

3 Why do some people inhale volatile substances? Correlates and causes

Interventions addressing VSM are invariably informed by beliefs about its causes. If boredom is seen to be the cause, recreational programs might be developed. If VSM is considered to be a disease or illness, a treatment program is the logical response. This section looks at explanations that have been offered for VSM. We begin by summarising literature on correlates between VSM and a host of psychological and social factors, then examine attempts to establish causal pathways leading to VSM.

A question that emerges from our reading of this literature is the extent to which Indigenous Australian VSM should be treated as a separate issue in its own right, or as an instance of VSM that happens to occur in a particular population. As the following review shows, instances of both approaches can be found.

3.1 Correlates of inhalant use

The correlation between VSM and increased rates of psychological disorder—**depression, anxiety, and stress**—is recurrently stressed in the literature (Best et al., 2004; Sakai, Hall, Mikulich-Gilberts, & Crowley, 2004; Wu et al., 2004). Inhalant users have been found to have particularly high incidence of attention-deficit hyperactivity disorder (Lane, 2005; Matsumoto, Kamijo, Yamaguchi, Iseki, & Hirayasu, 2005), antisocial personality disorder (Brouette & Anton, 2001; Dinwiddie, Reich, & Cloninger, 1991) or poor self-esteem (May & Del Vecchio, 1997).

Inhalant users are disproportionately likely to be involved in petty crime and violent, anti-social behaviour, to spend time with other ‘deviant’ youth, and to be incarcerated (Best et al., 2004; McGarvey, Canterbury, & Waite, 1996; Swadi, 1996; Wu et al., 2004). VSM has been identified as both a cause and a consequence of poor schooling outcomes and early school leaving (Allanson, 1979; Bates et al., 1997; Best et al., 2004; Chadwick et al., 1990). It has also been linked with both co-occurring and future drug use, including intravenous and other poly-drug use, cigarette smoking and excessive alcohol use (Best et al., 2004; Dinwiddie, Reich, & Cloninger, 1991; Flescher, Tortolero, Baumler, Vernon, & Weller, 2002; Kurtzman et al., 2001; National Inhalant Abuse Taskforce, 2006; Sakai et al., 2004; Storr, Westergaard, & Anthony, 2005; Swadi, 1996; Wu et al., 2004; Wu, Pilowsky, & Schlenger, 2005). Family alcohol dependence or other problematic drug use is also seen as a predictor or correlate of inhalant use (Gutiérrez & Vega, 2003). Inhalant use has been linked with family problems such as high levels of conflict, early leaving of the family home and parental death, and experiences of the child welfare system (Frank, Marel, & Schmeidler, 1988; Lara, Romero, Dallal, Stern, & Molina, 1998; Smith, Joe, & Simpson, 1991; Swadi, 1996). Links have been established between childhood physical or sexual abuse (Fendrich, Mackesy-Amiti, & Wislar, 1997; Howard, Walker, Cottler, & Compton, 1999; Lane, 2005; Sakai et al., 2004; Segal, 1997) or emotional deprivation (Zur & Yule, 1990).

Homelessness and living in over-crowded housing appear to correlate with VSM across a range of cultures (Cheverton, Schrader, & Scrogings, 2003; Gutiérrez & Vega, 2003; Mallett, Edwards, Keys, Myers, & Rosenthal, 2003). In Brisbane, 23 of 50 surveyed clients of an outreach service for homeless youth identified themselves as daily or weekly users of inhalants (Pearson & Squires, 2003).

3.2 Causes and reasons

The social sciences offer two kinds of explanations for phenomena: those based on empirically established relationships between which a causal link is asserted (e.g. some young people do X because they have low self-esteem) and those based on the reasons people give for doing something (e.g. some young people do X because they want to defy authority, or because they like the particular kind of ‘high’ that X offers). Although attempts to explain inhalant use have drawn on both approaches, the causal connections between inhalant use and its correlates remain far from clear (Oetting et al., 1988). For example, one study comparing heroin users with and without a history of inhalant use concluded that inhalant use was a causal factor in later heroin use (Holger & Kindermann, 1986). Later longitudinal research appeared to confirm, after controlling for confounding factors, that young people who had used inhalants by age 16 were at least nine times more likely to use heroin in the future (Johnson, Schutz, Anthony, & Ensminger, 1995). Did this mean that VSM *caused* heroin use? A more recent study cautions that a general susceptibility to drug use is more likely to be responsible for the link between early inhalant use and future opiate use, rather than a direct causal relationship (Storr et al., 2005).

Although an association between inhalant use and low socio-economic status is frequently reported (Beauvais & Oetting, 1988; Dinwiddie, 1994; Howard, Walker, Cottler, & Compton, 1999; Lara, Romero, Dallal, Stern, & Molina, 1998; Shah, Vankar, & Upadhyaya, 1999), the nature of this relation is rarely explored. A recent US study concludes that adverse socio-economic conditions, rather than ethnicity or race, account for most VSM. For instance, Native Americans living on reserves with poor access to schooling or other opportunities report higher rates of VSM than Native Americans living in other settings (National Institute on Drug Abuse, 2005).

Solvent use, whether by Aboriginal or non-Aboriginal young people, is generally a social activity (Brady, 1992; Carroll, Houghton, & Odgers, 1998; MacLean, 2005). Marginalised young people in both urban and remote communities speak of using volatile substances to alleviate boredom (Cheverton et al., 2003). Young people both in Australia and elsewhere have been reported to use volatile substance-induced intoxication to block hunger pains and to dull both physical and emotional pain (Cheverton et al., 2003). Some young people speak of VSM as providing an ‘escape’ from unbearable life situations (MacLean 2006).

Like other drug use, VSM also functions as a way of communicating information about one’s identity. Brady has argued that in Aboriginal communities sniffing is seen as a means for young people to express power over their bodies—one of the few forms of authority available to many Aboriginal young people. Some users, according to Brady, are motivated by a desire to do this

through becoming thin, which in turn occurs as a result of petrol sniffing inhibiting appetite (1992, pp. 78–82). Petrol sniffing is also practised, according to Brady, in order to deliberately provoke outrage in sniffers' own communities and among local non-Indigenous staff.

Like petrol sniffing, inhaling spray paint in an urban context is also symbolically charged, and may be used to shock and disturb others. Non-indigenous young people in one study reported deliberately using VSM to upset parents, carers or members of the public (MacLean, 2006). Another study (Ogwang et al., 2006) concluded that paint sniffing in public places in Brisbane enabled young Indigenous people to express resistance at white domination and their own marginality. Policing responses to VSM, the authors argue, only served to intensify young people's alienation and hence perpetuate the social setting in which VSM becomes attractive for them.

A study of current, ex- and non-volatile solvent users in Perth, only a minority of whom were Aboriginal, found that volatile substance users both had and wanted a more 'non-conforming reputation' than non-users (but not ex-users) (Houghton, Odgers, & Carroll, 1998, p. 205). The study found also that peer groups of volatile substance users could lend members a strong sense of identity: 'adolescents are using specific substances, such as volatile solvents, as a means to attain an ideal reputation, one which allows them to both achieve and experience success' (1998, p. 208). Although solvent users generally have a poor self-image, within peer groups of solvent users, chronic users have the highest status (Carroll et al., 1998).

One often overlooked reason why young people, Aboriginal and non-Aboriginal, use drugs is because it is exciting and *pleasurable*. VSM products are easily accessible and cheap compared with other drugs, and produce hallucinations that can be both frightening and entertaining. Some regular users report that their preferred inhalants offer not just one among several ways of getting high, but a distinctive and valued hallucinatory experience. Users report visions of ancestors or spiritual beings, characters from popular culture and hallucinatory engagement with contemporary film or electronic games (Brady, 1992; MacLean, 2005, 2007a). As Langton remarks:

If you look at why white kids do heroin, or coke or ecstasy, it's not necessarily because they're powerless. Some of them are quite powerful. So why do they do it? For pleasure. I think that fundamental factor is ignored in much of the discussion on alcohol and substance misuse (Collinge, 1991, p. 22).

A few studies also ask the question: Why do inhalant users stop? A small qualitative study undertaken in NSW (Finney Lamb, Dillon, & Copeland, 2007) found that factors contributing to VSM cessation included unpleasant side-effects, lack of a 'high', perceived stigma and concerns about harms associated with the practice. Some participants stopped after a bad experience with a volatile substance or because of a health scare. Relationships with family or friends also helped some young people to cease VSM, as did a change in the availability of other preferred drugs.

In Aboriginal communities, changes in social circumstances appear to be associated with cessation. In a study of young men living in an Indigenous community in northern Australia, Burns et al.

(1995) found that male ex-sniffers interviewed had most commonly ceased VSM on the advice or instruction of a parent or senior community member. Obligation to children, a wife or a job was the second most cited reason for giving up petrol sniffing. Shaw (2002), in a Central Australian study, reported that three young men stopped sniffing after experiencing a significant life event (marriage or moving to an outstation) at a time when community pressure to stop sniffing petrol was most intense (Shaw, 2002). Brady (1992) also found that people would stop sniffing after a major life change such as getting married, having a child or becoming Christian.

3.3 Explaining VSM in Indigenous communities

Whereas most explanations for substance misuse draw on the pathology-oriented perspective of Western clinical science, attempts to explain VSM in Australian Aboriginal communities have tended to turn to other frameworks, citing community-level stress or the wider social and cultural impact of 200 years of dominance at the hands of non-Indigenous Australians. Some Indigenous writers describe VSM as an illness or addiction caused by cultural disruption (particularly to family structures), colonisation and dispossession. For instance, Divakaran-Brown and Minutjukur (1993) argue that petrol sniffing must be seen as part of a process of social deterioration, pointing out that petrol sniffing is a malady which besets lonely young people who have experienced family breakdown or whose parents or other family members have died.

In an early analysis based on communities in Arnhem Land, NT, Eastwell (1979) argued that petrol sniffing frequently occurred in large settlements in which different clan-language groups lived in unaccustomed mutual proximity, and in which traditional patterns of social order are threatened. Nearly 20 years later, Burns (1996) attributed petrol sniffing in one such community to a combination of conflicts between landowners and other groups living in the community, government domination of community affairs, and widespread social and cultural dislocation.

Brady (1992), however, has questioned the utility of ‘socio-political’ explanations on the grounds that they characterise petrol sniffers as victims and thereby as powerless to control their drug use. She points out that petrol sniffing is prevalent in some of the most ‘tradition-oriented’ communities on Aboriginal-owned land and often absent in communities with a long association with the pastoral industry.

Aboriginal leader Noel Pearson has mounted an even stronger attack on what he decries as ‘symptom theory’—that is, the view that Indigenous substance misuse can be explained as a symptom of colonisation, dispossession and contemporary socio-economic disadvantage. Whatever its origins, he argues, substance misuse today is no longer simply a set of harmful behaviours engaged in by some members of otherwise functional communities; rather, the norms, values and practices that legitimise and sustain substance misuse have insinuated themselves into the social and cultural systems of the communities themselves. Substance misuse has become a self-perpetuating ‘social epidemic’, and the prime obstacle in the way of restoring wellbeing. ‘Symptom theory’, in Pearson’s view, diverts attention away from the fundamental causal significance of substance misuse (Pearson, 2001, 2002, 2004).

3.4 Summary

- Inhalant use has been correlated with a number of indicators of individual psychosocial dysfunction, including depression, anxiety and stress. It has also been associated with poor schooling outcomes, anti-social behaviour, co-occurring and future drug use, a family background of problematic drug use, family conflict, a history of physical or sexual abuse, homelessness and involvement with the welfare and criminal justice systems.
- The causal pathways leading to VSM, however, are not well researched. For example, although VSM is associated with particular ethnic groups, it is not clear from available research how much of this association should be attributed to socio-economic disadvantage rather than ethnicity *per se*.
- Studies addressing the reasons why people use inhalants have drawn attention to several factors, including a desire to block hunger pains, dull physical and emotional pain, assert opposition to familial and institutional authority, and establish a non-conformist identity. One important reason not to be overlooked is that inhalant users engage in VSM because they find it exciting and pleasurable.
- A few studies have explored people's reasons for ceasing inhalant use. Reasons have been found to include negative sniffing experiences and health-related scares and also, especially in Indigenous communities, changes in life circumstances such as getting married or starting a job.
- Whereas most general explanations for VSM focus on individual characteristics of sniffers, attempts to explain VSM in Australian Indigenous communities often emphasise historical and social factors, such as colonisation and intra-community tensions. These frameworks, however, have recently come under criticism, notably from Aboriginal leader Noel Pearson who argues that substance misuse (including VSM) has become so pervasive in some Aboriginal communities that it is no longer helpful to see it as a symptom of historical and social injustices, but rather as a 'social epidemic' and root cause, in its own right, of other social, psychological and economic harms.