

## **Structural Features, Diffusion of Addiction and Addicts' Social Traits: the Case of Italy**

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### **Introduction and Theoretical Perspectives**

The abuse of illicit drugs has been considered as a privileged field for the microsocial approach and in particular for interactionism and *labelling* theory (Becker, 1953, 1963; Ray, 1961; Schur, 1965, 1971; Blumer *et al.*, 1967; Lemert, 1967; Matza, 1969; Young, 1971; more recently, Rosenbaum, 1981; Pearson, 1987b; Stephens, 1991; Beck and Rosenbaum, 1994 and, as to unreintegrating stigmatization, Braithwaite, 1989). Such an approach has constituted a reaction to more structural theses, such as the functionalism ones, prompted in the field of drug abuse interpretation by Merton's works in particular (1949, 1957).

No doubt, the reaction has had its reasons. First, these structural theses, with their reference to the pressure exerted by a single, juggernaut-like model of cultural goals, seemed abstracted from the more down-to-earth pressures behind the addict's daily life. And their use of the concept of class as the main variable for the opening of a gap between goals and available licit means appeared as particularly dubious in the case of drug addiction, a behaviour spreading also beyond the lower classes.

Second, addiction does not appear as an isolated deviant action; it materializes in an ongoing behaviour, in a series of interlinked actions. Concurrently, addiction seems to be the result of an uninterrupted transformation and adjustment of the individual to the world of drugs. Therefore, it suggests the existence of a process based on role balances achieved through microsocial interaction.

Third, while drug addiction is regarded as a *deviant* behaviour—at least in Western countries—no real agreement exists about its criminal character. Some penal systems have punished it with great harshness, others have regarded it as a mere misdemeanour or have even depenalized it. In any case, law enforcement can reach only a few of the millions of people involved in drug use. On the basis of the lack of consistency in the relevant moral and criminal issues and of the apparently casual character of law enforcement, *labelling* theory could regard the dynamics of toxicomania as largely influenced by the arguable social reaction to the addict's behaviour; and specifically by the impact upon it of the action of the official agencies.

However, it is difficult to think that addiction is mainly dependent on the

processes described by the microsocial approach. The rapid diffusion of drug addiction, in Western societies, and the unevenness of its distribution over the territory and among the population (e.g. Giggs, 1991; Staley, 1992), seem to suggest the emergence at the present time of macrosocial, structural phenomena with a particular impact on some specific areas and some specific people. Such aspects of the phenomenon seem to be at odds with a couple of basic suggestions advanced by the interactionist approach, and especially by its most radical authors. The first suggestion is that addiction is the result of a microsocial process of adjustment that involves the addict and the drug users' community. Consequently, any other feature of society—especially macro—would represent only the external framework and would be therefore largely meaningless in terms of the addiction itself. The second suggestion is that addicts are not fundamentally different from the man in the street, their only difference being that produced by the process of social interaction with drugs and in particular by their identification and labelling by the official agencies.

The issue of the influence of these structural variables on addiction is also beyond the main field of other approaches particularly interested in explaining this form of deviance. A first such approach is that of 'learning theory' (for instance, Akers *et al.*, 1979; Elliott *et al.*, 1985). Though less centred on the concept of role, since derived also from the more mechanical value-transmission model of differential association (Sutherland and Cressey, 1978), learning theory has substantially remained within the range of a microsocial, interactionist causality, focusing on attitudes, expectations and reinforcements mainly revolving around the peer groups, ordinarily in the same process of drug use. A second approach is that of 'control theory' (Hirschi, 1969; Gottfredson and Hirschi, 1990). Though interested in aspects that are preceding the interactionist process of addiction, control theory has dealt with bonding to the conformist values of integration and with the aspects of attachment, commitment and involvement in conventional groups and activities: and has therefore mainly focused on the microsocial contexts of family and peer groups. And a third approach is the more recent one of mixed models, such as that of 'interactional theory', that adds elements of control theory to the learning one (Thornberry, 1987; Krohn *et al.*, 1996). In this case too the aforesaid structural variables are not taken into consideration.

The entire problem may usefully be re-read in the light of data regarding the diffusion of drugs in Italy. This is a country that was characterized by a rather belated onset of the mass phenomenon of addiction. However, since the 1970s it has experienced a huge expansion of the latter (Solivetti, 1994), so much so that it now presents a very high rate of people under treatment for addiction, i.e. about 130 people per 100,000 pop., a high rate of people charged with drug trafficking (65 people per 100,000), and a mortality rate due to drug abuse equal to more than 2 per 100,000, which is at the top of those recorded among the most heavily populated countries of Europe (Italy, Presidenza del Consiglio dei Ministri, 1990; Italy, Ministero dell'Interno, 1993).

Now, to evaluate aspects of the drug abuse phenomenon overlooked by the interactionist approach, we shall use two perspectives. The first perspective is territorial in nature. We shall start by ascertaining the occurrence of a distribution of addiction on the territory that could not be regarded as casual. Then, we shall try to locate structural features of the territorial units. The main

hypothesis behind all this is that—if drug addiction is not merely the result of individual, microsocial processes of adjustment—there should be both a connection between drug addiction and precise characteristics of the individual territorial units, and a clearly differentiated distribution of the drug phenomenon over the national territory.

The second perspective is that of detecting possible characteristics of the addicts, that might make them, as a group, something different from a casual sample of population. The hypothesis here is quite simply that, if addicts present peculiar social traits that could be regarded as preceding the interactionist experience of drug use, these traits may be causally meaningful for their own addiction. The addicts' social traits are ultimately expected to show some sociologically significant interplay with the differentiated distribution of the territorial features.

### **Methodology and Data**

In a preliminary check of these hypotheses, the distribution of addiction was analysed at the regional level.<sup>1</sup> The results were encouraging, and so a more elaborate survey was conducted on much smaller territorial units, i.e. provinces, since a small territorial unit would have reduced the danger of scarce homogeneousness of the territory. Provinces appeared as the smallest territorial-administrative unit in which such a survey could be significant and reliable data are available. Each province has on average a population of only 606,063 over an area of only 3,171 km<sup>2</sup>.

As a second step, indicators of drug addiction were collected. Now, drug addiction is a phenomenon with obscure traits, and especially with an obscure dimension. Addicts have precise social and penal reasons for trying to avoid their habit becoming publicly known. Therefore, no single source of data may be regarded as reliable enough to assess drug addiction and its distribution on the territory. So, we used a series of indicators per province: deaths due to drug abuse; addicts treated in public structures; addicts treated in private structures; addicts treated in public or private structures; people identified by the police as holders of drugs for personal use; people charged with drug trafficking offences; cases of AIDS recorded.<sup>2</sup>

Subsequently, a wide series of indicators of the demo-socio-economic-criminal characteristics of the territorial units, i.e. the provinces, were chosen and the relevant data collected. Data were all provided by the pertinent official agencies.<sup>3</sup>

The Appendix shows all the collected variables that were found in some aspect meaningful vis-à-vis the drug addiction indicators. Some of the variables were subsequently discarded, either because they were overlapping, or because they were less significant than others.<sup>4</sup> Ultimately, only the 14 variables shown in Table 1 were used for the successive steps of the study. The relationship between each of them and each of the drug addiction indicators was analysed by means of Pearson's coefficient of correlation. The relationship between each of the socio-economic and crime variables and all the drug addiction indicators, as well as that between all the socio-economic variables and each indicator, were examined through regression analysis. To examine the relationship between *all* the socio-economic variables and *all* the drug diffusion variables, the canonical correlation analysis was used.<sup>5</sup> Factor analysis provided

**Table 1.** Main variables' correlations (*r* and *multiple r*)

	Drugs diffusion indicators						
	All indicators	Deaths	Treated pub.	Treated pub. & pr.	Identified	Charged	Aids
<b>Socio-economic variables</b>							
Income	0.66***	0.58***	0.45***	0.41***	0.32**	0.35**	0.54***
Alimentary consumption	0.54***	-0.48***	-0.34**	-0.35**	-0.28***	-0.34**	-0.38***
Consumption of cultural type	0.71***	0.64***	0.43***	0.51***	0.38***	0.37***	0.46***
Cars	0.63***	0.52***	0.38***	0.42**	0.29**	0.26*	0.52***
Dailies	0.65***	0.55***	0.42***	0.31**	0.38***	0.43**	0.53***
Population with secondary school diploma	0.59***	0.52***	0.37***	0.39***	0.34**	0.37***	0.44***
Self-employed population	0.70***	0.62***	0.41***	0.45***	0.42**	0.37***	0.51***
Unmarried women 15-24 years	0.56***	0.43***	0.41***	0.43***	0.33**	0.32**	0.43***
Family size	0.55***	-0.44***	-0.40***	-0.35**	-0.40***	-0.43**	-0.36***
Birth rate	0.56***	-0.44***	-0.42***	-0.44***	-0.36***	-0.33**	-0.39***
Population in communes >50,000 inhabitants	0.53***	0.49***	0.23*	0.27**	0.33**	0.29**	0.29**
Population in urbanized areas	0.65***	0.57***	0.31**	0.34**	0.50***	0.43***	0.36***
Migration	0.74***	0.65***	0.53***	0.44***	0.35**	0.44***	0.58***
Judicial separations	0.66***	0.57***	0.46***	0.40***	0.38***	0.44***	0.51***
All socio-economic variables	0.83 <sup>a</sup>	0.76***	0.62***	0.61***	0.59***	0.62***	0.69***
<b>Crime variables</b>							
Murders	0.29	-0.23*	-0.25*	-0.23*	-0.19	-0.13	-0.15
Extortions	0.29	-0.25*	-0.15	-0.18	-0.08	-0.08	-0.19
Robberies	0.20	0.11	-0.04	-0.09	0.01	-0.04	0.06
Thefts	0.54***	0.50***	0.28**	0.28**	0.33**	0.26*	0.39***

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

Bartlett chi-square statistic: 2152.430; DF = 276; Prob. = 0.000.

<sup>a</sup>Coefficient of the canonical correlation.

Legend: All indicators = all the indicators of drug diffusion; Deaths = deaths due to drug abuse; Treated pub. = addicts treated in public structures; Treated pub. & pr. = addicts treated in public and private structures; Identified = people identified by the police as holders of drugs for personal use; Charged = people charged with drug trafficking offences; Aids = cases of AIDS; Other labels = see Appendix.

the means to channel the quantitative associations between the socio-economic variables into a few underlying constructs capable of improving the understanding of the entire matter.<sup>6</sup>

As to the second perspective—i.e. that of checking whether addicts have, as a category, peculiar personal and social traits that might be regarded as having preceded the condition of addiction itself—we were able to take advantage of the availability of new data, relating to the characteristics of all the addicted population of the entire country, recorded by the official national agencies in Italy.<sup>7</sup> In dealing with these data, however, we met difficulties similar to those found in dealing with the problem of drug addiction over the territory. No single source offers a thoroughly representative and complete series of information.<sup>8</sup> To overcome these difficulties, we used information drawn from various sources of data, i.e. those regarding addicts under treatment, people charged with drug trafficking, people sentenced for drug trafficking, people jailed for drug trafficking, people who died from drug abuse, addicts identified by the police. In some cases, we added to these data, regarding the entire addict population, those drawn from sample surveys. We then developed these raw data and compared them with data relating to corresponding segments (by age or sex) of the general population. We regarded all this second perspective as necessary also because it prevents the ecological fallacies concealed in the territorial analysis.

The data collected focus, mainly but not exclusively, on the phenomenon of drug diffusion as represented by addiction to hard drugs.<sup>9</sup>

## **Results**

### *(1) Drug Diffusion and Environmental Features*

The drug diffusion indicators show a distribution of addiction by province that is both markedly uneven (e.g. the index of deaths due to drug abuse ranged from less than 0.5 to 5 per 100,000 pop.) and highly correlated with the democio-economic variables. First, the indicators are significantly correlated with a set of variables directly or indirectly relating to economic affluence. The most direct of them is income, positively correlated with drug diffusion (Table 1). Then there is a neat inverse correlation between drug diffusion and the rate of alimentary consumption vis-à-vis total consumption. Since the poorer the community, the higher the percentage of income dedicated to buying alimentary goods, alimentary consumption is a very reliable indicator of the real affluence. Also the rate of consumption channelled towards cultural expenses is a sign of affluence, since not surprisingly these expenses are expected to increase when affluence is higher. Then there is the number of cars circulating: another feature suggesting many things about social organization and among them certainly affluence and consumption. The positive correlation between the usual drug diffusion indicators and the rate of the population variation due to migration means that we find higher levels of drug diffusion in those provinces where there was a higher inflow of immigrants. The migration variable is also a reflection of the level of affluence and development, because we know that the country has been characterized—especially in the past decades—by a substantial migration from the poorer to the richer provinces, from those with scarce job opportunities to those with opposite features.

Migration data, for reasons that we will later clarify, refer to the period 1961–1971, but they are highly correlated with present-day basic indicators (such as income, 0.78; people looking for their first job,  $-0.65$ ). All this by the way shows that the distribution of these basic characteristics on the territory has been relatively stable over the years. The last of these sets of variables is the rate of population self-employed in the services sector. We have excluded from this variable people employed in trading activities (meaning first of all shop-keeping), in order to limit the variable to people who may best represent the advanced services sector and their highly entrepreneurial spirit. Of course the variable is also the expression of a high-affluence social context and is therefore highly correlated with income (0.85).

The use of stepwise regression shows that—within this set of six variables—migration and cultural consumption are the best predictors of the drug diffusion variables; alimentary consumption follows. These six variables characterize the first rotated factor produced by the factor analysis. This factor accounts for 31% of the total variance explained. We have called it ‘affluence, consumption & achievement’ to emphasize, together with the high income, the aspects of use peculiar to it and the inherent perspective of personal achievement.

A second set of variables correlated with drug diffusion refers to aspects connected with education and attitudes towards models of social integration. The most direct variable of this group is measuring the rate of population with senior secondary school diploma. This is an indicator not only of the level of education in itself, but also of the general level of social development, since it reflects the characteristics of the social organization, of the economic sectors of production and of the labour market. Not surprisingly, the level of education is the variable most commonly used—together with income—by international comprehensive indices of social development (e.g. United Nations, 1990 and ff. yrs). Quite obviously this variable is correlated with income (0.77), rate of population self-employed in the services sector (0.77), rate of population employed in agriculture ( $-0.51$ ). The number of newspapers sold per 1000 pop. has a substantially similar but more generic meaning. It implies the possibility of keeping in touch with information regarding economy, technology and culture in general. Underlying it, there is the concept of knowledge directly acquired by the individual, without the traditional mediation of family and community. The definition given by Hegel—newspapers as the morning prayers of modern man—in some way epitomizes all this. The variable is, as expected, correlated with population with diploma (0.73) and with the variables correlated with the latter.

The last variable of this set is the rate of unmarried women in the age class 15–24. This variable implies much more than an appeal for willing young men. As a rule, a high rate of unmarried women implies that at least part of the women do not regard marriage and procreation as their preferred choice, and channel their energies towards education, work and in general a social integration that does not pass first of all through the role of wife and mother. The positive or negative orientation towards marriage and procreation is in turn connected with aspects such as the economic role of the domestic unit, the prevalence of one of the economic sectors of production (agriculture, industry and services) over the others, the division of work, the level of education required by the social organization, the role of the individual in society.



Ultimately, the rate of unmarried women may be regarded as linked to all the major socio-economic aspects of society, reflecting in some way all of them. For this reason, it may be used to compare countries in terms of socio-economic features and development (United Nations, 1990). The rate of unmarried women is, as expected, correlated with the previous two variables of education and newspaper diffusion (0.65 and 0.71) and all of them positively with the drug diffusion indicators.

Within this set of variables, education and newspapers sold emerge as the best predictors of drug diffusion. These three variables characterize the second factor produced by the factor analysis; it accounts for 21% of the total variance. We have called it 'education and individualistic aims' to underline both the aspects of high level of instruction, training, technological knowledge, and of high individualistic achievement, detached from the usual channels provided by family and community.

A third set of variables concerns aspects relating more specifically to the family. Drug diffusion is inversely correlated with both the mean family size and the birth rate in the various provinces: two variables that are, as expected, highly inter-correlated (0.82). So, the smaller the family size and the lower the birth rate, the wider the diffusion of addiction. The latter is also correlated with the frequency of judicial separations. This time, however, the correlation is positive. The character of this set of variables, on the other hand, cannot be simply attributed to the sum of personal attitudes built up in the domestic sphere. On the contrary, this set of variables is clearly part of a model of societal organization. High rates of separation, for instance, have long been regarded as not only a source of anomie but also an outcome of structural aspects mainly relating to individualism and the loosening of social bonds (Durkheim, 1897). Unsurprisingly, we find that the index of separations is strongly correlated with, for instance, income (0.77), self-employed population in the services sector (0.72), cars circulating (0.74), and also with newspapers sold (0.76), population with senior secondary school diploma (0.70), and migration (0.74).

Within this set of variables, separation is the best predictor of drug diffusion. We have called this set of variables 'reduced & fragile family'; the relevant factor accounts for 18% of the total variance.

The last set of variables regards the aspect of urbanization. Here, we have just two variables: the first simply based on the rate of population living in communes with more than 50,000 inhabitants, the second on the actual urban characteristics of the population. The two variables are highly inter-correlated but not overlapping each other (0.64). In the case of this set of variables too, we are dealing not with isolated characteristics of the population, but with aspects of a comprehensive model of societal organization. We can better understand this by considering that the rate of actually urbanized population is correlated, as expected, with income (0.50); it is also correlated with migration (0.60), cultural consumption (0.54), population self-employed in the services sector (0.62), population with senior secondary school diploma (0.71), mean family size (-0.53). As to the well-known correlation between affluence and urbanization, it should be remembered that it does not mean that one of these phenomena absorbs the other in predicting drug distribution; multiple regression analysis showed that, for instance, both income and urbanized population are good predictors of deaths due to drug abuse.

Within this set of variables, urban population is the leading predictor of drug diffusion. We have called this fourth set of variables 'high urbanization'. The relevant factor accounts for 16% of the total variance.

We can summarize the relationship between all the socio-economic variables and all the drug diffusion indicators by means of canonical correlation analysis; its coefficient is rather high (0.83) and it gives us a synthetic idea of the situation.

It is also worth noting that—in the group of all the 14 socio-economic variables aforementioned—migration is the best predictor of the drug diffusion indicators; closely followed by cultural consumption and population living in communes with more than 50,000 inhabitants.

## (2) *Prevailing Traits of the Addicts*

To the picture provided by the environment let us now add features that can be drawn from some prevailing social traits of the addicts. As we have already mentioned, it seems that the phenomenon of addiction is markedly concentrated in well-defined layers of the population. In particular, addiction affects men by far more than women. Table 2 is, in this respect, very clear. In all the groups taken into consideration—i.e. addicts under treatment at public institutions, addicts under treatment at private 'communities', addicts who died of drug abuse, addicts identified by the police, people charged with crimes of drug trafficking—the percentage of women always remains very low, swinging from 8.1 and 18.1%. This aspect on the other hand is a characteristic that the Italian 'hard' drugs addicts have in common with addicts in other countries (for instance, in the USA 85% of opiate addicts are men: US, NIDA, 1989, 1990).

Moreover, it is also interesting to note that such a concentration of the phenomenon of addiction in men is not a constant characteristic but a specific feature of late 20th-century drug diffusion; for instance, statistics relating to the situation in the USA in the early part of the 20th century tell us that at that time two-thirds of opiate addicts were women (Akers, 1992; see also O'Neill, 1956).

Also the present distribution of addiction in the various age classes suggests the existence of specific factors capable of inducing situations affecting clear-cut classes. Table 3 shows that, as regards addicts under treatment (for the first time), there is a very strong concentration of cases in the age class 20–29 years, which embraces 75.7% of all cases. The concentration by age is very marked also for people who died of drug abuse (Table 3). Since the latter were people who made use of drugs to excess, and therefore whose state of addiction

**Table 2.** Percentage of men and women among addicts under treatment in public institutions, in private institutions, addicts deceased from drug abuse, addicts identified by the police, people charged with drug trafficking

	Treated pub. inst.	Treated pr. inst.	Deceased	Identified	Charged
Men (%)	82.9	81.9	90.5	91.0	91.9
Women (%)	17.1	18.1	9.5	9.0	8.1



**Table 3.** Distribution by age class of addicts under treatment (for the first time) and addicts who died of drug abuse

	<15 (%)	15–19 (%)	20–24 (%)	25–29 (%)	30–39 (%)	40– (%)
Addicts under treatment	0.2	11.1	43.9	31.8	12.0	1.0
Addicts who died of drug abuse	0	2.3	23.4	40.6	30.3	3.3

needed time to reach so critical a level, a shift forward of the age classes more affected by the drug phenomenon would be expected. And indeed, the age class 25–29 is by far the most affected one; the age class 20–29 years, on the other hand, comprises 64% of the cases.

The same particular age-group distribution can be found among people sentenced for drug trafficking offences. These people’s concentration in the 20–34 years class is higher than that recorded for other crimes such as murder, the issuing of bad cheques, and even for theft—a crime usually associated with youth and the latter’s better physical condition.

Further characteristics of the mass of the addicts seem to confirm the existence of basic social factors underlying drug diffusion. The occupational condition of the addicts, for instance, appears particularly important. From Table 4, concerning all the addicts under treatment (for the first time), it may be noticed that more than half of them (51.4%) are either unemployed or underemployed, while just 30% among them are stably and fully employed. The latter percentage is not only very low in itself but also much lower than that relating to the general population; the rate of people permanently employed among the male population of the country in the age classes corresponding to those of the addicts, amounts to 62.5% (Italy, ISTAT, 1990a, b), notwithstanding the constant decrease of this figure in the past decades. Such a decrease, on the other hand, is in itself something showing the general decline of the opportunities for the vocational integration of youths.

The addicts’ level of education presents significant aspects of difference vis-à-vis the general population. Table 5 shows the educational level of all addicts under treatment in public and private institutions (Italy, Ministero

**Table 4.** Distribution by occupational condition of addicts under treatment (for the first time)

Permanently employed (%)	Under-employed (%)	Unemployed (%)	In search of first job (%)	Non-occup. condition (%)	Student (%)	Condition unknown (%)
30.0	9.8	41.6	4.9	2.7	2.4	8.4

**Table 5.** Distribution by educational qualification of addicts under treatment (for the first time), compared with that of the general population of the same age class

	None (%)	Primary sch. (%)	Jr sec. sch. (%)	Sr sec. sch. (%)	Univ. degree (%)	Unknown (%)
Addicts	0.9	15.4	56.9	16.4	1.3	8.9
General population	1.5	7.5	48.9	39.3	2.7	0

**Table 6.** Distribution by marital status of addicts under treatment

Singles (%)	Married (%)	Cohabiting (%)	Widowed (%)	Separated and div. (%)	Status unknown (%)
73.3	11.4	2.7	0.2	5.5	6.8

dell'Interno, 1989). It may be noticed that most of them reached the level of the intermediate school certificate, which marks the end of compulsory education in Italy. But their further education qualifications are remarkably poor, as shown by the comparison with the layer of population closest to the addicts in terms of gender and age—i.e. the part of the national population constituted of males, aged 20–29 years. Moreover, we should take into account that—as we have already stressed—addicts are concentrated in provinces characterized by a higher mean level of education; and they are also concentrated—as will be shown later—in the most heavily populated communes, where educational facilities are better and the mean level of education higher than in the rest of the province. So, we can take it for granted that the actual gap in education between the addicts and the layer of the population comparable with them is actually far worse than the already striking disparity shown by our data.

The data concerning the family situation of the addicted population are equally meaningful. Taking into consideration addicts under treatment, it may be noticed (Table 6) that most of them have no family of their own—i.e. they are single, separated or divorced. This marital peculiarity of the addicts is confirmed by the figures regarding all people identified by the police as holders of drugs for their personal consumption, as well as by those regarding people sentenced for crimes of drug trafficking, whose concentration in the category of singles is higher than that for people sentenced for any other crime. Also in the case of marital status, the addicts' data are significantly different from those relating to the country's population as a whole in the corresponding age classes. For instance, among all the men belonging to the age class 20–29 years—that comprising three-quarters of the addicts under treatment—married people are 32%, i.e. almost three times the rate for addicts (Italy, ISTAT, 1985, Vol. II).

Moreover, the peculiar situation regarding addicts' own families seems to be perfectly matched by the concurrent peculiarity of the situation regarding the families from which addicts come. The existence of substantial problems in the family from which the addict comes is in all probability the feature most frequently identified in the empirical studies on the characteristics of addicts, in the technologically advanced societies. These problems are, according to case, either associated with a broken family; or with the presence of contrasts and tensions within the family itself; or more in particular with a preceding situation of conflict between the future addict and his parents. The empirical studies conducted in Italy tend emphatically to support the hypothesis of a connection between intra-familial breakdowns and tensions and the building up of a propensity to addiction (Cancrini, 1973; D'Arcangelo, 1977; Barbero Avanzini, 1978; Gius and Nazor, 1982; Italy, Ministero di Grazia e Giustizia, 1983; in other European countries, Willis, 1969; Noble, 1970; d'Orbán, 1970; Bean, 1971; Baumann and Shenker, 1973; Stimson, 1973; Pelletier, 1978;

**Table 7.** Distribution of addicts under treatment, by quality of the relationship with their own father, before the addiction onset

Antagonistic, hostile, etc. (%)	Friendly, affectionate, etc. (%)	Neutral, indifferent (%)
67.7	30.7	1.7

Jamieson *et al.*, 1984; Brook *et al.*, 1985; Ladewig and Graw, 1985; in the USA, Chein *et al.*, 1964; Vaillant, 1966; Friedman *et al.*, 1973; Jurich *et al.*, 1985).

To sum up this situation of conflict and tension within the addict's family, we can use the information relating to the quality of the relationship between the addict and his father, before the start of the addiction phase (Table 7). The rate of cases of conflict is clearly anomalous.

Some data about the level of urbanization help to add further information to the picture of the prevailing social traits of addicts. The distribution of addicts under treatment by demographic size of the commune of residence (Table 8) shows that their concentration in larger urban centres is twice that for the general population. This trend is confirmed by data concerning people sentenced for crimes of drug trafficking. Their distribution according to the demographic size of the commune in which the crime was committed (Table 9) is distinctly different from that of people sentenced for other crimes. In particular, the concentration of people sentenced for drug trafficking in the communes with a population from 250,000 upwards may be noticed. Such a concentration is even higher than that relating to theft, a crime traditionally regarded as markedly urban, or that relating to the issuing of bad cheques, a crime encouraged by the anonymity of the interaction within a strongly urbanized context.

This connection between the diffusion of drugs and the degree of urbanization of the various areas, on the other hand, cannot be dismissed as a

**Table 8.** Distribution of addicts under treatment by demographic size of the commune in which they reside, compared with that of the general population

	<50,000 (%)	50,000–250,000 (%)	>250,000 (%)	Unknown (%)
Addicts	27.4	30.6	35.2	6.8
General population	62.3	18.2	19.5	0

**Table 9.** Distribution of people sentenced for crime of drug trafficking and other crimes by demographic size of the commune in which crime was committed

	<50,000 (%)	50,001– 100,000 (%)	100,001– 250,000 (%)	250,001– 500,000 (%)	>500,000 (%)
Drug trafficking	31.9	8.6	14.1	15.9	29.3
Theft	47.4	9.6	11.4	10.1	21.3
Murder	53.1	12.7	5.5	8.8	19.8
Bad cheques	53.0	14.6	13.3	9.6	9.2
All crimes	51.6	12.3	12.0	9.6	14.4

phenomenon simply dependent upon a similarly 'dyshomogeneous' distribution of the drugs themselves or of the information relating to them. The development of the transport network and of the communications system through both personal contacts and the mass media constitutes a sound reason for rejecting the hypothesis that less urbanized areas are less affected by addiction precisely because they are underprivileged in terms of transport and communications (as regards the availability of drugs in rural areas, Edwards, 1997). As a consequence, the impression is strengthened that the concentration of addiction in markedly urbanized areas is first of all the result of the latter's inherent characteristics, which exert a pressure in the direction of a spread of the drug phenomenon; in particular—as has been stressed above—among men belonging to a limited age class.

### **Discussion: a Sociological Analysis of the Interplay between the Environmental Features and the Prevailing Traits of the Addicts**

Let us now try to tie together the threads of the environmental features and the addicts' prevailing traits. A first point is that of the high level of affluence and consumption. The role played by this feature may look at first sight dubious. In effect, there is no ground for thinking that drug addiction spreads in particular among people who are comparatively more affluent. On the contrary, drug addiction, in particular hard drug use, has been often associated, over the past decades, with the most underprivileged urban enclaves of Western countries (e.g. Chein *et al.*, 1964; Hughes, 1977; Parker *et al.*, 1986; Pearson, 1987a). However, many other studies have supported the thesis of a proportional diffusion, all in all, of drug abuse in the various social classes (Platt and Labate, 1976; Grimes, 1977; Jamieson *et al.*, 1984; US, NIDA, 1989, 1990; Ramsay and Spiller, 1997). And this thesis seems to prevail in the present evaluations of the phenomenon (Akers, 1992). As for Italy, in particular, the proportional diffusion of addiction in the various social classes seems beyond dispute: various surveys stress that addicts—those using hard drugs included—seem to come from familial backgrounds that represent, without meaningful concentrations, the entire social ladder (e.g. Italy, Labos and Ministero dell'Interno, 1991; Arlacchi, 1993; cocaine addiction's concentration, however, seems to be class-biased, though in the sense that it is higher in upper education and upper income classes).

In any case, a most important point—that belongs to the macrosociological level—should not be missed, i.e. that of a more particular connection between the level of affluence and consumption and the spread of addiction. The very high cost of addiction to, in particular, hard drugs such as heroin, has emerged as a more or less constant feature from surveys conducted in Italy as elsewhere (e.g. United Nations Social Defence Research Institute, 1984; Stimson, 1987). Therefore, it is reasonable to expect that the spread of addiction, *ceteris paribus*, finds a particularly favourable ground where essential expenses absorb a less substantial share of the produced income: in short—due to a well-known socio-economic rule—where the mean level of economic affluence is higher. So, addiction can certainly spread also in underprivileged social enclaves, but the latter have to be part of a wider, affluent social context.

Moreover, attention should be paid to the fact that addicts—as stressed above—are substantially characterized by young age and low level of vocational

integration. So, employment certainly plays a limited role—even if not a meaningless one—in economically supporting the drug-related expenses. Some sample surveys stressed in particular the aspect of a combination of low employment rates and high drug-related expenses: in Italy, according to a survey conducted in the early 1980s, while just 17% of the addicts spent less than \$20 for their daily dose of drug, 51% between \$20 and 50, 28% between \$50 and 100, 4% more than \$100, 41% of the same addicts were unemployed and 45% just intermittently employed (United Nations Social Defence Research Institute, 1984).

So, since the addicts tend to be economically and socially dependent, not only the daily cost of their unproductive life but especially their very high level of drug-related expenses has to be supported from outside, by their parents and relatives, or, more broadly, by the social group on which they rely, or, even more broadly, by the general social context, through either licit or illicit means.

In fact, not only a large proportion of the occasional, non-addicted drug users but also a substantial number of heavy users rely on the support provided by family and welfare. So, illegal means, and in particular income-generating property crime, are not the only source for the high drug-related expenses (US, Research Triangle Institute, 1976; Wardlaw, 1978; Johnson *et al.*, 1985). On the other hand, for the heavy users of drugs and in particular of opiates like heroin, the main source of income is drug dealing itself and subordinately other criminal income-generating activities. To secure the money necessary to buy their daily dose, heavy users are engaged in a frenetic activity centred on drug dealing and other criminal actions (Agar, 1973; Johnson *et al.*, 1985). The existence of a variety of sources for the high expenses related to drug abuse, however, should not disguise the fact that both legal and illegal sources need a substantially affluent general social context. In effect, the addict that gets the money for the daily dose of drug from his parents and relatives needs a substantially affluent family; the user–pusher that gets his own drug through his drug dealing needs a group of affluent buyers; the addict that constantly steals in order to afford the drug cost needs a social context rich enough to sustain the cost of this kind of crime; his property crime is favoured by high levels of consumption and particularly by ostentatious consumption (cars, valuable goods, etc.).

Ultimately, the mass phenomenon of addiction finds a fertile ground where a high level of the overall economic affluence and consumption allows young people to remain economically dependent for a long period, maintaining at the same time a consumption-oriented attitude involving high expenses.

On the other hand, the contrast between these environmental characteristics and the addicts' social traits should be emphasized. Such characteristics, in particular those represented by the first set of variables ('affluence, consumption & achievement'), identify a social and cultural model hinging on high income, consumption, individualistic goals in terms of economic improvement, employment and achievement. Now, we can see that addicts emerge as characterized in negative terms vis-à-vis this model as a whole: they are not only young, but in particular marginal in respect of occupational integration, the key—in particular for young men—to legitimately adjust to this model of 'affluence, consumption & achievement'. This point is backed also by sample surveys, conducted in Italy as well as in other Western countries (Blumberg *et al.*, 1974; Freeman and Medoff, 1982; Italy, Ministero di Grazia e

Giustizia, 1983; Italy, Ministero dell'Interno, 1984; United Nations Social Defence Research Institute, 1984; Kandel and Yamaguchi, 1987; Pearson, 1987a; Switzerland, Office Fédéral de la Santé Publique, 1990; US, Substance Abuse etc., 1996 as to heroin users). They show, for instance, that even among detainees, who present on average a negative occupational record, the rate of addicts with a lasting work experience is less than half that of their fellow inmates (Italy, Ministero di Grazia e Giustizia, 1983). Moreover, this occupational failure does not seem to be just the fallout of the state of addiction: it started before addiction set in.

So, the first set of variables does not simply describe an environment which provides for the material means that allow a high level of expenses by also vocationally marginalized people. It also describes an environment in which prevails a model of comparatively high expectations in terms of economic and social achievement, of individualistic entrepreneurship, for which some people, addicts, seem to have been particularly ill-equipped from the beginning.

From the first set of variables something more may be deduced. The best predictor of drug diffusion, i.e. the migration variable, may be considered, as we have already stressed, a particularly good indicator of the existence of a model characterized by affluence, consumption, vocational opportunities, social and economic mobility, since people migrate precisely in order to achieve all this. And this model seems to be strongly connected with high drug diffusion. On the other hand, migration may be a factor directly influencing drug diffusion. The impact of migration on the individual, in terms of his uprooting, cultural conflict, and difficulties of adjustment is something well known. In particular, it is well known, since Sellin's works (1938), that these problems emerge more violently in the second generation of immigrants (see also Killias, 1989). Bearing this presupposition in mind, we have used migration data that regarded the time of a generation ago. So, the migration variable used here discriminates between provinces on the basis of the substantial presence, now, of immigrants' sons, possibly carrying the aforementioned problems of adjustment. And the fact that the migration variable so constructed showed a definitely higher predicting value in respect of drug diffusion than other variables within the same set, seems to back the underlying hypothesis. Moreover, if we shift to the level represented by the addicts' prevailing traits, we can add to all this some reinforcing information, i.e. that 53.7% of the addicts experienced some mobility on the territory and 24% of them moved more than once; in particular 16.6% from another region or from abroad, 16.7% within the same region, and the remaining only locally (Italy, Ministero dell'Interno, 1993). A comparison with the mean territorial mobility of the general population shows that the addict's mobility trait is meaningful, since it is approximately twice that of the former.

As to the second set of variables, those called 'education & individualistic aims', something partly similar to that already said for the previous set may be suggested. Here the focus is on higher education, knowledge, culture, access to information, postponement of marriage and procreation. These aspects are of course instrumental to the perspectives of achievement described by the first set. However, what we believe is most important is that they also describe a social situation of comparatively high expectations. These expectations imply shifting energies from more directly and immediately attainable rewards—



such as that possible within the pair group, family and local community—to a more mature, ‘social’ and postponed set of goals. These expectations presuppose an earlier adjustment than that relative to the first set of variables. Such early adjustment is precisely what addicts seem mostly to miss. The data already presented here (regarding *all* addicts under treatment) clearly show this fact: addicts have experienced a much lower level of school achievement than the average youth. On the other hand, we have plenty of data, from sample surveys, backing this. These surveys show that addicts prevalently present a previous, marked school maladjustment—fundamentally preceding the onset of addiction. For instance, among those who repeatedly failed at school, the rate of addicts has turned out to be 7.4 times higher than their rate in the entire sample (Gius and Nazor, 1982; see also Calvanese and Rossi, 1989; Italy, Dipartimento per gli Affari Sociali, 1996; elsewhere Bean, 1971; Kandel, 1978; Cohen and Santo, 1979; Akers, 1992; US, Substance Abuse etc., 1996, as to heroin users).

Summarizing all this, we can say that drug diffusion is high where there are social expectations in terms of early adjustment to high educational and corollary standards, and that these expectations are ones that present addicts have been—since before their addiction—particularly ill-equipped to meet.

As regards the aspects describing a ‘reduced & fragile family’, we can say—at the macrosociological, environmental level—that we are faced by an overall model hinging on the individual and his economic and social achievements independently from his own family. Within this model, the scope for the family to carry out its more traditional functions of production, education and socio-economic integration, is increasingly limited. Not surprisingly, the family therefore loses its footing also in terms of lasting stability, numerical size, birth rate, etc. A reduction in the size and in the number of generations of the family, as well as in the functions effectively played by it, may be regarded as the answer to different requests of societal organization. And even the possibility of severing marriage ties that end up by representing an obstacle to the adult individual’s aims of achievement, may be regarded as a sound adjustment to external pressures. However, the effect of all this is the individual’s instability; and especially the decline of the family role of socialization and integration of the young generations may hardly be described as positive for the latter.

Now, let us shift from the macrosocial level to the microsocial context of the relationship between addicts and the family. Here, we have the prevailing trait of the addicts’ negative attitude towards marriage and the forming of one’s own family (something backed by other studies: Blumberg *et al.*, 1974; Yamaguchi and Kandel, 1985; Newcomb and Bentler, 1988); and concurrently the addicts’ disproportionately difficult familial background. The latter is represented by a variety of serious problems, identified by the empirical studies mentioned in the previous section. However, this variety of serious problems should not, in our opinion, divert attention from an essential point, i.e. that the familial problems connected to the situation of addiction are at the core constituted by the presence of obstacles that hinder the interiorization, within the domestic context, of an appropriate model of the well socialized adult: as a consequence of the lack of either adequate parent-figures or an adequate relationship parents-child. The lack of these basic features is—as expected—duplicated by the addict’s inadequacy in playing the role of spouse and parent.

So, in the context of the family aspects here taken into examination, we can conclude that the diffusion of the mass phenomenon of addiction finds a fertile ground, at the environmental level, where the general socio-economic framework produces, together with an individualistic model of achievement, a reduced and fragile family. The latter seems to experience difficulties in playing the role of socialization and integration of the young generations. On the other hand, the prevalent background of addicts compounds this negative picture, since addicts mainly come from families that—in comparison with the situation of the general population—seem particularly inadequate to the aforementioned role.

By contrast, the urbanization findings are easier to interpret. Since the School of Chicago studies of the 1920s–1930s, the influence of urbanization (particularly in terms of division of labour, dyshomogeneousness of social and cultural conditions, loose and transient relations, anonymity, room for unconventionality) are well known (e.g. Wirth, 1964); and later studies have confirmed the persistence of this influence (Fisher, 1975; Decker *et al.*, 1982). The combination of the traits of both the environment and the addicts themselves seems more interesting, however. It shows that, while drug diffusion tends to be concentrated in provinces with a higher rate of urbanization, addicts themselves come from comparatively bigger urban centres. In the latter, we can assume, the negative characteristics of urbanization are even more accentuated. So, just as in the case of the ‘reduced & fragile family’ aspects, in the case of urbanization the prevailing traits of the addicts’ personal background represent an aggravation in respect of the general characteristics of the environment.

Among the addicts’ prevailing traits, two more aspects should be taken into consideration: the peculiar distribution of addiction by age and sex. Now, such a distribution may be linked to the socio-economic environmental framework described here. The trait of the addicts’ young age leads us to advance the following hypothesis: the social and vocational maladjustment of the subject emerges more clearly at the age at which the expectations of his integration become more compelling; the anxiety usually produced by the feeling of his inadequacy becomes more severe; the pressure to find an alternative, though deviant, balance, more difficult to resist. This age is in short that of late adolescence and early adulthood. This is an age when young people are expected to abandon the juvenile hedonistic model of life, and when they can only maintain it within a deviant model such as that of addiction.

The addicts’ young age and its corollary characteristics seem to agree with what we think is the most productive sociological picture of drug addiction: a continued and compulsive use of drugs (in particular, of hard drugs) as the outcome of conflict and inadequacy vis-à-vis the adult role model of integration in a contemporary, technologically advanced society, where individualism and competition is higher, family and community support lower. Within this overall situation, the addict rejects the standard forms of social integration. However, he/she does not become an asocial, modern hermit, as social theory of some decades ago tended to represent him; on the contrary, as also the data of the present study show, he/she remains in the middle of an advanced, affluent, consumeristic environment. He/she prefers the densely populated urban areas, with their opportunities in terms of multiple, differentiated social contacts. And, as we know from several studies, he/she conducts a hectic social

life, especially within the community of those whose life is centred on addiction. So, he/she rejects the forms of social integration based on an adult role depending first of all on regular work and the forming of one's own family: the adult role for which he/she has been ill-equipped from the beginning. He/she does not reject, on the contrary he/she actively seeks, social integration within the addicts' community and the perpetuation of a juvenile, hedonistic phase of life. This attempt, however, is in the end obviously bound to fail, since the responsibilities of adult life have ultimately to be faced: as our data show, the experience of addiction is destined to be restricted to precise age classes.

Addiction, however, affects much less young women. Why? Such a phenomenon certainly is not due to lack of physical strength, since addiction does not require it, unlike some types of theft and robbery. Moreover, any comparison with the situation regarding crime—and in particular with the familiar phenomenon of the scarcity of women, as a rule, among people charged, sentenced and jailed—should be handled with care. The groups taken into consideration concern not only people who committed a crime—as in the case of people involved in drug trafficking—but mostly people who, as far as one can see, only engaged in some deviant behaviour, such as drug addiction itself. The type of groups taken into consideration also rules out reference to the possibility, in any case dubious, of under-detecting and leniency towards women involved in crime and deviance. What is the use of these concepts as to people who died of drug abuse?

On the other hand, the image of a clearly separate life for men and women seems obsolete, at least in the Western world. In Italy, for instance, women represent 49.8% of the population studying at universities. In terms of vocational integration, however, women's role shows some substantial difference: women represent 34.9% of all the working population (somewhat less than the average of the other economically advanced countries). And the gap is still present among the young generation: women form 39.5% of the working population in the age class 14–34 years. What is more meaningful is that the percentage of working women out of all working age women is only 35.8%, whereas that of men is 70.5%; at the same time, the percentage of married women out of all working women is only 33.6% against 82.2% for men (Fadiga Zanatta, 1988; Barberis, 1989). Also due to this relatively minor presence in the vocational world, mothers have always been more present at home than fathers and therefore they have supplied girls with the opportunity for a more direct contact with an adult model. This is the source of a sex difference in the opportunity of interiorizing an appropriate adult model. Moreover, in broken families (so common in the addicts' background), children are almost always assigned to their mother; and this introduces another sex difference regarding the interiorizing of an adult model.

Against this background, the following hypothesis may be advanced. First, women have better opportunities in terms of interiorizing the adult role of their own sex (or better, of their own mothers). Second, women's social roles—as also figures show—are less centred on a vocational perspective. Other roles (affective, familial), more attainable even if not necessarily particularly sought after, and carrying with them social restraining values (Hagan *et al.*, 1979), seem to be competing with the vocational ones. Women are, as a consequence, less dependent than men on the model of individual socio-economic achievement mainly based on successful vocational integration (this is partly

reminiscent of Cohen, 1955, in spite of the changes which have occurred since those years). Therefore, the difficulties experienced vis-à-vis this model and women's possible inadequacies probably create less traumatic consequences and less need to recur to an alternative, deviant, form of social integration, disclaiming the standard ones. This form of 'protection' of women may well persist also in those advanced environments where women are relatively more interested in education, work and 'modern' integration and where, as shown here, drug addiction is rife. At the same time, we expect this form of 'protection' to be more effective where the environment is less advanced and more traditional; and therefore the rate of women among addicts to be lower in such an environment. And actually our data show that e.g. the rate by province of women among addicts under treatment in public institutions is strongly correlated with the rate of unmarried women (0.58), birth rate (-0.66) as well as with income (0.61), population self-employed in the services sector (0.62), cars circulating (0.65), etc.

### Conclusions

From what has been shown here about the phenomenon of addiction to hard drugs, in the mass dimension it took in an advanced Western country, a few theoretical concepts may be deduced. In particular, the influence on the phenomenon of four factors may be emphasized:

- 'deviant opportunities', represented by environmental characteristics (affluence, consumption, etc.) that either directly or indirectly favour the spread of addiction;
- 'higher expectations', that increase, in some environmental contexts, the probability of people experiencing difficulties of adjustment;
- 'social disorganization and social mal-integration', that particularly affect the socialization of youths in some environments;
- 'prevailing traits' in some groups of persons, that both actualize the condition of the gap vis-à-vis the 'higher expectations' and, at the addict' level, worsen the environmental picture of 'social disorganization and social mal-integration'.

Ultimately, the explanation of drug diffusion proposed here is based on a combination of causes acting at two different levels: that of structural, environment features and that of social traits of particular layers of the population. We suggest that only this combination is causally meaningful. Referring to the structural features alone would pinpoint a real source of both objective conditions that make drug use easier and exert pressure towards deviance: but not the limits and forms of its real outcome. It would, in other words, overrate deviance. The referring to the social traits alone—shifting the attention to the microsocial level—would better focus on the real subjects of deviant action and on their characteristics, i.e. on something mostly missed by the 'strain theories'; but in turn it would miss the existence of an interaction with the structural features.

The results of the present study seem at odds with the microsocial approach and in particular with the radical interactionist assertion that the only significant aspect, in the building up of deviant behaviour, is represented by the

process of interaction; while no preceding feature of society, no previous trait of the subject involved in the process has substantial importance.

Showing that there are significant preceding features of society and previous traits does not mean that the construction of a deviant role and identity—as portrayed by interactionism—is a falsehood. Certainly, such an approach seems to deny itself any possibility of taking into consideration what happens in general society in terms of social and cultural phenomena, as well as in terms of social and cultural differences between layers of the population; in other words, what has been the main object of sociology from its beginning. On the other hand, it seems quite acceptable to think that, to become a drug addict, any subject has to experiment with drugs, to interact with other people, to accept his own dealing with drugs, to build up a role of addict. All this may be regarded as a kind of social bottleneck through which addiction should pass. However, the combination of environmental features and prevailing social traits may be regarded as the force that pushes people towards this bottleneck. In other words, we suggest that there are factors that channel in particular some people, holding some prevailing social traits, towards the construction of a deviant role and identity.

Something very similar may be said about the differential association/social learning theory. Also in this case, one can agree that the association with groups sharing pro-addiction values, the learning of their attitudes and the reinforcing of behaviour represent not only a common aspect of the addict's experience but also a catalyst of the actual process of becoming an addict. Still, the combination of environmental features and prevailing social traits may be regarded as what pushes people towards such an association and learning process, as well as towards the emerging of pro-addiction groups where they did not exist before. The latter point is of theoretical importance especially for addiction, since addiction—unlike for instance property crime—is a form of behaviour that in some countries like Italy sprang up like mushrooms, almost from nothing, in the space of a few years.

What has been said about interactionism also applies to labelling theory. On the other hand, the Italian case provides data that seem specifically to conflict with labelling theory. It should be remembered that the actual spread of addiction and deaths from drug abuse occurred in Italy after the 1975 Drug Act, which depenalized for the first time in the recent history of the Western world the holding of a certain amount of drugs for personal use. In other words, the spread of addiction and connected deaths occurred when the use of illegal drugs no longer carried with it the danger for the user of being labelled as a criminal by the official agencies. Ultimately, to partly maintain the labelling theory assertion, it would be necessary to shift the emphasis from specific labelling by official control agencies to a generic labelling by 'society' (see Downes, 1977) or even to self-labelling; something that appears as a last-chance theoretical reasoning, since it is difficult to utterly exclude it but even more difficult to empirically back it up, due to its lack of specificity. In any case, it would be something not against interactionism (Downes and Rock, 1988), but certainly not within its radical mainstream.

The present study clearly supports the importance of structural features of society for the emerging of deviant behaviour such as drug addiction. However, this study is not necessarily in agreement with already classical explanations of deviance, i.e. with those theories presenting deviance as a by-product of a



dominating model based on social–economic, individual achievement, in respect of which people belonging to lower classes turn out to be the most probable losers by way of either their scarce access to socio-economic means or their cultural attitudes (Merton, 1949, 1957; Cohen, 1955; Cloward and Ohlin, 1961; Blau and Blau, 1982). It is not in agreement because:

1. The structural features taken into consideration here do not regard society taken as a whole. They regard an organizational model that has especially developed in some areas, making them different from other areas. A basic hypothesis supported here is therefore the dyshomogeneous diffusion of the model in question. For this reason, this article starts from a point that is also opposite to that assumed by the ‘control theory’, in so far as the latter considers ‘strain’ a constant variable. On the other hand, one may wonder how it would be possible to maintain the concept of homogeneousness, or that of constant strain, when variables identifying the basic socio-cultural model are found out to present such widely different values; as is the case here with the index of separations, whose values vary between provinces with the ratio 1:35; of cultural consumption (1:7); of newspaper diffusion (1:9); of urbanized population (1:6); and even of birth rate (1:2.6). Besides, if the organizational model were homogeneous, why should we find such a higher level of addiction in those environments where opportunities seem on the whole better, as shown by higher income, less people looking for their first job, higher immigration, etc.?
2. The structural features’ effect on the propensity to addiction is not apparently filtered through other structural features such as, first of all, class division, with or without the ancillary aspects of cultural diversity. This study backs the hypothesis of addiction as a cross-class phenomenon, affecting some particular segments of the population within each class. These segments are made up of people less adequate (in terms of age, vocational and educational skills, familial conditions, residential background) to achieve a good social integration. Among these aspects of inadequacy, those deriving from family problems are of particular significance, since it is clear that, no matter the family social class, such problems would affect the social integration of youths. By contrast, the problems regarding education would seem more connected with class. One could think that poor educational achievement would less jeopardize the adjustment of lower class youths, whose goals might be somewhat downgraded vis-à-vis those prevailing in the local environment. However, in the addict’s experience these educational failures seem connected with a school maladjustment reflecting a more general social maladjustment: therefore, with something going beyond class boundaries. Some of these aspects (in particular poor vocational and educational qualities) might be regarded as also signs of weak internal and external controls, without challenging the meaning of the general model.
3. The structural features taken into consideration here include the issue of ‘opportunities’ in the local environment. This issue, however, does not regard here negative opportunities for professional criminal activities and violent crime—due to the putative interiorization of law-abiding values or to police control or low level of criminal organization in the environment—that would leave addiction as the residual pattern of deviant adjustment. Instead, it regards the occurrence of positive features, favouring addiction.



Points 2 and 3, in particular, markedly differentiate the present picture from that described by the original concept of 'strain'. The latter saw deviance as the issue of a society split between 'those who have and those who have not', with the latter pushed towards deviance precisely by their having not. The picture of the territorial units where addiction is rampant is one of general affluence and consumption, accompanied by other characteristics of Italy's more advanced areas, such as a welfare policy developed also by the local authorities, plus the general lack of poverty on an ethnic basis. All this certainly did not abolish class boundaries, but watered down the dramatic differences of a few decades ago, relieving the conditions of the most underprivileged. Concurrently, the diffusion of drug addiction seems the answer not to differences of access to licit means on a class basis, but to more universal difficulties of adjustment to the higher standards of integration of an advanced technological society. If we want to keep using the expression 'strain', in the domain of addiction, we should re-phrase it in the light of these changes. The spreading of addiction at the present time emerges as something linked to a mature, welfare capitalist society, more than to one characterized by wild capitalism and struggle for life. And even the addict who commits property crimes does this to feed his addiction, not to better climb the social ladder.

This mention of the relation between addiction and crime introduces a last problem. We know from innumerable accounts that addicts do commit common crime—meaning first of all offences against property, such as theft and burglary—to partly support their habit. As expected, we found a significant territorial correlation between theft (including burglary) and drug diffusion indicators (Table 1). But what about professional, criminal gangs' activities, detached from drug use, i.e. those criminal activities regarded as typical of the lower classes and their negative characteristics in terms of both culture and licit means? Some of the aspects regarded here as associated with addiction to hard drugs (in particular, the addicts' experience of educational and vocational maladjustment) may also be associated with more professional criminal activities—within both the 'strain' and 'control' theories.

Now, to show the difference between the factors of addiction and professional crime would need a distinct research. However, the point is too important to be dropped without some brief concluding remarks. If the combination of factors described here as the background to addiction turns up to be also associated with professional crime, it would imply that such combination is causally meaningless, since it could equally produce a quite different result. However, the most important offences usually linked with professional criminal activities, i.e. first of all murder, and also extortion and robbery (Table 1), do not coincide with the territorial distribution of drug addiction. Nor do they coincide with the model, based on affluence, consumption, education, family organization, etc., underlying drug addiction diffusion. For instance, murder, extortion and robbery are territorially negatively correlated with income (respectively,  $-0.46$ ;  $-0.48$ ;  $-0.23$ ) and education ( $-0.43$ ;  $-0.36$ ;  $-0.11$ ), and positively with alimentary consumption ( $0.48$ ;  $0.46$ ;  $0.27$ ), people looking for their first job ( $0.54$ ;  $0.51$ ;  $0.46$ ) and birth rate ( $0.56$ ;  $0.50$ ;  $0.41$ ). Criminal gangs' activities ultimately seem to be associated with an environmental situation of relative deprivation in terms of income, general affluence, vocational opportunities, education and with the concurrent aspects of less individualistic

family organization. Therefore, with a socio-economic situation substantially opposite to that underlying drug diffusion.

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### Notes

1. Regions are major territorial-administrative units in Italy, each of them comprising on average a population of 2,878,800 over an area of 15,061 km<sup>2</sup> (on 31 December 1989).
2. Deaths due to drug abuse appeared to be the best indicator, on the basis of its objective nature. The number of addicts treated in public structures appeared a rather good indicator, by its very nature and also since public structures for the treatment of addiction are available in every province. The data dealing with addicts treated in private structures were judged to be useful as supplementary indicators only, since they are conditioned by their uneven availability over the same territory. The data relating to people identified as holders of drugs for personal use and by people charged with drug trafficking offences were both regarded as biased by their dependence upon the police's attitude and ultimately upon the Government's policy towards drug diffusion; they were considered, however, useful supplementary indicators. As to people charged with drug trafficking, it should be remembered that they are not necessarily addicts. Since the innovative 1975 Drug Act, holding a limited amount of drugs for one's personal use is no longer a crime in Italy; and so addicts, *qua* addicts, are not liable to be charged with drug trafficking offences. However, it is well known that most of the people charged with drug trafficking are drug addicts who feed their personal habit by means of a petty trade in drugs. As to this point, some inferences may be drawn from the fact that more than 80% of those charged with drug trafficking committed offences of 'slight importance' (*lieve entità*); while less than 10% were charged with participating in the activities of organized criminal gangs (Mafia or other) (Italy, Ministero dell'Interno, 1992). Ultimately, the number of people charged with drug trafficking may be regarded as an indicator of drug diffusion, in particular of both the number of petty-trading addicts and of the demand level in the local drug market. The recorded number of cases of AIDS was regarded as a good indicator, due to the fact that over two-thirds of all the cases of AIDS in Italy are linked with drug intravenous injection (68.1% of the cases in 1990).
3. As regards the data relating to various structural aspects of the country, the main source of information was the already mentioned Istituto Centrale di Statistica (various publications, see *infra*); data about income, consumption and savings were made available by the Institute G. Tagliacarne of Rome. Variables refer to annual data (e.g. the 'judicial separations' variable is based on all the cases of judicial separations recorded in each province in the given year). The year of reference is not the same for all the variables, since certain data were available only for some year, due to various reasons (e.g. census). However, the time of reference was contained within a 3-year span (1989–1991), with a couple of exceptions: the rather complex index of population living in urbanized areas, that was available only for 1981; and the migration variable that, for reasons that will be presented later in the paper, refers to the 1961–1971 period.
4. Various techniques were used to test the significance of the relationship between the variables. The initial correlation matrix of all the variables was submitted to the Bartlett chi-square test, whose result was encouraging; then the Bonferroni-adjusted probabilities were examined.
5. The canonical correlation analysis is a statistical technique that optimizes the linear combination of the variables of a first set vis-à-vis the linear combination of the variables of a second

- set. The canonical scores of the set of drug diffusion indicators were also used to find out, one by one—through stepwise regressions—the best predictors of drug diffusion among the socio-economic variables.
6. The matrix of correlations between the variables showed coefficients that almost always were high (only six less than 0.3): so that the presence of common factors was inferred. The Kaiser–Meyer–Olkin measure of sampling adequacy gave a value of 0.90, i.e. exceptionally good, showing that such high coefficients were due to the effect of common factors more than to direct correlation of the variables, and suggesting therefore the opportuneness of proceeding with factor analysis. The latter was carried out using the *principal components* technique to extract the underlying factors. The factors were then rotated, using an oblique rotation technique (Oblimin, with  $\delta = 0$ ; see Appendix) that produces correlated factors; this technique suits a situation where the subsets of variables hinting at the various factors are highly correlated (see the Results section).
  7. The main sources of information were the Ministero dell'Interno (Ministry of the Interior), as regards the figures and characteristics of addicts under treatment, addicts who died of drug abuse, people identified by the police as holders of drugs for personal consumption or consumers of drugs (year of reference, 1989–1990); the Istituto Centrale di Statistica (*Statistiche Giudiziarie 1988*, Rome, 1990), as regards figures and characteristics of people charged, sentenced and jailed for crimes of drug trafficking.
  8. For instance, some sources provide information about addicts' educational level but not about their marital status, and so on. Some sources offer wider information, but the sources *in se* may be regarded as less representative of the entire category of addicts (this is the case for instance with information about people sentenced for drug trafficking).
  9. First, addicts under treatment at public and private institutions fed their habit by a range of illegal drugs: more precisely 78% of them took heroin, 6% opium, 21% morphine, 15% methadone, 21% cocaine, 10% amphetamines, 10% LSD, 7% barbiturates, 24% cannabis products. Second, addicts who died of drug abuse overwhelmingly did so of heroin: in 98% of the cases the drug involved was in fact heroin, in the remaining, cocaine and psychotropic drugs. Third, of those identified by the police as holders of drugs for personal consumption, in 61.3% of the cases the substances involved were hard drugs, almost always heroin, in 35.5% soft drugs, in 3.1% the information is lacking. And fourth, of people charged with crimes of drug trafficking, the trafficking regarded in 56.9% of the cases heroin, in 9.4% cocaine, in 23.5% hashish (Italy, Ministero dell'Interno, 1993; Italy, Presidenza del Consiglio dei Ministri, 1993).

## References

- Agar, Michael H. (1973) *Ripping and Running: A Formal Ethnography of Urban Heroin Addicts*, New York, Seminar Press.
- Akers, Ronald L. (1992) *Drugs, Alcohol, and Society: Social Structure, Process, and Policy*, Belmont, CA, Wadsworth.
- Akers, Ronald L., Krohn, Marvin D. and Lanza-Kaduce, Lon (1979) 'Social learning and deviant behavior: a specific test of a general theory', *American Sociological Review*, Vol. 44, pp. 635–655.
- Arlacchi, Pino (1993) 'Traffico della droga', in *Enciclopedia delle scienze sociali*, Vol. 3, Rome, Istituto Enciclopedia Italiana, pp. 270–277.
- Barberis, Corrado (1989) *La società italiana: esperienze di un secolo*, Milan, F. Angeli.
- Barbero Avanzini, Bianca (1978) *Droga, giovani e società*, Bologna, Il Mulino.
- Baumann, Charles A. U. and Shenker, K. (1973) 'Sozialer Hintergrund und Persönlichkeit von Drogenkonsumentinnen', *Zeitschrift für Präventivmedizin*, Vol. 18, pp. 195–207.
- Bean, Philip (1971) 'Social aspects of drug abuse: a study of London drug offenders', *The Journal of Criminal Law, Criminology and Police Science*, Vol. 62, No. 1, pp. 80–86.
- Beck, Jerome and Rosenbaum, Marsha (1994) *Pursuit of Ecstasy*, Albany, State University of New York Press.
- Becker, Howard S. (1953) 'Becoming a marihuana user', *American Journal of Sociology*, Vol. 59, pp. 235–242.
- Becker, Howard S. (1963) *Outsiders: Studies in the Sociology of Deviance*, New York, Free Press.
- Blau, Judith R. and Blau, Peter M. (1982) 'The cost of inequality: metropolitan structure and violent crime', *American Sociological Review*, Vol. 47, pp. 114–129.

- Blumberg, Herbert H., Cohen, S. Daryl, Dronfield, B. Elizabeth, Mordecai, Elizabeth A., Roberts, J. Colin and Hawks, David (1974) 'British opiate users: II. Differences between those given an opiate script and those not given one', *International Journal of the Addictions*, Vol. 9, No. 2, pp. 205–220.
- Blumer, Herbert, Sutter, Alan, Smith, Roger and Ahmed, Samir (1967) *The World of Youthful Drug Use*, Berkeley, University of California Press.
- Braithwaite, John (1989) *Crime, Shame and Reintegration*, Cambridge, Cambridge University Press.
- Brook, Judith S., Whiteman, Martin and Gordon, Ann Scovell (1985) 'Father absence, perceived family characteristics and stage of drug use in adolescence', *British Journal of Developmental Psychology*, Vol. 2, pp. 87–94.
- Calvanese, Ernesto and Rossi, Eugenio (1989) 'Analisi e riflessioni su un campione di tossicodipendenti reclusi nella casa circondariale di Milano', *Bollettino per le farmacodipendenze e l'alcoolismo*, Nos. 1–2, pp. 11–33.
- Cancrini, Luigi (ed.) (1973) *Esperienze di una ricerca sulle tossicomanie giovanili in Italia*, Milan, Mondadori.
- Chein, Isidor, Gerard, Donald L., Lee, Robert S. and Rosenfeld, Eva (1964) *The Road to H: Narcotics, Delinquency and Social Policy*, New York, Basic Books.
- Cloward, Richard and Ohlin, Lloyd E. (1961) *Delinquency and Opportunity: A Theory of Delinquent Gangs*, Glencoe, IL, Free Press.
- Cohen, Albert K. (1955) *Delinquent Boys: The Culture of the Gang*, Glencoe, IL, Free Press.
- Cohen, Allan Y. and Santo, Yoav (1979) 'Youth drug abuse and education: empirical and theoretical considerations', in Beschner, George M. and Friedman, Alfred S. (eds), *Youth Drug Abuse: Problems, Issues, and Treatment*, Lexington, MA, Lexington Books, pp. 229–254.
- D'Arcangelo, Enzo (1977) *La droga nella scuola*, Turin, Einaudi.
- Decker, David L., Shichor, David and O'Brien, Robert M. (1982) *Urban Structure and Victimization*, Lexington, MA, Lexington Books.
- d'Orbán, P. T. (1970) 'Heroin dependence and delinquency in women: a study of heroin addicts in Holloway Prison', *British Journal of Addiction*, Vol. 65, No. 1, pp. 67–78.
- Downes, David (1977) 'The drug addict as a folk devil', in Rock, Paul (ed.), *Drugs and Politics*, New Brunswick, NJ, Transaction Books, pp. 89–97.
- Downes, David and Rock, Paul (1988) *Understanding Deviance: A Guide to the Sociology of Crime and Rule-breaking*, Oxford, Clarendon.
- Durkheim, Emile (1897) *Le suicide: Étude de sociologie*, Paris, Alcan.
- Edwards, Ruth W. (1997) 'Drug and alcohol use among youth in rural communities', in Robertson, Elizabeth B., Sloboda, Zili, Boyd, Gayle M., Beatty, Lula and Kozel, Nicholas J. (eds), *Rural Substance Abuse: State of Knowledge and Issues*, Rockville, MD, NIDA, pp. 35–78.
- Elliott, Delbert S., Huizinga, David and Ageton, Suzanne S. (1985) *Explaining Delinquency and Drug Use*, Newbury Park, CA, Sage.
- Fadiga Zanatta, Anna Laura (1988) 'Donne e lavoro', in ISTAT (Ist. Centrale di Statistica) and Associazione Italiana di Sociologia (eds), *Immagine della Società Italiana*, Rome, ISTAT, pp. 281–303.
- Fisher, Claude S. (1975) 'Towards a subcultural theory of urbanism', *American Journal of Sociology*, Vol. 80, pp. 1319–1341.
- Freeman, Richard B. and Medoff, James L. (1982) 'The youth labor market problem in the United States: an overview', in Freeman, Richard B. and Wise, David A. (eds), *The Youth Labor Market Problem: Its Nature, Causes and Consequences*, Chicago, University of Chicago Press, pp. 35–74.
- Friedman, C. Jack, Friedman, Alfred S. and Levin, Fredrica M. (1973) 'Drug abuse and delinquency among lower class, court adjudicated adolescent boys', in National Commission on Marihuana and Drug Abuse (ed.), *Drug Use in America: Problem in Perspective*, Appendix, Vol. 1, Washington, DC, US Government Printing Office, pp. 398–484.
- Giggs, John A. (1991) 'The epidemiology of contemporary drug abuse', in Whynes, David K. and Bean, Philip T. (eds), *Policing and Prescribing: The British System of Drug Control*, Houndmills and London, Macmillan, pp. 145–175.
- Gius, Erminio and Nator, Carlo M. (1982) 'Cultura giovanile, realtà sociale e droga', in Gius, Erminio (ed.), *La questione droga*, Milan, Giuffrè, pp. 175–269.
- Gottfredson, Michael and Hirschi, Travis (1990) *A General Theory of Crime*, Stanford, CA, Stanford University Press.
- Grimes, John A. (Department of Health and Social Security) (1977) *Drug Dependence Study: A Study of Drug Addicts Attending for Treatment*, London, Department of Health and Social Security.

- Hagan, John, Simpson, John H. and Gillis, A. R. (1979) 'The sexual stratification of social control: a gender-based perspective on crime and delinquency', *British Journal of Sociology*, Vol. 30, No. 1, pp. 25–38.
- Hirschi, Travis (1969) *Causes of Delinquency*, Berkeley, CA, University of California Press.
- Hughes, Patrick (1977) *Behind the Wall of Respect: Community Experiments in Heroin Addiction Control*, Chicago, University of Chicago Press.
- Italy, Dipartimento per gli Affari Sociali, Istituto Superiore Sanità (1996) *Diffusione dell'uso di oppiacei e altre psicodroghe tra i giovani*, Rome, Dipartimento per gli Affari Sociali.
- Italy, ISTAT (Istituto Centrale di Statistica) (1985) *Dati sulle caratteristiche strutturali della popolazione e delle abitazioni*, Rome, ISTAT.
- Italy, ISTAT (Istituto Centrale di Statistica) (1990a) *Rilevazione delle forze di lavoro: media 1989*, Rome, ISTAT.
- Italy, ISTAT (Istituto Centrale di Statistica) (1990b) *Statistiche della previdenza, della sanità e dell'assistenza sociale*, Rome, ISTAT.
- Italy, Labos and Ministero dell'Interno (1991) *Famiglia e percorsi di tossicodipendenza*, Rome, TER.
- Italy, Ministero dell'Interno (1984) *Diffusione delle tossicodipendenze*, Rome, Ministero dell'Interno.
- Italy, Ministero dell'Interno, Direzione Centrale per i Servizi Antidroga (1992) *Attività antidroga svolta dalle Forze di Polizia in Italia*, Rome, Ministero dell'Interno.
- Italy, Ministero dell'Interno, Osservatorio permanente sul fenomeno droga (1989) *Andamento della tossicodipendenza 1984–1988*, Rome, Ministero dell'Interno.
- Italy, Ministero dell'Interno, Osservatorio permanente sul fenomeno droga (1993) *Andamento delle Tossicodipendenze in Italia etc.*, Rome, Ministero dell'Interno.
- Italy, Ministero di Grazia e Giustizia, Ufficio Studi (1983) *Indagine su 371 tossicodipendenti detenuti etc.*, Rome, Ministero di Grazia e Giustizia.
- Italy, Presidenza del Consiglio dei Ministri (1990) *Aggiornamenti, modifiche ed integrazioni della legge 22 dic. 1975, n. 685*, Rome, Presidenza del Consiglio dei Ministri.
- Italy, Presidenza del Consiglio dei Ministri, Dipartimento per gli Affari Sociali (1993) *Relazione sui dati relativi allo stato delle tossicodipendenze in Italia*, Rome, Presidenza del Consiglio dei Ministri.
- Jamieson, Anne, Glanz, Alan and MacGregor, Susanne (1984) *Dealing with Drug Misuse: Crisis Intervention in the City*, London, Tavistock.
- Johnson, Bruce D., Goldstein, Paul J., Preble, Edward, Schmeidler, James, Lipton, Douglas, Spunt, Barry and Miller, Thomas (1985) *Taking Care of Business: The Economics of Crime by Heroin Abusers*, Lexington, MA, Heath.
- Jurich, Antony P., Polson, Cheryl J., Jurich, Julie A. and Bates, Rodney A. (1985) 'Family factors in the lives of drug users and abusers', *Adolescence*, Vol. 20, No. 77, pp. 143–159.
- Kandel, Denise B. (1978) 'Convergencies in prospective longitudinal surveys of drug use in normal population', in Kandel, Denise B. (ed.), *Longitudinal Research on Drug Use: Empirical Findings and Methodological Issues*, Washington, DC, Hemisphere-Wiley, pp. 3–38.
- Kandel, Denise B. and Yamaguchi, Kazuo (1987) 'Job mobility and drug use: an event history analysis', *American Journal of Sociology*, Vol. 92, No. 4, pp. 836–878.
- Killias, Martin (1989) 'Criminality among second-generation immigrants in Western Europe: a review of the evidence', *Criminal Justice Review*, Vol. 14, No. 1, pp. 13–42.
- Krohn, Marvin D., Lizotte, Alan J., Thornberry, Terence P., Smith, Carolyn and McDowall, David (1996) 'Reciprocal causal relationships among drug use, peers, and beliefs: a five-wave panel model', *Journal of Drug Issues*, Vol. 26, No. 2, pp. 405–428.
- Ladewig, Dieter and Graw, Peter (1985) *Entwicklungschancen Drogenabhängiger*, Basel, Beltz.
- Lemert, Edwin M. (1967) *Human Deviance, Social Problems and Social Control*, Englewood Cliffs, NJ, Prentice-Hall.
- Matza, David (1969) *Becoming Deviant*, Englewood Cliffs, NJ, Prentice-Hall.
- Merton, Robert K. (1949, 1957) *Social Theory and Social Structure*, Glencoe, IL, Free Press.
- Newcomb, Michael D. and Bentler, Peter M. (1988) *Consequences of Adolescent Drug Use: Impact on the Lives of Young Adults*, Newbury Park, CA, Sage.
- Noble, Peter J. (1970) 'Drug taking in delinquent boys', *British Medical Journal*, Vol. 1, pp. 102–105.
- O'Neill, Eugene (1956) *Long Day's Journey into Night*, New Haven, CT, Yale University Press.
- Parker, Howard, Bakx, Keith and Newcombe, Russel (Misuse of Drugs Research Project) (1986) *Drug Misuse in Wirral: A Study of Eighteen Hundred Problem Drug Users Known to Official Agencies*, Liverpool, University of Liverpool.
- Pearson, Geoffrey (1987a) 'Social deprivation, unemployment and patterns of heroin use', in Dorn, Nicholas and South, Nigel (eds), *A Land Fit for Heroin?*, London, Macmillan, pp. 62–94.



- Pearson, Geoffrey (1987b) *The New Heroin Users*, Oxford, Blackwell.
- Pelletier, Monique (ed.) (1978) *Mission d'étude sur l'ensemble des problèmes de la drogue*, Paris, Documentation Française.
- Platt, Jerome J. and Labate, Christina (1976) *Heroin Addiction: Theory, Research, and Treatment*, New York, Wiley.
- Ramsay, Malcom and Spiller, Josephine (1997) *Drug Misuse Declared in 1996: Latest Results from the British Crime Survey—Home Office Research Study*, London, Home Office.
- Ray, March B. (1961) 'The cycle of abstinence and relapse among heroin addicts', *Social Problems*, Vol. 9, No. 2, pp. 132–140.
- Rosenbaum, Marsha (1981) *Women in Heroin*, New Brunswick, NJ, Rutgers University Press.
- Schur, Edwin M. (1965) *Crimes without Victims*, Englewood Cliffs, NJ, Prentice-Hall.
- Schur, Edwin M. (1971) *Labeling Deviant Behavior*, New York, Harper & Row.
- Sellin, Thorsten (1938) *Culture, Conflict and Crime*, New York, Social Science Research Council.
- Solivetti, Luigi M. (1994) 'Drug diffusion and social change: the illusion about a formal social control', *The Howard Journal of Criminal Justice*, Vol. 33, No. 1, pp. 41–61.
- Staley, Sam (1992) *Drug Policy and the Decline of American Cities*, New Brunswick, NJ and London, Transaction.
- Stephens, Richard C. (1991) *The Street Addict Role: A Theory of Heroin Addiction*, Albany, State University of New York Press.
- Stimson, Gerry V. (1973) *Heroin and Behaviour: Diversity among Addicts Attending London Clinics*, New York, Wiley.
- Stimson, Gerry V. (1987) 'The war on heroin: British policy and the international trade in illicit drugs', in Dorn, Nicholas and South, Nigel (eds), *A Land Fit for Heroin?*, London, Macmillan, pp. 35–61.
- Sutherland, Edwin H. and Cressey, Donald R. (1978) *Criminology*, 10th edn, Philadelphia, Lippincott.
- Switzerland, Office Fédéral de la Santé Publique (1990) *Le problème de la drogue—en particulier en Suisse—considéré sous son aspect social et préventif*, Lausanne, Office Fédéral de la Santé Publique.
- Thornberry, Terence P. (1987) 'Toward an interactional theory of delinquency', *Criminology*, Vol. 25, pp. 863–891.
- United Nations (1990 and ff. yrs) *Human Development Report*, New York, UN.
- United Nations (1990) *Patterns of First Marriage: Timing and Prevalence*, New York, UN.
- United Nations Social Defence Research Institute (1984) *Combating Drug Abuse and Related Crime*, Rome, Fratelli Palombi Ed.
- US, NIDA (National Institute on Drug Abuse) (1989) *National Household Survey on Drug Abuse Population Estimates, 1988*, Rockville, MD, National Institute on Drug Abuse.
- US, NIDA (National Institute on Drug Abuse) (1990) *National Household Survey on Drug Abuse: Main Findings, 1988*, Rockville, MD, National Institute on Drug Abuse.
- US, Research Triangle Institute (1976) *Drug Abuse Treatment and the Criminal Justice System: Drug Use and Crime*, Rockville, MD, National Institute on Drug Abuse.
- US, Substance Abuse and Mental Health Services Administration (1996) *National Household Survey on Drug Abuse: Main Findings 1994*, Rockville, MD, US Department of Health and Human Services.
- Vaillant, George E. (1966) 'A 12-year follow-up of New York narcotic addicts: III. Some social and psychiatric characteristics', *Archives of General Psychiatry*, Vol. 15 (December), pp. 599–609.
- Wardlaw, Grant (1978) *Drug Use and Crime: An Examination of Drug Users and Associate Persons and Their Influence on Crime Patterns in Australia*, Canberra, Australian Institute of Criminology.
- Willis, J. M. (1969) 'Drug dependence: some demographic and psychiatric aspects in U.K. and U.S. subjects', *British Journal of Addiction*, Vol. 64, No. 1, pp. 135–146.
- Wirth, Louis (1964) 'Culture conflict and misconduct', in Reiss, Albert J. (ed.), *On Cities and Social Life: Selected Papers of Louis Wirth*, Chicago, University of Chicago Press, pp. 229–243.
- Yamaguchi, Kauzo and Kandel, Denise B. (1985) 'On the resolution of role incompatibility: a life event history analysis of family roles and marijuana use', *American Journal of Sociology*, Vol. 90, pp. 1284–1325.
- Young, Jock (1971) *The Drugtakers: The Social Meaning of Drug Use*, London, McGibbon & Kee.



## Appendix

Table A1. Variables analysed by province: years, units, means and standard deviations

Variable	Unit	Mean	Std dev.
Deaths due to drug abuse (1990)	Per 100,000 pop.	1.56	1.12
Addicts treated in public structures (June 1991)	Per 100,000 pop.	72.03	47.13
Addicts treated in private structures (June 1991)	Per 100,000 pop.	25.90	43.24
Addicts treated in public or private structures (June 1991)	Per 100,000 pop.	97.33	65.54
Holders of drugs for personal use identified by the police (1991)	Per 100,000 pop.	32.86	22.10
People charged with drug trafficking offences (1989)	Per 100,000 pop	41.40	29.75
Cases of AIDS (1990)	Per 100,000 pop.	3.91	3.65
Income available resident population (1989)	Lire ,000 per capita	15,491.00	3034.45
Savings resident population (1989)	Lire ,000 per capita	2993.00	779.63
Consumption resident population (1989)	Lire ,000 per capita	12,498.64	2420.54
Alimentary consumption resident and non-resident population (1989)	% of total consumption	20.26	3.25
Electric power consumption (production sector) (1990)	kWh per capita	2926.69	1702.24
Electric power consumption (home sector) (1990)	kWh per capita	895.50	121.27
Total electric power consumption (1990)	kWh per capita	3822.19	1739.28
Consumption of cultural type (private sector) (1990)	Lire ,000 per capita	92.30	36.63
Telephones (1990)	Per 100 families	79.72	7.16
Telephone business calls (1990)	Index (Italy = 100)	89.76	11.81
Daily newspapers diffusion (1991)	Copies per 1,000 pop.	105.11	49.06
Population with senior secondary school diploma (1991)	% of total pop.	16.56	2.56
Population 25–34 years with senior secondary school diploma (1991)	% of 25–34 years pop.	36.59	5.56
Cars circulating (1990)	Cars per 1,000 pop.	472.46	90.16
Population employed in agriculture (1991)	% of total pop.	3.09	1.69
Population employed in the services sector (1991)	% of total pop.	12.90	2.34
Self-employed population in the services sector (trade exc.) (1991)	% of total pop.	2.19	0.55
People looking for their first job (1991)	% of total pop.	4.01	2.89
Population unemployed (1991)	% of total pop.	2.73	1.02
Unmarried population 15–24 years old (1991)	% of pop. 15–24 years	91.72	2.27
Unmarried women 15–24 years old (1991)	% of female pop. 15–24 years	86.78	3.54
Mean family size (1990)	Persons	2.77	0.26
Birth rate (born alive) (1990)	Per 1,000 pop.	9.63	2.49
Natural births (born alive) (1991)	Per 1,000 births	67.55	30.78
Population living in communes >50,000 inhabitants (1990)	% of total pop.	28.72	18.71
Population living in urbanized areas (ISTAT) (1981)	% of total pop.	45.63	18.04
Population variation due to migration (1961–1971)	% of 1971 pop.	-5.17	9.00
Judicial separations (1990)	Per 100,000 pop.	69.14	36.13

**Table A1.** (Continued)

Variable	Unit	Mean	Std dev.
Suicides reported (1990)	Per 100,000 pop.	7.75	4.05
Murders reported (1989)	Per 100,000 pop.	2.16	4.20
Extortions reported (1989)	Per 100,000 pop.	8.14	7.73
Robberies reported (1989)	Per 100,000 pop.	41.46	64.47
Thefts reported (1989)	Per 100,000 pop.	1649.15	1016.17
All criminal offences reported (1989)	Per 100,000 pop.	3035.99	1319.38

**Table A2.** Rotated factors matrix (pattern matrix). Oblimin ( $\delta = 0$ ). Total variance explained = 86.3%

Variable	Factor 1	Factor 2	Factor 3	Factor 4
Alimentary consumption	-0.502	0.447	-0.107	-0.114
Birth rate	-0.358	0.283	-0.474	-0.158
Cars	0.885	0.061	0.205	0.108
Consumption of cultural type	0.887	-0.046	-0.067	-0.100
Dailies	0.024	-0.660	0.247	-0.191
Population with senior secondary school diploma	0.071	-0.540	0.279	-0.275
Family size	-0.107	-0.048	-0.932	-0.006
Income	0.643	-0.232	0.225	0.089
Migration	0.787	0.005	0.034	-0.170
Population in communes >50,000 inhabitants	0.133	0.110	-0.096	-0.955
Self-employed population	0.700	-0.258	0.005	-0.131
Judicial separations	0.301	-0.101	0.479	-0.278
Unmarried women 15-24 years	0.221	-0.860	-0.131	0.099
Population in urbanized areas	-0.056	-0.316	0.258	-0.685

Factor 1 = 'Affluence, consumption & achievement'.

Factor 2 = 'Education & individualistic aims'.

Factor 3 = 'Reduced & fragile family'.

Factor 4 = 'High urbanization'.