a form of stigma – especially if they are still hiding their sexual orientation – and may benefit from positive intervention from within the school. Indeed, anything that would help reduce pupils' mood disturbance is to be welcomed.

Conclusion:-

The rates of drinking, of drunkenness and of hangovers among senior secondary school boys in Ireland appears to have fallen since 2013. Nonetheless, three out of four such pupils drink underage, starting from as young as 10 years old. In contrast to earlier results the mood disturbances of heavy drinkers do not appear to be significantly higher than for either moderate drinkers or abstainers. Use of cannabis is still a minority pursuit, with just 27% of the total cohort taking part. However, of those who do, 11% say they use it "all the time".

Sexual orientation does not appear to be statistically connected to many of the factors in this study, although nonheterosexuals do show increased mood disturbance, particularly if they are still hiding their orientation. Hence, the factors connecting alcohol consumption with sexual orientation found in the literature are not observed here. This is very likely due to the small numbers involved and would need more focussed research. What is clear, however, is that there is a definite need for pupils to be made more aware that talking, and not alcohol, is helpful in dealing with stress and trauma.

Bibliography:-

- 1. Boden, Joseph M and Fergusson, David M (2011) "Alcohol and depression", Addiction, 106 (5), 906-914.
- Earnshaw, Valerie A; Elliott, Marc N; Reisner, Sari L; Mrug, Sylvie; Windle, Michael; Tortolero Emery, Susan; Peskin, Melissa F; and Schuster, Mark A (2017) "Peer Victimisation, Depressive Symptoms, and Substance Use: A Longitudinal Analysis" *Pediatrics*, 139 (6), peds. 2016-3426
- 3. Fish, Jessica N.; Watson, Ryan J.; Porta, Carolyn M.; Russell, Stephen T.; and Saewyc, Elizabeth M. (2017) "Are alcohol-related disparities between sexual minority and heterosexual youth decreasing?" *Addiction*, 112 (11), 1931-1941
- 4. Gonzalez, Cesar A; Gallego, Joseph D; and Bockting, Walter O. (2017) "Demographic Characteristics, Components of Sexuality and Gender, and Minority Stress and Their Associations to Excessive Alcohol, Cannabis, and Illicit (non-cannabis) Drug Use Among a Large Sample of Transgender People in the United States", *The Journal of Primary Prevention*, 38 (4), 419-445
- Kerr, Robert A. (2013) "Adolescent Males in Secondary School in Ireland: Alcohol Use and Depressed Mood," *Irish Journal of Applied Social Studies*: Vol. 13: Iss. 1, Article 3. Available at: <u>http://arrow.dit.ie/ijass/vol13/iss1/3</u>
- 6. Lhomond, Brigitte; Saurel-Cubizalles, Marie-Josèphe; Michaels, Stuart; and the CSF Group (2014) "A Multidimensional Measure of Sexual Orientation, Use of Psychoactive Substances, and Depression: Results of a National Survey on Sexual Behavior in France", *Archives of Sexual Behavior*, 43 (3), 607-619
- Moody, RL.; Starks TJ.; Grov, C; and Parsons, JT. (2017) "Internalised Homophobia and Drug Use in a National Cohort of Gay and Bisexual Men: Examining Depression, Sexual Anxiety, and Gay Community Attachment as Mediating Factors", *Archives of Sexual Behavior*, Available on <u>https://doi.org/10.1007/s10508-017-1009-2</u>.
- Murphy, Eimear; O'Sullivan, Ian; O'Donovan, Derry; Hope, Ann; and Davoren, Martin P. (2016) "The Association between Parental Attitudes and Alcohol Consumption and Adolescent Alcohol Consumption in Southern Ireland: a cross-sectional study", *BMC Public Health*, 16 (821). Available at <u>https://doi.org/10.1186/s12889-016-3504-0</u>
- 9. Scott, RL; Lasiuk, G; and Norris, C (2016) "The relationship between sexual orientation and depression in a national population sample", *J Clin Nurs.*, 25 (23-24), 3522-3532

- Tucker, Joan S.; Ewing, Brett A.; Espelage, Dorothy L.; Green, Harold D. Jr.; de la Haye, Kayla; and Pollard, Michael (2016) "Longitudinal Associations of Homophobic Name-Calling Victimisation with Psychological Distress and Alcohol Use During Adolescence" *Journal of Adolescent Health*, 59 (1), 110-115. Available on <u>https://doi.org/10.1016/jadohealth.2016.03.018</u>
- 11. Zhang, Xiaoyun and Wu, Li-Tzy (2017) Marijuana use and sex with multiple partners among lesbian, gay and bisexual youth: results from a national sample", *BMC Public Health*, 17 (19). Available at https://doi.org/10.1186/s12889-016-3905-0