

Theoretical Orientations in Drug Abuse Prevention Research

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ABSTRACT While there is a world wide recognition that efforts should be primarily directed toward prevention, in no area of drug abuse research is the lack of systematic development of theory more apparent than in the educational strategies toward prevention of substance abuse. This article examines the most prominent theoretical developments in the area of drug education and prevention that have occurred in the past twenty years. These developments fall within three distinct theoretical orientations, so-called here: (1) the informative-communicational model; (2) the humanistic model and; (3) the cognitive-behavioral perspectives. For each model, a description of the main preventive strategies and its rationale is presented. Attention is also given to the results of evaluation studies concerning the impact of these strategies on attitudes and drug related behaviors.

The Informative Communicational model

Historically, the interventions designed to prevent alcohol and drug abuse emerged in educational contexts. It is not then surprising that they had stressed 'didactic' and informational components. In fact, since the beginning of this century (Roe, 1943) several European countries and the US included basic information about the negative effects of alcohol abuse in their school programs.

However, it is very difficult to accept, before the 1960s, the existence of a model that might have given a solid theoretical support to the preventive strategies developed in this area. The vicissitudes and fluctuations that occurred during this period were almost exclusively related with the specific characteristics and 'styles' associated with the process of information dissemination.

For example, in north European countries and also in US, where temperance movements were strong, alcohol education followed a abstinence-oriented philosophy, expressed, at a pragmatic level, in "reliance on authoritarian statements, one-sided presentation of information and fear appeals" (Blane, 1977, p. 551). The growing influence of sociological perspectives about alcohol use/abuse as well as the emergence of socialization theories to explain adolescent drinking behavior (see, for example, Alexander & Campbell, 1967; Jessor & Jessor, 1975; Barnes, 1977), seem to have contributed to a gradual shift from a abstinence-oriented model to a 'responsible-use' approach, with strong emphasis in the transmission of accurate and 'scientific' information about alcohol effects.

Those transformations were not associated to any relevant theoretical develop-

ments in the field of alcohol-drug abuse prevention and expressed only the impact of different cultural definitions in the general theory and objectives of preventive programs. In fact, even cursory examination of the theoretical developments that occurred in this area until the 1960s, reveals that they were, to a great extent, focussed on denouncing the theoretical 'naïvete' or the "action-oriented" nature (Evans, 1979) of the informative-based approaches.

It is not until the early 1970s that some sparse steps were taken to theoretically and empirically validate the basic assumptions of the informative-communicational model. Those efforts derived within the field of social psychology, were traditionally associated with research on attitude change. Consequently, some studies (see, for example, Smart & Fejer, 1975; Fritzer & Majer, 1975; Kohn & Snook, 1976) worked on assessing the persuasive impact of verbal communications about drugs as a way of influencing attitudes and behaviors toward these substances. This research orientation drew its inspiration from the work of Hovland and the group of Yale, and focused in the study of a wide variety of attitude change problems such as the effect of source credibility, the use of fear appeals and the role of specific individual factors.

This method had, however, some evident limitations as applied to the drug prevention field. The first limitation was, essentially, of epistemological nature. In fact, when the adoption of this 'convergent approach' (McGuire, 1976) of hypothesis generation on attitude change emerged in the drug prevention area, its apogee in the social psychology field had already occurred about one decade before (McGuire, 1986).

At least to some extent, the decline of this method was the result of the accumulation of largely inconsistent data concerning the influence of source, message and receiver factors on attitude change. As some authors have pointed out, this situation was practically inevitable once the influence of a "manipulation of any one variable will depend not only of the values of the other variables that are manipulated by the experimenter but those that are held constant as well" (Jaccard, 1981, p. 262).

The second limitation was related with the characteristics of the behavior-change in drug abuse, being attempted through persuasive communication methods. Some authors (for example, Shlegel & Norris, 1980) have in fact questioned the adequacy of classic methods of persuasion as applied to 'real life' topics that, as is the case of drug abuse, are associated with a strong affective involvement. In addition, "a classically well-designed communication can produce an immediate persuasive impact but this does not ensure that anti-drug attitudes will be maintained nor result in immediately decreased drug usage" (Shlegel & Norris, 1980, p. 123).

With regard to substance abuse prevention, little attention has been given to the development of theories of variables that mediate source, message, audience characteristics and attitude change. Perhaps, McGuire's persuasion-communication model is the only exception. The model postulates a sequence of six steps for behavioral change: (1) presentation; (2) attention; (3) comprehension; (4) yielding, (5) retention and (6) behavior.

This approach stimulated the introduction of some modifications in the methods of information dissemination, focused, essentially, in the different aspects of smoking behavior (for example, Evans, 1983). Those modifications consisted in the adoption of different procedures directed to increase the probability of occurrence of the six behavioral steps presented above.

However, it does not appear that McGuire's formulation has had a very impressive impact in the evolution of the informative-communicational model of prevention. Specifically, it generated little empirical research directly relevant to drug prevention. In fact most of the conclusions that are pertinent to this area were an extrapolation from basic research in the field of social psychology (for example, McGuire, 1974).

Perhaps the most prominent theoretical influence, that shaped the evolution of the informative-communicational model, was McGuire's inoculation approach to attitude change. Briefly stated, the approach suggests that existing attitudes may be strengthened by inoculating individuals against counter-arguments to which they might be exposed.

Inoculation procedures to drug abuse prevention represented a "behavioral variation" (Evans, 1983) of McGuire's inoculation approach. Here, the main focus was to promote a comprehension of the nature of the various social influences that could lead to the initiation of alcohol and other drugs use as well as provide adolescents with specific tactics that they might use to cope with these social influences.

The development of 'social' inoculation procedures to drug abuse prevention clearly expresses a break from early research in the area of attitude change. A central feature of this rupture, consisted in conceptualizing the initiation to drug use as no longer being a question of lack of knowledge about these substances, but as a result of behavioral changes influenced by the impact of specific socio-environmental factors. This principle is now generally integrated into a conception of the initiation of drug use/abuse based in Bandura's social learning theory and although other conceptual areas of psychology (e.g. 'problem-behavior' theory) might have some impact, Bandura's theory remains the more influential.

The Humanistic Model

Although humanistic prevention programs are a more heterogeneous collection of strategies and procedures, this approach basically reflects the growing popularity that the humanistic dimension of psychology (Rogers, 1954; Maslow, 1968) had in the field of substance abuse prevention since the 1970s.

Unlike the informational strategies, this model recognises that increased cognitive knowledge is unlikely to lead to attitudinal or behavioral changes, unless preventive efforts are made in a more affective vein. The concept 'affective', as applied in the context of humanistic prevention strategies, has however, at least two significant distinctions. Firstly, in order to develop modifications in attitudes and drug related behaviors, it is crucial to influence the affective or emotional factors that might in turn be responsible for the influencing patterns of substance abuse. Second, the concept 'affective' is frequently used to characterize the methods of the humanistic model of prevention. The methods are defined as active, orientated to promote a greater degree of adolescent participation and 'affective' involvement.

These two features were, in some way, implicit in the philosophy of early 'humanistic' programs conducted in the late 1960s (for example, Williams *et al.*, 1967; Unterberger & DiCicco, 1968). In fact, those programs, although typically involving presentations on the negative consequences of abusing alcohol and drugs, also suggested the promise of strategies orientated toward a "ventilation

of feelings" (Unterberger & DiCicco, 1968), recognizing simultaneously the inadequacy of "speech making" and the need to adopt group discussion techniques.

It was possible to equate these formulations to some precursors of the humanistic strategies of prevention. The objectives of these interventions were however too vague (e.g. evaluate one's attitudes about the use of drugs or alcohol) and the strategies poorly defined (e.g. free group discussion; sharing of adolescent's own experiences).

Most relevant to our current discussion, was the emergence, during the 1970s, of three preventive approaches that were typically humanistic oriented. These involved (1) values clarification; (2) decision-making; (3) the alternatives to drug abuse. We will address briefly each of these approaches, including a summary evaluation of the problems and implications for the drug prevention field.

(1) The use of *values clarification* techniques as a tool to prevention of drug abuse draws its inspiration from the work of Rathes *et al.* (1966). The approach "claims not to be concerned primarily with the ultimate product—the content of values—but with the valuing process, with the means through which values are acquired and exercised" (Chng, 1980). According to Rathes *et al.* (1966), values are clarified when an individual may choose between several alternatives, after having examined the consequences associated with each of them.

The premise for using values clarification methods in drug prevention programs is that, at least partially, the abuse of alcohol and other drugs is a direct function of a confused value system. Not surprisingly, the 1970s witnessed the development of a diversity of programs emphasizing procedures aimed at discerning basic values that an individual esteems and/or discerning values, specific to alcohol and drugs (see, for example, Blum *et al.*, 1976; Bry & George, 1979).

Although values clarification was widely accepted and used in drug prevention programs during the 1970s, its popularity rapidly started to decline. Besides the ethical critiques that were addressed to this approach (cf. Chng, 1980), some recent evaluative studies (for example, Goodstadt & Sheppard, 1983; Braucht & Braucht, 1984), raised serious doubts concerning the potential of this approach to effectively influence drug related attitudes or behaviors.

(2) Another popular humanistic approach to substance abuse prevention involves the teaching of *decision-making skills*. The central assumption for using decision-making methods in drug prevention programs is that it would be unrealistic to eradicate the use of drugs in societies that are so orientated to or dependent on them; instead, it would be more adequate to help young people to "develop the ability to reason" (Robinson, 1975, p. 188), through learning how to make more rewarding and responsible decisions.

Although globally appealing and defensible, this approach has some conceptual and practical limitations. The theoretical relationship of decision-making and drug use, for example, has not yet been clearly delineated or conceived. It is often assumed that the mere use of decision-making exercises, rather than didactic presentations, through which social influence and behavioral options are considered as elements in decision-making, should lead to specific decisions that in turn would result in overt behavior (i.e. decreased drug use).

Besides, this method not being totally effective in conceptualizing the relationship between general decision-making skills and alcohol or drug related problems (Polich *et al.*, 1984). Some studies (for example, Schlegel *et al.*, 1984) also

suggest that the decision-making procedure, might not be adequate with younger adolescents, once it forces the student "to evaluate and choose from other possibilities that (he/she) may not yet have explicitly considered" (Schlegel *et al.*, 1984, p. 435).

Recent developments of this approach (Felner *et al.*, 1991) have adopted a developmental perspective trying to attend to both the characteristics of the persons in the settings as well as to the key conditions of their environments.

(3) Finally, the *alternatives approach* to drug abuse prevention represents another preventive model that is clearly humanistic oriented. This approach is based on the premise that by providing individuals with healthful and non-chemical ways of obtaining rewards and pleasures they will be less likely to engage in drug or alcohol abuse (Cohen, 1971; Dohner, 1972).

After enjoying a brief period of enthusiasm during the 1960's, the approach seems to have fallen out of favour, largely because of a combination of conceptual confusion and difficulties related with the definition of criteria for the development and application of alternative activities. Recently, however, some attempts have been made in order to better understand the behavioral and physiological events that underlie the dynamics of alternatives.

One of the most promising research effort in this area has been conducted by Cook and associates (Cook & Morse, 1980; Cook, 1985). The author basically proposes a biopsychological model of alternatives based essentially in social-psychological research, opponent-process theory and research on the mechanisms of action of opioid drugs.

The Cognitive-behavioral Perspectives

The late 1970s witnessed the emergence of another theoretical orientation in the field of alcohol/drug use prevention. This orientation is basically characterized by the importance given to the acquisition of specific social skills as a way of preventing substance abuse. In other words, it is assumed that the abuse of drugs is partially due to the absence of adequate social skills (Dupont & Jason, 1984; Englander-Golden, 1985).

This general principle is associated with a perspective of the initiation of alcohol and drug use based in Bandura's (1977) social learning theory, that stresses the impact of different social influences, particularly those related with the imitation of models such as peers and significant adults.

An examination of the conditions that stimulated the development of these approaches leads to the identification of at least three distinct influences, present in last decade drug abuse research.

One of these trends, is characterized by the attempt to relate the presence (or absence) of specific social skills with distinct patterns of alcohol and drug use. Some studies (for example, Horan *et al.*, 1975; Williams *et al.*, 1983), for example, give solid empirical support to the notion that drug users, by comparison to non-users, are significantly less assertive, then suggesting that this evidence may express the difficulties of the adolescent to cope with peer requests for drug use.

The use of assertiveness training as a treatment tool for alcoholics and other drug dependants (see, for example, Martorano, 1974; Calner & Ross, 1978; Miller *et al.*, 1974; Miller & Eisler, 1974), also seems to have stimulated the interest for the application of these strategies in the field of alcohol and drug abuse prevention. The validity of this treatment procedure stems from the verification

that the less assertive the alcoholic becomes, he is more likely to drink excessively.

Finally, another recent trend in drug abuse research that might have influenced cognitive-behavioral formulations, refers to a vast body of empirical data stressing the importance of peer contact and peer pressure as factors that are strongly associated with adolescent initiation to alcohol and drug use (Logan, 1991). In fact, development of drug abuse in adolescence has been related both with peer pressure and exposure to drug-using peers, both of which imply deficits in specific social skills as refusal.

The cognitive-behavioral strategies seem to be organized around two distinct orientations. The first, tries to promote the acquisition of social skills directly related with situations that may contribute to the initiation of adolescent's drug use. In this case, the objective is to help the adolescent to refuse the offer of a drug in a specific social context.

The other orientation, stresses the development of "positive social skills" (Botvin, 1983, 1985; Botvin *et al.*, 1984), and is based in the premise that a preventive effect may occur when giving the individuals the opportunity to enhance their interpersonal functioning qualitatively and quantitatively). In other words, those programs are based on the recognition that adequate social skills may have a general positive impact upon personal development, then preventing the contact of the adolescent with alcohol and drugs.

Conclusion

The aim of this article has been to examine some of the most significant theoretical developments in the area of drug education/prevention during the past 20 years. The three most influential preventive approaches that emerged in this field were also analyzed taking into consideration the specific explanatory models for alcohol and other drug abuse and research results that support their premises and strategies.

Significant progress has been made in the past 20 years concerning the theoretical foundations of substance abuse preventive efforts. It is now clear that the most basic and a-theoretical interventions involving educationally-focused information and dissemination procedures about the dangers of drug abuse belong to the past. By contrast to these theoretically lacking educational efforts, there appears to be a growing trend toward a great conceptual sophistication in designing drug abuse preventive programmes.

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