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Preventing Youthful Substance Use and Harm – Between Effectiveness and Political Wishfulness

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Abstract

Drinking, smoking and drug use are symbolic behaviors for young people, often involving a claim for adult status, and set against a “social clock” of expectations about appropriate behavior for a given age. Use is set in a social world of youth sociability, which young people strive to control themselves. Hence it is difficult to prevent or delay use though adult-run institutions such as schools. Youth-oriented prevention initiatives succeed best when in tune with general social trends, so that youth cannot so easily feel hypocritically singled out. Regulatory approaches which apply to all have had some success in limiting and shaping youthful use and problems. Well-evaluated trials of efforts to insulate youthful use from harm are needed.

Key Words: symbolic behavior, social clock, youth prevention, emancipation, school-based prevention, regulation

Introduction

This paper is concerned with drugs or psychoactive substances broadly construed -- in particular, including tobacco and alcohol, along with illicit drugs. It is worth keeping in mind where the weight of the burdens of problems **associated with the use** of these substances lies in our societies. According to the Global Burden of Disease estimates for 2000 from the World Health Organization, for “Europe A”, essentially comprising western Europe, 12.1% of the total burden of disease was estimated to be attributable to tobacco, 6.6% to alcohol, and 2.1% to illicit drugs. On a global basis, the figures are 4.1%, 4.0%, and 0.8% respectively (Ezzati et al, 2002). In a global These figures underline that, across the whole lifetime, 90% of the death and disability from **the use of** psychoactive substances comes from substances which are legal for

adults.

In terms of the immediate health and injury burden for teenagers, the legal substances play at least as strong a role, although in this frame it is alcohol which is dominant. Thus among hospital stays in 1992 by 10-19 year olds in Ontario, Canada which were attributable to psychoactive substance use, 69% were attributable to alcohol, 22% to tobacco, and 9% to illicit drugs (Xie et al., 1996). These figures suggest that a drug education or prevention program which focuses only on illicit drugs is, in literal terms, whistling past the graveyard – ignoring the greatest part of the burden of social and health harm from **the use of** psychoactive substances.

The symbolism of drinking, smoking and using drugs for young people

Drinking – indeed, heavy drinking – smoking and drug use are common among young people in most high-income societies. Why do so many young people drink and get drunk, smoke cigarettes, and use drugs and get high? The experience of intoxication, whether on alcohol or on other drugs, is eventually spread widely enough among teenagers that it has to be seen and interpreted not only in pathological but also in normalizing terms -- as part of the process of growing up.

In this framing, adolescence is seen as a period of experimentation and identity formation. Part of this developmental process includes seeking new sensations and taking at least some risks, with a particular focus on behaviours which are supposed to be for adults and thus serve as markers of adulthood. As the opening sentences of a novel written by two Australian teenagers put it:

When we were thirteen, the coolest things to do were things your parents wouldn't let you do. Things like have sex, smoke cigarettes, nick off from school, go to the drive-in, take drugs and go to the beach. (Lette & Carey, 2002)

Thus adolescents learn about and experiment with new behaviors as various as sexuality and driving an automobile, including experimenting near or at the edge of the various dangers that may accompany these “adult” behaviors. Motives for experimenting with drinking and intoxication -- as also with other psychoactive substances -- vary. Motives which are commonly mentioned in the literature include rebellion, sensation-seeking, providing pleasure, alleviating boredom, satisfying curiosity, facilitating social bonding, attaining peer status, or as an escape/coping mechanism (Amos et al., 1997; Arnett, 1992; Banwell & Young, 1993; Franzkowiak, 1987; Igra & Irwin, 1996; Wilks, 1992).

In terms of some of these motivations, drinking, smoking and drug use are thus functional behaviors. However, these behaviors are also heavily weighted with symbolic significance. Youthful drinking, and for that matter smoking and drug use, is often a performance in front of an audience of associates and others, staking a claim to a valued identity, and expressing solidarity in a group or marking off social boundaries (Room, 1994). Choices about the particular product used – which type of alcoholic beverage, which brand of cigarettes, which brand or type of drug and in what mode of use -- are potent ways of identifying with a cultural style

(Polhemus, 1994), of marking a symbolic distinction from those who are outside the circle or “too young,” and of performing for an audience of other youth

The **substance use** prevention literature pays too little attention to the collective and symbolic aspects of drinking, smoking, and drug use. Drinking and drug use, and for that matter smoking in its initial stages, is predominantly done in groups, and is often incidental to another social activity, such as dancing, clubbing, partying, or following a particular style of music (Thornton, 1995). “Peer influence” is often more a matter of the attraction of a particular social group for the teenager than it is a matter of pressure from anyone specifically to drink, smoke, or use drugs.

During the slow transition into adulthood, then, drinking, smoking and drug use can symbolize freedom and autonomy, providing youth with a seemingly adult status (Jessor, 1992; Jessor & Jessor, 1977). For tobacco and alcohol, positive lifestyle advertisements and sponsorships contribute to general favorable associations and expectancies (Wyllie et al., 1998). Messages about not drinking or smoking “until you are old enough” have a double edge, reinforcing the status of drinking or smoking as claims on adult status. In the context of the social acceptance of adult behaviors, youth see messages that they should behave differently as hypocritical and, thus, are likely to reject them (D’Emidio-Caston & Brown, 1998).

Emancipation and settling down: the “social clock”

Part of growing up, in fact, is to try out and to take on new behaviors. While the process is often fraught with anxiety for the person growing up, it is often even more anxiety-producing for parents and other adults in the vicinity. The anxiety or disapproval may be about trying out the behavior at all. But often it is also about the age at which the behavior is taken on. Behavior which is seen as too “grown up” for one age may be accepted without too much fuss if it occurs at a later age.

In the context of discussions of social problems and youth, the focus tends to be on behaviors that are taken on “too young”. But in a wider frame, there is also growing unease if a young person does not try out and take on a behavior at what is felt to be an appropriate age. It may be seen as equally inappropriate to fail to have a full-time job by the age of 25 as it would be to hold a full-time job at age 12. Sociologists talk of these normative standards for when a behavior or status should be taken on as the “social clock” (Neugarten et al., 1965).

We can think of the period of adolescence and young adulthood in terms of two complementary processes: emancipation and settling down. The content of emancipation includes the various behaviors for which there are minimum age-limits, as well as such aspects as staying out late at night and moving out of the parental home. Along with the general legal provisions we have mentioned, the emancipation process is governed by strong general cultural expectations. By its nature, it almost always sooner or later also involves a generational tug-of-war within the family. In the individual life-history, emancipation and settling down may be

closely linked, as for instance if a daughter does not leave the parents' home until she marries. But characteristic of modernity is a considerable temporal separation of the two processes, leaving a considerable liminal space in adolescence and early adulthood. Contrary to common belief, this transitional status and period has also been common in other societies and times (e.g., Sarmela, 1969). In European farming communities a century and more ago, for instance, there was a substantial period of life in which young women were indentured as house-servants and young men as farm laborers, a period which might only end as farmers of the previous generation died or retired (e.g., Sarmela, 1969; Bales, 1962).

Emancipation and contested behaviors

The process of emancipation involves many behaviours we may describe as "contested" (Gusfield, 1996). Some of these behaviours -- driving a car, getting a job, having sex -- are expected by nearly everyone to happen eventually as part of adult life, but to engage in them too early is seen as upsetting or even shocking. Others are legal but grudgingly tolerated for adults, and there is at least hope that the process of emancipation will not include them. Thus most parents nowadays hope that their children will never take up cigarette smoking. Other behaviors are illegal for everyone but common in the emancipation process: marijuana smoking, for instance, as well as behaviors with victims such as vandalism and violence.

The contest is generational, between teenagers and young adults on the one hand and adults in general and school and civic authorities on the other. It is also intensely personal, within the family: parents find themselves on the front line, locked into a role as guardians of conventional hopes and expectations against the claims for autonomy and emancipation of their offspring. For many parents, the process of emancipation feels like a long process of grudging retreat from their preferred standards of conduct. As Robin Williams (1960) has discussed, a last fallback expedient in upholding a norm is a "patterned evasion", that is, ignoring evidence of its violation. The parent scoots past the couch with eyes averted, rather than face up to the reality of the entangled limbs there. It might be noted that there is also considerable patterned evasion of norms at a societal level: in most developed societies, almost all who will eventually drink alcoholic beverages start doing so before the legal drinking age.

Some data about expectations about the social clock is available from Ontario, Canada. In 1996, adults in Ontario were asked "Regardless, of what the law says, how old do you think a male/female should be before it's OK for him/her" to engage in each of a list of behaviors, with random halves being asked the questions for a male and for a female (Paglia and Room, 1998). For all behaviors except having a fulltime job, driving a car alone, and going on a date, some respondents volunteered that it was "never OK", with rates below 10% for buying a lottery ticket, drinking beer or liquor, and buying beer, and above 40% for getting drunk on beer at home, being a regular smoker, and trying marijuana. Table 1 shows responses among those aged 25 or older for those who did give an age when it is OK. Ages for it being acceptable to drink or purchase alcohol were in the upper half of the ages for the behaviors asked about,

ranging between 18.8 and 19.8. Thus the age of acceptability for buying a lottery ticket, driving a car alone, getting a fulltime job, smoking a cigarette, or having sex with a girl/boyfriend was lower than the age for having a drink of beer. Of the behaviors asked about, only moving in with a girl/boyfriend had a higher age of acceptability than any of the alcohol items.

Table 2 compares the responses of Ontario teenagers and adults, grouped by age, on acceptable ages to try marijuana and initiate cigarette smoking, beer drinking, and buying a six-pack of beer (Room & Paglia, 2001). It will be seen that for all behaviors the normative age of initiation is gently curvilinear by age, with the lowest age given by those who are themselves at about that age (Grade 11 students would usually be 16 or 17). At the level of the “public norms” which tend to be measured in response to a telephone survey (for the adults) or to items on a questionnaire (for the students), the variation between generations is fairly modest. For the two alcohol items, for instance, the average difference between 11th-graders and the 40-54-year-old adults, roughly their parents’ generation, is about 2½ years.

The normative ages given by Ontario adults for tobacco and alcohol correspond fairly well to the legal minimum ages there, which are 19 for alcohol and 18 for cigarettes. However, the actual ages at which Ontario teenagers start experimenting with the behaviours are considerably younger. Among students in Grade 7 (ages 12-13), 32% report alcohol use in the past 12 months, with 58% having used at some time in their lives; in Grades 9 and 11 the proportions drinking in the past 12 months rise to 55% and 80% respectively (Adlaf et al., 1997: Table 10 & Fig. 57). These five years provide an ample arena for contests between the generations.

But it is worth noting that the results in Table 2 suggest that younger experimenters with alcohol, tobacco and marijuana see themselves as breaking rather than conforming to the norms of their own age-cohort. In the earlier teenage years, to drink or to smoke is to do something you’re not supposed to be doing yet. To the extent this is true, it offers a potential entry-point for persuasional efforts to postpone initiation.

What are we trying to prevent?

A crucial question for any substance use prevention program is, what are we trying to prevent? A youth prevention program focussed on alcohol, for instance, can aim to prevent or postpone drinking at all; to prevent or postpone risky drinking such as intoxication; or to prevent or postpone harms from drinking or intoxication. A program focussed on tobacco can aim to prevent or postpone tobacco use at all, or can aim particularly to prevent the most harmful forms of tobacco use, such as cigarette smoking. Likewise, an illicit drug use prevention program can be aimed at preventing any use at all, or at reducing the risks of harms from drug use.

The aims of such programs will to a considerable degree conditioned by the society’s expectations about youth drinking, smoking and drug use. If the legal drinking age is high, then it is likely that programs aimed at youth in their early or middle teens will aim to prevent or

postpone drinking at all. Harm reduction strategies may run into political difficulty in this environment, since they are predicated on a recognition that many youths are already drinking. Prevention programs to reduce harm from illicit drugs are even more likely to have such difficulties.

From a public health perspective, the ultimate aim of a prevention program is to prevent harm. Preventing use is one strategy of preventing harm, but not the only one. Preventing use is often justified in terms of potential long-term harms. But while the longer term must be kept in mind, there are several good reasons for putting the greatest weight in youth prevention work on the more immediate potential harms. First, preventing a proximal harm is inherently an easier task than preventing a distal harm. Most commonly, the effects of any intervention decays over time: in the long run, there is just too much “noise” from the intervening activities and events of everyday life. For instance, a youth substance use prevention program has a much better chance of preventing a tragedy from driving home drunk after an upcoming high-school prom than it has of preventing a death from liver cirrhosis in a 50-year-old. Secondly, a youth audience will be more open to prevention messages about immediate problems in their lives than to messages about how to prevent problems which may or may not occur when they are in their 60. Thirdly, more strategies are available for preventing harms related to the immediate drug use event or pattern than are available for preventing long-term chronic conditions (Room, 1974). While the main way of preventing liver cirrhosis is by affecting the person’s cumulative amount of drinking, preventing a drinking-driving casualty can be accomplished not only by affecting the driver’s drinking, but also by such means as providing an alternative driver or transport, relocating the prom, or even by seat-belts and airbags.

The effectiveness of school-based programs

A difficulty with the literature evaluating the effectiveness of youth education programs on alcohol, tobacco and drugs is that much of it has been produced in a societal environment of hostility to acknowledging the realities of youthful substance use, since so much of the literature comes from the United States. Much of the evaluation literature available for reviewing thus evaluates programs which might be seen as starting with one hand tied behind their back, in assuming that the target audience is not already engaging in the relevant behaviours.

Reviews of the literature on the effectiveness of school-based programs find rather slight evidence of long-term effectiveness (Paglia & Room, 1999; Babor et al., 2010a; Babor et al., 2010b). Where there is some evidence of effectiveness, it was in a context where the programs were building on trends in the larger society – as was true, for instance, of some anti-smoking programs in the U.S. in the 1980s. There also seems to be more signs of success when school-based programs are part of and integrated into more general community prevention initiatives. But still, the effect size of school-based prevention programs is at best small.

In terms of the framing of youthful drug use which we have discussed, it is not difficult to

see why this would be the case. Drinking, smoking and drug use are part of worlds of youthful sociability. These worlds mostly operate away from the adult worlds of the home and the school, and in fact are often resistant to adult efforts to intervene in their operation. The fact that school-based drug education is school-based is, then, one of its difficulties: it is an attempt by the adult world to impact on the worlds and subcultures conducted by young people themselves.

Political wishfulness and the prevention of substance use problems

School-based education programs are not the only example of strategies which societies return to again and again in efforts to prevent substance use-related problems. Other strategies which also have great political popularity include alternatives programs, which offer alternative activities which it is hoped will substitute for alcohol, tobacco or drug use. The scattered evaluations of these programs usually fail to find an effect, and indeed there are even examples of such programs having the opposite effect from that intended (Carmona & Stewart, 1996; Norman et al., 1997). Mass media and other public persuasional campaigns have also had difficulty showing any effects in the arena of prevention of youthful alcohol, tobacco and drug-use-related problems. The only exception so far has been for some specific U.S. anti-smoking campaigns: the fact that the official state campaigns in California, Florida and Massachusetts attacked a large and powerful industry seem to have impressed teenagers enough that at least in the short run rates of initiating smoking were driven down (e.g., Sly et al., 2002).

These anti-smoking campaigns may have been effective, but they were of course politically controversial, and in the long run proved politically unsustainable. The Florida campaign, for instance, was stopped under political pressure from the tobacco industry after a year. This is an instance of the general problem that there is a substantial discrepancy between the prevention strategies which are effective and those which are politically popular. The discrepancy is not only a matter of the popularity of relatively ineffective strategies like alternatives programs, conventional mass-media campaigns and school-based education programs, but also of the political unpopularity or unfeasibility of effective strategies. For instance, although a number of harm reduction measures have proved effective, the measures are often politically controversial where the behaviour is itself illegal, as is true for illicit drugs and for consumers under a set age for drinking and in many places for tobacco smoking. In the case of the licit substances, alcohol and tobacco, it is clear that high taxation and controls on availability are effective ways of holding down consumption and problems (Grossman et al., 1994; Chaloupka et al., 1999; Babor et al., 2010a), and particularly effective for teenagers, yet such measures are politically difficult to enact and sustain, and find a particularly hostile policy environment in an era when free-market ideology has been dominant. Of course, state or local regulatory controls on the market are not available as a prevention strategy where the market is formally illegal, as in the case of illicit substances. One argument for regulating rather than prohibiting markets, indeed, is that the state has many more levers to control consumption and its consequences in a regulated market (Room et al., 2010).

We may well ask, why is there such a lack of correspondence between what is popular and what is effective? One simple answer, of course, is that effective strategies are opposed because they will hurt economic interests. The alcoholic beverage industry has learned that it can live quite comfortably with school education. Some educational messages, such as messages emphasising that drinking is for adults, may even help its interests, cementing in the symbolic meaning of drinking as a claim for adult status.

But the lack of correspondence is not only a matter of pressure from economic interests. Strategies which are effective but unused are often unused because they conflict with competing values and ideologies. Most of all, the answer to the puzzle often lies in the fact that, in a given society, the effective strategies which are easily acceptable in the culture are usually already in place, so that further steps will push at the boundaries of cultural acceptance. This does not mean that the further steps are impossible, but it does mean that inherently they will be more difficult for the political process to take.

Conclusions

1. The main goal of any alcohol, tobacco or drug use prevention program for youth should be to reduce levels of harm, both to the user of alcohol, tobacco or drugs, and to others. The means to this end may be preventing use of the substance altogether, or limiting or shaping it, or insulating the use from harm. Whatever means the program adopts, the program should be designed on the basis of an assessment of the dimensions of harm related to the substance use (taking into account delayed harm) in the target population, and measurement of changes in the attributable harm should be included in the evaluation.

2. There are few examples, indeed, of school-based education programs with substantial and lasting effects. But whatever the evaluation literature may conclude, school-based education will continue. In this circumstance, alcohol, tobacco and drug **use** education curricula might well be based on general educational principles, rather than framed by ideology. Students are citizens and potential future consumers, and with respect to these roles it is appropriate to provide them with biological and social science information about psychoactive substance use and problems, and to encourage discussion of the intellectual, practical and ethical issues these problems raise.

3. Educational and persuasion material should be matched to its target audience. In particular, information aimed at limiting harm from drinking or drug use is usually most appropriately targeted at youth who are already drinking or using drugs. On the other hand, education and persuasion campaigns need to be sensitive to the surrounding environment of messages. In the case of mass media, this environment includes public health messages to adults, program or editorial content, and advertising and other promotions from alcohol and tobacco marketers.

Studies have shown that children are attentive to alcohol advertisements, for instance, and a fair proportion see them as a source of information on real life (Wyllie et al., 1998). Product

marketing is often attractive to children; a marketing study in the U.S. found that beer commercials featuring frogs and other animals ranked first among all ads when children were asked to name their favourite TV ads (Hays, 1998).

4. Though the material on them lies largely outside the formal evaluation literature, there have been major social movements and shifts in popular sentiment which have greatly affected rates and patterns of alcohol, tobacco and drug use and problems. Father Matthew's crusade against drinking in Ireland in the 1830s was so successful in the short run that serious crimes dropped by almost 94% in 12 years (Aschaffenberg, 1913:129), and the early U.S. temperance movement in the same era brought alcohol consumption down by half through moral suasion (Rorabaugh, 1979). Butler (2006) describes the sobering of a rural indigenous community in Ecuador precipitated on the one hand by social change advocacy by evangelical Protestants, liberation-theology Catholics, and sympathetic government functionaries and on the other hand by an earthquake, taken as a sign from God. The shift of middle-class sentiment against tobacco smoking in the last two decades has had a substantial role in substantially reducing rates of smoking in most high-income countries. That Chinese opium smoking could reasonably be presented as an imposition from European imperialists meant that the Communists, with their enormous moral authority as successful revolutionaries in 1949, were able relatively nonviolently to come close to eradicating the habit for a generation (Yongming, 2000).

These shifts among adults are usually reflected in changing rates and patterns among youth. Programs to prevent problems among youth are well advised to try to hitch their approach and framing of the issues to current trends among adults and in youth cultures. Put another way, it is extraordinarily difficult for a school-based or other demonstration program to achieve change in the opposite direction to prevailing trends in the population.

5. Regulatory approaches to the alcohol and tobacco markets have shown considerable success in limiting and shaping youthful drinking and smoking. In this circumstance, regulatory authorities can efficiently enforce limits on youth access as a condition of licences to sell. However, the success of such regulatory approaches is dependent on a popular consensus supporting them. Maintaining this consensus may require efforts at public persuasion.

Saltz et al. (1995) note that policy and other environmental approaches to prevention enjoy some natural advantages. Such approaches are not dependent on persuading individuals; and their effects may not decay over time. Moreover, policies work directly and indirectly by reflecting social norms and reflecting what is and is not acceptable. In the case of alcohol, the positive impact of policies on consumption levels as well as subsequent harm is supported by consistent scientific evidence (Babor et al., 2010a).

6. Community action programs and other initiatives which combine policy and environmental measures with educational or persuasional approaches seem more likely to succeed than initiatives taking only one of the approaches. However, evidence is still lacking of lasting effects from such combined community approaches.

7. There is a substantial need for well-evaluated trials of approaches which acknowledge the reality of youthful smoking, drinking and drug use, and either attempt to shape the use so as to minimize the risk of harm, or attempt to shape the social and physical environment of use to insulate the use from harm (e.g., McBride et al., 2004). There will often be a need for an accompanying campaign to explain to adults the rationale for these harm reduction initiatives.

8. Evaluated prevention demonstration projects are inherently difficult to mount successfully, requiring staff with different orientations and skills to work together. For many interventions, a true experiment is impossible or unethical. There is a need to take maximum advantage of “natural experiments” and other quasi-experimental designs if we are to reach an adequate knowledge base across the whole range of preventive interventions. If preventive interventions are to perform well in a cost-effectiveness analysis, they must set realistic goals and give attention to containing the costs of the intervention.

Declaration of Interest

The author reports no conflicts of interest. The author alone is responsible for the content and writing of the article.

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Table 1. Mean and standard deviation of the acceptable age for 15 contested behaviors, according to Ontario adults aged 25 or older, 1996

	Mean	Standard Deviation
go out on a date	16.2	1.4
buy a lottery ticket	17.4	2.3
drive a car by him/herself	17.7*	1.5
get a fulltime job, year-round	17.7	2.3
smoke a cigarette	18.0	2.4
have sex with a girl/boyfriend	18.4	2.2
buy a pack of cigarettes	18.6	1.9
have a drink of beer	18.8*	1.7
try some marijuana	18.8	2.2
become a regular smoker	19.0	2.6
have drink of liquor	19.3*	2.0
get drunk on beer at home	19.4	2.3
buy a six-pack of beer	19.5*	1.7
go to a bar with friends and drink enough to feel the effects	19.8*	1.9
move in with a girl/boyfriend	20.1	2.6

* Mean age significantly lower for a female to do this than a male. Differences between the genders were all less than half a year.

Note that this is based on those who gave an age for the behavior, i.e., excluding those who said it was “never OK”.

Source: Paglia & Room, 1998.

Table 2. Mean (and standard deviation) of the acceptable age given, by grade in school (1997 Ontario student survey), and by adult age group (1996 Ontario survey).

Behaviour --	Grade (usual age)					Adult Age Group				
	Total	7 (12-13)	9 (14-15)	11 (16-17)	13 (18-19)	Total	18-24	25-39	40-54	55+
By A Male:										
Smoke a cigarette	16.4 (2.5)	17.1 _a	15.9 _b	16.1 _b	17.1 _a	18.1 (2.4)	17.4	18.1	18.2	18.3
Try marijuana	16.3 (2.6)	17.7 _a	15.9 _b	15.8 _b	17.0 _a	18.9 (2.3)	18.5 _a	18.8 _a	18.5 _a	20.4 _b
Have drink of beer	16.7 (2.6)	17.7 _a	16.4 _b	16.2 _b	17.3 _a	18.9 (1.6)	18.2 _a	19.0 _b	18.9 _b	19.0 _b
Buy 6-pack of beer	18.0 (2.3)	19.0 _a	17.9 _{bd}	17.6 _{bc}	18.3 _d	19.6 (1.7)	18.7 _a	19.8 _b	19.7 _b	19.6 _b
By A Female:										
Smoke a cigarette	16.3 (2.9)	17.1 _a	15.9 _b	15.8 _b	17.1 _a	17.9 (2.5)	17.9	17.6	18.2	17.8
Try marijuana	16.3 (2.6)	17.2 _a	15.9 _b	16.0 _{bc}	17.0 _{ac}	18.6 (2.2)	18.1	18.5	18.6	19.2
Have drink of beer	16.8 (2.8)	17.7 _a	16.4 _b	16.2 _b	17.4 _a	18.6 (1.8)	18.3	18.6	18.8	18.5
Buy 6-pack of beer	18.1 (2.3)	19.0 _a	17.9 _{bc}	17.6 _b	18.3 _{ac}	19.3 (1.7)	19.0	19.2	19.6	19.3
N Range:	448-948	57-186	130-288	187-337	71-149	280-577	49-83	102-210	70-172	34-113

Notes: Means with the same subscript are **not** significantly different at $p < .05$, based on the Scheffe comparison test.

Comparisons between the students' overall means and adults' overall means revealed significant differences (t-tests, $p < .001$) for all items. N ranges in size due to the "never OK," "don't know" options or missing responses.

Many students do not continue to Grade 13.

Source: Room & Paglia, 2001.

Glossary: Brief definitions of key terms, concepts and processes.

Burden of disease: a total accounting of death and disability, whether on a global basis or for a particular country or population, measured in deaths, in life-years lost, or in disability-adjusted life-years (DALYs), which combine years of life lost from premature death and years of impaired quality of life from disability. A Comparative Risk Assessment measures the contribution of different risk factors, including tobacco, alcohol and drugs, to the burden of disease.

Community action programs: in the context of prevention of substance use problems, the term “evaluated community action programs” describes programs implementing specific prevention strategies which combine community organizing and enlistment of local professionals with a research presence for advising and evaluation.

Emancipation: in discussions of the lifecourse, a term describing acts or a stage where a person is moving away from the status of being a child under parental control.

Natural experiment: this term is used in contrast to a designed or controlled social experiment, where researchers design an experimental trial of a social intervention such as a prevention strategy. The “natural” means that the researchers do not control what happens; a natural experiment is typically a legislative or policy change which researchers then scramble to evaluate or study as best they can.

Patterned evasion of norms: a sociological description of behavior in circumstances in which there is a clear rule of conduct but also shared understandings on how the rule may be bent or broken.

Social clock: a sociological term for the strong cultural expectations about appropriate ages or life-stages for a behavior or transition.

About the Author:

Robin Room is a sociologist who has worked on social, cultural and epidemiological studies of alcohol, drugs and gambling behaviour and problems, and studies of social responses to alcohol and drug problems and of the effects of policy changes. He has directed alcohol and drug research centres in the United States, Canada and Sweden, and now in Australia, his native country. He was Professor and Director of the Centre for Social Research on Alcohol and Drugs, Stockholm University, Sweden (1999- 2006). Prior to that he was Vice President for Research at the Addiction Research Foundation in Toronto, Canada (1991-1998), and before that Scientific Director of the Alcohol Research Group, a U.S. National Alcohol Research Center (1977-1991). Since 2006 he is Professor of Social Alcohol Research at the School of Population Health of the University of Melbourne and the Director of the AER Centre for Alcohol Policy Research at Turning Point Alcohol and Drug Centre. He has been an advisor for the World Health Organization since 1975, and has received awards for scientific contributions in the U.S.,

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Abstracts in French and Spanish:

Prévenir la consommation de substances psychotropes par les jeunes et ses méfaits - Entre efficacité et désir politique

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Résumé

La consommation d'alcool, de stupéfiants et le tabagisme sont des comportements symboliques pour les jeunes, impliquant souvent une revendication d'un statut d'adulte, et opposant à une «horloge sociale» des attentes concernant le comportement approprié pour un âge donné. L'enjeu est de se situer dans un monde social, où les jeunes s'efforcent de se contrôler. C'est pourquoi il est difficile d'empêcher ou de retarder la consommation de stupéfiants dans les établissements comme les écoles. Les initiatives de prévention axées sur les jeunes réussissent mieux quand elles sont en phase avec les tendances sociales générales, et ce afin que les jeunes ne sentent pas hypocritement montrés du doigt. Les approches réglementaires qui s'appliquent à tous ont eu un certain succès dans la limitation de l'utilisation et l'encadrement des problèmes des jeunes. Des essais et des efforts pour isoler l'utilisation de drogues par la jeunesse sont nécessaires.

Mots clés: comportement symbolique, horloge sociale, prévention chez les jeunes, émancipation, prévention en milieu scolaire, réglementation

Prevenir el uso de drogas en los jóvenes y el daño - Entre eficacia y deseo político

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Resumen

El abuso del alcohol, el tabaco y las drogas son comportamientos simbólicos para los jóvenes, a menudo relacionados con una reclamación de la condición de adulto, y el conjunto en contra de un "reloj social" de las expectativas sobre el comportamiento apropiado para una edad determinada. Su uso está ambientado en un mundo social de la sociabilidad juvenil, que los jóvenes se esfuerzan por controlar. Por lo tanto, es difícil de prevenir o retrasar la ejecución, aunque las instituciones de adultos, tales como las escuelas. Orientados a la juventud las iniciativas de prevención tenga éxito mejor cuando está en sintonía con las tendencias generales sociales, por lo que la juventud no es tan fácil sentir hipócritamente señalado. Los enfoques regulatorios que se aplican a todos los han tenido cierto éxito en la limitación y la configuración

de uso juvenil y los problemas. Ensayos bien evaluados de los esfuerzos para aislar el uso juvenil de los daños se necesitan.

Palabras clave: comportamiento simbólico, reloj social, la prevención de la juventud, emancipación, la prevención escolar, la regulación