British Journal of Addiction 79 (1984), 261–273

Relapse Prevention: Introduction and Overview of the Model

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Summary

As an introductory overview of the Relapse Prevention (RP) model, this article briefly describes the conceptual and clinical features of the RP approach to altering excessive or addictive behaviour patterns. In contrast with traditional approaches that overemphasize initial habit change, RP focuses more on the maintenance phase of the habit change process. From this perspective, relapse is not viewed merely as an indicator of treatment failure. Instead, potential and actual episodes are key targets for both proactive and reactive intervention strategies. RP treatment procedures include specific intervention techniques designed to teach the individual to effectively anticipate and cope with potential relapse situations. Also included are more global lifestyle interventions aimed at improving overall coping skills and promoting health and well being. Important questions raised by this relatively recent alternative to traditional approaches are discussed.

What is Relapse Prevention?

Relapse Prevention (RP) is a self-control programme designed to teach individuals who are trying to change their behaviour how to anticipate and cope with the problem of relapse. In a very general sense, relapse refers to a breakdown or failure in a person's attempt to change or modify any target behaviour. Based on the principle of social-learning theory [1], RP is a psychoeducational programme that combines behavioural skill-training procedures with cognitive intervention techniques. Because the RP model combines both behavioural and cognitive components, it is similar to other cognitive-behavioural approaches that have been developed in recent years as an outgrowth and extension of more traditional behaviour therapy programmes. Descriptions of related cognitive-behavioural research and treatment approaches with a variety of clinical problems are available in a number of recent publications [2, 3, 4, 5, 6].

The RP model was initially developed as a behavioural maintenance programme for use in the treatment of addictive behaviours [7]. In the addictions, the typical goals of treatment are either to refrain totally from performing a target behaviour (e.g., to abstain from drug use), or to impose regulatory limits or controls over the occurrence of a behaviour (e.g., to diet as a means of controlling food intake). Relapse prevention procedures can be applied either in the form of a specific maintenance strategy to prevent relapse or as a more general programme of lifestyle change. In the former case, the aim of the procedure is to anticipate and prevent the occurrence of a full-blown relapse following a period of improvement or after the initiation of a new behaviour change programme (e.g., to prevent a recent ex-smoker from returning to habitual smoking). As such, the procedures are designed to enhance the maintenance of behaviour change and may be applied regardless of the theoretical orientation or intervention methods applied during the initial treatment phase. Once an alcoholic has stopped drinking, for example, RP methods can be applied toward the effective *maintenance* of abstinence, regardless of the methods used to *initiate* abstinence (e.g., attending AA meetings, aversion therapy, voluntary cessation, or some other means).

In the second application of the RP model, the purpose is a more general one: to facilitate changes in personal habits and lifestyle so as to reduce the risk of physical disease or psychological stress. Here, the aim of the RP programme is much broader in scope: to teach the individual how to achieve a *balanced lifestyle* and to prevent the formation of unhealthy habit patterns. A balanced lifestyle is characterized by a harmonious balance between work and play activities and the development of 'positive addictions' [8] such as physical exercise and medication. The central theme or motif of this approach is embodied in an underlying *principle of moderation:* A balanced lifestyle is one that is centred on the fulcrum or midpoint of moderation (in contrast with the opposing extremes of behavioural excess or restraint). Viewed from this more global perspective, RP can be

considered as a component of the developing movement in 'health psychology' or holistic medicine [9,10].

Treatment versus Maintenance: Separate Processes?

To illustrate the distinction between treatment and maintenance as separate processes in the modification of addictive behaviours, let us first consider the example of an alcoholic or problem drinker who is motivated to change his or her behaviour. There is a wide variety of procedures and techniques available that may be effective in getting an alcoholic to stop drinking; examples include comprehensive inpatient programmes, aversion therapy, dietary management, marital or family counselling, group therapy, Antabuse medication, occupational therapy, behaviour modification, religious conversions, Alcoholics Anonymous, etc. Some techniques are directed more toward getting the person to stop drinking in the first place (i.e., orientated toward the initial *cessation* of the problem behaviour), while others are directed more toward long-term *maintenance* of this change. Far too often these two aims are confused because important distinctions between initial treatment and long-range maintenance are not made clear. The fact is that we know very little about the relative effectiveness of treatment procedures designed to produce the cessation of a particular behaviour, compared to procedures which are designed to maintain behaviour change following the initial cessation or 'quit date.'

A typical response to the high relapse rate in the field of addiction treatment has been to increase the number of initial treatment techniques, to build a more comprehensive broad-spectrum or multi-model treatment package designed to facilitate cessation of the target behaviour. The underlying assumption here seems to be that if we add enough components into the initial treatment programme, the effects on treatment outcome will somehow last longer. This trend has become increasingly clear in recent years. With regard to the treatment of problem drinking, for example, behavioural intervention programmes have moved from a concentrated focus on one or two primary treatment modalities (e.g., aversion therapy) to today's shotgun approach in which every technique that might possibly prove effective is thrown into the hopper.

There are two major drawbacks to the multi-modal approach to treatment. First, recent evidence suggest that the more techniques and procedures we apply in any treatment case, the more difficult it becomes for the client to maintain compliance with the programme requirements [11]. The second problem is that many if not all of the intervention techniques are directed primarily toward initial behaviour change only, and not toward the long-term maintenance of this change. Many current smoking treatment programmes, to take another example, administer the bulk of procedures *prior* to the target quit date. Frequently treatment techniques are primarily geared toward producing *cessation* of the target behaviour, whether it be smoking, alcohol consumption, overeating, or the performance of other problem behaviours (e.g. sexual exhibitionism). What is often overlooked with this focus on initial cessation during the treatment phase is that the *maintenance* of change, once it has been induced, may be governed by entirely different principles than those that are associated with initial cessation.

One important difference between initial treatment procedures and those designed to enhance maintenance effects over time is that the former techniques are usually administered to the client by the therapist (e.g., aversion therapy, assertive training, contingency contracting, etc.), whereas maintenance procedures are often self-administered by the client. An exception to this distinction is the use of externally applied 'booster' sessions, in which a technique such as aversion therapy is readministered to the client at various intervals following treatment in an attempt to bolster and reinforce the effects of the initial treatment programme. The goal of teaching the client self-administered maintenance techniques is to train the client to become his or her own therapist and to carry on the thrust of the intervention programme after the termination of the formal therapeutic relationship. Instead of relying on 'willpower' or internal fortitude during the maintenance phase, a successful graduate of this type of programme would be equipped with behavioural self-management skills. This self-control orientation is characteristic of the RP approach to maintenance. The RP model is basically a self-control programme in which the clients are taught how to anticipate and cope effectively with problems as they arise during the post treatment or follow-up period. Since it appears to be the case that the self-control procedures employed during the maintenance phase may be relatively independent in their effects from the externally administered techniques in the initial treatment phase, the RP approach may be applied regardless of the orientation or methods used during treatment.

Relapse: Two Opposing Definitions

At a recent workshop for alcoholism and drug counsellors,

members of the audience were asked to share their subjective associations to the term *relapse*. Here are some of their replies: 'treatment failure,' 'return to illness,' 'falling back into addiction,' 'failure and guilt,' 'breakdown,' etc. These associations are reflected in one of two definitions of 'relapse' given in *Webster's New Collegiate Dictionary:* 'a recurrence of symptoms of a disease after a period of improvement.' This definition corresponds with the dichotomous view of treatment outcome fostered by the disease model: one is either 'cured' (or the symptoms are in remission) or one has relapsed (recidivism). It has been standard practice in the addictions field to view *any* use of drugs following an abstinence-orientated treatment programme as indicative of relapse. This all-or-none outlook is reflected in most of the traditional treatment outcome literature, where cases are reported as either successes (e.g., maintaining abstinence) or failures (any violation of abstinence). Relapse is thus seen as an *end state:* the end of the road; a dead end.

There are a number of problems with this rather pessimistic approach to relapse. If the black/white dichotomy of abstinence/relapse is assimilated by the individual while in treatment, it seems likely that this will set up an expectation leading to a self-fulfilling prophecy in which any violation of abstinence will send the pendulum to the other extreme of relapse. We call this swing of the pendulum from one extreme (abstinence) to the other (relapse) the *oscillation of perceived control.* On the one side of this oscillation is the extreme of absolute control or total restraint; the other extreme is that of loss of control or total indulgence.

Another problem with the traditional definition of relapse is its association with the return of the disease state. The cause of the relapse is usually attributed to *internal* biological factors associated with the disease condition. Behaviours associated with relapse come to be equated with the emergence of symptoms signalling the reactivation of the underlying disease, much as the experience of fever and chills serves as a signal of relapse in malaria. This emphasis on internal causation carries the implicit message that there is *nothing much one can do* about the outbreak symptoms; how does one prevent a fever from breaking out? This outlook tends to ignore the influence of situational and psychological factors as potential determinants in the relapse process. It also reinforces the notion that the individual who experiences a relapse is a helpless victim of circumstances beyond his or her control.

There is an alternative approach to the issue of relapse, and it is reflected in the second definition listed in Webster's dictionary: 'relapse is the *act* or *instance* of backsliding, worsening, or subsiding.' The italics are added here to emphasize that a relapse can be viewed as a *single act* of falling back: a single mistake, an error, a slip. A better word to refer to the singular occurrence of the behaviour in question (e.g., the first drink or cigarette following a period of abstinence) would be *lapse* (as in a 'lapse' of attention). The same dictionary defines 'lapse' as 'a slight error or slip. . . a temporary fall esp. from a higher to a lower state.' One thinks here of a skater in competition who trips and falls on ice: whether or not the skater gets up again and continues to perform depends to a larger extent on whether the fall is seen as a 'lapse' or a 'relapse' – as a single slip (mistake) or as an indication of total failure. By allowing room for mistakes to occur (as opposed to viewing any slip as a symptom of deterioration), one may be able to avoid the oscillation effect in which the individual is either perceived as in control (standing up) or out of control (falling down).

In the RP approach, a relapse is viewed as a *transitional process,* a series of events that may or may not be followed by a return to pretreatment baseline levels of the target behaviour. It is possible to view the alcoholic who takes a single drink after a period of abstinence as someone who has made a slight excursion over the border between abstinence and relapse. Whether or not this first excursion is followed by a return to abstinence depends considerably on the personal expectations of the individual involved. The RP approach attempts to provide the individual with the necessary skills and cognitive strategies to prevent the single occurrence of a lapse from snowballing into a total relapse. Rather than looking pessimistically upon a relapse as a dead end, the RP approach views it as a fork in the road, with one path returning to the former problem behaviour, and the other continuing in the direction of positive change.

Many new questions arise when one adopts this alternative perspective of relapse. Most of these questions are not even raised by those who adhere to the disease model, with its exclusive emphasis on internal or biological determinants of relapse. Are there any specific situational events that serve as precipitating triggers for relapse? Are the determinants of the first lapse the same as those assumed to govern a total relapse? Is it possible for an individual to covertly 'plan' a relapse by setting up a situation in which it is virtually impossible to resist temptation? At which points in the relapse process is it possible to intervene and alter the course of events so as to prevent a return to the former habit pattern? How does the individual react to and conceptualize the events preceding and following a relapse, and how do these reactions affect the person's subsequent behaviour? Is it possible to prepare persons in treatment to anticipate the likelihood of a relapse, so that they

may engage in preventive alternative behaviours? To borrow a term from the medical model, can we develop prevention procedures that would 'inoculate' the individual against the inevitability of relapse? In order to answer these and other questions, it is necessary to engage in a detailed micro-analysis of the relapse process itself. This fine-grained approach focuses upon the various determinants of relapse, both in terms of the immediate precipitating circumstances and the longer chain of events that may or may not precede the relapse episode. In addition, the role of such cognitive factors as expectation and attribution are examined in detail, particularly in terms of the individual's reactions to the relapse. A micro-analysis of the relapse process is justified by the old maxim that *we can learn much from our mistakes.* Rather than being seen as an indication of failure, a relapse can more optimistically be viewed as a challenge, an opportunity for new learning to occur.

Overview of the Relapse Model

In the following overview, only the highlights of the model are presented, since further details are presented elsewhere; background research and theory leading to the development of this model can be found in Cummings, Gordon, & Marlatt [12], Marlatt [13, 14, 15], and Marlatt and Gordon [7, 16]. The following overview draws extensively from those previously published accounts of the model.

To begin, we are assuming that the individual experiences a sense of perceived control while maintaining abstinence (or complying with other rules governing the target behaviour). The behaviour is 'under control' so long as it does not occur during this period — the longer the period of successful abstinence, the greater the individual's perception of self-control. This perceived control will continue until the person encounters a *high-risk situation.* A high-risk situation is defined broadly as any situation which poses a threat to the individual's sense of control and increases the risk of potential relapse. In a recent analysis of 311 initial relapse episodes obtained from clients with a variety of problem behaviours (problem drinking, smoking, heroin addiction, compulsive gambling, and overeating), we identified three primary high-risk situations that were associated with almost three-quarters of all the relapses reported [12]. A brief description of the three categories associated with the highest relapse rates follows.

(a) *Negative emotional states* (35 per cent of all relapses in the sample): situations in which the individual is experiencing a negative (or unpleasant) emotional state, mood, or feeling such as frustration, anger, anxiety, depression, boredom, etc., prior to or at the same time the first lapse occurs. For example, a smoker in the sample gave the following description of a relapse episode: 'It had been raining and I had the basement filled with a good three inches of water. To make things worse, as I went to turn on the light to see the extent of the damage, I got shocked from the light switch. Later that same day I was feeling real low and knew I had to have a cigarette after my neighbour, who is a contractor, assessed the damage at over $400. I went to the store and bought a pack.'

(b) *Interpersonal conflict* (16 per cent of the relapses): situations involving an ongoing or relatively recent conflict associated with any interpersonal relationship, such as marriage, friendship, family members, or employer-employee relations. Arguments and inter-personal confrontations occur frequently in this category. A gambler who had been abstaining from betting on the horses described his relapse in the following terms: 'I came home late from a horrible day on the road and I hadn't stepped in the house five minutes before my wife started accusing me of gambling on the horses. Racetrack, hell! I told her if she didn't believe me, I'd give her a real reason to file for divorce. That night I spent $450 at the Longacres track.'

(c) *Social pressure* (20 per cent of the sample): situations in which the individual is responding to the influence of another person or group of people who exert pressure on the individual to engage in the taboo behaviour. Social pressure may either be direct (direct interpersonal contact with verbal persuasion) or indirect (e.g. being in the presence of others who are engaging in the same target behaviour, even though no direct pressure is involved). Here is an example of direct social pressure given by a formerly abstinent problem drinker in our sample: 'I went to my boss's house for a surprise birthday dinner for him. I got there late and as I came into the living room everyone had a drink in hand. I froze when my boss's wife asked me what I was drinking. Without thinking, I said 'J&B on the rocks.'

In our analyses of relapsed episodes to date (12, 7), we have found that there are more similarities than differences in relapse categories across the various addictive behaviours we studied. These same three high-risk situations are frequently found to be associated with relapse, regardless of the particular problem involved (problem drinking, smoking, gambling, heroin use, or overeating). This pattern of findings lends support to our hypothesis that there is a common mechanism underlying the relapse process across different addictive behaviours.

If the individual is able to execute an effective

coping response in the high-risk situation (e.g., is assertive in counteracting social pressures), the probability of relapse decreases significantly. The individual who copes successfully with the situation is likely to experience a sense of mastery or perception of control. Successful mastery of one problematic situation is often associated with an expectation of being able to cope successfully with the next challenging event. The expectancy of being able to cope with successive high-risk situations as they develop is closely associated with Bandura's notion of *self-efficacy* [17], defined as the individual's expectation concerning the capacity to cope with an impending situation or task. A feeling of confidence in one's abilities to cope effectively with a high-risk situation is associated with an increased perception of self-efficacy, a kind of 'I know I can handle it' feeling. As the duration of the abstinence (or period of controlled use) increases, and the individual is able to cope effectively with more and more high-risk situations, perception of control increases in a cumulative fashion. The probability of relapse decreases accordingly.

What happens if an individual is not able to cope successfully with a high-risk situation? It may be the case that the person has never acquired the coping skills involved, or that the appropriate response has been inhibited by fear and anxiety. Or, perhaps the individual fails to recognize and respond to the risk involved before it is too late. Whatever the reason, if a coping response is not performed, the person is likely to experience a decrease in self-efficacy, frequently coupled with a sense of helplessness and a tendency to passively give in to the situation. 'It's no use, I can't handle this,' is a common reaction. As self-efficacy decreases in the percipitating high-risk situation, one's expectations for coping successfully with subsequent problem situations also begins to drop. If the situation also involves the temptation to engage in the prohibited behaviour as a means of attempting to cope with the stress involved, the stage is set for a probable relapse. The probability of relapse is enhanced if the individual holds *positive expectancies* about the effects of the activity or substance involved. Often the person will anticipate the immediate positive effects of the activity, based on past experience, while at the same time ignoring or not attending to the delayed negative consequences involved. The lure of immediate gratification becomes the dominant figure in the perceptual field, as the reality of the full consequences of the act recedes into the background. For many persons, smoking a cigarette or taking a drink has long been associated with coping with stress. 'A drink would sure help me get through this,' or, 'If only I could have a smoke, I would feel more relaxed,' are common beliefs of this type. Positive outcome expectancies are a primary determinant of alcohol dependency and other forms of substance abuse [18]. Expectancies figure prominently as determinants of relapse in our model.

The combination of being unable to cope effectively in a high-risk situation coupled with positive outcome expectancies for the effects of the old habitual coping behaviour greatly increases the probability that an initial lapse will occur. On the one hand, the individual is faced with a high-risk situation with no coping response available; self-efficacy decreases as the person feels less able to exert control. On the other hand, there is the lure of the old coping response, the drink, the drug, or other substance. At this point, unless a last minute coping response or a sudden change of circumstance occurs, the individual may cross over the border from abstinence (or controlled use) to relapse. Whether or not this first excursion over the line, the first lapse, is followed by a total relapse depends to a large extent on the individual's perceptions of the 'cause' of the lapse and the reactions associated with its occurrence.

The requirement of abstinence is an absolute dictum. Once someone has crossed over the line, there is no going back. From this all-or-none perspective, a single drink or cigarette is sufficient to violate the rule of abstinence: once committed, the deed cannot be undone. Unfortunately, most people who attempt to stop an old habit such as smoking or drinking perceive quitting in this 'once and for all' manner. To account for the reaction to the transgression of an absolute rule, we have postulated a mechanism called the *Abstinence Violation Effect* or AVE [13, 7]. The AVE is postulated to occur under the following conditions. Prior to the first lapse, the individual is personally committed to an extended or indefinite period of abstinence. The intensity of the AVE will vary as a function of several factors, including the degree of prior commitment or effort expended to maintain abstinence, the duration of the abstinence period (the longer the period, the greater the effect), and the subjective value or importance of the prohibited behaviour to the individual. We hypothesize that the AVE is characterised by two key cognitive-affective elements: cognitive dissonance (conflict and guilt), and a personal attribution effect (blaming the self as the cause of the relapse).

The Relapse Model: Covert Antecedents of a Relapsed Situation

In the foregoing discussion of the immediate deter-

minants and reactions to relapse, the high-risk situation is viewed as the precipitating or triggering situation associated with the initial lapse or first 'slip' following a period of abstinence or controlled use. In many of the relapse episodes we have studied in our research programme, the first lapse is precipitated in a high-risk situation that the individual unexpectedly encounters. In most of these cases, the person is not expecting the high-risk situation to occur, and/or is generally ill prepared to cope effectively with the circumstances as they arise. Quite often, the individual will suddenly find him/herself in a rapidly escalating situation that cannot be dealt with effectively. For example, one of our clients who had a serious drinking problem experienced her first lapse after several weeks of abstinence when she treated a newly-found friend to lunch. A last-minute change of plans led them to eat at a restaurant that served alcoholic beverages. Just moments after their arrival, a cocktail waitress approached their table and asked for drink orders. Our clients' friend ordered a cocktail first, and then the waitress turned to the client saying, 'And you?' She too ordered a drink, the first of a series of events that culminated in a full-blown relapse. As the client said later, 'I didn't plan it and I wasn't prepared for it.' Suddenly confronted with a high-risk situation (a social-pressure situation, in which the client was influenced both by her friend's ordering a drink and by the waitress' asking her for an order), she was unable to cope effectively.

In other relapse episodes, however, the high-risk situation appears to be the last link in a chain of events preceding the first lapse. In another case study, for example, the client was a compulsive gambler who came to us for help in controlling his habit that had caused him numerous marital and financial problems. Before coming to us, he had managed to abstain from all gambling for a period of about 6 months, followed by a relapse and an inability to regain abstinence. We asked the client, a resident of Seattle, to describe this last relapse episode. 'There's nothing much to talk about,' he began. 'I was in Reno and I started gambling again.' Reno, Nevada is a high-risk city for any gambler who is trying to maintain abstinence, since it is one of the largest gambling centres in Nevada. We then asked him to describe the events preceding his arrival in Reno (especially since Reno is over 1,000 miles away from Seattle). A close analysis of this chain of events led us to the conclusion that this client had covertly set up or 'planned' the relapse. Although our client strongly denied his responsibility in this covert planning process, it was clear to us that there were a number of choice-points (forks in the road) preceding the relapse where the client 'chose' an alternative that led him closer to the brink of relapse. He finally ended up in a downtown Reno casino where he succumbed to a slot machine, an event that triggered a week-end long binge of costly gambling. It was as if he had placed himself in a situation that was so risky that it would take a moral Superman to resist the temptation to resume gambling.

Why do some clients want to plan their own relapse? From a cost-benefit perspective, a relapse can be seen as a very rational choice or decision for many individuals. The benefit is swift in coming: the payoff of immediate gratification (and the chance of hitting the jack-pot). For many, the reward of instant gratification far outweighs the cost of potential negative effects that may or may not occur sometime in the distant future (especially if one is a gambler at heart). Why not take the chance — this time it might be different, and perhaps it could be done with impunity. Cognitive distortions such as denial and rationalization make it much easier to set-up one's own relapse episode: one may deny both the intent to relapse and the importance of long-range negative consequences. There are also a number of excuses one can use to rationalize the act of indulgence.

One of the most tempting rationalizations is that the desire to indulge is *justified*. This justification is exemplified in the title of a book describing the drinking lifestyles of derelict alcoholics: *You Owe Yourself a Drink* [19]. Our research findings and clinical experience in working with a variety of addictive behaviour problems suggests that the degree of balance in a person's daily *lifestyle* has a significant impact on the desire for indulgence or immediate gratification. Here, we are defining 'balance' as the degree of equilibrium that exists in one's daily life between those activities perceived as external demands (or 'shoulds'), and those perceived as activities the person engages in for pleasure or self-fulfillment (the 'wants'). Paying household bills, performing routine chores or menial tasks at work would count highly as 'shoulds' for many individuals. At the other end of the scale are the 'wants' — the activities the person likes to perform and gains some immediate gratification from engaging in (e.g., going fishing, taking time off for lunch with a friend, engaging in a creative work task, etc.). Other activities represent a mixture of 'wants' and 'shoulds.' We find that a lifestyle that is weighted down with a preponderance of perceived 'shoulds' is often associated with an increased perception of self-deprivation and a corresponding desire for indulgence and gratification. It is as if the person who spends his or her entire day engaged in activities which are high in external demand (often perceived as 'hassling' events)

attempts to balance this disequilibrium by engaging in an excessive 'want' as a means of justifying self-indulgence at the end of the day (e.g., drinking to excess in the evening).

Assessment and Intervention Strategies

In this section, we present highlights of the RP assessment and intervention strategies. We first discuss strategies that are designed to teach the client how to anticipate and cope with the possibility of relapse — to recognize and cope with high-risk situations that may precipitate a lapse, and to modify cognitions and other reactions so as to prevent a single lapse from developing into a full-blown relapse. Because these procedures are explicitly focused on the immediate precipitants of the relapse process, we refer to them collectively as *specific intervention strategies*. Second, we go beyond the micro-analysis of the initial lapse and present strategies designed to modify the client's lifestyle and to identify and cope with covert determinants of relapse. We refer to these procedures as *global self-control strategies*.

Both specific and global RP strategies can be placed in three main categories: skill training, cognitive reframing, and lifestyle intervention. Skill-training strategies include both behavioural and cognitive responses to cope with high-risk situations. Cognitive reframing procedures are designed to provide the client with alternative cognitions concerning the nature of the habit-change process (i.e., to view it as a learning process), to introduce coping imagery to deal with urges and early warning signals, and to reframe reactions to the initial lapse (restructuring of the AVE). Finally, lifestyle intervention strategies (e.g., relaxation and exercise) are designed to strengthen the client's overall coping capacity and to reduce the frequency and intensity of urges and craving that are often the product of an unbalanced lifestyle.

Most traditional treatment programmes for addictive behaviours tend to ignore the relapse issue altogether. There seems to be a general assumption in such programmes that to even discuss the topic of relapse is equivalent to giving clients permission to relapse. The rationale that we present to our clients (or to administrators who show some reluctance to focus on relapse issues in their treatment programme) is a simple one. We point out that we already have numerous procedures in our society that require us to prepare for the possibility (no matter how remote) that various problematic and dangerous situations may arise. For example, we have firedrills to help us prepare for what to do if a fire breaks out in public buildings or schools. For those who are lucky enough to afford ocean liner cruise, there are lifeboat drills to teach the passengers what to do in the remote possibility that the ship runs into trouble at sea. Certainly no one believes that by requiring people to participate in firedrills or other similar exercises, the probability of future fires or other accidents increases; quite the contrary, in fact as the aim is to minimize the extent of personal loss and damage should an accident occur. The same logic applies in the case of relapse prevention. Why not have a 'relapse drill' as a prevention strategy to be included as part of an ongoing treatment programme? Learning precise prevention skills and related cognitive ideologies would seem to offer more help to the client than relying on vague constructs such as 'willpower' or attempting to adhere to the advice embedded in various prophetic slogans such as, 'You are only one drink away from a drunk.' Other slogans seem much more suited to the RP approach, such as: FOREWARNED IS FOREARMED, and AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE.

Which of the various intervention techniques should be applied with a particular client? It is possible to combine techniques into a standard 'package,' with each subject receiving identical components, if the purpose is to evaluate the effectiveness of a package programme. Most readers, however, will be applying the RP model with clients in an applied clinical setting. In contrast with the demands of treatment outcome research, those working in the clinical area typically prefer to develop an *individualized* programme of techniques, tailor-made for a particular client. The individualized approach is the one we recommend for implementation with most client problems. Selection of particular techniques should be made on the basis of a carefully conducted assessment programme. Therapists are encouraged to select intervention techniques on the basis of their initial evaluation and assessment of the client's problem and general lifestyle pattern. The overall goal of the *specific intervention procedures* is to teach the client to anticipate and cope with the possibility of relapse: to recognize and cope with high-risk situations that may precipitate a slip, and to modify cognitions and other reactions so as to prevent a single lapse from developing into a full-blown relapse. The first step to take in the prevention of relapse is to teach the client to recognize the *high-risk situations* that may precipitate or trigger a relapse. Here, the earlier one becomes aware that one is involved in a chain of events which increases the probability of a slip or lapse, the sooner one can intervene by performing an appropriate coping skill and/or recognize and respond to

the discriminative stimuli that are associated with 'entering' a high-risk situation, and to use these cues both as warning signals and as 'reminders' to engage in alternative or remedial action.

To introduce a metaphor that we use with our clients, imagine that the client involved in a self-control programme is a driver setting out on a highway journey. The trip itinerary (i.e., moving from excessive drug use to abstinence) includes both 'easy' and 'hard' stretches of road (from the plains to mountain passes). From this metaphorical perspective, the high-risk situations are equivalent to those dangerous parts of the trip where the driver must use extra caution and driving skills to keep the car on the road and prevent an accident. The discriminative stimuli which signal a high-risk situation can be thought of as highway signs providing the driver with information about upcoming dangers and risks on the road (e.g., 'Icy patches ahead: SLOW to 25'). The responsible alert driver is someone who is trained to keep an eye out for these signs and to take appropriate action to prevent a mishap. So it is with the person who is attempting to refrain from engaging in a particular target behaviour (smoking, drinking, overindulging, etc.): one must be on the lookout for cues that denote the proximity of potentially troublesome situations. These cues can serve as early warning signals that remind the individual to 'Stop, Look, and Listen,' prior to engaging in an appropriate coping response. The sooner these signs are noticed, the easier it is to anticipate what lies around the next bend and take appropriate steps to deal effectively with the situation.

An essential aspect of teaching clients to better handle high-risk situations is first enabling them to identify and anticipate these situations. Earlier we discussed prototypic kinds of high-risk situations. However, ultimately the identification of high-risk situations is an individualized question requiring idiographic assessment procedures. *Self-monitoring* procedures offer an effective method for assessing high-risk situations, whenever it is possible to have clients keep a record of their addictive behaviour for a baseline period prior to treatment. As little as two weeks of self-monitoring data can often highlight the situational influences and skill deficits that underline an addictive behaviour pattern.

Determining the adequacy of pre-existing coping abilities is a critical assessment target. In a treatment outcome investigation aimed at teaching alcoholics to handle situational temptations, Chaney, O'Leary, and Marlatt [20] devised the Situational Competency Test to measure coping ability. In this technique, the client is presented with a series of written or audiotaped descriptions of potential relapse situations. Each description ends with a prompt for the client to respond. Later, the client's responses to the scenes are scored on a number of dimensions including response duration and latency, degree of compliance, and specification of alternative behaviours. In a similar technique, the client is presented with a list of potential relapse situations. For each situation, the client uses a seven-point rating scale to estimate his or her subjective expectation of successful coping. Ratings across a wide range of situations enable the individual to identify both problematic situations and skill deficits in need of remedial training. Results from these types of assessment can later dictate the focus of skill-training procedures.

Carefully executed assessment procedures will enable the individual to identify many high-risk situations. The client must then learn an alternative approach for responding to these situations. A first step in this new approach is to recognize that high-risk situations are best perceived as discriminative stimuli signalling the need for behaviour change in the same way that road signs signal the need for alternative action. When viewed in this way, these situations can be seen as choice points rather than as inevitable and uncontrollable challenges that must be endured. In this light, the choice to simply avoid or take a detour around risky situations becomes more available to the individual. However, in many cases, routine avoidance of particular high-risk situations is unrealistic. Therefore, coping skills that enable the individual to cope with these situations must be acquired. The specific coping skills to be taught will depend on whether the existing deficiencies are due to actual skill deficit or response inhibition. In the former case, the person never learned or mastered the skills needed to better cope with the high-risk situation. What is needed in this instance is remedial skill training. In the case of response inhibition, the individual has already acquired the skills needed to get through the situation, but is unable to execute them due to inhibiting anxiety and/or beliefs. In this instance skill training focuses on interventions designed to disinhibit the appropriate behaviour by either reducing anxiety (e.g., systematic desensitization) or altering beliefs (e.g., Rational Emotive Therapy).

Remedial skill training necessitated by identification of coping skill deficits is the cornerstone of the RP treatment programme. When the individual lacks coping skills, a variety of remedial skills can be taught. The content of the skill training programme is variable and will depend on the needs of the individual. Possible content areas include assertiveness, stress management,

relaxation training, anger management, communication skills, and general social and/or dating skills. In addition to these specific content areas, the RP approach routinely includes training in more general problem-solving skills [21]. The advantage of this latter feature is that it provides the client with a set of highly flexible skills that are generalizable across situations and problem areas. Equipping the client with general problem-solving skills obviates the need for over-reliance on rote memorization and execution of the relatively mechanized behavioural prescriptions that often typify content-focused skill-training programmes. In skill-training, the actual teaching procedures are based on the work of McFall [22] and other investigators. The range of methods include behaviour rehearsal, instruction, coaching, evaluative feedback, modelling, and roleplaying. In addition, Meichenbaum's [6] work on cognitive self-instruction has proven especially valuable for teaching clients constructive self-statements. For troubleshooting and consolidating the newly acquired skills, regular homework assignments are an essential ingredient in skill training.

To reiterate, implementation of a specific skill-training programme will be dictated by the client's unique profile of high-risk situations. If the individual typically drinks or overdrinks after arguments with a spouse or significant other, then communication or anger management skills are indicated. If risky encounters revolve around contact with the opposite sex, then dating and social skills may be recommended. To illustrate with a specific example, suppose that the client's drinking routinely follows interpersonal interactions where he or she passively submits to unreasonable demands from others. The clear indication here is for assertiveness training. To accomplish this, a therapist would begin by advising the client of his or her personal rights in the situation and proceed with instruction on the principles of assertion, modelling of an assertive response, roleplaying the interaction with the client, providing coaching and corrective feedback, and encouragement to rehearse and implement the new behaviours.

In some instances, it will not be practical to rehearse the new coping skills in real life situations. This problem can be surmounted through utilization of *relapse rehearsal.* In this procedure, the client is instructed to imagine that they are in actual high-risk situations and that they are performing more adaptive behaviours and thinking more adaptive thoughts. The emphasis here is on *coping* rather than *mastery* imagery. That is, the individual is encouraged to visualize him/herself successfully handling the situation through some difficulty and effortful struggle rather than by easy mastery. To emphasize self-efficacy enhancement, the client can be instructed to imagine that the rehearsed experience is accompanied by mounting feelings of competence and confidence. As a consequence, the person experiences heightened expectations of successful coping in future real life situations, thereby reducing the probability of relapse. Obviously, the relapse rehearsal procedure can be readily carried out as an inter-session homework assignment.

The possibility that the client may fail to effectively employ these coping strategies and experience a slip must be anticipated. The client's post-slip reaction is a pivotal intervention point in the RP model because it determines the degree of escalation from a single isolated slip to a full-blown relapse. The first step in anticipating and dealing with this reaction is to devise an explicit therapeutic contract to limit the extent of use if a slip occurs. The actual specifications of the contract should be worked out with the client on an individual basis. However, the fundamental method of intervention after a slip is the use of cognitive restructuring to counteract the cognitive and affective components of the AVE. The main objective here is to have the client carry a wallet-sized reminder card with instructions to read and follow in the event of a slip. The text of this card should include the name and phone number of a therapist or treatment centre to be called, as well as the cognitive reframing antidote to the AVE.

The final thrust in the RP self-management programme is the *global intervention procedure* of lifestyle change. It is not enough to teach clients mechanistic skills for handling high-risk situations and regulating consumption. A comprehensive self-management programme must also improve the client's overall lifestyle so as to increase the capacity to cope with more pervasive stress factors that serve as antecedents to the occurrence of high-risk situations. To accomplish this training, a number of treatment strategies have been devised to short-circuit the covert antecedents to relapse and promote mental and physical wellness.

As we discussed earlier, a persistent and continuing disequilibrium between shoulds and wants can pave the way for relapse by producing a chronic sense of deprivation. To reiterate, when the individual *perceives* his or her lifestyle as predominated by duties and obligations and as lacking commensurate indulgence in gratifying activities, then a sense of deprivation begins to accrue. As these feelings mount, the person will experience a growing desire to treat oneself to an immediately gratifying indulgence. It goes without saying

that for most clients, drug use has come to be viewed as a source of immediate gratification and a method for restoring balance to an 'unfairly' lopsided equation. This desire for indulgence translates into urges, cravings, and distortions that permit one to 'unintentionally' meander closer to the brink of relapse.

The first step in preempting this progression, is to raise the person's consciousness as to the dynamics of this analysis and to sharpen their awareness of the want/should imbalance. An effective way to start this process is by having the client employ self-monitoring techniques to inventory the wants and shoulds that prevail in their life. By keeping a daily record of duties and obligations on one hand and indulgences on the other, the client can soon become acutely aware of the discrepancy between their shoulds and wants. Next, the client should be encouraged to seek a restoration of balance by making time each day to engage in worthwhile indulgences. The emphasis here is on including more *positive addictions*. Glasser [8] described negative addictions (e.g., excessive drinking) as activities which initially feel good but produce long-term harm. Conversely, positive addictions (e.g., running) produce short-term discomfort while yielding long-range benefits. After short-range disincentives have been surmounted, a positively addicting activity acquires a great deal of attraction value for the individual and comes to be perceived as a want. At this point, the person feels deprived if prevented from engaging in the activity. The advantage of this shift from negative to positive addiction lies in the latter's capacity to contribute toward the person's long-term health and well-being while also providing an adaptive coping response for life stressors and relapse-risk situations. As long-range health benefits accrue, the person begins to feel better about him/herself and his or her life.

Activities having potential for positive addiction include meditation, relaxation inductions, and regular exercise. Meditation and other relaxation techniques [23] offer an easily learnable and readily available method for achieving a constructive 'high' experience. Jogging and regular exercise regimes require more physical exertion and perhaps more attention to scheduling (particularly if done with others), but also provide sources of constructive personal indulgence. Recent research in our laboratory has shown that a regular programme of aerobic exercise (running) is associated with a significant reduction in drinking behaviour among heavy drinkers [24].

Despite the efficacy of these techniques for counteracting feelings of deprivation that would otherwise predispose the individual toward relapse, occasional urges and craving may still surface from time to time. For this reason, various urge control procedures are recommended. Sometimes urges and cravings are directly triggered by external cues like the sight of one's favourite beer mug or wine goblet in the kitchen cabinet, or meeting an old friend who is a heavy smoker. The frequency of these externally triggered urges can be substantially reduced by employing simple *stimulus control* techniques aimed at minimizing exposure to these cues. In some instances, *avoidance strategies* offer the most effective way of reducing the frequency of externally triggered urges. Certain events or situations like the biweekly poker games or the wine section of the local grocery may just have to be avoided temporarily while the individual develops more coping skills. Generally, avoidance strategies can often come in handy for dealing with unexpected high-risk situations that emerge. A selection of viable avoidance strategies can enhance the individual's sense of choice when confronted with dangerous situations.

In teaching clients to cope with urge and craving experiences, it is important to emphasize that the discomfort associated with these internal events is natural. Often, people undergoing cravings have a tendency to feel as though the discomfort will continue to mount precipitously until their resistance collapses under the overwhelming weight of a ballooning urge. In working with this concern, we stress that urges and cravings are in fact determined, that is they are triggered by environmental or endogenous cues, they rise in intensity, reach a peak, and then subside. In this respect, urges can be likened to waves in the sea: they rise, crest, and fall. Using this perspective, we encourage the client to wait out the urge, to look forward to the downside, and to endure that slice in time when the urge discomfort is peaking. In drawing an analogy to surfing, we commonly refer to this cognitive strategy as *urge surfing*. The client presumably learns to 'ride out' urges in the same manner that the surfer learns to maintain his or her balance without 'wiping out' as the wave swells and crests.

Recall that urges and cravings may not always operate at a conscious level, but may become masked by cognitive distortions and defence mechanisms. As such they can still exert a potent influence by allowing for 'apparently irrelevant decisions' (AIDS) that inch the person closer to relapse. To counter this, we train the client to 'see through' these self-deceptions by recognizing their true meanings. Explicit self-talk can help in making AIDs seem more relevant. By acknowledging to oneself that certain 'mini-decisions' (e.g., keeping a bottle at home in case friends drop over) actually represent urges

and cravings, the client becomes able to use these experiences as *early warning signals*. An important objective in these urge control techniques is to enable the individual to externalize urges and cravings and to view them with detachment. Another way to achieve this detachment is to encourage the client to deliberately label the urge as soon as it registers into consciousness. Urges should be viewed as natural occurrences that happen in response to environmental and lifestyle forces rather than as signs of treatment failure and indicators of future relapse.

Empirical Support and Future Directions in Research

The RP model outlined in this paper is still in the formative stages of development. The empirical underpinnings of this approach have been reviewed in a recent book on this topic [16]. In terms of treatment efficacy, only a few outcome studies have appeared in the literature that have compared the RP model with other approaches to the treatment of addiction or the prevention of relapse, although research is currently underway on this issue. The few outcome studies that have appeared, along with research on the role of expectancies (self-efficacy and outcome expectancies) and coping skills in the habit-change process, have provided general support for the model. Some of the highlights of this research are presented in this section, along with some questions for future research. Researchers who wish more detailed information on research support are referred to the Marlatt and Gordon [16] text.

Most research has been conducted in the areas of alcohol dependency and smoking, although work is underway applying the RP model to other addictive behaviours. In the alcohol field, the pioneering work of Litman and her colleagues at the Addiction Research Unit at the Maudsley Hospital has provided valuable insight into the role of coping with high-risk situations as a factor that discriminates between alcoholics who relapse after treatment from those who 'survive' or show a good treatment outcome. Litman and her co-workers have provided extensive documentation of relapse situations and associated coping responses related to treatment outcome [25, 26, 27, 28]. Similar research on the role of coping as a factor reducing relapse risk among ex-smokers has been described by Shiffman and his colleagues at the University of South Florida [29, 30, 31, 32]. Related studies in the smoking area have shown that self-efficacy ratings made on or near the date for smoking cessation are valid predictors of subsequent treatment outcome [33, 34]. In the Condiotte and Lichenstein study, it was not only found that overall efficacy ratings served as an accurate predictor of relapse rates in general, but also that ratings of efficacy in specific situations were frequently predictive of the actual relapse episode in which the client resumed smoking. Self-efficacy ratings can thus be used as aids to treatment planning: therapists can focus their energies on working with low-efficacy situations reported by clients at the time of intake. A similar approach to assessing self-efficacy with alcoholics in treatment has been reported by Annis and her colleagues at the Addiction Research Foundation in Toronto [35].

Skill-training approaches have also received some attention in the treatment outcome literature. To take a specific example from our own skill-training research with alcoholic clients [20], the client's responses to the Situational Competency Test are first taken into account in planning the specific skill-training programme. For one particular client, the problem may involve an inability to resist social pressure to indulge; for another, the problem may involve a deficit in coping with feelings of loneliness or depression. In the skill-training programme described in the Chaney *et al.* study, alcoholics in treatment met together in small group format for a series of treatment sessions. Each group was led by two therapists, who began by describing a particular high-risk situation. The group member then discussed the situation and generated various ways of responding to it. The therapists then modeled an appropriate coping response and practiced it in front of the group. Using this procedure, each client received individualized feedback from group members and specific coaching and instructions from the therapists. The client was then required to repeat the coping response until it matched the therapists' criteria for adequacy. This particular skill-training programme was evaluated in a year-long follow-up study in comparison with two control groups: a group that spent an equivalent amount of time discussing their emotional reactions with regard to the same high-risk situations (as in psychodynamic group therapy), and a no-treatment control condition (regular hospital programme only). The skill-training condition proved to be more successful than either control group, showing a significant improvement at the one-year follow-up period for such variables as amount of posttreatment drinking, duration of time spent drinking before regaining abstinence, and frequency of periods of intoxication. Similar positive results for skill-training with alcoholics have been reported in recent studies by Jones and Lanyon [36] and Oei and Jackson [37].

Despite this emerging empirical support, many of the basic tenets of the model and the effectiveness of the RP approach with various addictive behaviours have yet to be firmly established. Refinement of the basic assumptions and clinical applications of the model will

undoubtedly occur on the basis of future research.

Many questions remain unanswered at this point. To name but a few:

— What is the role of *motivation* in habit change and how can it be enhanced? If relapse prevention is designed for the maintenance stage or 'back end' of the habit-change process, there is a strong need for a corresponding 'front end' emphasis on motivation and self-efficacy enhancement.

— What is the *time course* of relapse across various addictive behaviours? Do certain high-risk situations occur earlier than others for most people, and, if so, what is the expected course of such risk situations over time? Examination of relapse rates (based on survivor analysis of time periods preceding initial lapses and/or subsequent relapses) may reveal a distribution of periods of differential risk (e.g., within successive weekly periods after a commitment to abstinence). If so, it may turn out that various RP intervention strategies are effective at different time periods.

— What is the optimum format for the delivery of RP strategies? To what extent is the assistance of trained professional or paraprofessional therapists or counselors necessary or helpful? Can the RP model be effectively applied in the form of self-help manuals, correspondence courses, or other formats? What about individual counseling as opposed to a group treatment format?

— Perhaps the most intriguing question that arises from a comparison of the self-control and disease models of addiction is this: Is one approach more effective than the other for some clients, and vice versa? Do the self-control and disease models reflect the principle of 'different strokes for different folks?' It does seem to be the case that the population differs with regard to people's basic orientation toward personal causation and locus of control. Evidence is mounting that people can be placed along a continuum of 'perceived personal causation,' with those at one extreme believing that they are capable of exercising choice and free will to determine the direction and course of their lives, in contrast with those on the other end who believe that their lives are under the deterministic control of external forces, such as fate, change, and luck [38]. Most people, of course, fall somewhere between these extremes of internal or external control. It remains an open question as to the extent to which these personal differences in perceived control are modifiable for any given individual. Can we change the underlying belief orientation of an individual who is high on the 'external' side of this dimension? Can a therapist facilitate a change in such a person by the careful application of procedures designed to enhance self-efficacy? In the meantime, it is tempting to consider the possibility of matching a particular treatment approach with the client's own expectancy system or locus of control orientation. For those clients who strongly believe that their addiction problem is primarily a physical addiction, involving a 'compulsion' beyond volitional control, a traditional disease model approach may be more effective. In contrast, clients who reject the notion that they are incapable of exercising control over their behaviour and who would prefer instead to learn the skills and attitudes required to modify their lifestyle habits may be more suitable and appropriate for the RP approach.

— A final question concerns the range of application of the RP model. The primary focus is on the application of RP principles to the modification of addictive behaviours in the usual sense of the term: excessive use of alcohol, tobacco, food, or other 'substance abuse' problems. The model does, however, seem to have applications in areas other than addictive behaviour or substance abuse. One such area is sexual aggression. In the treatment of the sexual aggressor (e.g., rapists), the overall goal is the same as it often is in the treatment of addiction: to abstain from engaging in the taboo behaviour. A recent chapter by Pithers, Marques, Gibat, and Marlatt [39] explores the application of the RP model in the treatment of sexual aggression. A second area of potential application is the 'transfer-of-training' problem: how can the effects of new training programmes be effectively transferred to and maintained in the target setting? In a recent review paper, Marx [40] discusses the application of the RP model to managerial training programmes. Marx states: 'although organizations invest heavily in training programmes to enhance managerial effectiveness, little attention is paid to the transfer of such training from the workshop to the workplace. This paper describes a cognitive-behavioural model that offers a systematic approach to the maintenance of behaviour. Relapse prevention strategies are discussed, and implications for management training and research are considered' [40, (Marx, p. 433]. Other potential applications of the RP model await future investigation.

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