THE ABSTINENCE VIOLATION EFFECT IN
CHILD MOLESTERS

A thesis
submitted in fulfilment
of the requirements for the Degree
of
Doctor of Philosophy in Psychology
in the
University of Canterbury
by
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University of Canterbury
1992
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ABSTRACT

The Relapse Prevention (RP) approach to the treatment of addictive disorders (Marlatt & Gordon, 1985) and the model of the relapse process underlying it, is described and critically analysed. Its application to the treatment of sex offenders is described and a key RP construct, the abstinence violation effect, is critically examined. A reformulation of the abstinence violation effect is presented together with a discussion of the empirical support for this construct. Classification issues are also reviewed. Twenty-six incarcerated male child molesters were assessed, using the Differential Emotions Scale (Izard, Doughty, Bloxom, & Kotsch, 1974) and the Four Attributional Dimension Scale (Benson, 1989), at three points (background, lapse, and relapse) while they listened to an audiotaped recording of a description of their most typical offence chain. Subjects were also classified as either fixated or regressed according to age of onset of their offending, quality of the relationship with the victim, lifestyle issues, stress, and drug use.

Eighteen subjects experienced an AVE at the point of relapse and seven as the result of a lapse. There were significant increases in most negative emotions and decreases in interest over the relapse chain. There were significantly higher disgust, contempt, hostility, fear, shame, shyness and anger scores reported by those showing an AVE. Conversely the AVE group showed significantly lower scores for joy and surprise. There were no significant differences on any of the four attributional dimensions across the relapse process but those showing an AVE reported significantly more uncontrollability and higher stability scores. The results also indicated that there appear to be different types of AVE that, in conjunction with the generally high levels of positive emotion at the lapse point, reflects the important role of emotion in the relapse process. Concerning classification,
there were no differences in the frequency with which fixated or regressed offenders experienced an AVE, although five out of the seven experiencing this reaction at the point of lapsing were regressed subjects, as were twelve out of eighteen at relapse. Fixated subjects reported more positive emotions and less negative emotions than regressed offenders. In addition fixated subjects perceived the cause of their offending as more stable than regressed offenders. For subjects experiencing the AVE at relapse, those classified as fixated saw the cause of the relapse as more stable than did regressed subjects.

The significance of these results for Pithers (1990) RP model, clinical practice and research, is discussed, along with limitations of the study.
ACKNOWLEDGMENTS

This thesis would not have been possible without the help and encouragement of many people. My thanks to Professor Bill Marshall whose vision, and modelling of the scientist-practitioner role, inspired me to do both clinical and research work in the sex offender's area. My gratitude to David Riley and his staff at the Department of Justice Psychological Services, Christchurch, who made it possible to get the project off the ground. I would also like to thank the Director of Psychological Services, Harry Love, for giving me the time and encouragement to go on with this study. Appreciation is due to Dr Jan Mackenzie for her advice and constructive criticism when I started to formulate some of the key ideas underlying this research. My thanks to Jillian Larsen who worked as a research assistant during the data collection stage and helped considerably in the piloting of the methodology.

Thanks to Mr Tony Spencer, then Manager of Rolleston Prison and Mr Ray Bell, Divisional Officer, for their practical support. I am in debt to the men who participated in the research project and who went out of their way to accommodate the projects requirements. I would also like to acknowledge the guidance and contribution of the therapy staff at Kia Marama, particularly Peter Johnston, Robin Jones, and Ron Chambers. I am grateful to Jackie Edmond, unit manager of the Psychiatric Emergency Service Christchurch Hospital, and to Dr Frank Walkey, chairperson Psychology department Victoria University of Wellington, for allowing me time to work on aspects of this thesis.

My thanks to Professor Ken Strongman, one of my supervisors, for his confidence in me. I owe an immense debt to my major supervisor, Dr Steve Hudson, whose endless patience, incisive questioning, and insight helped to stimulate my thinking and to clarify particularly obstinate problems. He
always made time for my queries, and has contributed significantly to the
development of my thinking in this area. At times when I began to doubt
my ability to complete this study he helped me to see daylight at the end of
the tunnel.

My gratitude to my children, Nathaniel, Kalya, Nicholas and
Alexander for their understanding when I was totally absorbed in my work.
Thanks also to Ruth for her unshakeable belief that I could achieve
academically. Finally, my greatest debt is to my wife Claire. She constantly
egged me on and emotionally supported me when I was on the point of
giving up. I have talked through all the key ideas with her, sometimes at
the most unusual times, and always found her comments extremely
valuable. She also relieved me of the burden of household tasks and
responsibilities so I could be free to work on this thesis.
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CHAPTER ONE

INTRODUCTION

Sexual abuse of children has received increasing public attention over recent years and typically causes feelings of anger and outrage that such acts have been committed upon vulnerable individuals. Frequently allied with this response is a deeply ingrained pessimism concerning the possibility of treating these men, and a belief that therapy represents a "soft option" and a waste of money. While these kinds of sentiments are perfectly understandable, the reality is that most child molesters get released from prison at some point and untreated they are considerably more dangerous. While reconviction rates for untreated child molesters are around 13%, actual reoffending rates for this group have been estimated to be as high as 42%, (Marshall, Jones, Ward, Johnston & Barbaree, 1991). Therefore this chronic relapsing feature (Furby, Weinrott, & Blackshaw, 1989) creates considerable emotional and financial costs and constitutes the major puzzle that challenges theory builders and clinicians alike (Haig, 1987; Hudson, Ward, & Marshall, 1992).

There is accumulating evidence that sex offenders can be successfully treated and a recent review suggests that reoffending rates can be considerably reduced by cognitive-behavioural treatment, perhaps by as much as two thirds (Marshall et al., 1991). Treatment has also been demonstrated to be cost effective and for every man successfully treated the state may save up to US $180,000 (Prentky & Burgess, 1990).

The success of cognitive-behavioural interventions, and the associated assumption that the aetiology of problematic behaviours is causally linked to problematic cognitions, has led to the consideration of the distorted perceptions, beliefs and thinking involved in sexually aggressive behaviour (Murphy, 1990; Salter, 1988; Segal & Stermac, 1990). While researchers and
clinicians have often noted the important role offenders causal attributions play in mediating the transition to reoffending (Pithers, 1990; Salter, 1988) there has been no empirical evidence to support such observations.

The high relapse or recidivism rates in sex offenders have been thought to be associated with compulsivity or addictive processes (Laws, 1989; Pithers, 1990). Within the cognitive-behavioural framework this has lead to the application of effective treatment strategies from the addiction area, such as relapse prevention, to sex offenders.

In the last decade Relapse Prevention (RP) has emerged as an innovative approach both to the conceptualisation and treatment of addictive disorders (Marlatt & Gordon, 1985; Wilson, 1992). Marlatt and his colleagues (Marlatt 1985a, 1985b; Marlatt, Baer, Donovan, & Kivlahan, 1988; Marlatt, Curry, & Gordon, 1988; Marlatt & Gordon, 1991), have produced an important body of work that has contributed to understanding the processes underlying relapse. They have also developed a number of unique strategies and methods for the treatment of addictive behaviour.

RP procedures aim to enhance clients' self-management skills in order to maintain the initial behaviour change induced by therapy. Marlatt's conceptualisation has proved remarkably valuable in the field of addiction, particularly his observation of commonalities across addictive disorders; the presence of short-term satisfaction, delayed negative consequences, the probability of high personal and social costs and difficulty in maintaining behaviour change (Miller, 1980). RP has attracted much interest from clinicians and researchers and the initial outcome literature concerning its effectiveness is certainly encouraging (Curry, Marlatt, Gordon, & Baer, 1988; Gossop, 1989; Laws, 1989; Marshall et al., 1991; Wilson, 1992).

The relapse prevention model has been extended to sex offenders by a number of clinicians and researchers, (Laws, 1989; Marshall, Hudson, & Ward, 1992; Pithers, Marques, Gibat, & Marlatt, 1983). Pithers and his
colleagues (Pithers & Cumming, 1989; Pithers, Cumming, Beal, Young, & Turner, 1989; Pithers, Martin, & Cumming, 1989) developed the Vermont Treatment Programme for sex offenders and their initial outcome data is encouraging. At this stage only 3% of child sex offenders graduating from their programme have re-offended (Marshall et al., 1991). Pithers has modified Marlatt's cognitive-behavioural model of the relapse process for sex offenders. Other programmes using an RP approach or component include the Atascadero Programme (Marques, Day, Nelson, & Miner, 1989), the Kia Marama programme in New Zealand (Marshall, Johnston, Ward, Jones & Hudson, 1992) and a number of Canadian programmes established by Marshall and his colleagues (Marshall & Barbaree, 1990a).

In the RP model, a careful distinction is made between an initial loss of control or lapse, and relapse; a return to problematic levels of addiction or prohibited behaviour (Mackay & Marlatt, 1991). Marlatt hypothesises that intervening between the lapse and relapse is a process called the Abstinence Violation Effect (AVE). This includes a causal search and attribution for the cause or reason for the lapse and the affective reaction to this attribution. In essence, how an individual views the initial lapse is predictive of his or her ability to successfully resume compliance with their restraint or abstinence rules.

The AVE is a core component of the relapse process and research into the cognitive and affective processes underlying it is both clinically and theoretically important. There has been no empirical research into the AVE in sex offenders and little in the general addiction area. The work that has been done has tended to rely upon Marlatt's formulation. However there are a number of difficulties with his version of the AVE, which in turn, have limited the quality of the research into its components. In this thesis I will present a reformulation of the AVE that I believe avoids these problems and which lead to more fruitful research possibilities, as well as relevant data.
However before analysing this important construct further, I will discuss
the RP model as developed by Marlatt and his colleagues.
CHAPTER TWO
THE RELAPSE PREVENTION MODEL

In this chapter I will examine Marlatt's RP model in a more comprehensive manner. Although Marlatt presents a model of the relapse process, his exposition lacks clarity at times. Rather than a fully fleshed out theory of relapse, his work contains a set of theoretical assumptions and lower level clinical models to guide therapy. This lack of clarity is understandable as the development of new theories inevitably creates some degree of initial conceptual looseness.

There are alternative models describing the development (aetiology) and treatment of addictive disorders, as well as influential behavioural theories of relapse in the area of addiction. I will describe each in turn to help place RP in a theoretical and clinical context. Secondly, I will critically examine the generic RP model and then discuss Pithers extension of this approach to sex offenders.

CONCEPTUAL MODELS OF ADDICTION

Brickman, Rabinowitz, Karuza, Coates, Cohn et al., (1982) have developed a conceptual framework for comparing and contrasting models of addiction, that essentially revolves around two key questions: (a) To what extent is the person responsible for developing the addiction, and (b) to what extent is the person responsible for solving the addiction problem? Four conceptual models can be derived from the answers to these questions.

In the moral model of addiction, the person is responsible both for the development and the changing of their addictive behaviour. Frequently addiction is viewed as an indication of weak character and change is
thought to occur through an exercise of willpower. According to Baer and Marlatt (1988), this model has received little empirical support in the addiction's literature.

The disease/medical model of addiction attributes no responsibility to the addicted individual for either the development or treatment of his/her problem. Addiction is conceptualised as an underlying disease process with an emphasis on physical dependency, genetic vulnerability and a belief that the "disease" is progressive. An advantage with this model is that the addict can seek help without feeling blamed for his problem. However, it fails to convincingly account for commonalities across the various addictions or situations where people independently solve their own addiction problems.

In the enlightenment model, individuals are seen as responsible for the acquisition of their addiction but not for changing their behaviour. An assumption of this approach is that change is only possible if a person is enlightened regarding the true nature of their addiction and thereby by relinquishing personal control to a higher power or collective entity. The various self-help groups, such as Alcoholics or Narcotics Anonymous, are thought to rely on this model.

Finally, in the compensation model the person is held personally responsible for change, but not for the development of their addiction. In this approach, aetiology is typically viewed as involving biological and learning factors beyond an individual's control. Addiction is viewed as learned maladaptive or dysfunctional behaviour that occurs in the context of personal and environmental factors. RP is an example of a compensatory model. According to Baer and Marlatt (1988), treatment approaches derived from this conceptual model are well supported in the addiction literature.
BEHAVIOURAL MODELS OF RELAPSE

There have been three influential behavioural theories of relapse in the addictions area, the withdrawal, compensatory, and appetitive models, (Niaura, Rohsenow, Binkoff, Monti, Pedraza et al., 1988). In the conditioned withdrawal model of relapse, whenever the individual experiences environmental or internal cues that were associated with drug effects or withdrawal, he/she will experience a conditioned response resembling the withdrawal state (Wikler, 1980). The cues or conditioned stimuli eliciting these symptoms could include drugs similar in action to the drug of abuse or mood states associated with drug taking. This may lead to increased drug seeking behaviour to eradicate these unpleasant symptoms, and eventually lead to relapse.

The conditioned compensatory response relapse model was developed by Siegel (1983) to explain the development of drug tolerance. From this perspective, the environmental cues or stimuli that are repeatedly associated with drug use become conditioned stimuli and will evoke a conditioned response. A key assumption is that the conditioned responses are opposite in direction to the unconditioned responses or direct pharmacological action of the drug. This is thought to compensate for the anticipated drug effects and in this way, maintains a homeostatic balance. Drug seeking behaviour may be motivated by the attempt to avoid or escape the conditioned responses, therefore increasing the chances of relapse.

The final behavioural model of relapse is the conditioned appetitive theory (Stewart, de Wit, & Eikelboom, 1984). In this approach, the positive incentive value of drugs plays the major role in substance abuse and drug taking is thought to be maintained by appetitive motivational processes rather than by the desire to escape or avoid withdrawal symptoms.
Through conditioning stimuli come to elicit a positive motivational state similar to that created directly by the drug in question. This positive motivational state is characterised by increases in drug related thoughts and cravings, and drug seeking behaviour. Withdrawal symptoms are believed to be conditioned stimuli that elicit positive affect rather than conditioned responses. The research evidence at this point tends to support the appetitive theory (Niaura et al., 1988; Rohsenow, Niaura, Childress, Abrams, & Monti, 1991).

MARLATT'S RELAPSE PREVENTION MODEL

In the development of the RP model Marlatt uses methods and concepts from a diverse range of psychological theories, for example, social learning theory (Bandura, 1977), attributional theory (Weiner, 1972), self-awareness theory (Duval & Wickland, 1972). A particularly striking feature of RP is its capacity to draw together the strands of quite different theoretical and therapeutic traditions, although it is essentially based upon social learning theory (Bandura, 1986).

In RP addictive behaviours are viewed as learnt, maladaptive responses to specific problems and therefore serve a function or number of functions. For example, alcohol can be used to escape from or avoid negative affect, or to enhance self-esteem. Because addictive behaviour is learnt, a major therapeutic goal is control or self-management rather than "cure". Related to this assumption, the difference between normal and maladaptive use of alcohol, for example, is seen as one of degree rather than kind. Therefore addiction is construed in dimensional rather than in categorical terms, with problematic behaviours at one end of the dimension and adaptive use at the other.
According to the RP model, there are no single factors involved in the aetiology or relapse of addictive disorders. Rather, in both cases a number of factors are influential, depending upon the situation or stage of treatment. In the RP model, psychological factors play a major role particularly the perception and interpretation of internal and external events (Abrams & Niaura, 1987). How an individual labels an urge to drink, for example, will influence the degree to which he/she attempts to control subsequent alcohol use. This is in marked contrast to biological models of addiction where physical processes are viewed as fundamental (Marlatt, Baer, Donovan, & Kivlahan, 1988).

The major therapeutic task in RP is to teach clients who are motivated to change their addictive behaviour to identify, anticipate, and cope with the problem of relapse and its antecedents. The therapy model is based on the construct of the relapse process. A major assumption is that relapse occurs in discrete steps over time rather than unexpectedly. It is not seen as an all or nothing phenomenon where a person moves from abstinence directly to a state of relapse. The challenging of this dichotomous view of relapse, usually associated with the disease model of addiction, has been one of Marlatt's seminal achievements (Brownell, Marlatt, Lichtenstein, & Wilson, 1986; Donovan & Chaney, 1985).

One of the most important distinctions in the RP model is that between a lapse, the initial occurrence of a prohibited behaviour, and a relapse, a return to problematic levels of addictive behaviour (Mackay & Marlatt, 1991; Saunders & Allsop, 1987). One of the unfortunate implications of the disease model of addiction is the collapsing or merging of these two separate stages in the relapse process. This tendency may in part explain the finding that the majority of people who experience a lapse end up relapsing (Brownell et al., 1986; Marlatt & Gordon, 1991; Rohsenow et al., 1991).
Although Marlatt incorporates conditioning processes into his model of relapse, his is essentially a social learning theoretical perspective. To briefly summarise, in contrast to the medical/disease model, the person treated according to RP principles is held responsible for the change process. In addition, aetiology is viewed as multi-factorial and addiction thought to consist of maladaptive or dysfunctional behaviour that is maintained by its consequences. Cognitive factors play an important role in both relapse and treatment.

**THE RELAPSE PROCESS**

The RP approach to treatment is directly related to a particular view of relapse. I will now describe this model of relapse in some detail as it is necessary to be familiar with it to understand the role of the AVE in sexual aggression. For ease of discussion it is helpful to divide the relapse process into three components, that is, events and processes that (a) lead individuals to high risk situations that set the scene for a possible relapse, (b) lead from high risk situations to a lapse and, (c) facilitate the transition from a lapse to a relapse.

**Factors leading to high risk situations**

HRSs are defined as when a person's sense of control over behaviour relevant to his/her addiction is threatened, for example, when an alcoholic is offered a drink in his favourite bar. HRSs may refer to external situations, such as being in a bar, or to internal states, for example, feeling anxious, angry or depressed.

When the negative influences in a person's life outweigh the positive (lifestyle imbalance) and he/she lacks the resources for coping with this, stress is experienced. This may lead to a desire for indulgence, a sense of
deserving or being entitled to something pleasurable. There are three major sources of stress that lead to HRSs; life events, daily hassles and a marked discrepancy between obligations and benefits. These lead to the sense of being deprived alluded to above and a consequent return of urges and cravings for a particular substance or activity.

Additionally, associated with the abstinence state is frequently a sense of resentment at being denied choice. This can lead to a desire to test out control by engaging in addictive behaviour (Brehm, 1966). Associated with this craving and desire for indulgence, are a number of cognitive distortions and maladaptive decisions that in a real sense set the stage for a lapse, and possible subsequent relapse.

There are three major pathways to HRSs in Marlatt's model. The first occurs when a person is unexpectedly placed in a situation he/she has difficulty managing, for example, being offered a smoke by a superior at work. A second pathway involves difficulty coping with stressors. This results in the person feeling overwhelmed and falling back on old "coping" behaviours, that is, addictive behaviour. The third major pathway to HRSs involves apparently irrelevant decisions, (AIDs). Marlatt labels this pathway, the covert antecedents of relapse (see figure 1). AIDs are "mini-decisions" or choices that superficially appear to be reasonable and unrelated to addiction, but which collectively help set up HRSs and therefore increase the chances of relapsing. They frequently appear acceptable, even praiseworthy, but are motivated primarily by the urge to indulge in a "prohibited" behaviour. The individual may not be fully aware of the motives behind these decisions. AIDs function to avoid self-criticism and social disapproval and provide an excuse for lapsing. For example, an alcoholic who just happens to go for a walk by his favourite
Fig. 1 Covert antecedents of a relapse situation
drinking spot, lapses and then claims "it was impossible to resist the urge to drink". These decisions are invariably accompanied by cognitive distortions that serve to obscure individuals' real motives and to legitimise their behaviour. For example, when accepting a request to babysit a young child, a sex offender reassures himself "I'm just helping a friend".

Marlatt draws upon the work of Janis and Mann (1977) in his discussion of the various maladaptive decision-making strategies' people use to set up HRSs. Janis and Mann (1977) argue that all decisions involve conflict resolution and therefore presuppose conflict over possible options and alternatives. The major type of maladaptive decision-making associated with AIDs is defensive avoidance (Janis & Mann 1977). In defensive avoidance, an individual escapes from conflict by procrastinating, shifting responsibility to others, and by rationalisation. This latter strategy involves minimising or denying the negative consequences of decisions and magnifying the perceived benefits.

The degree of initial commitment to abstinence is an important factor that influences which pathway to a HRS is likely to be taken. Clearly individuals who have made a public declaration of an intention to change, and who have previously successfully complied with their abstinence rules, would find it embarrassing to simply resume their addictive behaviour. The desire or need to indulge would clash with the need to avoid social disapproval and self-criticism.

From high risk situations to a lapse

Lifestyle imbalance can lead to HRSs directly, or indirectly by the way of AIDs. Once a person is in a HRS he/she is particularly vulnerable to lapsing. As discussed above, addictive behaviours are viewed as learnt, maladaptive responses to specific problems and therefore serve a function or number of functions. Without effective coping skills an individual is
more likely to fall back upon addictive substances or activities in order to escape from, or cope with, the HRS.

Clearly HRSs are definitionally a threat to an individual's commitment to abstinence. There is conflict between the desire to maintain control and the desire to indulge in the addictive behaviour. One of the major difficulties with the AIDs pathway to HRSs is the avoidance of awareness and responsibility for the decisions creating these situations. This makes it less likely that a person will be prepared for, or cope effectively with, these stressful events.

There are a number of factors that place someone at risk for relapsing. Marlatt describes three major types of HRSs that can lead to relapse in different addictive disorders; negative emotional states, interpersonal conflict, and social pressure.

Once in a HRS, skills that enable an individual to cope effectively with the threat to abstinence are of crucial importance (see figure 2). Effective coping results in increased self-efficacy (Bandura, 1989) and a consequent strengthening of the perception of control. This, in turn, leads to a lowered risk for relapse. If, however, someone fails to respond adaptively to a HRS, his/her chances of lapsing, and ultimately relapsing, are considerably increased.

Skill deficits, maladaptive decision making strategies and the failure to recognise the risks associated with HRS combine to reduce the chances of effective coping. The failure to deal adaptively with a HRS leads to decreased self-efficacy and an increased sense of hopelessness. These factors, in conjunction with a strong attraction to the prohibited substance or activity (urges and cravings), and positive outcome expectations, result in a lapse occurring. That is, an initial use of the substance or occurrence of an addictive behaviour.
Fig. 2 A cognitive-behavioral model of the relapse process
There are a number of mechanisms or processes that are hypothesised to mediate and assist this transition from a HRS to a lapse, and eventually a relapse. The first of these is the problem of immediate gratification (PIG) which results in the filtering out or ignoring of both short-term and long-term negative consequences of lapsing. The focus on immediate pleasurable features, in association with impaired decision making, increases the chances of a lapse occurring. Secondly when an individual lacks an alternative coping strategy this increases his/her reliance on and attraction to old coping responses, that is, addictive behaviour.

Thirdly, once a person has lapsed then the biphasic effect of drugs or addictive substances function to intensify the initial positive experience. In this effect, a drug or addictive behaviour has an initial high or positive effect with delayed negative consequences.

Fourthly, whether an initial violation of abstinence rules (a lapse) result in relapse, depends on the strength of the consequent effect of this behaviour, that is, the Abstinence Violation Effect (AVE). I will now describe this construct in detail.

**From a lapse to relapse**

The AVE is said to be a complex cognitive/affective reaction to an initial violation of an abstinence rule forbidding or restricting a particular behaviour. Its strength depends on the strength of commitment to abstinence, the degree to which a person can justify the lapse, the presence of significant others, the personal cost of maintaining abstinence on previous occasions and the length of the period of abstinence. It is a dimensional phenomenon varying in intensity with relapse being associated with a more intense AVE. Marlatt has developed two versions of this important construct. His first definition of the AVE contains a cognitive dissonance effect and an attribution concerning the cause of the
lapse (Marlatt & Gordon, 1980). In the cognitive dissonance effect, there is conflict between an individual's perception of himself or herself as an abstainer, and the recent experience of lapsing. The individual may resolve the conflict created by this inconsistency by modifying his/her self image, that is, view themselves as addicts. An attribution made to personal characteristics may intensify the AVE. Marlatt was dissatisfied with this model of the AVE and drew upon the social cognitive literature to reformulate it (Marlatt & Gordon, 1985). In the most recent version of Marlatt's theory, the AVE is seen as having two major components, an attribution as to the cause of the lapse and the affective reaction to this attribution (George & Marlatt, 1989; Marlatt & Gordon, 1985).

The essence of Marlatt's description of the AVE is that how individuals view the initial lapse is predictive of their ability to successfully resume compliance with the restraint or abstinence rule. The "how" is a consequence of a multi-step process. For example, when a person abstaining from smoking lapses by lighting a cigarette, the distinctiveness of his/her behaviour leads to increased self-attention (see figure 3). A causal search is instigated ("why did it happen?") and the lapse is evaluated, particularly in terms of individual responsibility. If the causal attribution for the lapse is made to external, unstable and specific factors such as "I was forced to take this cigarette so as not to offend my boss", the AVE is likely to be minimal and thus the probability of a full-blown relapse is low. If on the other hand, the causal attribution for the lapse is made to internal, dispositional factors such as "I have no willpower", then the person would experience a negative emotional reaction and loss of control. In addition, the comparison of the immediate behaviour to ideal standards may produce feelings of guilt and self-blame. This negative affect and the associated perceived loss of self-control, is aversive and as such has motivational properties. Specifically, aversive emotional states typically
energise over-learnt dominant responses such as old addictive behaviours. In addition, an individual may attempt to reduce the consequent cognitive dissonance by redefining his/her self-image in line with the ongoing, addictive behaviour, for example, "I'm just an addict". There is a generalised decrement in expectations of future coping and perceived self-efficacy concerning abstinence and as a consequence, continuation of the forbidden behaviour. In other words a relapse has occurred. Each further use of the substance or occurrence of the prohibited behaviour increases this effect and creates a vicious addictive circle.

Marlatt formulated a number of attributional hypotheses concerning the perceived cause of the lapse. He argues that attributions of causality to:

1. internal factors such as an underlying disease will increase the probability of relapse;
2. external factors, such as work pressures, will decrease the chances of relapse;
3. motivational deficits, for example a lack of willpower, will increase relapse chances;
4. deficits in coping skills will reduce the probability of relapse occurring.

**RELAPSE PREVENTION AND THERAPY**

The RP model has been researched in a number of areas including smoking (Baer & Marlatt, 1991; Curry, Marlatt, & Gordon, 1987; Shiffman, 1989), alcohol dependence (Ito, Donovan, & Hall, 1988), sex offenders (Marshall et al., 1992) drug abuse (Birke, Edelman, & Davis, 1990), bulimia nervosa (Johnson & Connors, 1987), diabetes (Kirkley & Fisher, 1988) and obesity (Schlundt, Hill, Sbrocco, Pope-Cordle, & Kasser, 1989). It has recently been extended into non-traditional areas such as schizophrenia,
Transgression of abstinence rule; The lapse

Use of substance (Relapse)

Decreased self-efficacy and expectations of future coping in similar situations

Cognitive redefinition of self and increased drive to engage in habitual responses

Negative affect (guilt/shame) cognitive dissonance

Comparison of ideal versus actual behaviour

Attribution to external, unstable specific factors

Attribution to internal, global, stable factors

Perceived to be in control

Perceived not to be in control

Fig. 3 The Abstinence Violation Effect
marital therapy, social competence, chronic pain and anxiety disorders (Wilson, 1992).

Consistent with its cognitive-behavioural focus, RP distinguishes between initial and maintaining causal factors. Individuals may have skill deficits that have predisposed them to develop difficulties with drugs or alcohol. However, once the problematic behaviour is acquired, its consequences function to maintain it independently of these vulnerability factors.

RP can be used as an "umbrella" approach organising the whole of treatment or as an additional module or component (George & Marlatt, 1989; Marshall, Hudson, & Ward, 1992). The RP emphasis on the development of self management skills, particularly those associated with maintenance, is markedly different from more traditional relapse treatment models (Mackay & Marlatt, 1991). In these approaches' individuals typically either attend "booster" sessions or make a lifelong commitment to treatment. Some programmes also adopt a "shotgun" strategy, where more and more elements are added to therapy, without theoretical rationale, in the hope relapse will be avoided.

In Marlatt's treatment approach, global and specific treatment strategies are derived from his model of the relapse process. He maintains the importance of imparting to the person "the big picture" or broad view of relapse early in therapy. This helps to increase motivation by identifying a series of proximal and distal goals involved in the recovery journey.

RP's treatment is cognitive-behavioural. The skill deficits that have predisposed a person to become addicted are explicitly targeted in association with reconditioning strategies to extinguish the urge to engage in the addictive behaviour. Typically this involves learning problem-solving, social, relationship, stress management, and lifestyle skills. In addition, individuals learn a variety of meta-cognitive skills that enable
them to monitor their own internal processes and the environment for HRSs. The choice of particular techniques depends upon the type of factors that are related to a particular offender's sexual aggression (e.g., biological or cognitive) and on what is modifiable in the particular situation.

The following is a (fictitious) example of the match of therapy techniques with points in the relapse process. John is a man who has sexually offended against his daughter. Assessment reveals that he is working two jobs and spends most of his spare time renovating the house. He has very few friends and finds talking about his feelings extremely difficult. His relationship with his wife is characterised by mutual frustration and self-defeating attempts to solve their marital problems. He uses alcohol to relax and to help him avoid thinking about his many problems. He had begun to watch pornographic videos and masturbate to fantasies based on this material since sexually abusing his daughter.

The RP approach to therapy involves specifically addressing each of the components of the relapse process. The desire for indulgence resulting from lifestyle imbalance is addressed by balancing daily activities and including positive addictions such as jogging. In addition, substitute indulgences, for example taking up a hobby, replace the prohibited behaviour. Coping imagery, stimulus control procedures and reconditioning techniques are used to reduce urges and cravings. The learning of more effective problem-solving and decision-making skills lessens the frequency and impact of HRSs and lapses. John learns how to counter the AVE by using cognitive restructuring and reattributational strategies.
I will now focus on the problems in Marlatt's RP model. The majority of my criticisms are conceptual. An important part of theory development involves conceptual appraisal alongside empirical evaluation. One of the unfortunate legacies of the narrow empiricist view of science bequeathed by radical behaviourism has been a distrust of theory and a corresponding overemphasis on data (Haig, 1987; Hooker, 1987). Theoretical advances lead to better empirical research and ultimately, more effective interventions (Staats, 1991).

The RP model is a relatively new approach and therefore it is still too early to be clear about its effectiveness (Ito, Donovan, & Hall, 1988). Much of the early treatment outcome research in the sex offender area is supportive, although there have been some exceptions (Marshall et al., 1991). This form of cognitive-behavioural therapy appears to be particularly effective with child molesters, while other types of sex offenders such as exhibitionists, do not do as well (Marshall et al., 1991).

Along with the limited amount of treatment outcome research, there has been little conceptual criticism of the RP model. An exception to this is the work of Allsop and Saunders (Allsop & Saunders, 1987; Saunders & Allsop, 1987, 1989) who while approving of much in the RP approach to relapse, have consistently challenged Marlatt's emphasis on coping skill deficits and HRSs in his model, and what they see as his under-emphasis of decision making processes.

They place a great deal of importance on the addict's decision to use drugs and believe that the process of relapse is very much influenced by the quality of the initial resolution to remain abstinent or control drug use. They also draw upon the work of Janis and Mann (1977) to partially explain the high relapse rates in the addictive disorders, and see decision making as
an integral part of recovering from addiction. The decision to remain abstinent involves a weighing up of the values associated with drug taking versus those of a drug free life.

As mentioned above, the two most impressive aspects of Marlatt's work have been his ability to draw upon diverse psychological theories and to provide a description of the process of relapse. He has used self-awareness theories (Duval & Wickland, 1972; Storms & McCaul, 1976), cognitive dissonance theory (Festinger, 1964), self-efficacy theory (Bandura, 1977), drive theory (Spence & Spence, 1966), attributional theory (Weiner, 1972), self-regulation theory (Carver & Scheier, 1981), decision theory (Janis & Mann, 1977), operant learning theory (Skinner, 1974), classical conditioning (Hilgard & Bower, 1975) to mention only the most important.

The attempt to integrate such diverse theories has however, made Marlatt's analysis cumbersome and confusing in places. He frequently hypothesises the existence of a number of mechanisms to account for the relapse process that either conflict or creates theoretical redundancies.

Although Marlatt stresses the importance of interaction between the multiple factors leading both to the establishment of addictive disorders and relapse, his RP model does not adequately reflect these relationships (see figures 1 & 2). He does not convincingly address the relationships between lapses, HRSs, AIDs and so on. Individuals with addictive disorders who are committed to abstinence, do not tend to relapse in a dichotomous fashion (Birke et al., 1990; Ogden & Wardle, 1990; Polivy & Herman, 1991; Saunders & Allsop, 1987). Frequently there are a number of feedback loops or interactions between the various components that eventually may lead to relapse (Hall, 1989; Kirkley & Fisher, 1988; Saunders & Allsop, 1989; Saunders & Allsop, 1987).

A related issue is the difficulty determining the point at which the lapse becomes a relapse (Mackay & Marlatt, 1991). Is relapse a return to an
individual's previous level, for example, of drug taking, or simply use that leads to life problems? Clearly, differences in defining a lapse lead to different definitions of relapse; these are logically related.

Marlatt places a great deal of emphasis on the role of AIDs in setting up HRSs and ultimately relapse. He links the use of maladaptive decision making strategies, for example defensive avoidance, with such covert planning. When people are under stress their capacity to think clearly and make decisions is adversely affected (Marlatt, 1985b). For example, thinking tends to be more simplistic and concrete and the memory span is reduced. Marlatt argues that the desire to avoid self criticism and social disapproval results in covert planning and the setting up of relapse possibilities. The major problem with his explanation is that it is not clear how such planning occurs and what underlying mechanisms are involved. It seems to require unconscious thinking and defence mechanisms that involve complex cognitive processes inaccessible to consciousness. This raises more questions than it answers. For one thing, it doesn't explain how an individual whose thinking is adversely affected by stress manages to carefully plan and set up lapse/relapse opportunities. What is the relationship between the surface cognitive distortions and the underlying covert plans and goals? Marlatt seems to place a large burden on the cognitive capacity and processes of individuals who are struggling to comply with their abstinence rules. Certainly many clinicians have noted the importance of planning regarding relapse and the person's reported lack of awareness of this. However, Marlatt has arguably merely described this phenomenon, not explained it.

Related to this point, is the criticism that Marlatt appears to support the existence of unconscious desires. He argues that AIDs are preceded by a desire for indulgence, for example, "I owe myself a drink". This is said to be part of the process that leads to the setting up of HRSs by the way of
AIDs. Either this desire is unconscious or else the relationship between this (conscious) desire and subsequent events remains unnoticed. This appears to be implausible; the problem is to account for this desire without invoking the "unconscious". One of the major assumptions of mainstream cognitive-behavioural therapeutic approaches is that there is no need to resort to the concept of a dynamic unconscious to explain human behaviour (Dobson, 1988).

It is not clear why a person who is committed to abstinence fails to cope effectively in HRSs. Marlatt makes the assumption that he/she lacks adequate coping skills. However, there is some doubt about this and a major puzzle in the addiction area is why people report lapsing in situations where they would normally cope (Allsop & Saunders, 1989; Rohsenow et al., 1991; Saunders & Allsop, 1987; Saunders & Allsop, 1989; Ward & Hudson 1992). Why do they fail to use their coping skills in these HRSs on some occasions?

A criticism concerns Marlatt's definition of HRSs. It appears that different types of HRSs play different roles in relapse and are associated with different mechanisms. For example, for someone who is in a situation containing addictive stimuli (e.g., a bar) a lack of skill alone may result in a lapse and perhaps a relapse. However, for a person who is alone without any such addictive substances and who is feeling depressed, further steps are needed which ultimately involve either entering such an environment (i.e., an additional HRS), or purchasing alcohol and so on. Marlatt does not make these important distinctions.

Related to this is the problem of defining HRSs in phenomenological terms, that is, where a person's sense of control over behaviour related to his/her addiction is threatened. This is a problem because it fails to account for a number of possible situations. First, if cognitive distortions are present, then the person may not recognise the HRS as a threat to
his/her control. However arguably it would still make sense to speak of the situation constituting a HRS when you take into account his/her addictive behaviour history. Secondly, there is the reverse situation where a person feels his/her control is threatened but realistically there is little possibility of him/her lapsing. In this situation, they may be excessively anxious and therefore hypervigilant. It would be useful to narrow the definition of a HRS to external situations where the appropriate addictive stimuli are present. Internal factors would then become risk factors or high risk elements that may lead to HRSs by the way of AIDs or other mechanisms.

There appear to be several mechanisms suggested by Marlatt that mediate the transition from a HRS to a lapse. Marlatt argues that before lapsing an individual experiences a loss (or lessening) of control, lowered self-efficacy and a sense of helplessness as a consequence of not coping. This leads to negative affect and a consequent reliance on old coping strategies, that is, engaging in addictive behaviour. Marlatt does not acknowledge the possible independence of these mechanisms. It is desirable when theory building to seek simpler explanations (Hooker, 1987; Newton-Smith, 1983). It is possible that individuals could lapse in a HRS simply because they lack the skills to cope effectively. For example, a person who lacks the assertiveness skills to refuse his boss's offer of a drink. This could lead to a lapse and a possible AVE. Of course, he may excuse his "mistake" by blaming his employer.

Second, the negative affect created by lifestyle imbalance, could result in a failure to employ assertiveness skills present in the individual's repertoire in the above situation. The individual remains passive, frequently seeing him/herself as deserving the indulgences anyway, and does not actively attempt to cope with the HRS. This leads directly to a lapse.
Third, negative affect created by lifestyle imbalance (e.g., a HRS) could lead to the direct activation of old (addictive) coping strategies and result in a lapse. In this situation, there is an active decision to use a particular coping strategy, for example drinking alcohol, to escape from negative affect.

Fourth, the negative affect created by lowered self-efficacy with respect to restraint, loss of control and helplessness could lead to the use of addictive substances or behaviours to cope. This is a different type of negative affect than that mentioned above as it emerges as a result of a failure to manage early aspects of a HRS, rather than from precursors to the HRS such as lifestyle imbalances.

Fifth, the lack of coping and lowered levels of self-efficacy could be mediated by attributions that lead to the perception of diminished control. This is a relatively pure cognitive pathway.

Sixth, the exclusive focus on the immediate and pleasurable consequences in a HRS and the consequent narrowing of attention and therefore problem solving options, could result in a lapse. This is what Marlatt terms the Problem of Immediate Gratification (PIG).

This difficulty is a result of heterogeneity in types of HRS, each of which involve potentially different transition mechanisms. For example, in a more situationally defined HRS such as being in a bar, the presence of alcohol could result in a lapse in association with a lack of coping skills. Whereas in a situation where the HRS is more internal, such as the example of depression, a lack of coping skills would not be enough to lead directly to a lapse, the availability of alcohol would be required, and perhaps, an active decision to drink.

A related criticism involves the important role of motivation invoked by Marlatt in explaining the shift from a HRS to a lapse. The perceived attraction of the addictive substance or activity is viewed as out-weighing
the longer term negative consequences. The problem is that Marlatt collapses two different motivational processes that could arguably function quite independently. First, he argues that the urges/cravings elicited by stimuli in HRSs function to push or drive the individual to indulge; a conditioning perspective. Alternatively however, he emphasises the importance of expectations in facilitating the transition from a HRS to a lapse; a cognitive perspective. These processes can function quite independently and it is confusing to combine them in this manner. In Marlatt's model it is not clear whether a lapse occurs because of low efficacy concerning restraint or over-whelming urges to indulge. Of course both processes may function in conjunction as well as individually. Perhaps each has a role to play in different HRSs, or additionally, each may be differentially important in different addictive disorders, or in different individuals.

There are also a number of problems with Marlatt's formulation of the Abstinence Violation Effect. I will only make one general criticism concerning Marlatt's version of the AVE at this time and will address this issue more fully in the next chapter. As described above, the AVE is a cognitive/affective reaction to an initial violation of an abstinence rule forbidding or restricting a particular behaviour (George & Marlatt 1989; Marlatt, 1985a, 1985b). This reaction is an important mediator of relapse and as such in part determines whether or not a lapse becomes a full-blown relapse. How individuals view the initial lapse determines in part whether or not they resume adherence to their abstinence rules.

Briefly, although Marlatt claims that his formulation of the AVE only uses attributions and affective processes, in actuality he implicitly draws upon a diverse set of ideas and theories, and this creates problems. The major difficulty is that he postulates a number of competing mechanisms
that underlie the AVE that appear to operate quite independently, and even conflict with each other.

An example of this problem is the confusion engendered by the introduction of the biphasic concept. Marlatt argues that the initial effect of taking drugs or indulging in addictive behaviour is a positive one and that negative effects occur later. However, if this is the case, when does the AVE occur and what is its relationship to the biphasic effect? Certainly, if the two processes occur in conjunction, there must be a time lapse while the positive effects of the drugs or addictive behaviour recede. How long does this need to be and how does this apply to different addictive substances or activities? A related difficulty is the assumed delayed negative effect of biphasic responses. If this involves negative affect (and it seems to) why do you need the AVE? It becomes redundant if there is already a link between negative affect and addictive "coping responses", which Marlatt maintains. Does the biphasic effect involve biological or psychological mechanisms, or both? If attributions are involved, what is their role? The major problem is that in Marlatt's RP model there are multiple pathways to continued addictive behaviour. It is not clear whether the mechanisms underlying these are related or whether they can even be theoretically integrated.

There is some evidence to suggest that the AVE is not a stable phenomenon (Collins & Lapp, 1991; Hall, 1989; Ward & Hudson, 1992) with Marlatt (1985b) himself arguing that an individual may only experience it briefly. A significant puzzle is to account for this instability. Certainly, taking into account the biphasic effect of addictive substances, it is clear that for Marlatt the initial effect of taking drugs or indulging in an addictive behaviour is positive. What is the relationship between the AVE and the (arguably) appetitive processes associated with this positive effect? Does this lead to some attenuation of the AVE, and do mechanisms such as redefining the self as an addict or justifying the lapse, also lessen its
intensity? Marlatt does not fully explain its instability, or clarify the relationship between the various mechanisms involved that impact on its intensity.

Another criticism concerns the relationship between the problem of immediate gratification and relapse or a lapse. Why does a person who is committed to abstinence focus only on the immediate consequences and "forget" or ignore what he/she has experienced in the past? Why does the PIG exercise such influence and what are the mechanisms underlying this cognitive distortion? Marlatt appeals to conditioning theory to account for the presence of urges and cravings. However this does not explain the apparent capacity of some addicted individuals to discount their prior knowledge and experience.

**RELAPSE PREVENTION AND THE TREATMENT OF SEX OFFENDERS**

As noted earlier, the RP model has been extended to the treatment of sex offenders by a number of clinicians and researchers (Marques et al., 1989; Pithers, 1990). A recent review of RP programmes with sex offenders has commented favourably on their efficacy (Marshall et al., 1991). Three programmes in particular stand out as impressive examples of the application of RP treatment methods to sex offenders. All of these programmes included different types of sex offenders, although it seems that Marshall has the least restrictive criteria (Marshall et al., 1991).

Marshall and his colleagues in Canada have developed a cognitive-behavioural treatment programme for sex offenders that includes a relapse prevention component (Marshall & Barbaree, 1990a). Their initial outcome data suggests a reduction in the reoffending rate of almost two thirds, down from approximately 42% (in some offence categories) to 13%
(Marshall & Barbaree, 1990a). The time at risk for their sample is up to ten years.

The programme based at the Atascadero State Hospital has been described by Marques et al., (1989). Out of 47 men with an average of 12.7 months at risk, only 8% had reoffended at follow-up compared to 20% of untreated volunteers (n = 49) and 21% of non-volunteers (n = 42). However, encouraging as this data is, it is important to note that the actual time at risk is still insufficient to provide an adequate test of the model.

The other major RP programme is operated by Vermont State Corrections and has been systematically evaluated (Pithers, Martin & Cumming, 1989). Of the 147 child sex offenders to graduate from this programme, only 3% have reoffended (Pithers & Cumming, 1989). It is not clear what the time at risk is for this group of offenders, although it appears to span at least six years.

In adapting the RP approach to sex offenders, a number of changes have had to be made to the model. The presence of a victim has required the redefinition of a lapse and relapse to points further back in the behaviour chain. Here a lapse is defined as the occurrence of deviant sexual fantasies that is said to be the first predictable sign of losing control (Pithers, 1990), while a relapse is seen as the occurrence of an actual offence.

Another major recent change has been the addition to the RP model of the external supervision dimension (Pithers, 1990). The traditional RP model with its emphasis on the acquisition of self-management skills has been relabelled the internal management dimension. The external supervision dimension is a component added to the RP model for post-treatment follow-up, and is particularly designed for incarcerated offenders who leave prison under jurisdictional control, for example, on probation. It involves enhancing the efficacy of supervision by identifying specific offence precursors and creating an informed network of collateral contacts.
to assist both the offender and the probation officer. This serves to create a collaborative relationship between those responsible for the offender's supervision and the mental health professionals treating the offender, the offender himself, and his social network.

As argued above, concerning the general model, the RP model that has been applied to the treatment of sex offenders depends upon the concept of the relapse process and its various components. It is important when assessing its adequacy to critically evaluate its theoretical components. There is a clear conceptual relationship between RP treatment strategies and the hypothetical underlying relapse process, indeed this is a major strength of this approach to therapy.

I will critically examine Pithers (Pithers, Cumming, Beal, Young, & Turner, 1989; Pithers & Cumming, 1989; Pithers, Martin, & Cumming, 1989; Pithers, Marques, Gibot, & Marlatt, 1983) models of the relapse process because of the tentative effectiveness of his treatment programme and the major influence his work on relapse has had in the area. Arguably, it is the best formulated, articulated and most influential model of the relapse process in the sex offender area.

PITHERS MODELS OF THE RELAPSE PROCESS

Pithers (1990) argues that sexually aggressive acts share affective, cognitive and behavioural components associated with relapse in the addiction area. He questions the assumption that sexual aggression is an impulsive act and emphasises the importance of planning in the majority of sexual assaults. He notes that offenders appear to carefully plan their offences to create the appearance of impulsiveness, and argues that therefore models of the relapse process need to reflect this fact (Pithers, 1990).
Pithers has actually formulated two distinct although related models of the relapse process (see figures 4 and 5). One of these covers (figure 4) the whole relapse process and is clearly related to Marlatt's model of relapse. While the other (from HRSs to relapse, see figure 5), originated from his work into the antecedents of sexual offending. He frequently discusses both in his many book chapters on RP but does not clearly integrate them, particularly in relapse prevention terms. I will discuss each in turn.

In his first model of the relapse process, Pithers emphasises the role that AIDs play in setting up HRSs (figure 4). He defines HRS in terms identical to Marlatt, where a person's sense of control over their prohibited behaviour is threatened. The major HRSs are those involving negative emotional states, interpersonal conflict, and external situations such as baby-sitting. Thus initially the offender is in an abstinent state with consequent high levels of self-efficacy concerning control over his deviant sexual behaviour. However AIDs function to set up HRSs which if not coped with effectively result in a lapse, for example, a sexual fantasy. An example of an apparently irrelevant decision is the decision to spend the summer vacation in a national park where children are likely to be present. Being in the park around children constitutes the HRS and the failure to cope effectively with this problem can lead to a lapse, for example, sexual fantasies about children.

The AVE influences whether or not a lapse becomes a relapse. Pithers relies on Marlatt's earlier formulation of the AVE and hypothesises that there is conflict between a sex offenders self-image as reformed and the recent experience of a lapse, for example, a deviant sexual fantasy. This dissonance effect is a major component of the AVE and may be resolved by the offender deciding that despite his treatment, he is still a sex offender.
Abstinence
1. Self-efficacy
2. Success expectancy

 Apparently Irrelevant Decision

 High-risk Situation
1. Negative emotional state
2. Interpersonal conflict

 Adaptive Coping Response

 Continued Abstinence
1. Enhanced self-efficacy
2. Decreased probability of relapse

 Lapse
1. Deviant fantasy
2. Pornography purchase

 Abstinence Violation Effect (AVE)
1. Self-deprecation
2. Failure expectation
3. Problem of immediate gratification
4. Erroneous attributions
5. Increased probability of relapse

 Adaptive Coping Response

 Continued Abstinence

 Relapse
1. Sexually aggressive act

 Return to Abstinence

Fig. 4 A Cognitive-Behavioural Model of the Relapse Process
Fig. 5 Pithers (Antecedent) Model of the Relapse Process
How it is resolved determines the strength of the AVE. The second major component of the AVE is an attribution as to the cause of the lapse. If the offender identifies a factor such as a lack of willpower or weak personality as the cause, there is little reason to expand energy and he is therefore more likely to relapse and offend sexually. Pithers argues that the intensity of the AVE (and therefore its effect on the probability of relapse) is further increased if the offender focuses selectively on the positive consequences of sexual assault and ignores the negative. This is the problem of immediate gratification (PIG). If the offender fails to deal effectively with the AVE, relapse is highly probable.

In his second model (see figure 5), Pithers hypothesises that an offender who is currently in control of his sexual offending, experiences a negative affective change, for example, feeling depressed, anxious or lonely, and is unable to cope effectively with these feelings. This leads to fantasies of performing sexually aggressive acts. These fantasies are then converted into distorted thoughts concerning the (fantasised) victim. These include rationalisation, justifying possible future assaults and attributing inappropriate characteristics to the victim, for example, attributing adult characteristics to a child. Next the offender refines plans that enable the fantasies to be enacted, usually during masturbation, the pairing with orgasm effectively enhancing its valence. This plan may also contain aspects that minimise the offender's degree of responsibility. Finally the plan is carried out and the offender relapses, that is, a sexual assault occurs.

PROBLEMS WITH PITHERS MODELS OF THE RELAPSE PROCESS

There are a number of problems with Pithers RP model. A general point is that Pithers has two models of the relapse process, one covering the whole relapse process and the other from HRSs to relapse. The major problem is
that they are not well integrated. In the second model, Pithers further divides the lapse into a number of components, that is fantasy, cognitive distortions, and planning, without specifying that he is doing this. An additional difficulty is that the second model is not an RP model at all, at least in Marlatt's sense. Pithers does not clearly label the related processes in RP terms and in fact some seem to be completely missing, for example, the AVE.

Therefore I will concentrate further critical remarks on his first model of the relapse process as it is similar to the RP model formulated by Marlatt (1985b). Pithers is vulnerable to many of the criticisms directed at Marlatt's model because he relies so heavily on it. I will briefly summarise these criticisms.

A generic point is that Pithers, like Marlatt, postulates the existence of a number of mechanisms associated with the relapse process that appear to either conflict with each other, or are not clearly related. Additionally, Pithers does not convincingly address the interactions between the major constructs such as HRSs, lapses, AIDs, and so on. An offender frequently experiences a number of lapses before ultimately relapsing (George & Marlatt, 1989; Hall, 1989). He also runs the risk of evoking unconscious decision making (by the way of AIDs) without accounting for the mechanisms involved. Finally, Pithers over emphasises the role of skill deficits in relapse (Rohsenow et al., 1991).

There are also a number of problems specific to Pithers RP model that need to be addressed.

Pithers reliance on Marlatt's earlier version of the AVE is a weakness of his model. It is (logically and empirically) possible that the mechanisms comprising this version of the AVE, cognitive dissonance and the formulation of attributions, may operate independently. The former is a motivational drive mechanism where negative affect created by dissonance
"drives" individuals to reduce it by redefining their self-image. While the latter involves the perception of uncontrollability and therefore the expectation that any future attempt at coping is futile.

Pithers assertion that the PIG operates after the lapse, as part of the AVE, is somewhat confusing. This claim contrasts markedly to Marlatt's view that the PIG functions to mediate the transition from a HRS to a lapse. In Pithers model the PIG appears to undermine the AVE; there is a clash of mechanisms. This construct involves positive affect and facilitates the transition to a lapse because of its focus on the immediate pleasurable consequences of lapsing. While the AVE involves negative affect and leads to relapse because of the impact of this factor on expectations and coping skills. It appears that the changes made in the RP model for sex offenders have created this problem. The movement of the lapse point further back in the behaviour chain (in Pithers model) means that the PIG now becomes part of the AVE. Therefore instead of the PIG facilitating the transition from a HRS to a lapse as it does with other disorders, for sex offenders it operates as part of the lapse-relapse transition. This change in the model raises some difficult questions regarding the relationship between the AVE and the PIG.

Pithers confuses his discussion of HRSs by including negative affect as an example of a HRS without further clarification. Negative emotional states and interpersonal conflict are related to HRS in two ways. Such states could constitute HRSs on their own and if individuals fail to cope this could lead to relapse. Perhaps because offenders rely on old coping strategies, such as sexual fantasies and so on. Secondly, such states may lead to HRSs by the way of AIDs. In this pathway, negative affect is a risk factor possibly related to lifestyle imbalance. If a person habitually copes with sadness and anxiety by fantasising about having sex with children, then he/she may enter a HRS through AIDs to create this possibility.
Pithers fails to acknowledge that factors such as negative affect and interpersonal conflict can lead to HRSs by different pathways. This implies that AIDs are only likely to be involved in setting up some types of HRSs.

In contrast to Marlatt's model, Pithers (see figure 4) has only one pathway to HRSs. This is unnecessarily restrictive and fails to accommodate the research evidence concerning relapse (Marlatt & Gordon, 1985). It lacks the additional direct links from lifestyle imbalance and unexpected situations to HRSs. Perhaps this issue reflects Pithers overemphasis on the role of planning (AIDs) in relapse or reoffending.

Consistent with all RP approaches, Pithers draws a distinction between a lapse and relapse. However, he does not draw a further distinction between the first instance of a sexual offence, and a return to pre-treatment levels of offending or increased severity of offending. On the face of it this appears inconsistent with the RP approach and in fact serves to under-cut the RP model. Surely there is an important difference between committing one offence and committing many, or increasing the severity of offending during a single assault. An offender treated according to Pithers model may experience a very strong AVE after the first offence and therefore is likely to continue (or exacerbate) his sexually aggressive behaviour. Perhaps we need to make a further distinction based on the severity or frequency of offending. For example, a single instance of sexually aggressive behaviour could be labelled Relapse One, and multiple offences or increased severity, could be labelled Relapse Two (Hudson & Ward, 1992). Arguably, the social costs of the latter are greater than the former. It is a sensible and ethically appropriate strategy to continue to apply RP principles following the first sexual offence. Of course in therapy it is important to teach offenders to regard relapse as something to avoid.

It is important to distinguish between HRSs that refer to situations and those that refer to non-volitional states. Clearly AIDs can only directly
function to covertly set up some situations and internal states more indirectly, if at all. If a lapse is a sexual fantasy, what is the HRS from which it emerged? If a person is baby-sitting (clearly a HRS), then it makes sense to view the lapse more behaviourally, that is, as either approaching or suggesting something to a child rather than in terms of sexual fantasies. One possibility is to introduce the idea of a hierarchy of lapses with the more covert and distal factors having less immediate impact on relapse. Therefore, sexual fantasies would be less (temporally) directly related to sexual assault than, for example, an offender asking a child to sit on his knee.

There are a number of difficulties in both Marlatt's and Pithers models of the relapse process that arguably undermine the coherency of the AVE construct and the theory in which it is embedded. However, for the purposes of this study, the construct of the Abstinence Violation Effect is of crucial importance. In the next chapter I will critically evaluate Marlatt's reformulated AVE (the most recent version of the AVE) and then offer a reformulation in purely attributional terms that I believe avoids the above criticisms.
CHAPTER THREE
THE ABSTINENCE VIOLATION EFFECT - A REFORMULATION

The AVE is a cognitive/affective reaction to an initial violation of an abstinence rule, forbidding or restricting a particular behaviour (George & Marlatt 1989; Marlatt, 1985a, 1985b). This reaction is an important mediator of the relapse process and as such in part determines whether a lapse becomes a full-blown relapse. To briefly summarise, the AVE has two major components, an attribution as to the cause of the lapse and the affective reaction to this attribution. How individuals view the initial lapse determines in part whether they resume adherence to their abstinence rules. Marlatt argues that the intensity of the AVE will be greater if an attribution is made to factors that are stable, internal and global and perceived to be uncontrollable. The AVE is an dimensional construct and the more intense the AVE is, the greater the probability of relapse.

REVIEW OF THE LITERATURE

There has been no published empirical research into the AVE in the area of sexual aggression although a small amount of research has been done in other areas with addictions. I will critically review this literature and following a critique of Marlatt's recent version of the AVE, present a reformulation of this construct and discuss its advantages.

It is possible to divide the existing research into two groups based on its overall strategy, (a) studies where the existence of the AVE is either not the primary focus of the research, or else it is indirectly inferred, and (b) research that attempts to directly measure
the components of the AVE and thereby establish its existence. The former line of research provides less satisfactory evidence for the AVE and I will review this first.

There has been some interesting research into the cognitive mediators of dieting and compulsive eating (Heatherington & Baumeister, 1991; Jansen, Merckelback, Osteerlaan, Tuiten, & Vanderhout, 1988; Polivy & Herman, 1991; Ruderman, 1985). There is some evidence that restrained eaters overeat after the disruption of self-control of caloric intake (Ogden & Wardle, 1991; Ruderman, 1986). This process is mediated by cognitive mechanisms similar to the AVE, however, the literature describing this research has tended to focus on constructs like restraint and counter-regulation (Polivy & Herman, 1991; Jansen et al., 1988). The researchers have not tended to explicitly test for the AVE, although some (Ogden & Wardle, 1990) have done so implicitly (see below).

Barrios and Niehaus (1985) investigated the role of self-efficacy and the AVE (Marlatt's first version) in precipitating relapse in smokers. They used an established self-efficacy based questionnaire to determine whether sex of the subject and duration of smoking history affected self-efficacy, and whether relapse episodes were associated with negative moods. They hypothesised that smoking precipitated by negative affect should lower self-efficacy and increase the chances of relapse and that successful quitters should report higher self-efficacy than unsuccessful quitters. The results supported these hypotheses. Although their study did not include a measure of the AVE, Barrios and Niehaus argued that their results provided evidence for this effect. This conclusion was based on the hypothetical relationship between negative mood states, low self-efficacy expectations and relapse.
An obvious weakness of this study is the failure to measure the components of the AVE. The reliance on Marlatt's earlier formulation of the AVE is also a problem.

Kirkley and Fisher (1988) examined the validity of the RP model of relapse in diabetics. Insulin dependent and non-insulin dependent diabetics were interviewed regarding their most recent dietary violations and the results coded according to the type of HRSs involved. In addition, the subjects were asked to describe the main reason for violating the diet, any thoughts or feelings that precipitated the lapse, feelings about the violations and whether the violation was followed by a relapse. They concluded that there was no evidence of the AVE in this patient population. The majority of both subject groups reported no negative emotional reactions to their dietary violation. Of those who did experience negative affect following a lapse, only a minority continued to stay off their diets. The majority of the sample were, however, under continued poor metabolic control. Interestingly, a number of subjects (17%) reported lapsing under the influence of a positive mood state.

A weakness in this study is the lack of specific attributional and affect measures. Therefore the authors are not able to identify the hypothesised changes in the attributional dimensions that accompany the AVE. Another problem is the lack of commitment of the subjects to their treatment regime. Therefore, it is not surprising that a lapse failed to lead to the AVE.

Schlundt et al., (1989), examined the eating behaviour of obese women by conducting a microanalysis of their eating diaries, which included a record of HRSs. They also asked subjects to check a list of eighteen adjectives describing positive and negative physical and emotional feelings at the time of the eating episode. In addition,
subjects made judgements describing their behaviour and perceptions at each episode. These included rating their degree of craving, urge to over-eat, presence of forbidden foods, degree of impulsivity and whether they felt they had eaten too much. Their results suggested that eating behaviour is partially controlled by environmental, cognitive and affective variables as opposed to only biological variables. The positive relationship between over-eating, loss of control and degree of impulsivity was thought to suggest the AVE.

A good feature of this study is the attempt to specifically assess emotions during eating episodes. The naturalistic design is also a commendable aspect. However, a major difficulty is the failure to specifically measure attributional dimensions.

Haaga (1989) used the RP framework to evaluate claims that the Articulated Thoughts during Simulated Situations (ATSS) paradigm is more valid than endorsement methods of cognitive assessment. A major subsidiary hypothesis was that low self-efficacy expectations and a high AVE should predict relapse. He used the Curry et al., (1987) definition of the AVE where measurement of the attributional (dimensions of internality, stability, globality) and the affective (guilt) components is by seven point scales. He assessed the cognitions of abstinent smokers shortly after lapsing and found that a high AVE failed to discriminate lapsers from recoverers.

Although Haaga's design allowed for the measurement of guilt (within the ATSS procedure) he failed to assess affect in a comprehensive manner. In addition by using the Curry et al., (1987) definition of the AVE, he does not adequately assess the attributional dimension of controllability (see below); arguably a core component of the AVE.
Kales (1990), examined attributions towards food groups among bulimic individuals and the reported contents (safe versus forbidden foods) of both binge and non-binge eating episodes. Subjects recorded total daily food intake for a week before arriving at the testing sessions and listed five foods, rated in order of intensity, in each of two food categories labelled "safe" and "forbidden". The Foods Attribution Rating Scale provided pretest information about subject's beliefs regarding specific foods. The results showed a strong association between attributions and dichotomous attitudes about specific foods, and the content of binge and non-binge episodes. Kales concluded that the connection between eating forbidden foods (the perception of abstinence violation) and the consequent loss of control expressed in binge eating behaviour, suggested an AVE. However the study failed to specifically measure attributional dimensions and affect and therefore is not in a good position to provide evidence for the AVE.

Bradley, Gossop, Brewin, Phillips, and Green (1992) investigated the reaction of opiate addicts to abstinence violations and whether their subsequent attributions predicted future drug use. Attributions were measured in two ways. First by using a measure of attributions of responsibility for positive and negative outcomes and secondly, specific attributions concerning opiate use were elicited by interview questions. The attributions elicited by interview were subsequently rated by an independent researcher on the attributional dimensions of locus, stability, controllability and globality. They found that addicts who attributed greater responsibility for negative outcomes to themselves and who attributed relapse episodes to more personally controllable factors were more likely at six months followup to be either completely abstinent or else were successfully able to prevent a
lapse from becoming a relapse. The only attributional dimension, aside from responsibility, to be positively associated with abstinence, was controllability. They argued that their results do not support the importance of the attributional dimensions of stability or globality and therefore do not support the AVE construct.

A problem in this study is the failure to measure attributions at the time of the lapse rather than retrospectively. In addition, the researchers coded the subjects' interview attributions into the relevant dimensions as opposed to using a direct rating method. According to Benson (1989) and Russell (1982), this is a less valid way of assessing attributional dimensions. Another problem is the failure to measure affect at all.

The above studies, although frequently supportive, failed to specifically target the cognitive and the affective components of the AVE. Five recent studies have focused more specifically on the AVE and as such deserve closer attention.

Curry, Marlatt, & Gordon, (1987) provided evidence for the attributional component of the AVE in smokers. The measurement of the AVE (see below) consisted of obtaining an average of three attributional dimensions. Attributions for responsibility following initial lapses were assessed both prospectively and retrospectively. Subjects were presented, in the former condition, with six hypothetical situations in which people might be tempted to smoke, and asked to imagine themselves in each situation. They were asked to fill out the scales twice, once for each of two outcomes, abstinence and smoking. They identified a cause for the outcome and filled out attribution rating scales traversing the attributional dimensions of locus, stability and globality. In the latter treatment condition, subjects who had lapsed also supplied retrospective causal
attributions for initial smoking episodes using the same rating scales. Guilt and stress were measured on 7 point rating scales. Their results indicated that participants who relapsed following a slip reported a significantly larger AVE, than those who resumed compliance with their abstinence rules. Interestingly, the AVE score emerged as the strongest predictor of later smoking.

A problem with this research project is the failure to measure affect adequately; only guilt and stress were assessed. In addition, one of the attributional measures (the prospective measure using hypothetical situations), confounds attributional style with post-event specific attributions. The important outcomes as far as the AVE is concerned are not those described in the hypothetical situations, but rather, situations specific to the individuals concerned. In the condition containing the hypothetical HRSs, the individual smokers were asked to make attributions concerning situations they may have never experienced, rather than about their own lapses or possible lapses.

Another problem is their failure to directly measure the controllability dimension or to include it in their definition of the AVE (higher scores on the attributional dimensions of locus, globality and stability). Although Marlatt did not include controllability as part of the attributional component of the AVE, he does stress its importance in intensifying negative affect.

Birke et al., (1990) investigated the impact of the AVE on relapse in illicit drug users. Subjects were interviewed in their own homes and completed a semistructured interview and an attributional measure. The attributional style of abstainers and relapsers were examined besides the HRS precipitating resumed drug use. They used Marlatt's earlier version of the AVE (Marlatt & Gordon, 1980) in
which both cognitive dissonance and attributions combine to produce
the AVE. The AVE was measured (see below) by modifying the
Attributional Style Questionnaire (Peterson, Semmel, von Baeyer,
Abramson, Metalsky, & Seligman, 1982). Their results did not
support the existence of the AVE and they argued that perhaps it was
not as relevant for illicit drug users as for users of other addictive
substances.

A major difficulty with this study is the measurement of
attributional style rather than post-event specific attributions. In
Marlatt's model of the AVE it is the person's attribution for a specific
outcome or behaviour that is important rather than attributional
style. This represents a different level of analysis and arguably
undermines their conclusions concerning the AVE. They do not
measure affect or emotion at all or assess the attributional dimension
of controllability.

Ogden and Wardle (1990) examined the relationship between
attributional style and dietary compliance in restrained eaters. They
also examined whether attributions mediated the transition from a
lapse to a relapse. Although they did not explicitly mention the AVE,
it is clear from their discussion of Marlatt's RP model and the
perceived relationship between a lapse and attributions, that they
were referring to this process. Their results indicated that while an
internal attributional style for negative events was associated with
more diet breaking episodes, attributions did not differentially predict
a lapse versus a relapse. The results also suggested that neither the
internality nor stability attributional dimensions successfully
predicted a relapse. Their results did not support the AVE.

There are a number of problems with this study. First, Ogden
and Wardle (1990) do not explicitly label the AVE when it appears
obvious that they are using this construct. They also mistakenly conceptualise the cognitive component of the AVE in terms of attributional style rather than post-event specific attributions. Additionally, there is no attempt to measure affect at all and therefore their (implicit) conclusions concerning the AVE are not valid.

In an important study Collins and Lapp (1991) investigated the AVE in social drinkers. In a cross-sectional test of the AVE a community sample of social drinkers completed measures of perceived efficacy for controlling alcohol consumption and causal attributions for drinking related events. They developed the Drinking Attributional Style Questionnaire to assess attributional style for drinking related events. They addressed the role of emotion in the AVE (see below) by including a measure of negative affect, the Beck Depression Inventory (BDI). One of their major hypotheses was that if the AVE occurs among social drinkers, then attributional style and measures of alcohol restraint (control) should predict alcohol problems and greater consumption.

They concluded that the tendency to attribute causes of drinking related events to internal, stable and global characteristics, in association with elevated BDI scores, predicted higher levels of alcohol consumption and related problems. This was thought to provide some evidence for the AVE.

An impressive feature of Collins and Lapp's study is their acknowledgment of the importance of the affective component of the AVE, although unfortunately the BDI is not a measure of emotion or affect (see below). A problem with their method is the use of attributional style as a measure although they do focus on specific drinking related events. They also fail to include an adequate measure of the controllability dimension.
Finally, Schoeneman, Hollis, Stevens, Fischer, and Cheek (1988) compared smokers who had relapsed after a period of abstinence with those who had lapsed but returned to abstinence. In a retrospective study they telephoned subjects one to two years after they had completed a smoking cessation programme and assessed their attributions, emotions and expectations following their first lapse. They were particularly interested in whether or not the two groups were discriminable in terms of characterological versus behavioural self-blame, as the former was thought to be an important part of the AVE. In terms of their hypotheses Schoeneman et al., expected that relapsed subjects would show a more intense AVE with greater endorsement of characterological causes, while those who returned to abstinence would engage more in behavioural self-blame. They used a modified attributional style test and a shortened version of Russell's (1982) Causal Dimension Scale to measure attributions and attributional dimensions retrospectively. Emotions were assessed by using 16 five point scales, one for each of sixteen emotions. The results indicated that while relapsers were more likely to ascribe lapses to characterological causes, there was no difference between the two groups on the attributional dimensions or emotion scales. These results did not provide clear support for the AVE.

A commendable feature of this study is the attempt to comprehensively measure emotions and post-event specific attributions. However, the measures used to assess both are inadequate. They do not use an established and psychometrically valid measure of emotion, and in addition the shortening of the CDS may have reduced its reliability. Another difficulty is the retrospective nature of the design. The failure to discriminate between lapsers and relapsers may be due to the lack of emotional immediacy of the lapse, given the
retrospective nature of the study, as well as the inadequacy of the measures used.

The research evidence for the AVE at this stage is a mixture of supportive and unsupportive studies. The major problem is that the majority of the research is guided by a flawed AVE construct (see below) and therefore, because of this, undermined by inadequate measurement strategies. It would be a valuable extension of the research into the AVE to focus more on the dimension of controllability and assess a wider range of emotions (Lazarus, 1991a).

Concerning the tendency of most researchers to measure attributional style rather than post-event specific attributions, this is an empirical question. It does raise the important issue whether or not stylistic or trait cognitive variables are more important than specific state ones in causing relapse and its associated processes.

DEFINING THE AVE CONSTRUCT

It is obvious from the above literature review that much of the previous research into the AVE has been flawed by inadequate measurement strategies. To test the AVE hypothesis it is necessary to measure both emotions and attributional dimensions. I will now critically examine the way some of the more important studies reviewed above, have operationally defined the AVE.

Haaga, (1989) and Curry et al., (1987), conceptualise the AVE as a combination of internal-external, stable-unstable and global-specific attributional dimensions and by obtaining an average (in these studies, the higher the score, the greater the AVE) arrived at a single AVE score. A problem in their approach is the failure to include the attributional dimension of controllability. However, they are simply
following Marlatt's model of the AVE in this respect (Marlatt, 1985b). Although Marlatt does discuss the important role of the perception of uncontrollability in creating the AVE, he does not explicitly include it as part of the attributional component. An additional difficulty is their failure to assess emotion or affect in a comprehensive way. A positive feature of the definition of the AVE used in these studies, is the combining of the attributional dimensions. Marlatt views the AVE as a composite construct and the above measurement strategies reflect this fact. The difficulties with Marlatt's formulation of the AVE are discussed in the next section.

Collins and Lapp (1991) developed the Drinking Attributional Style questionnaire to assess explanatory style as applied to drinking related events. They modelled this measure on the Attributional Style Questionnaire (Peterson et al., 1982) used extensively in work on the attributional underpinning's of depression (Abramson et al., 1989). As noted earlier, they measured affect using the Beck Depression Inventory and a difficulty here is that the BDI is not a measure of emotion or affect, but rather, a measure of depression. Collins and Lapp used a composite score of causal attributions for positive and negative situations to define the attributional component of the AVE, and found that the tendency to attribute causes of drinking related events to internal, stable and global characteristics contributed to a higher maximum number of drinks and greater number of alcohol related problems. As discussed above, the use of an attributional style measure is a problem with this study.

Birke et al., (1990) used the attributional style questionnaire to assess locus, stability and globality of attributions as a way of measuring the Abstinence Violation Effect in illicit drug users. They compared abstainers and relapsers on the three attributional
dimensions and this constituted their measure of the AVE. The failure to include emotion and the confounding of attributional style with post event specific attributions are problems in this study.

Ogden and Wardle (1990) defined the AVE in terms of locus but also compared relapers and abstainers on the dimensions of globality and stability. They measured attributions using the Life Evaluation and Attributions Rating Scale (LEAR) which is an attributional style measure.

There are problems with the way these studies have operationally defined the AVE. They have either neglected to adequately measure emotion or have not combined the attributional dimensions in a way that reflects Marlatt's definition of the AVE as a composite construct. I will describe the definition used in this thesis in chapter four.

**PROBLEMS WITH MARLATT'S VERSION OF THE AVE**

Marlatt uses a variety of conceptual sources in his formulation of the AVE. I argue that the integration of such diverse theories has made his analysis somewhat cumbersome and has lead to inadequacies. This has resulted in a narrowing of the range of application of the AVE (and related attributional processes) and in the failure to accommodate the full number of attributional pathways to relapse or sexual offending. Because of this Marlatt failed to include in his model of the relapse process a number of important behavioural possibilities that are relevant to the conceptualisation of relapse, and clinical intervention.

The essence of the problem with the AVE as currently conceptualised is the reliance on Weiner's earlier work (1972) which
means that causes are defined on an a priori basis (e.g., luck, effort, ability). The use of this older version is important for two reasons. The relative narrowness of this view of attribution has meant Marlatt needed to broaden the theoretical base to include constructs such as objective self-awareness to account for the AVE phenomena. This has lead to an unfortunate degree of cumbersomeness.

Secondly, this reliance on Weiner's (1972) version leads to a narrower view of the possibilities involved in the relapse processes (AVE) than is currently desirable. Both of these problems are avoidable by using the more recent and broader attributional theory proposed by Weiner in 1986. However, before presenting this reformulation I would like to detail the difficulties in the current AVE construct.

The use of Weiner's (1972) earlier theory ignores that attributions represent naive causal explanations and are therefore best construed as lying along dimensions such as locus, stability and controllability (Weiner 1986) rather than representing categorical choices between discrete alternative explanations. An illustration of Marlatt's confusion between type of causes and causal dimensions is his translation of Weiner's earlier "basic causes" such as ability (a stable internal factor) to coping skills (unstable internal factor). This is not necessary if a person is rating an attribution directly onto attributional dimensions.

Marlatt also fails to distinguish between different kinds of affect or emotions and their possible differential impact on behaviour. In his recent revision of attributional theory, Weiner (1986) explicitly argues that different emotions occur as a consequence of different causal inferences (via dimensional loading). These emotions in turn
have different effects on behaviour because of their different information value.

The examples of shame and guilt illustrate the relationship between causal dimensions and emotions. Shame arises when the cause of some negative event is attributed to internal, uncontrollable factors such as a lack of ability, whereas guilt arises from attributions to internal but controllable factors such as a lack of effort. As a consequence, these two emotions may have quite different motivational consequences, both at the time these emotions arise and in terms of avoiding future risks. For example, if an alcohol dependent individual committed to abstinence, blames himself for not having made a big enough effort to avoid a recent lapse, then the consequent guilt may prompt him to escape from the HRS and thereby avoid relapse. On the other hand, if he attributes the cause to his "deficient personality" (a stable, internal and uncontrollable cause), he will feel ashamed, and see further effort as hopeless. This would most likely lead to relapse. Marlatt, however, speaks of these emotions as if they are equivalent.

In terms of theoretical simplicity (Hooker, 1987) Marlatt's reliance on a diverse range of theories has resulted in confusion where different, often conflicting mechanisms are said to be causally linked to the AVE. For example, a discrepancy between ideal and actual behaviour leads to negative affect independently of an attribution. Therefore there are two types of negative affect generated by quite different mechanisms. Secondly, attributions concerning the cause of the lapse are understood to drive ongoing addictive behaviour either by negative affect (a drive/energy pathway) or as a consequence of low self-efficacy expectations (a cognitive pathway) or possibly by both. Weiner's (1986) recent formulation of attribution
theory does not have this limitation and can be used to reformulate the AVE.

Marlatt's claim that the emotional impact following violation of abstinence rules is greater when ascribed to internal rather than external factors is mistaken. It is not a question of being greater but rather different; different affective or emotional consequences follow from different attributional dimensions.

Finally, Marlatt's formulation of the AVE and associated relapse process is not able to accommodate the full range of attribution/relapse links that are implied by current theorising and which have different treatment implications. The AVE probably only represents a few of the possible relationships between attributions and lapse or relapse.

These short-comings do not diminish the heuristic value of the AVE construct. However, I argue that it needs to be reformulated within purely attributional terms to avoid the above problems.

ATRIBUTION AND ATTRIBUTIONAL THEORIES

Clearly attributions (and attributional dimensions) comprise a fundamental part of the AVE. To understand the influence that attributional theories have had on clinical psychology in general, and the sex offender field in particular, it is helpful to briefly review the area.

Attribution and attributional theories have had a distinguished history within social psychology (Fiske & Taylor, 1984; Hewstone, 1989; Weary, Stanley, & Harvey, 1989). One of the major consequences of the cognitive revolution in psychology has been an increased interest in attribution and attributional theories,

Causal attributions are defined as inferences concerning why events occur and involve the explanation of interpersonal situations, natural events and individual characteristics (Weary et al., 1989). Causal attributions help people to obtain their goals and in situations of uncertainty, facilitate successful adaptation and mastery of the environment, that is, they enable people to understand, predict and control the world. A distinction is frequently drawn between attribution theory, the study of the antecedents and the formation of attributions, and attributional theory, the study of the consequences of attributions and their impact on behaviour, emotion and cognition (Hewstone, 1989; Weary et al., 1989; Weiner, 1986).

Heider (1958, 1944) founded the area of attribution research and theory. His seminal book, The Psychology of Inter-personal Relations (1958), focuses on the way people explain the actions of others. His approach is phenomenological and concentrates on the reasons people give for other's actions, rather than on underlying unconscious causes. He also explicitly endorses the metaphor of people as lay scientists engaged in constructing theories about the world in order to understand and adapt (Weary et al., 1989). Jones and Davis (1965), other important early attribution theorists, contributed significantly to research with their model of correspondent inferences. This theory is essentially concerned with the factors that influence a person's attributions of intentions and dispositions to other people. Kelly (1972, 1967) and Bem (1972) extended attribution theory to self-perception. Kelly (1967) further
developed the person as scientist metaphor and believed that when people make causal attributions they are functioning very much like naive statisticians undertaking an analysis of variance. He also introduced the concept of causal schemata (1972) to account for situations where individuals rely on experience when forming causal explanations rather than engaging in systematic data analysis. In these situations they do not have access to multiple instances of an event. It is arguable that this theoretical development opened the door for the introduction of unconscious or automatic attributional processes (Lazarus, 1991b).

Contemporary research in attribution and attributional areas has moved well beyond social psychology (Hayes & Hesketh, 1989). It is now in the process of providing the social-cognitive underpinning of cognitive-behavioural therapy (Bradbury & Fincham, 1990; Fosterling, 1986; Hilton, 1990; Iacobucci & McGill, 1991; Kenardy, Evans, & Oei, 1990; Weiner, 1986).

WEINER'S ATTRIBUTIONAL THEORY

Weiner's (1972) theory provides the attributional underpinning's to Marlatt's latest model of the AVE, however as noted above, there are problems with both of these. His recent work (Weiner, 1986) can be used to reformulate the AVE in a way that avoids these criticisms and increases its range of application.

This recent attributional theory (Weiner, 1986) is a significant contribution to the motivation and emotion literature and has recently been used in a number of criminal justice research projects (Larsen, 1992; Mackay-Lawes, 1992). There is convincing research evidence for the relationship between attributional dimensions and

Weiner's model has been subject to criticism from other researchers who have challenged his claims concerning the appropriate number and type of attributional dimensions (Weary et al., 1989). For example, Benson (1989) includes globality in a test he has developed to measure attributional dimensions, while others have singled out intentionality and universality as being of importance (Weary et al., 1989). However these disagreements do not detract from the enormous influence that Weiner's work has had in the social cognitive and clinical area. I will now describe his recent attributional theory in some detail.

In his 1986 book, Weiner develops a theory of motivation and emotion that is based upon the construct of causal attributions. He defines a cause as an answer to a why question concerning an event or outcome. A cause is inferred by an individual and therefore the study of attributions involves phenomenology; attributions are naive causal explanations. He supports his view that all individuals engage in causal explanations to facilitate adaptation by citing evidence that people engage in spontaneous attributional activities (Weiner, 1985, 1986) rather than attributions being an artefact of the experimental situation. More specifically, individuals formulate causal explanations following negative, unexpected or important outcomes (see figure 6). He cites research evidence to support the existence of at least three attributional dimensions. Attributions differ along the major dimensions of stability, locus and controllability (Weiner, 1986). Stability refers to whether or not the identified cause is seen as enduring. For example attributing behaviour to a lack of ability may involve accepting that the cause of the behaviour is a stable, relatively
unalterable factor. Stability also functions as a magnifier, potentiating the affect determined by the remaining two dimensions, presumably because of the more enduring nature of the cause.

Locus of control refers to whether the cause is seen as internal to the person (e.g., a disease or a personal deficit), or as externally imposed (e.g., the weather or the action of another person). Controllability concerns the person's sense that the cause was volitional (i.e., able to be influenced by effort or action). He concedes that there is evidence of at least two other attributional dimensions, global/specifc and intentional/unintentional, but builds his theory of motivation and emotion around the three dimensions outlined above. Weiner argues that an attributional search begins with an outcome (see figure 6) that is perceived to be important, unexpected, or negative. A number of variables affect an attributional search and these include a person's history, causal rules or schemata and salience of the outcome. He views goal expectations as an important determinant of behaviour, which are related to attributions. Changes in expectations following an outcome are influenced by the perceived stability of the cause. Thus a stable cause is expected to occur with greater certainty in the future, whereas an unstable cause may not alter future expectations.

Attributions not only enable the person to understand, predict and control the world, they also have a differential causal impact on emotional reactions. The relationship between different causal ascription's and different emotions is essential to understanding the AVE and it relevance for relapse.

Weiner argues that attributions typically precede and determine a person's affective reaction to an outcome. The link between goal expectations, attributions and behaviour is strengthened by emotion
Fig. 6: Attributional theory of motivation and emotion
(i.e., the value of a goal relates to its emotional impact). Therefore if something has positive value for a person, its attainment will have positive emotional consequences. The perception of what caused an outcome will in part determine the emotional response to it. In Weiner's theory, cognitions of increased complexity enter into the emotional process and further refine and differentiate emotional experience (see figure 6). He distinguishes between relatively simple attribution independent emotions such as joy or pleasure that do not result from a causal search and emotions that do, which are definitionally cognitively more complex. This is of relevance regarding the AVE in that the lapse itself does not directly determine affect, aspects of the perceived cause do. In a sex offender committed to abstinence, a lapse is seen as a negative outcome; but it is the attribution regarding the cause of the lapse that determines his emotional response.

Weiner suggests that the nature of the causal attribution for an outcome is uniquely related to particular differentiated emotional reactions. However, the links between attributions on the one hand and emotions on the other are not straightforward. Each emotion is related to a particular, or a combination of, attributional dimensions. The future related emotions such as hope and fear typically involve two attributional dimensions. For example, hopelessness requires stable and internal attributions for failure, whereas confidence occurs when success is experienced and attributed to a stable internal cause. As stated above, there is convincing research evidence for the relationship between attributional dimensions and specific emotions (Graham & Weiner, 1991; Graham & Weiner 1986; Kelly & Forsythe, 1984; Weiner, 1986, 1985). However, some theorists (Lazarus, 1991a, 1991b; Lazarus & Smith, 1988), believe that an attributional approach
to emotions is necessarily incomplete. Lazarus (1991b) argues that attributions only occur as components of secondary appraisal processes and are not able to accommodate situations where primary appraisal is of paramount importance. Clearly, further research is necessary here.

For ease of discussion, I will focus on the attributional dimensions of locus and controllability in the rest of this chapter.

As stated above, Weiner argues that the links between attributions on the one hand and emotions on the other, are not straightforward.

First, there exist the four possibilities defined by the two major dimensions that I am considering: locus and controllability. Weiner suggests that the causal locus (internal vs external) influences self-esteem such that when a negative outcome is ascribed to an internal cause, this reduces perceptions of self-worth. If the cause is thought to be external, then self-esteem is unlikely to be affected. Conversely, if a person attributes the cause of a positive outcome to internal factors their self-esteem is enhanced. Guilt is related to controllability and if a person perceives him/herself as having been able to control a negative outcome (i.e., internal and controllable attribution), then he/she will accept personal responsibility for a failure to avoid the outcome; they will blame themselves and feel guilty because they could have controlled it. If, however, a negative outcome is seen as being caused by factors internal but uncontrollable (e.g., personal deficiencies) then shame is experienced.

As I have already noted, differential motivational consequences occur with shame and guilt due to the different loading upon the controllability dimension. Where a person experiences guilt, they see themselves as having had control over the cause of the negative
outcome and thus can attempt to reduce the future probability of the event. Shame, on the other hand, which results from perceiving the cause of failure to be personal but uncontrollable (e.g., lack of ability), generates little motivation for change if there is perceived to be no chance of improvement.

Secondly, an additional conceptual issue needs to be considered. There is a special case where the cause of the negative and salient outcome happening to oneself is perceived as being not only external but also resulting from the actions of another individual, rather than non-volitional aspects of the environment such as the weather.

This causal perspective is especially important where the individual is seen as having control over whether or not the situation occurs. In this situation, the probable emotional response is anger directed at the other person who may be seen as blame-worthy. Unfortunately such a state may not only lead to a relapse but also to retributive action against the person seen as responsible. In Weiner's terms this would be seen as an external controllable cause (where controllable means controllable by anyone). However, in this thesis for ease of discussion I will refer to it as a variant of an external uncontrollable cause.

To illustrate. A sexually aggressive offender who is committed to avoid reoffending has an argument with a woman. This results in him feeling angry and leads onto fantasies of performing sexually abusive acts, that is, a lapse occurs. If the offender is attempting to restrain his deviant behaviour, this will be seen as a negative and salient outcome and therefore a causal search will occur. In this particular situation, the cause of the lapse will be seen as being the woman with whom he has argued and she will be seen as having had control over the fact they argued (e.g., "she was just trying to get at
me"). This attribution may lead to an escalation of anger and therefore result in a sexual attack directed towards her.

A REFORMULATION OF THE ABSTINENCE VIOLATION EFFECT

Reformulating the AVE in terms of Weiner's recent version of attributional theory (Weiner, 1986) will, I argue, provide a clearer picture of the process and have more beneficial implications for treatment.

As in the case of the earlier relapse formulation, when a lapse occurs, and is seen by the offender as negative and important, an attributional search occurs. The particular causal attributions made reflect the different emotional and motivational possibilities mentioned above and these are summarised in table 1.

If the cause is seen as internal and controllable (e.g., a lack of personal effort) the offender may be expected to feel guilty and experience lowered self-esteem, yet he is likely to remain hopeful and continue to adhere to his goal of abstinence. If, on the other hand, the cause of the lapse is perceived as internal and uncontrollable (e.g., the result of a lack of willpower or "addictive" personality) the person is likely to experience shame, lowered self-esteem and not attempt to cope with the situation; therefore thus a full-blown relapse is more probable. The cause of the lapse may be seen as external but controllable (e.g., the HRS is seen as the trigger but the person sees that he could remove himself) and the resulting affect is likely to be guilt. Again, guilt is likely to motivate the offender to avoid relapsing.

Where the cause of the lapse is external but uncontrollable, there are two possibilities, depending on whether the externally
Table 1. Attribution-affective links

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Illustrative cause</th>
<th>Offender’s affect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal controllable</td>
<td>“It’s my fault. I have not tried hard enough to keep to my plan. I should not have driven this way home.”</td>
<td>Guilt</td>
</tr>
<tr>
<td>Internal uncontrollable</td>
<td>“I have no willpower. I am a disgusting person.”</td>
<td>Shame</td>
</tr>
<tr>
<td>External controllable</td>
<td>“This kid is really sexy but I could stop looking at her.”</td>
<td>Guilt</td>
</tr>
<tr>
<td>External uncontrollable</td>
<td>“It’s not my fault I am aroused, there are sexual images everywhere.”</td>
<td>Hopelessness</td>
</tr>
<tr>
<td>(nonperson cause)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External uncontrollable</td>
<td>“She is stupid to be here alone. It’s her fault I’m aroused.”</td>
<td>Anger</td>
</tr>
<tr>
<td>(person cause)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
attributed cause is viewed as resulting from unfortunate circumstances or from the actions of another person. Clinicians frequently note the tendency of clients to "excuse" themselves by attributing responsibility for lapses to, for example, partners or stress (i.e., external and uncontrollable). When some unfortunate but unavoidable circumstance is seen as the cause of the lapse, unhappiness is an expected consequent emotional state. If the cause is also seen as stable, hopelessness would occur. In these circumstances the offender will see no point in trying to avoid a relapse. Where the cause of the lapse is seen as being the result of another person's actions (i.e., where the offender sees, for example, the victim is the cause of his lapse), the woman or child is seen by the offender as having put themselves in a risky situation. The victim may be seen as having been deliberately seductive or careless. Under these circumstances the offender will consider himself justifiably angry at the victim for having provoked him and thus feels justified in assaulting him/her.

The attributional scenarios above constitute a general set of possibilities and seem to represent the essence of the reformulated AVE. Certainly, a number of other variations or examples are possible and it may be that slight variations in the circumstances may result in somewhat different emotional responses. Weiner (1986) argues that locus, controllability and stability are best thought of as dimensions rather than categories, so that the degree to which attributions reflect locations along these dimensions, will influence the affective response.
An important part of theory appraisal involves conceptual
elegance, explanatory depths, as well as heuristic value and
integration across psychological domains (Haig 1987; Hooker, 1987;
Staats, 1991). I believe that the reformulated AVE construct is
broader, more integrated, and more parsimonious than the previous
conceptualisation of the abstinence violation process. Therefore, it
represents not only a conceptual improvement over the earlier
version, but also has clear advantages for clinical work with sex
offenders.

The reformulated AVE avoids the need to add concepts from
self-efficacy theory, efficacy expectations are part of Weiner's (1986)
account. Similarly, for self-awareness theory; it is not necessary to
refer to additional, attentional mechanisms, nor is it necessary to
invoke a comparison of ideal and actual behaviour. The conflict
view of motivation, embodied in cognitive dissonance theory, is also
unnecessary. Nor does the reformulated AVE require a reference to
drive theory to account for the escalation and maintenance of
addictive behaviour. There is a clear link between cognition,
emotion and behaviour in Weiner's attributional theory. It predicts
failure to cope entirely as a consequence of specific attributions and
the emotional states they induce.

The reformulated AVE makes clear predictions concerning the
links between cognition, affect and behaviour, and recognises the
greater range of emotional possibilities in response to particular
causal attributions, than does the earlier AVE construct. These
differing emotional responses have different implications for
outcome and need to be addressed quite specifically in treatment if we are to minimise resistance to relapse.

It is possible that different groups of sex offenders have different attributional routes to the final common pathway of behaving in a sexually offensive or aggressive manner. For example, anger and hostility towards their victims is more commonly observed in rapists (Segal & Stermac, 1990) than in child sex offenders, which suggests that rapists are more likely to attribute blame for their lapses to woman (i.e., external and uncontrollable). Child molesters more often experience guilt and shame about their offences which tends to suggest that they attribute responsibility to themselves, (i.e., internal and either controllable or uncontrollable causes).

Because sexual aggression involves a chain of behaviour or responses, it is possible that causal attributions and their consequent emotions may be modified if this chain unfolds over time. Attributions occurring after important events are clearly dynamic rather than unchanging. Therefore it makes sense to examine specific changes in both causal attributions and emotions across the offence behaviour chain. For example, a child molester may argue with his wife, become angry or depressed and begin to fantasise about having sex with a child. At this point he may attribute blame for his fantasising to the "bitchy" nature, as he sees it, of all females, thereby justifying the initiation of the behaviour chain leading to an assault. However, once he is in a HRS, such as a park, waiting for a potential victim to appear, his anger may have dissipated and he may see himself as unable to exert control at this point. Consequently he will feel shame at being unable to stop his planned attack. These possibilities suggest that one aspect of research into attributional
process should examine attributions and emotions at varied points in the relapse sequence.

Taking into account the above criticisms of Marlatt's work, it is important not to study the AVE, and its related processes, only as defined in his model. That is, as likely to be more intense if attributions are global, internal and stable. An obvious problem is that Marlatt has neglected the important dimension of controllability, although as stated above, it is certainly implicit in his RP model of the AVE. In Marlatt's construal of the AVE (a dimensional and composite construct) high globality, stability, and internal locus are located at one end of a continuum, with specific, external and unstable attributions at the other. It is also not clear how the other attributional dimensions, or the other clusters of dimensions as postulated by Weiner, are related to a lapse/relapse. There are important advantages in considering the attributional dimensions separately as outlined in the chapter on reformulation. Different attributional dimensions are hypothesised to cause different emotions, which in conjunction with expectations, can ultimately lead to a lapse or relapse.

**CLASSIFICATION**

There has been no research into the relationship between offender type and the AVE, although clearly this is an important issue that may have an impact on relapse. I will briefly discuss the problem of classification and outline the typology used in this thesis.

There have been a number of different classification systems advocated in the literature on child molestation (Knight & Prentky, 1989; Lanyon, 1986). They have ranged from theoretically driven
typologies to the relatively atheoretical criteria of the DSM III-R (American Psychiatric Association, 1987). The controversy continues regarding the relative merits of the competing systems, and indeed, over the more fundamental issue of classification itself (Millon, 1991; Simon, Sales, Kaszniak, & Kahn, 1992). Clinical psychology and psychiatry have long debated the issue of classification and diagnosis (a form of classification) and associated problems such as whether a dimensional or a categorical system has greater validity (Millon, 1991). There have been disagreements concerning the appropriate methodology and whether classification systems ought to be theoretically or empirically derived (Knight & Prentky, 1990). Classification is valuable because it gives clinicians and researchers a common language when discussing research or clinical issues and problems. It also provides a focus for theory development by the way of identifying basic patterns in a data set. In order to theorise about a problem it is first necessary to identify it in some way (Haig, 1987). There is always more than one way to look at a data set or empirical problem; theories are inevitably under determined by the data (Haig, 1987; Hooker, 1987). When it comes to evaluating a theory or classification system (which is a lower level theory) conceptual criteria are also important, for example, simplicity, fruitfulness, coherence with other theories, logical consistency, and so on (Haig, 1987).

From a clinical perspective, one of the more helpful and heuristic classification systems in the child molestation area has been articulated by Groth, Hobson and Gary (1982), although it has been criticised (Simon et al., 1992). They classify child sex offenders (see table 2) into fixated or regressed types. Fixated offenders were viewed as suffering from arrested psychosocial development. The offending typically began in adolescence in the attempt to establish pseudo-
parental or pseudo-romantic relationships with his victims. The offending behaviour was usually premeditated, persistent, compulsive, and accompanied by firmly entrenched cognitive distortions concerning the legitimacy and beneficial nature of child-adult sexual contact.

In contrast, the regressed type of offender is seen as having had a normal psychosocial development. His offending tends to occur during times of perceived high levels of stress and is episodic. At these times he feels alienated from adults and is drawn to children who are perceived as less threatening and more accepting. The relationship with his victims tends to be a pseudo-adult one and the offending is impulsive. Contrary to the view of Groth et al., in this study, the distinction between fixated and regressed offenders is viewed in dimensional rather than in categorical terms.

It is important to stress that while any classification of sub types of child molesters is subject to debate, particularly those systems that embody psychodynamic assumptions, there appears to me to be a reasonable consensus that the broad distinctions reflected in the terms fixated and regressed have clinical value. They of course suffer the inherent problems of any categorical system, as opposed to dimensional, but remain useful and reflect a clinical heuristic (Millon, 1991).
Table 2

**Typology of child molesters**

<table>
<thead>
<tr>
<th>Fixated type</th>
<th>Regressed type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary sexual orientation is to children</td>
<td>Primary sexual orientation is to agemates</td>
</tr>
<tr>
<td>Pedophilic interests emerge in adolescence</td>
<td>Pedophilic interests usually not evident</td>
</tr>
<tr>
<td>Usually no precipitating stress/no subjective distress</td>
<td>Precipitating stress usually evident</td>
</tr>
<tr>
<td>Persistent interest and compulsive behaviour</td>
<td>Involvements more episodic depending more on stress</td>
</tr>
<tr>
<td>Premeditated, preplanned offences</td>
<td>Initial offence may be impulsive, not premeditated</td>
</tr>
<tr>
<td>Identifies with child</td>
<td>Substitutes child for adult</td>
</tr>
<tr>
<td>Male victims primary target</td>
<td>Female victims primary target</td>
</tr>
<tr>
<td>Little or no sexual contact with agemates</td>
<td>Sexual contact with child coexists with agemates</td>
</tr>
<tr>
<td>Usually no history of substance abuse</td>
<td>Offence is often alcohol related</td>
</tr>
<tr>
<td>Characterological immaturity; poor sociosexual peer relationships</td>
<td>Under developed peer relationships</td>
</tr>
</tbody>
</table>

(Adapted from Groth, Hobson, & Gary, 1982)
CHAPTER FOUR
HYPOTHESES AND RATIONALE

In this study, my aim is to extend the recent work researching the AVE into the area of sexual aggression. I set out to provide an empirical test of the AVE in child sex offenders and also to examine attributions and emotions at various points in the relapse sequence. Additionally, I am interested in whether or not emotions and attributions function more as traits across the offence chain, or rather fluctuate according to both internal and situational factors (i.e., state variables).

Although a number of researchers (Abel, Mittleman, Becker, Rathner & Rouleau, 1988; Gudjanssan, 1990; Jenkins-Hall, 1989; Pithers, 1990) have commented on the important role distorted cognitions play in facilitating both initial offending and relapse, there has been a dearth of empirical studies providing data on the AVE in sex offenders.

I will now outline the hypotheses guiding this study.

HYPOTHESES/RESEARCH QUESTIONS

This is a descriptive and exploratory study focusing on the following puzzles or hypotheses:

(a) Does the AVE occur in child sex offenders? If so, at what point in the offence chain does it occur? The issue of temporal variation over the offence chain is of importance, not only from a theoretical perspective but because of the morally driven changes in the relapse model for sexual offending, regarding the definition of the
lapse and relapse. In the other addictive disorders, a lapse is defined as the, for example, first cigarette or drink, and a relapse a return to problematic levels of addiction or pretreatment levels. This is clearly unacceptable for sex offenders. However, the temporal backward shift in the offence chain is not necessarily a reality for offenders.

(b) Do attributional dimensions change across the offence chain? Are they (and therefore the attributions or causes they reflect) more usefully conceptualised in trait or state terms? The majority of researchers into the AVE have used a modified attributional style measure. This appears to be a mistake as a lapse, which is hypothesised to precipitate an attributional search, is a unique event specific to an individual. However this is an empirical issue that hopefully this study will clarify.

Following on from the reformulation of the AVE outlined in chapter two, there is utility in also investigating the various attributional pathways to lapse and relapse separately. This involves examining the relationship of the attributional pairs outlined in table one to emotions (see below) and secondly, finding whether or not the subjects experiencing the AVE tend to cluster more into the internal-uncontrollable cell as predicted by Marlatt. Marlatt argues that the intensity of the AVE will be greater if an attribution is made to factors that are stable, internal and global and perceived to be uncontrollable. Therefore you would expect higher scores on each of these dimensions (although Marlatt does not explicitly include controllability as part of the attributional component of the AVE, he does discuss the important role of the
perception of uncontrollability in creating this effect) in those subjects experiencing the AVE.

(c) Do emotions change across the offence chain, if so, in what direction, positive or negative? Clearly, this has been a neglected area in research into the AVE. It is important to obtain more data on both the kinds of emotions associated with the AVE, and the degree of change across the offence chain.

(d) What are the relationships between attributional dimensions and emotions? What, therefore, are the different attributional pathways mediating lapse/relapse? I have argued in chapter three that Marlatt's formulation of the AVE is inadequate and probably fails to account for a number of important attributional-emotion-relapse relationships. Although this issue is of secondary importance in this study, hopefully the data obtained will suggest some trends or clarify some of these links.

(e) Do different types of offenders experience the AVE to a greater or lesser extent? Do they have different patterns of attributions (i.e., attributional dimensions) and emotions across the offence chain? As mentioned earlier, the whole issue of offender type and the AVE, or even the more general area of cognitive distortions and offender type, has been neglected in the sex offender field. Of course, a major obstacle in doing this kind of research is the lack of consensus concerning a valid classification system (Knight & Prentky, 1990; Simon et al., 1992). In this study, I am using the fixated/regressed typology (Groth et al., 1982) despite the problems of a categorical classification system (Simon et al., 1992). Because classification and the AVE are not the major focus of this study, it is
reasonable to use such an easily applied typology to obtain some initial data.

A number of hypotheses concerning the AVE follow from the typology of child molesters used in this study. First, fixated offenders would be less likely to experience an AVE following offending behaviour. Because of their entrenched distorted beliefs and attitudes concerning sex with children, and the tendency to build a lifestyle based on such relationships, it is thought unlikely that a lapse or relapse would be construed of as violating rules forbidding such behaviour. However, the regressed offenders would normally view sex with children as unacceptable; therefore they would be more likely to experience an AVE following sexual thoughts or behaviour with children.

Second, following on from this analysis, fixated offenders would experience heightened and greater frequency of positive emotions across the offence chain than regressed offenders. Correspondingly, fixated offenders would experience fewer negative emotions than regressed offenders.

Third, taking into account their persistent offending, fixated offenders would tend to make more stable attributions concerning the cause of their sexually assaultive behaviour. In view of their proclivity to base a lifestyle around pedophilic preferences, one would also expect fixated offenders to show a high rating on the attributional dimension of globality.

(f) What kind of reasons or causes do child sex offenders give for their offending? Do these reasons change across the offence chain? Although the major factor of interest as far as attributions are
concerned are the attributional dimensions, it is still important to obtain data concerning specific attributions. In a sense, reasons or causes, reflect an offender's implicit theories concerning their victims and offending, and therefore are of considerable interest for therapists. It is also important to discover whether these reasons change across the offence chain.

(g) Do the different types of sexual offenders give different kind of reasons for their sexual aggression? Similarly, it is important to gather data on the kinds of reasons different offenders give for their actual offending, and the behaviour associated with their offending.
CHAPTER FIVE

METHOD

Researchers have consistently stressed the importance of using ecologically valid methods and measures when assessing cognitive variables (Clark, 1988; Dobson, 1988; Safran & Segal, 1990; Segal & Shaw, 1988). An important finding is that at this point of time no single approach to cognitive assessment has been demonstrated to be superior to others (Clark, 1988; Haaga, 1989).

In this study I have attempted to incorporate these concerns by using an assessment method that allows the subjects to identify their own reason(s) for offending and behaviour associated with offending. In addition, I have used a direct rating approach where subjects directly rate their reported reasons on the different attributional dimensions. Regarding ecological validity, I have used an analogue approach where the subject uses his own history to construct an offence vignette and in a sense, "relives" this during the assessment session. For obvious reasons it is not possible to recreate actual offence situations so this approach creates as much realism as is practically possible and ethically permissible.

SUBJECTS AND SETTING

The subjects were undergoing the assessment phase before participating in the Kia Marama Sexual Offender Treatment Programme (Marshall, Johnston, Ward, Jones, & Hudson, 1992), a purpose built unit in a medium security prison in New Zealand, all were Caucasian and...
had provided an informed consent to be involved in the project. Seven potential subjects were excluded because they were illiterate, of borderline intelligence, or dementing. A further one man denied having committed any offence and so was not able to participate; similarly, with two men who were repeating the programme.

The testing was carried out in the laboratory of the treatment unit which had a screen to separate the subject and researcher and a comfortable chair in which the subject was seated.

**DEPENDENT MEASURES**

**The Differential Emotion Scale (DES)**

This self-report scale (Izard, Doughty, Bloxom and Kotsch, 1974) measures the presence of twelve basic emotions using a 5 point Likert Scale. These fundamental emotions are labelled interest, joy, surprise, sadness, anger, disgust, contempt, hostility (inner-directed), fear, shame, shyness, and guilt. There are 36 items, 3 per emotion, with scores ranging from 3 - 15. It has a number of different forms; the one used in this study was the DES IV a state measure designed specifically for children, young adults and adults with limited education. This version of the DES consists of 36 phrases that describe different emotions. The subject reads each phrase and indicates the extent to which it describes the way they feel. The reliability and validity of the DES has been investigated in a number of studies and its psychometric properties have consistently been found to be satisfactory (Boyle, 1984, 1987; Kotsch, Gerbing, & Schwartz, 1982). According to Izard et al., (1974) the reliability
of the state version of the DES can only be assessed in terms of the internal consistency of the items, although Boyle (1984) found the test-retest reliability for this form to be up to 0.7. Concerning internal consistency, the average coefficient alpha for the state version has been calculated to be 0.84 (Izard et al., 1974). The construct validity of the DES has been established in a number of studies and with a variety of methods, typically involving factor analysis or a comparison of the DES to similar instruments measuring constructs that overlap with discrete emotions (Boyle, 1987; Boyle & Katz, 1991; Izard et al., 1974). Factor analytic studies have revealed the presence of two secondary factors, with factor one essentially defined by a combination of negative mood states, and factor two, by positive mood states (Boyle, 1987).

The Four Attributional Dimension Scale (4-ADS)

There has been little empirical work done in the area of the measurement of attributions and attributional dimensions (Benson, 1989; Weary et al., 1989). Benson (1989), Elig and Frieze 1979, and Russell, McAuley and Tarico (1987) found that the most reliable and valid method of measuring attributional dimensions is the direct rating method. In this class of techniques the subject first states his/her reason for a behaviour or outcome and then rates the reason on attributional dimensions. Benson (1989) developed the 4 ADS which he found to be superior to Russell's (1982) Causal Dimension Scale (another direct rating scale). In contrast to Russell's Scale, the 4-ADS includes the dimension of Globality and has 4 items as opposed to 3, for each dimension. In addition, the inclusion of verbal anchoring for each
choice and more easily understood items, eliminate the need for additional administration instructions. This scale (Benson, 1989) directly relates attributions across a number of circumstances or events. The subject states the major reason or cause for an event or circumstance (they may give more than one) and then completes 16 x 5 point scales, 4 for each of the 4 dimensions: controllability, locus, stability, and globality. The scale is appropriate for use with subjects ranging in age from middle childhood to adulthood and has been found to have satisfactory psychometric properties (Benson, 1989). The median test-retest reliability coefficient has been calculated to be 0.72, with a range of 0.59 to 0.79 (Benson, 1989). Regarding construct validity, Benson (1989) found that the 4-ADS yielded results consistent with attribution theory in demonstrating predicted differences in attributional dimensions following success or failure outcomes. His results also demonstrated the independence of the causal dimensions and the predicted relationship between attributional dimensions and performance mediators such as expectations. The 4-ADS was modified slightly in this study as in the original, the internal and external perspectives of control are confounded. Consequently, "someone" in the items controllability 11 and 16 was changed to "you". In addition the direction of the controllability scores was reversed to make it consistent with the direction of the other dimensions. Therefore a high score on this dimension now means that a subject perceives himself to have little control over an outcome or behaviour, rather than the reverse.
PROCEDURE

Subjects constructed a written vignette describing their most recent or typical offence and subsequently read this onto audio tape (they were given instructions how to do this). For all men the most recent offence was also the most typical. The men were given instructions to write up to two A4 pages in the first person, present tense and to provide a description of background conditions as well as the events and actions surrounding the actual offence. Each vignette was divided into three sections according to the following rules. Segment One comprised a HRS, where the subject's sense of self-control over sexual behaviour was threatened (Pithers, 1990); Segment Two contained the lapse defined as a behaviour occurring before the actual offence, but which reflects the intention to offend and increases the probability of the offence being committed (e.g., approaching a child in the park and asking him/her to sit beside him); Segment Three described the first instance of any sexual behaviour, that is relapse.

Subjects were then asked to imagine themselves back in the situation they had described and to listen to the audio tape description of their offence. They did this individually, in private, whilst sitting in a recliner chair in a screened off area in the laboratory. At the end of each segment, they were asked to identify the major reason (they were permitted to give more than one) for the behaviour or circumstances they had just described. They then filled in both the DES and 4-ADS (the order of the questionnaires was alternated). The subjects were instructed to respond as closely as they could to how they would have responded at the time. They were also told there were no right or wrong answers and
the information they gave was confidential and would have no bearing on their possible release date. It was suggested to the men that their responses may change each time they completed the various scales but they should not try to be consistent but just reply appropriately at each point. The questionnaires were removed from the men as they had completed them. Following the completion of Segment Three, subjects were asked to focus on their emotions after sexual activity had finished. Subjects were then debriefed, especially concerning any distress experienced as a consequence of the task.

DEFINITIONS

The following arbitrary decisions were made to define the presence or absence of an abstinence violation effect. They are arbitrary in two senses; none of the theorists in the area have established any universally accepted criteria by which the effect is known and secondly, it is more likely that the effect constitutes a continuum.

In the primary analysis the Curry et al., (1987) method of defining the AVE was used because it provides a solution to the problem of integrating the scores from the different attributional dimensions in a way that is consistent with Marlatt's formulation, that is, as a composite phenomenon.

I will first use the Curry et al., (1987) definition of the AVE with the addition of controllability and average across the four attributional dimensions of globality, stability, controllability and locus, arriving at a composite score. The 12 basic emotions as measured by the DES (Izard 1974), with the exception of surprise and shyness, will be collapsed into
two broad categories of affect, positive (2) and negative (8) affect scores. This is consistent with Marlatt's model and the factor analytic research into the DES (Boyle, 1987).

An AVE was defined in any of the following three ways. Firstly, in terms of emotions, if the negative emotions on the DES were greater than the median score for the group as a whole, and if positive emotions were less than the relevant median score. The attributional component of an AVE was defined according to a median split of the composite scores derived from the four attributional dimensions, with high scores being associated with the presence of an AVE. This results in a conventional AVE (i.e., a Marlatt type). Secondly, an alternative but related possibility, involves both high attributions, high negative and high positive affect, and is consistent with Pithers' observation regarding the PIG. Thirdly, it seems reasonable to define an AVE in emotional terms alone, that is high negative and low positive emotions, as the attributional score may reflect cognitive distortions, particularly in incarcerated offenders.

Subjects whose scores did not exhibit these characteristics were rated either unclassifiable (typically high on both positive and negative emotions and low on attributions) or as 'not abstinence violation effect' (NAVE) where scores were clear-cut but in the opposite direction to those for the AVE (i.e., low scores on negative emotions, with high positive emotion scores).

Following this primary analysis I will examine the relationship of the pairs of attributional dimensions outlined in table one to the different emotions, and therefore indirectly, to lapse and relapse. This further analysis is an attempt to extend the attributional approach to relapse. The pairs of dimensions to be analysed further are:
internal/controllable, internal/ uncontrollable, external/controllable, external/uncontrollable. All subjects who experienced an AVE will be split into high/low groups depending on their scores on the locus and controllability dimensions and assigned to one of four cells: (1) internal-high controllability (2) internal-uncontrollability (3) external-high controllability (4) external-uncontrollability. A median split will be used to divide the groups as it is less influenced by extreme scores than the mean. The relationships between these attributional dimensions and the individual emotions of the DES will then be examined.

Of course, to comprehensively test Weiner's theory concerning the relationships between attributional dimensions and emotions, all the possible combinations of dimensions and emotions would need to be investigated. However the major aim of this study is to obtain data on the AVE in child molesters and therefore this further analysis, while worthwhile, is of secondary importance

CLASSIFICATION OF SUBJECTS

The small number of subjects used in this study meant that it was not possible to use a complex classification system, for example, the MTC:CM3 (Knight & Prentky, 1990). Therefore the fixated/regressed dichotomy (Groth et al., 1982) was used in order to guide further analysis, (see table 2).

Therapists judged which subjects were most adequately classified as fixated-preferential or regressed/situational offenders and were guided by the following instructions (Groth, Hobson, & Gary, 1982). Fixated offender's onset of offending is typically in adolescence, drugs are rarely
involved in offences, the relationship with the victim(s) is pseudo-parental-romantic, and the offending is typically persistent, compulsive and involves premeditation. In contrast, regressed offenders offending is more typically episodic, stress related with drugs commonly involved, the victim - abuser relationship of a pseudo-adult type and a lifestyle involving marriage but characterised by impulsivity (see table 2).

CLASSIFICATIONS OF REASONS

In addition, the reasons offenders gave at each of the three steps were classified according to criteria developed after consulting the relevant sex offender literature, (Marques et al., 1989; Pithers et al., 1988). The reasons given were placed into categories and checked by another person. Agreement was reached concerning these categories, which are as follows:

(1) Sexual arousal.
(2) Intimacy, desire for closeness.
(3) Negative affect (i.e., anxiety, sadness, loneliness).
(4) Power, aggression.
(5) Positive affect.
(6) Curiosity-helping.
(7) Other.

In summary, twenty-six incarcerated male child molesters were assessed, using the Differential Emotions Scale (Izard, Doughty, Bloxom, & Kotsch, 1974) and the Four Attributional Dimension Scale (Benson, 1989), at three points (background, lapse, and relapse) while they listened to an
audiotaped recording of a description of their most typical offence chain. Subjects were also classified as either fixated or regressed according to age of onset of their offending, quality of the relationship with the victim, lifestyle issues, stress, and drug use.

The independent variables in this study are breakpoints, offender type (fixated versus regressed), and the AVE versus not AVE (NAVE and unclassifiable). The dependent variables are the demographic features (IQ, age, number of victim's etc), 4-ADS scores, DES scores and reasons.
CHAPTER SIX

RESULTS

ANALYSIS

A within subject repeated measures design was used. All data were subjected to repeated measures analyses of variance using StatView (Abacus, 1986) and post hoc multiple comparisons using Fisher's PLSD. I will describe the results relevant to subjects, vignettes, and then each of the hypotheses outlined earlier.

SUBJECTS

Twenty-six incarcerated male child molesters (mean age = 42.9 years, SD = 11.9, range = 18-64 years; mean IQ = 110.5, SD = 12.4, range = 90-132) were finally involved in this study (see table 3 for further details). With respect to classification, there were significant differences between the Fixated or Regressed groups on the following variables, number of past convictions, $F(1, 25) = 9.05, p<.005$ and length of offending history, $F(1, 25) = 7.76, p<.01$. While there was not a significant difference between the two groups in terms of the number of victims there was a trend ($p=.06$) in this direction. These differences provide some support for the therapists classification of subjects into the fixated/regressed groups.
### Demographic characteristics of subjects (Fixated n=11, Regressed n=15)

<table>
<thead>
<tr>
<th></th>
<th>Fixated</th>
<th></th>
<th>Regressed</th>
<th></th>
<th>Total</th>
<th></th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>40.9</td>
<td>12.8</td>
<td>45.6</td>
<td>10.5</td>
<td>42.9</td>
<td>11.9</td>
<td>18-64</td>
</tr>
<tr>
<td>IQ</td>
<td>111.0</td>
<td>14.0</td>
<td>110.0</td>
<td>11.0</td>
<td>110.5</td>
<td>12.4</td>
<td>90-132</td>
</tr>
<tr>
<td>Sentence Length</td>
<td>51</td>
<td>39</td>
<td>34.6</td>
<td>18</td>
<td>41.2</td>
<td>28.1</td>
<td>18-120</td>
</tr>
<tr>
<td>(months)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of previous</td>
<td>1.9</td>
<td>2.2</td>
<td>1.3</td>
<td>.35</td>
<td>.84</td>
<td>1.63</td>
<td>0-6</td>
</tr>
<tr>
<td>convictions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Number of victims</td>
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<td>58</td>
<td>3.3</td>
<td>2</td>
<td>15.5</td>
<td>39.2</td>
<td>1-200</td>
</tr>
<tr>
<td>Length of offending</td>
<td>7.5</td>
<td>9.2</td>
<td>8.2</td>
<td>7.6</td>
<td>12.1</td>
<td>9.4</td>
<td>1-30</td>
</tr>
<tr>
<td>history (years)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
**VIGNETTES**

The average number of words in the vignettes was 602.4 (SD, 148.7); that is, between one and two A4 pages.

Reliability checks were carried out for the classification of the reasons into the seven categories (reliability coefficient = 89%) and the vignettes into the three segments. The experimenter and a research assistant initially divided the scenario's into the segments and where there was disagreement, consensus was negotiated. As an additional check, a third person independently classified a sample (8 from 26) randomly selected from all the vignettes, into the three sections. The classifications did not differ more than one sentence and this was judged to be insignificant.

**HYPOTHESES/RESEARCH QUESTIONS**

(a) The AVE in child molesters

Significantly fewer subjects experienced an AVE at the point of lapse than did not show an AVE, $X^2 (1, N = 26) = 5.4, p < .05$ (see table 4). Conversely a significantly greater number of subjects exhibited an AVE than not, at the point of relapse, $X^2 (1, N = 26) = 3.9, p < .05$ (see table 4). That is, significantly more subjects experience an AVE at relapse compared to at the point of lapse, $X^2 (1, N = 26) = 4.7, p < .05$ (see table 4).
Table 4
Abstinence Violation Effect

<table>
<thead>
<tr>
<th>type</th>
<th>lapse</th>
<th>relapse</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVEa</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>AVE2b</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>EAVEc</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sub-totals</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>NAVEd</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>UCLASSe</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>sub-totals</td>
<td>19</td>
<td>8</td>
</tr>
</tbody>
</table>

Note

a An AVE defined by high attributions, high negative affect, and low positive affect.
b An AVE defined by high attributions, high negative affect, and high positive affect.
c Emotional AVE defined by high negative affect, and low positive affect.
d A NAVE - the antithesis of the AVE.
e Unclassifiable
Table 5

Attributional dimensions across scenario segments

<table>
<thead>
<tr>
<th></th>
<th>one</th>
<th>two</th>
<th>three</th>
</tr>
</thead>
<tbody>
<tr>
<td>uncontrollability</td>
<td>10.8</td>
<td>10.8</td>
<td>11.1</td>
</tr>
<tr>
<td>locus</td>
<td>14.9</td>
<td>15.2</td>
<td>15.5</td>
</tr>
<tr>
<td>stability</td>
<td>14.9</td>
<td>14.0</td>
<td>13.7</td>
</tr>
<tr>
<td>globality</td>
<td>11.3</td>
<td>10.9</td>
<td>11.6</td>
</tr>
</tbody>
</table>
(b) Attributional dimensions across the offence chain

There were no significant differences in any of the four attributional dimensions across the three segments of the relapse process (see table 5).

Attributional dimensions and the abstinence violation effect

Subjects exhibiting an AVE showed significantly higher scores on uncontrollability, $F(1, 72) = 13.4, p<.001$ and stability, $F(1, 72) = 4.29, p<.05$ (see table 6).

Frequency of Attributional Pairs

In view of the near equivalence of cell frequencies for the attributional pairs, statistical testing was not carried out (see table 7).

(c) Emotions across the offence chain

There were significant increases in the emotions disgust, $F(2, 72) = 4.11, p<.05$, hostility, $F(2, 72) = 3.45, p<.05$, shyness, $F(2, 72) = 4.31, p<.05$ and guilt, $F(2, 72) = 13.18, p<.001$, and a significant decrease in the emotion interest, $F(2, 72) = 3.65, p<.05$ between segments 2 and 3 of the relapse process (i.e., between the point of lapse and that of having relapsed) (see table 8). None of the other emotions showed significant change.

Emotions and the abstinence violation effect

Subjects exhibiting an AVE reported significantly higher scores than those subjects not showing evidence of an AVE on the following DES emotions; anger, $F(1, 72) = 6.26, p<.05$, disgust, $F(1, 72) = 7.20, p<.01$,
contempt, $F (1, 72) = 5.93, p<.05$, hostility, $F (1, 72) = 5.78, p<.05$, fear, $F (1, 72) = 5.26, p<.05$, shame, $F (1, 72) = 6.02, p<.05$, and shyness, $F (1, 72) = 9.55, p<.01$ (see table 9). Significantly lower emotion scores were reported by the AVE group for joy, $F (1, 72) = 10.67, p<.01$, and surprise, $F (1, 72) = 6.14, p<.05$ (see table 9).

(d) Relationship between attributional dimensions and emotions

All $F$ ratios were less than 1 (NS) with the exception of surprise which was also non-significant $F (3, 25) = 1.71, p = .2$ (see table 10).

(e) Offender type and the AVE

The AVE

There were no significant differences in the frequency of an AVE between fixated and regressed subjects at the point of lapse, $X^2 (1) = 2.7, \text{ns}$, and relapse, $X^2 (1) = .8, \text{ns}$ (see Table 11). Similarly the were no significant differences in the frequency of the absence of an AVE (NAVE and unclassifiable) at both the point of lapse, $X^2 (1) = 0.0, \text{ns}$, and relapse, $X^2 (1) = 0.0, \text{ns}$.

Emotions and offender type

The fixated group showed significantly higher DES scores than the regressed group for the emotions interest, $F (1, 72) = 5.49, p< .05$, and joy, $F (1, 72) = 10.28, p< .005$, and significantly lower scores on the emotions sadness, $F (1, 72) = 9.71, p< .005$, anger, $F (1, 72) = 5.04, p< .05$, disgust, $F (1, 72) = 6.84, p< .01$, hostility, $F (1, 72) = 14.91, p< .001$, fear, $F (1, 72) = 15.15, p<$
.001, shame, $E(1, 72) = 3.58, p < .05$, shyness, $E(1, 72) = 10.77, p < .005$, and guilt, $E(1, 72) = 10.37, p < .05$ (see table 12). The emotions surprise, and contempt showed no significant differences between the two groups. There were no significant interactions between emotion scores and the scenario segments associated with the points of lapse or relapse.

**Attributional dimensions and offender type**

Regressed subjects showed significant lower scores on the attributional dimension of stability than fixated subjects, $E(1, 72) = 7.18, p < .01$ (see table 13). There were no other significant differences or interactions over the three points in the relapse process between the two groups.

**Subjects experiencing the AVE at relapse**

Stability scores were significantly higher for fixated offenders ($M = 16.9, SD = 2.4$) than for regressed offenders ($M = 13.6, SD = 4.7$) $F(1, 53) = 9.21, p < .005$. No significant differences were found between regressed and fixated types of offenders for controllability scores $F(1, 53) < 1$, ns ($M = 12.2$ and 11.5, and $SD = 3.1$ and 4.8), locus scores $F(1, 53) < 1$, ns ($M = 14.8$ and 15.3, and $SD = 4.0$ and 2.5 respectively), or globality scores, $F(1, 53) = 2.89, p = .1$ ($M = 10.8$ and 13.0, and $SD = 4.4$ and 5.2 respectively).

**Subjects not experiencing the AVE at relapse**

There was no significant differences in controllability, locus, stability or globality scores according to offender classification, $F(1, 23) < 1$ in all cases.
Table 6

<table>
<thead>
<tr>
<th>Attributional dimensions across presence or absence of the AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group</strong></td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td><strong>uncontrollability</strong></td>
</tr>
<tr>
<td>locus</td>
</tr>
<tr>
<td>stability</td>
</tr>
<tr>
<td>globality</td>
</tr>
</tbody>
</table>

Note.  

a significant at p < .05.  
b significant at p < .001  
NAVE group includes unclassifiable subjects
Table 7

Frequency of attributional pair (locus X controllability)

<table>
<thead>
<tr>
<th>Attributional pair</th>
<th>Int/cont*a</th>
<th>Int/uncon*b</th>
<th>Ext/con*c</th>
<th>Ext/uncon*d</th>
</tr>
</thead>
<tbody>
<tr>
<td>All subjects</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>AVE subjects</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Note:  
a Int/cont means internal locus and controllable.  
b Int/uncon means internal locus and uncontrollable.  
c Ext/cont means external locus and controllable.  
d Ext/uncon means external locus and uncontrollable.
Table 8
Emotions across scenario segments

<table>
<thead>
<tr>
<th></th>
<th>Segment</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>one</td>
<td>two</td>
<td>three</td>
<td></td>
</tr>
<tr>
<td>interest</td>
<td>9.7</td>
<td>10.9</td>
<td>7.7</td>
<td>*a</td>
</tr>
<tr>
<td>joy</td>
<td>8.5</td>
<td>8.7</td>
<td>6.9</td>
<td></td>
</tr>
<tr>
<td>surprise</td>
<td>6.3</td>
<td>7.5</td>
<td>8.2</td>
<td></td>
</tr>
<tr>
<td>sadness</td>
<td>5.5</td>
<td>5.4</td>
<td>8.2</td>
<td></td>
</tr>
<tr>
<td>anger</td>
<td>5.5</td>
<td>5.0</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>disgust</td>
<td>5.0</td>
<td>5.4</td>
<td>8.6</td>
<td>*</td>
</tr>
<tr>
<td>contempt</td>
<td>5.1</td>
<td>5.0</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>hostility</td>
<td>5.4</td>
<td>6.0</td>
<td>9.2</td>
<td>*</td>
</tr>
<tr>
<td>fear</td>
<td>6.3</td>
<td>6.7</td>
<td>8.9</td>
<td>*</td>
</tr>
<tr>
<td>shame</td>
<td>5.5</td>
<td>5.6</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td>shyness</td>
<td>5.9</td>
<td>6.0</td>
<td>9.2</td>
<td>*</td>
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<tr>
<td>guilt</td>
<td>5.4</td>
<td>5.5</td>
<td>10.6</td>
<td>*</td>
</tr>
</tbody>
</table>

Note. *a* significant at \( p < .05 \).
NAVE group includes unclassifiable subjects
Table 9

Emotions across presence or absence of the AVE

<table>
<thead>
<tr>
<th>Group</th>
<th>AVE</th>
<th>NAVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>interest</td>
<td>9.1</td>
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</tr>
<tr>
<td>joy</td>
<td>7.1</td>
<td>10.3 *&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>surprise</td>
<td>6.7</td>
<td>8.8 *</td>
</tr>
<tr>
<td>sadness</td>
<td>6.8</td>
<td>5.3</td>
</tr>
<tr>
<td>anger</td>
<td>6.3</td>
<td>4.3 *</td>
</tr>
<tr>
<td>disgust</td>
<td>7.0</td>
<td>4.8 *</td>
</tr>
<tr>
<td>contempt</td>
<td>5.7</td>
<td>4.2 *</td>
</tr>
<tr>
<td>hostility</td>
<td>7.6</td>
<td>5.3 *</td>
</tr>
<tr>
<td>fear</td>
<td>8.0</td>
<td>5.7 *</td>
</tr>
<tr>
<td>shame</td>
<td>6.7</td>
<td>4.6 *</td>
</tr>
<tr>
<td>shyness</td>
<td>7.8</td>
<td>5.2 **&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>guilt</td>
<td>7.6</td>
<td>6.3</td>
</tr>
</tbody>
</table>

Note.  
<sup>a</sup> significant at $p < .05$.  
<sup>b</sup> significant at $p < .01$
Table 10

DES mean scores according to attributional pair

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Int/cont\textsuperscript{a}</th>
<th>Int/uncon\textsuperscript{b}</th>
<th>Ext/cont\textsuperscript{c}</th>
<th>Ext/uncon\textsuperscript{d}</th>
</tr>
</thead>
<tbody>
<tr>
<td>interest</td>
<td>7.0</td>
<td>6.7</td>
<td>8.4</td>
<td>8.3</td>
</tr>
<tr>
<td>joy</td>
<td>4.2</td>
<td>7.4</td>
<td>7.8</td>
<td>7.3</td>
</tr>
<tr>
<td>surprise</td>
<td>10.8</td>
<td>8.1</td>
<td>8.3</td>
<td>6.2</td>
</tr>
<tr>
<td>sadness</td>
<td>8.8</td>
<td>7.9</td>
<td>6.9</td>
<td>9.7</td>
</tr>
<tr>
<td>anger</td>
<td>8.0</td>
<td>6.7</td>
<td>5.5</td>
<td>6.5</td>
</tr>
<tr>
<td>disgust</td>
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<td>8.7</td>
<td>8.6</td>
<td>8.2</td>
</tr>
<tr>
<td>contempt</td>
<td>4.4</td>
<td>6.9</td>
<td>5.5</td>
<td>6.0</td>
</tr>
<tr>
<td>hostility</td>
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<td>9.1</td>
<td>7.5</td>
<td>10.5</td>
</tr>
<tr>
<td>fear</td>
<td>9.8</td>
<td>8.7</td>
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<td>9.5</td>
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<tr>
<td>shame</td>
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<td>8.0</td>
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<tr>
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<td>7.9</td>
<td>9.8</td>
</tr>
<tr>
<td>guilt</td>
<td>11.2</td>
<td>10.7</td>
<td>11.4</td>
<td>9.0</td>
</tr>
</tbody>
</table>

Note:  
\textsuperscript{a} Int/cont means internal locus and controllable.  
\textsuperscript{b} Int/uncon means internal locus and uncontrollable.  
\textsuperscript{c} Ext/cont means external locus and controllable.  
\textsuperscript{d} Ext/uncon means external locus and uncontrollable.
### Table 11

**Abstinence Violation Effect Across Offender Type**

<table>
<thead>
<tr>
<th>phase</th>
<th>lapse</th>
<th></th>
<th>relapse</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>fixated</td>
<td>regressed</td>
<td>total</td>
<td>fixated</td>
</tr>
<tr>
<td>AVE(^a)</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>AVE(^b)</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>EAVE(^c)</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>sub-total</td>
<td>2</td>
<td>5</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>NAVE(^d)</td>
<td>7</td>
<td>6</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>UCLASS(^e)</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>sub-total</td>
<td>9</td>
<td>10</td>
<td>19</td>
<td>5</td>
</tr>
</tbody>
</table>

**Note:**

\(^a\) An AVE defined by high attributions, high negative affect, and low positive affect.

\(^b\) An AVE defined by high attributions, high negative affect, and high positive affect.

\(^c\) Emotional AVE defined by high negative affect, and low positive affect.

\(^d\) A NAVE - the antithesis of the AVE.

\(^e\) Unclassifiable
Table 12

<table>
<thead>
<tr>
<th>Emotions across regressed or fixated classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Group</strong></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>interest</td>
</tr>
<tr>
<td>joy</td>
</tr>
<tr>
<td>surprise</td>
</tr>
<tr>
<td>sadness</td>
</tr>
<tr>
<td>anger</td>
</tr>
<tr>
<td>disgust</td>
</tr>
<tr>
<td>contempt</td>
</tr>
<tr>
<td>hostility</td>
</tr>
<tr>
<td>fear</td>
</tr>
<tr>
<td>shame</td>
</tr>
<tr>
<td>shyness</td>
</tr>
<tr>
<td>guilt</td>
</tr>
</tbody>
</table>

Note.  

- a significant at $p < .05$.  
- b significant at $p < .01$.  
- c significant at $p < .001$. 
Table 13

Attributional dimensions across regressed or fixated classification

<table>
<thead>
<tr>
<th></th>
<th>Group</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>regressed</td>
<td>fixated</td>
</tr>
<tr>
<td>uncontrollability</td>
<td>11.1</td>
<td>10.6</td>
<td></td>
</tr>
<tr>
<td>locus</td>
<td>15.2</td>
<td>15.1</td>
<td></td>
</tr>
<tr>
<td>stability</td>
<td>13.1</td>
<td>15.6 **a</td>
<td></td>
</tr>
<tr>
<td>globality</td>
<td>10.7</td>
<td>12.0</td>
<td></td>
</tr>
</tbody>
</table>

Note.  

*a* significant at $p < .01$
Fixated offenders

Fixated offenders, experiencing the AVE at the point of relapse, reported greater stability than similar offenders not reporting an AVE ($M = 16.9$ and $13.6$, and $SD = 2.4$ and $2.7$ respectively for AVE and NAVE offenders), $F(1, 32) = 13.69, p < .001$. Fixated offenders experiencing an AVE did not score significantly differently on the three other attributional dimensions compared to similar offenders not showing the AVE, $F(1, 32) < 1$, ns for all cases.

Regressed offenders

Regressed offenders experiencing the AVE at the point of relapse, reported significantly less controllability compared to other regressed offenders not experiencing an AVE, $F(1, 44) = 15.46, p < .001$ ($M = 12.2$ and $8.2$, and $SD = 3.1$ and $2.8$ respectively for AVE's and NAVE's respectively). Regressed offenders experiencing an AVE did not score significantly differently on the three other attributional dimensions compared to similar offenders not showing the AVE, $F(1, 32) < 1$, ns for all cases.

(f) Reasons for offending

Looking at the change of reasons there was no significant difference, although there was a trend for sexual arousal to significantly increase across the break points, $X^2 (1, N = 6) = 3.44$ (see table 14). Collapsing reasons across the break points, a significantly greater number of subjects reported that sexual arousal was the primary reason for their behaviour, $X^2 (6, N = 26) = 89.68, p < .001$. Taking sexual arousal out of the analysis, intimacy emerged as the next major reason for acting in a sexually aggressive manner, $X^2 (5, N =$
26) = 13.35, p = .05. Next intimacy was removed from the analysis as well as sexual arousal and the results were not significant.

(g) Offender type and reasons

The number of offender types within each category of reasons were either roughly equal or too small, therefore statistical analysis was not undertaken (see table 14)
Table 14  
**Reasons given for behaviour at breakpoints**

<table>
<thead>
<tr>
<th>Reasons</th>
<th>one</th>
<th>two</th>
<th>three</th>
<th>total</th>
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</thead>
<tbody>
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<td>sexual arousal</td>
<td>11</td>
<td>15</td>
<td>20</td>
<td>46</td>
</tr>
<tr>
<td>intimacy</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>negative affect</td>
<td>4</td>
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<td>2</td>
<td>9</td>
</tr>
<tr>
<td>positive affect</td>
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<td>2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>power</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>7</td>
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<td>other</td>
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<tr>
<td><strong>total</strong></td>
<td>28</td>
<td>33</td>
<td>33</td>
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</tr>
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</table>

Table 15  
**Reasons given for behaviour at breakpoints**

<table>
<thead>
<tr>
<th>Reasons</th>
<th>fix</th>
<th>reg</th>
<th>fix</th>
<th>reg</th>
<th>fix</th>
<th>reg</th>
</tr>
</thead>
<tbody>
<tr>
<td>sexual arousal</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>7</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>intimacy</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>negative affect</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>positive affect</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>power</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>helping</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>other</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>total</strong></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
In this chapter I will firstly discuss the implications of the results for the hypotheses/puzzles outlined earlier. Secondly I will consider the limitations of the study. Finally, I will outline directions for future research.

**HYPOTHESES / RESEARCH QUESTIONS**

**(a) The AVE in child molesters**

There are four major implications that emerge from the data concerning the AVE.

The first major implication is that the AVE does occur in child molesters, at least, in those who are incarcerated. The majority of subjects exhibited this effect at relapse. There are three types of AVE and the subjects were equally distributed across these three distinct types. Six showed evidence of a conventional AVE at relapse (high attributions, high negative and low positive affect). Five experienced both high negative and high positive affect in association with AVE relevant attributions (uncontrollable, internal, global, and stable) as suggested by Pithers (1990) but not referred to by Marlatt, even in his most recent work (George & Marlatt, 1989). The remaining seven exhibited an emotional AVE (high negative and low positive affect together with low attributions). This group did not exhibit the expected attributional profile but clearly responded emotionally. It is possible that they reflect social desirability concerns
regarding causality and therefore did not exhibit the expected attributional profile. Alternatively their reported emotions may reflect an attempt to present themselves in a more socially desirable way, when in reality their attitudes were unchanged. An additional possibility is that this particular group may find emotions easier to report.

The second finding is that the AVE occurs more frequently at relapse rather than at the lapse point. This finding challenges Pithers claim that, as with other addictive disorders, the AVE in sex offenders occurs at the lapse point. In fact contrary to the accepted view, few of the subjects exhibited the AVE at this stage. The decision to change the definitions of lapse/relapse when adapting the RP model to sex offenders is driven by (understandable) ethical concerns. However the data obtained in this study suggest that the subjects were probably more under the influence of the PIG at the point of lapsing rather than the AVE. Recall that in the generic RP model the PIG functions to facilitate the transition from a HRS to a lapse. The movement of the lapse point further back in the behaviour chain (in Pithers model) means that the PIG now becomes part of the AVE. Therefore instead of facilitating the transition from a HRS to a lapse as it does with other disorders, for sex offenders it operates as part of the lapse-relapse transition. In a sense this finding provides evidence for the validity of Marlatt's generic model.

Clearly, the literature's definition of a lapse does not appear to be shared by the sex offender population (at least incarcerated child molesters); they are behaving in accord with the definition used in other areas of addictive behaviour. These men were recruited before treatment commenced but were highly motivated both to enter treatment and, by implication, to avoid behaving in a sexually offensive way. It therefore
seems apparent that changing these mens' definition of what constitutes events of substantial concern becomes a clear goal of therapy. Convincing them of the serious nature of the lapse point, and the therefore increased likelihood of the AVE, is an essential precursor to the successful coping with the lapse in a fashion that decreases the probability of relapse. In fact, the experiencing of an AVE following a lapse is more likely to be a consequence (hopefully) of therapy. Of course it is imperative that therapists ensure offenders do not experience the Marlatt version (stable, global and internal attributions) as this is likely to lead to a relapse. From a treatment perspective it is more desirable to teach them to regard the lapse, with its associated affective changes, as an early warning sign. Once alerted, the offender is then able to implement an effective coping strategy.

Therefore, in sex offenders the AVE is unlikely to mediate the lapse-relapse transition, at least as far as highly motivated but untreated child molesters are concerned. What is possible however, is that for these men having both lapsed, relapsed, and experienced the AVE at this second point, the transition is enhanced to what I have called relapse-two (Ward, Hudson, & Marshall, 1992), that is, a return to previous levels of offending behaviour. It is also possible that the AVE facilitates more extreme offending behaviour within the same episode, such that rather than stopping after an initial act, the offender escalates his behaviour both in terms of severity and intrusiveness.

The third major finding, as stated above, is that there is support for different types of AVE. This confirms the importance of, at least at this early stage, of working with a number of definitions. Those subjects exhibiting an AVE with high levels of positive as well as negative emotion are an interesting group. It seems that some men appear to experience
conflicting emotions following relapse, although they may move between contrasting emotional states rather than experience different emotions simultaneously. Pithers (1990), in contrast to Marlatt, includes the PIG as an integral component of the AVE, and it may be that this group reflects the dual influence of both these factors. Although there are conceptual difficulties with this, as argued in chapter three, it does appear to reflect an important process for some child molesters. There remains the problem, however, of spelling out the relationship between the AVE and the PIG.

The fourth major finding of this study as far as the AVE is concerned, is that the PIG or NAVE occurs in a significant number of men (13) at the lapse point, and may be undermining any AVE effect. This may reflect the impact of sexual arousal and the presence of predominantly positive emotions at this stage. This finding suggests that it is important to consider the role of appetitive processes at the lapse stage in untreated child molesters (Rohsenow et al., 1991) as well as cognitive and affective variables. As I have argued above, the kind of factors that (in other RP models), normally function to mediate the transition from a HRS to a lapse, now operate at the lapse point. This means that attribution independent affects, such as the positive emotions associated with sexual arousal, may play an important, and perhaps neglected, role in reoffending.

(b) Attributional dimensions across the offence chain

There were no significant differences across the scenario segments for the four attributional dimensions. It is not clear why this is the case, and is contrary to my initial expectations. It is at least possible that within the relatively narrow confines of their deviant sexual behaviour these mens'
causal beliefs concerning this aspect of their behaviour are consistent in terms of attributional dimensions and are therefore relatively stable. Of course it is only meaningful to speak of attributional style if the outcomes across the offence chain are perceived to be of similar valence. If the outcomes are perceived as fluctuating between positive and negative valence then it is not possible to infer the existence of an attributional style. For many of these men there was a major shift from a positive emotional state to a negative one at the relapse point and therefore the valence of the outcomes changed (see later in discussion). Attributional style refers to the tendency to interpret positive or negative outcomes in an enduring way, for example consistently interpreting a negative outcome as reflecting internal, stable and global causal dimensions and/or the outcomes as external, unstable and specific.

Differentiated according to the presence or absence of the AVE the groups showed some but not all the expected differences on the attributional dimensions. The AVE group, in comparison to the NAVE subjects, saw the causes of their deviant sexual behaviour as more uncontrollable, and more stable. This is partially in accord with Marlatt and Gordon's suggestion (Marlatt & Gordon, 1985), although there was no difference between the two groups on the remaining attributional dimensions. Although it is dangerous to interpret trends, the AVE group tended to make more global attributions, which is consistent with Marlatt's formulation of the AVE.

Looking more specifically at the pairs of attributional dimensions, it is interesting to observe that the subjects were grouped more or less equally into the four cells. This supports the utility of investigating the various attributional pathways to lapse and relapse separately. Marlatt tends to
emphasise the AVE pathway to relapse and underestimates the importance of the other attributional dimensions. If Marlatt was correct then you would expect to see a greater number of subjects in the internal-uncontrollable cell, rather than, as was the case, an equal distribution across all four possibilities.

(c) Emotions across the offence chain

The significant differences in emotional responses across the scenario segments (lapse and relapse in particular) were as expected. Interest showed a significant decrease at the relapse point while disgust, hostility, fear, shyness and guilt all showed significant increases. It also appears that the emotions move in concert, with trends towards most negative emotions increasing over the offence chain and positive emotions decreasing. It is possible that this reflects an order effect. This is unlikely because the major shift occurs between steps 2 and 3 rather than as a linear trend as would be expected if this effect was simply due to an order effect. The fact that emotions changed across the offence chain and that attributional dimensions did not (ignoring the issue of valence), suggests that they are more sensitive indicators or markers of the AVE. It also emphasises the importance of including an emotional measure when assessing the AVE.

The differences in emotions between the AVE and NAVE groups were also as expected with most negative emotions being higher in the AVE group along with lower positive emotion scores. The reverse was the case for the NAVE group. The large number of subjects exhibiting a NAVE at the lapse point indicates the important role positive emotions play in facilitating offending. This has clearly been underestimated by previous
research and is supportive of an appetitive-motivational approach to relapse.

**(d) Relationship between attributional dimensions and emotions**

There were no significant relationships between any of the individual emotions and the pairs of Attributional dimensions. This does not support Weiner's theory, however the major problem in this study is most likely a lack of subject numbers, that is, a lack of power with respect to these subsidiary hypotheses. When a comparison is made between shame and guilt it is interesting to note that the means reflect the hypothesised trends, that is, for shame, attributions tend to be internal-uncontrollable, whereas for guilt they tend to be internal-controllable. But it can be misleading to interpret trends and further research with sex offenders is necessary to clarify this issue.

**(e) Offender type and the AVE**

Contrary to my hypothesis there were no differences between fixated and regressed offenders with respect to the frequency with which they experienced an AVE. There was a trend for regressed subjects to be more likely to experience an AVE after both lapse and relapse than fixated subjects (5 and 2 for a lapse and 12 and 6 for relapse, respectively) but the small number of subjects available for analysis at this point precluded any statistical significance, and therefore no conclusions can be reached. The AVE does occur, in both fixated and regressed offenders, but as previously noted (Ward, Hudson, & Marshall, 1992a) it tends to be at the point of relapse rather than after a lapse.
The differences in emotions between the two groups were as expected. Generally fixated subjects reported significantly higher levels of positive emotions and lower levels of negative emotions than regressed subjects. This highlights the importance of assessing both positive and negative emotions, as well as attributions. Emotions are likely to be good markers for the underlying attributions and cognitive processes. In any event there are additional reasons for emotions to be assessed; recent work has emphasised the role of emotion in cognitive behaviour therapy. Some researchers argue that to access therapeutically relevant cognitions it is often necessary to experience the relevant emotion (Greenberg & Safran, 1987).

The greater degree of perceived stability of cause by fixated subjects was as predicted. This perception of stability has considerable treatment implications. It is likely that confronting the implicit beliefs embodied in these perceptions of stable cause forms a first step in the change process. Less effort needs to be directed at these processes in regressed offenders.

As expected, fixated offenders who experience an AVE at relapse, see the cause of their offending as more stable than do regressed offenders experiencing an AVE. These data further support the notion of stability defining sub-types of effect. This contrasts with Weiner's view that stability merely acts as a magnifier, but is in accord with Marlatt's suggestion that perceptions of stable cause are directly associated with an AVE. These data reflect the important role that entrenched pedophilic beliefs play in the offending lifestyle of fixated child sex offenders (Groth et al., 1982; Salter, 1988) and additionally lend some empirical support to the validity of the classification into fixated and regressed types of offenders.

Also as expected fixated offenders experiencing the AVE at the point of relapse, report higher stability than fixated subjects not showing the AVE.
These data further highlight the importance of addressing perceived stability, particularly in relation to the AVE. Regressed offenders experiencing an AVE were discriminable from the remaining regressed subjects only in terms of their report of greater uncontrollability. This reflects that those subjects experiencing as AVE were more likely to feel less in control.

These findings have significant implications for therapists. The various subtypes of offenders pose particular problems. The least difficulties are likely to be posed by regressed offenders that experience an AVE at the point of lapse, followed by those that at least do so at relapse. This type of offender is experiencing negative emotions, reflecting at least some discomfort with his behaviour, and making internal, uncontrollable attributions. The major therapeutic task is to challenge the perceived lack of controllability. Next in increasing order of difficulty are regressed NAVES. While these offenders do not differ from other regressed subjects in terms of stability and globality judgements they are, by definition not showing negative affect, reflecting a degree of comfort with their offending. These men need to be persuaded regarding the unacceptability of their behaviour.

Next in order of difficulty are fixated offenders that experience an AVE at lapse or at least relapse. These men are experiencing negative affect and internal attributions, and therefore are open to the consequent motivating effects, although they also see the cause as uncontrollable, stable and global, which poses a substantial therapeutic challenge. Highest in order of difficulty are those fixated offenders who do not experience that AVE at any point in the relapse process. While these men make less stable and global attributions regarding the cause of their offending behaviour, they experience less negative and more positive affect. It is likely that the therapy process must first start by persuading these men about the negative consequences of their behaviour on
their victims, and improve their ability to take a victim's perspective, before tackling the further issues of perceived cause. It is still an open question whether these offenders will pass through a stage of reporting increased stability judgements as they come to accept the impact on victims. There may be a progression of stages where these men come, as an interim step, to resemble those fixated subjects who do experience an AVE; it is also possible that they may move to more resemble the regressed subjects in this study. In any event, it seems likely that these different sub-types of offenders will pose differing therapeutic tasks, at least initially.

(f) Reasons for offending

The major reason subjects gave for their sexual offending was sexual arousal, followed by the need for intimacy or emotional closeness. At the lapse point sexual arousal or motivation was also given as the major reason or cause for their behaviour. There was a steady increase in the reporting of sexual arousal as the primary reason for behaviour across the three break points, although it was not significant, (from ten to 20) from step one to relapse. Overall, sexual arousal and secondly, the need for intimacy, emerged as significant reasons for behaving in a sexually aggressive way. Eight, (combining both positive and negative emotions) men reported that affective changes provided reasons either for their offending or behaviour associated with their offending. Although this was not statistically significant when compared with the other reasons given, it is consistent with Pithers (1990) claim (although not to the same extent) that the typical relapse sequence, or processes associated with sexual offending, is initiated by negative affect. But it seems that he has underemphasized the
importance of sexual arousal. The data also suggests that positive affect plays an important role in sexual offending. It may be that this is an underestimation of the influence of affect as emotions accompanied the lapse and relapse points and in this respect influenced behaviour even though they were not cited as reasons. This raises an important issue to keep in mind when assessing reasons or causes for behaviour. An individual may not identify emotions as constituting the primary reason for his behaviour even though they accompany, and are associated with, other reasons.

An interesting finding is the reporting of anger, or the issue of power and dominance, as a primary reason for offending for a small number of men. Unfortunately the number citing this as a reason (two and three at lapse and relapse respectively) was insufficient to establish (statistically) whether anger tends to be associated with external attributions. I included anger or power as a separate category rather than as part of negative affect. For one thing, it isn't clear whether anger is universally perceived by people as negative.

The fact that the need for intimacy or emotional closeness motivated some men's offending is certainly consistent with the prevailing theories and research in the area of sexual aggression (Marshall, 1989). A number of clinicians and researchers in the area have commented on the difficulty sex offenders have in intimate relationships (Marshall, 1989; Marshall & Barbaree, 1989; Marshall & Barbaree, 1990b). More specifically these men appear to be intimidated by adult relationships and seek to establish relationships with children whom they perceive as more accepting and less rejecting. Some theorists have hypothesised that such a deficit tends to predispose men to pedophilia (Marshall, 1989). Typically this reason was
accompanied by sexual arousal; recall that the subjects were asked for the reasons for their behaviour and that some men gave more than one.

**(g) Offender type and reasons**

There does not appear to be any relationship between offender type and the kind of reasons given for either sexual offending or behaviour associated with offending. This is not particularly surprising as according to Weiner (1986) attributional dimensions are more likely than reasons to be associated with emotions and expectations, and therefore behaviour. In addition, reasons are more likely to reflect social desirability concerns than causal dimensions.

Finally, there are two more general issues raised by this study that are worth briefly mentioning. Assessment of the changes in causal attributions induced by therapy is an important part of a comprehensive outcome evaluation. Clinicians have frequently remarked on the important role attributions and distorted thinking play in legitimising offending and setting up HRSs (Pithers, 1990). Therefore it is sensible to include an assessment of attributions and attributional dimensions as part of treatment evaluation.

This method constitutes an assessment device that has the potential to provide an individual offender's profile of causal perceptions of his behaviour at the various steps in the relapse chain. As such it aids risk assessment at any point, but particularly after intervention; therapy is hardly complete if despite other changes in attitudes and skills, an offender persists in not accepting the lapse as the point of concern, or is still making uncontrollable causal ascription's. This method makes explicit the
motivational aspects of both attributions and emotions; and it is motivation that is central to abstinence.

LIMITATIONS OF THE STUDY

In this project I set out to test the AVE hypothesis in child molesters. It is an exploratory piece of research and not an experiment. It makes sense to first establish whether there is evidence for a phenomenon such as the AVE in child offenders before initiating a larger, experimental study. Therefore because of the exploratory nature of this research, there are some inevitable limitations that I will now address.

Given the design of the study (see Method - Chapter 5), there is no way of being certain that the subjects were committed to "abstinence" at the time of their offence. Therefore it is arguable that the RP model does not apply to them as it is not clear that they were breaking their restraint rules. This is a descriptive study and one of my aims is to obtain data concerning the possible occurrence of the AVE in sex offenders. It is legitimate to assume the RP models relevance as a starting point and gather data on the existence or nonexistence of the AVE. It is also reasonable to assume that the majority of the subjects were aware of, (and arguably committed to obeying) the strict taboos against sex with children in our culture. The breaking or violation of these rules could therefore lead to the AVE.

Marlatt (1989, 1985a, 1985b) formulated the AVE as a dimensional construct and therefore it could be argued that by establishing an AVE cutoff point this effect has been artificially created or even obscured. A problem with investigating the AVE in sex offenders is the difficulty in creating
lapse-relapse situations to identify its presence. It is clearly ethically unacceptable to ask offenders to monitor these situations in their natural environment. A common research strategy in other addictions is to compare eventual lappers and relapsers on the relevant measures of the AVE and ascertain whether its presence is able to discriminate between the two groups. This is not possible with sex offenders and therefore to create situations where the AVE might occur it is necessary to use an analogue design and attempt to identify the hypothesised cognitive-affective processes. This approach involves establishing a cutoff point or criterion to differentiate between those subjects who experience an AVE and those who do not. Although subjects were placed into high or low groups on the independent dimensions of attributions, and positive and negative affect, it was still possible to obtain a nonsignificant result where the obtained groups occurred by chance. These results support the existence of an AVE in child molesters. An additional point is that because the range of the attribution and emotion scores is sufficiently wide it is permissible to use a median split to divide the groups.

It is possible that by requiring the subjects to report reasons or causes for their behaviour at each breakpoint they have been trapped into a causal search. That is, asked to complete a task that would not have occurred in their natural environment. According to Weiner (1986, 1985) people spontaneously engage in an attributional search following important, negative, or unexpected outcomes. It is arguable that sexual activity with children, or behaviour associated with such activity, would usually start an attributional search; an individual would attempt to explain to himself why he behaved as he did. It is reasonable to assume that such behaviour would be perceived as important or even negative in view of the cultural norms
(and of course laws) forbidding sex with children. Perhaps this issue interacts with offender type, with preferential or fixated child molesters more likely to view sex with children as important rather than negative or unexpected, while situational or regressed offenders would display the reverse pattern, but still see it as important.

Perhaps splitting the subjects into high and low positive/negative emotion groups created a misleading picture, that is, mistakenly implied that the subjects were experiencing strong emotions. The difficulty here is that if the means of the individual emotions are low then classifying subjects into high/low groups based upon a median split can be somewhat artificial. Therefore, it is arguable that the AVE (at least its emotional component) did not occur in any meaningful sense and that it was simply an artefact of the experimental situation. This is unlikely as most subjects found the task of "reliving" their offence upsetting and emotionally evocative. In addition the (group) mean scores reported during the different breakpoints are comparable to the norms supplied by Izard et al., (1974). The range of scores on the various subscales, from 5 to 15, also suggests that this was not a problem. The major shift in the intensity of the emotional response occurred at the point of relapse which suggests that the subjects were affectively engaged in the experimental task.

One of the major problems when applying the RP model to sex offenders is defining when a lapse occurs. Individuals only engage in an attributional search following an outcome that is perceived to be important, negative or unexpected. The difficulty is that while sex offending will clearly initiate such a search it is not clear that a lapse would, at least if it is defined in the way Pithers (1990) suggests. The problem in defining a lapse also means that it is difficult to be certain it had been identified and
therefore included in the study. But the marked shifts in emotion and attributional dimensions that occurred make this interpretation unlikely. Typically a person experiences a number of lapses before relapsing and therefore you would expect to observe some evidence of this, provided of course an AVE was experienced.

Given the nature of the design used in this research it is not possible to conclude that attributions caused the emotional responses as hypothesised by Marlatt. However, in view of the lack of evidence for the existence of post event specific attributions and emotions it is important to first obtain some basic data on these processes before attempting to establish in what direction the causal influences work.

It could be argued that it is misleading to collapse individual emotions into positive and negative categories when defining the AVE. In reply to this objection, Marlatt generally speaks of emotions in broad terms (negative or positive affect) rather than identifying them individually. Other influential researchers into relapse do likewise (Rohsenow et al., 1988; Niaura et al., 1991). At this time we lack basic knowledge concerning the role of emotion in relapse and its constituent processes. It is a useful first step to identify broad trends and phenomena and then undertake more fine grained analyses. Factor analytic studies have found that there are two secondary factors underlying the DES basic emotions. Factor one is basically defined by a combination of negative mood states and factor two by positive mood states (Boyle, 1987; Boyle & Katz, 1991). In light of this research, it is permissible to collapse the basic emotions into the categories of positive and negative affect.

Another possible objection concerns the analysis of the AVE using three types, Marlatt's AVE\(^3\) (high attributions, high negative affect and low
positive affect), $\text{AVE}^b$ (high attributions, high negative and high positive affect) and EAVE (an emotional AVE with high negative affect and low positive affect). It could be argued that in using three types of the AVE I am simply stretching the definition to fit the data and that it would be simpler to just use Marlatt's definition. There has been relatively little empirical research in the AVE and therefore we have rather a limited understanding of this phenomenon and its component processes. It is therefore important to spread the net widely to capture all the relevant data. This will help researchers to build better theories and lead to more fruitful empirical investigations. It is also clear that there is a conceptual link among the three forms of the AVE. They all involve negative affect, while $\text{AVE}^a$ and $\text{AVE}^b$ share high attributions, and $\text{AVE}^a$ and EAVE both involve low positive and high negative affect. As argued above, there are conceptual problems with Marlatt's formulation and it seems sensible to be guided in future work by the kind of AVE construct (and the related attributional pathways) outlined in this thesis. Marlatt appears to have missed some important attribution-lapse/relapse relationships and therefore some important phenomena. For example, those offenders who report both high levels of negative and positive affect along with the relevant attributions ($\text{AVE}^b$). As discussed above, this is similar to what Pithers (1990) calls the PIG.

There is the problem of external validity, that is, is it permissible to generalise from a prison based population of child molesters to child molesters in general? Certainly, there is evidence that outpatient sex offenders are more representative of the general population of sexual assaulters than incarcerated ones (Abel & Rouleau, 1990). The majority of sex offenders do not end up within the prison system. Therefore it is
possible that these findings only apply to men convicted and incarcerated for their sexual crimes.

An additional issue is that of motivation, all the men included in this study were awaiting treatment for their sexual offences and were therefore motivated to change their attitudes and behaviour. This may have influenced their willingness to focus their attention on the events associated with the sexual assault and therefore increased the chances of an AVE occurring. It could be objected, that while the phenomenon is real in the sense that the subjects genuinely experienced the thoughts and feelings reported, it may not have occurred at the time of the actual offence(s). The presence of such processes as cognitive deconstruction (see discussion below) may have further reduced either the chances of an AVE occurring at all or perhaps reduced its intensity. Clinicians and researchers in the area of sexual offending have noted the persistence of distorted attitudes, beliefs and thinking in men in treatment for their sexual aggression. Certainly, a common clinical impression is that cognitive distortions persist until they are explicitly challenged (Murphy, 1990; Pithers, 1990). Therefore, it is arguable, that despite being in treatment child molesters exhibit the same kind of cognitive distortions as those that existed at the time of their offending.

There are limitations in this study, but the important thing is to begin to gather data on phenomena such as the AVE in sex offenders. To start with incarcerated offenders is a sensible strategy because of the relative ease in researching this population. However, to build up our knowledge about the general population of sex offenders, it is necessary to extent this kind of research to outpatient populations.
Additional problems of generalizability include the lack of subjects from other ethnic groups and the absence of intellectually borderline or retarded offenders. In fact the subjects used in this study appear to be particularly bright. Concerning the ethnic composition of the sample, there were simply no men from other ethnic groups who met the criteria. No one was excluded upon the basis of ethnicity. There was however, a decision to exclude subjects who were of borderline intelligence or who were illiterate. It was felt that in view of the exploratory nature of this research, it would be easier initially to recruit subjects who would find the verbal nature of the task relatively (intellectually) undemanding.

The sample size in this study, while adequate for assessing the existence of the AVE, was probably insufficient for some of the secondary analyses, for example, the investigation of the relationship between attributional dimensions and emotions. The major focus of this research project was to provide an empirical test of the AVE in child molesters, more specifically, incarcerated offenders. The investigation of attribution-emotion links was merely a secondary concern. The problem regarding this secondary analysis, was the lack of the necessary number of subjects to adequately test out Weiner's theory regarding the relationships between dimensions and emotions (Weiner, 1986). While there are trends in the data consistent with his hypotheses, a lack of subjects has precluded stronger conclusions. The other issue of relevance is that the labour intensiveness of the methodology used in this study made it practically impossible to work with the number of subjects necessary to clarify this important problem.

The classification of offenders into fixated/regressed types has been criticised on both conceptual and empirical grounds (Knight & Prentky,
1990; Simon et al., 1992). Simon et al., (1992) research into the validity of the fixated/regressed dichotomy suggests that a unimodal and continuous distribution rather than a bimodal one (as suggested by Groth's theory) is more appropriate.

At this point our understanding of the different types of sex offenders is quite limited. It is sensible to work with a number of classification systems (if they have some apparent value) at the same time (Hooker, 1987). The fixated/regressed (or the related preferential/situational) dichotomy has clinical face validity and arguably is of some use at this preliminary stage of theory development. One of its virtues is its relative ease of application. Although there appear to be distinct developmental antecedents to different types of sexual offending (Knight & Prentky, 1990), it is not necessary to accept the psychodynamic assumptions of the Groth et al., (1982) system.

As stated above, the sample is too small to use a sophisticated system of classification such as that of Knight & Prentky (1990). Their use of two axes, degree of fixation and amount of contact, in conjunction with further classification according to social competence, meaning of contact, degree of injury inflicted, and presence of sadistic motives, yielded 24 possible cells. Studies so far have indicated that 11 of the possible cells are virtually empty and therefore of very little clinical value (Knight & Prentky, 1990). The fixated/regressed and preferential/situational types appear to map onto some of the cells of the MTC:CM3, although in a more complex way. For example the "typical" fixated or preferential offender would be highly fixated (high level of pedophilic interest) on axis one and have a high degree of contact on axis two. Of course there are exceptions and this is one of the reasons Knight & Prentky have developed a more complex system of
classification. They argue that the fixated/regressed dichotomy confounds style of offending, relationship with the victim, intensity of pedophilic interests and level of social competence (Knight & Prentky, 1990).

FUTURE RESEARCH DIRECTIONS

The AVE construct appears to play an important role in facilitating the transition from a lapse to a relapse in addictive disorders. However in untreated sex offenders it occurs more frequently at the point of relapse and may determine whether or not an offender continues to offend or increase the severity of his offending. A key therapeutic task is teaching sex offenders to regard the lapse as being of crucial importance in providing an early warning sign. In a sense this means training offenders to experience some form of AVE at the lapse stage instead of relapse. Further research would be helpful in assessing the value of this clinical strategy in minimising the chances of sexual aggression. An obvious question concerns whether the AVE will actually occur at the lapse point following such training.

The most useful way in which to define the AVE needs further research. Is it necessary to include all four attributional dimensions when operationalising this construct? Is it better to combine the dimensions as Curry et al., (1987) do or should each dimension be analysed separately? Perhaps it would be possible to define it purely in emotional terms because of the tendency of sex offenders to exhibit cognitive distortions. Are there different forms of the AVE as suggested in this study? These are all important problems that need to be addressed soon.
It would also be a valuable extension of research into the AVE to follow offenders through treatment and assess whether or not the AVE diminishes in intensity or changes in any way as a result of therapy. Of particular interest would be the impact of specific treatment components such as cognitive restructuring and victim empathy on the individual components of the AVE. Larsen (1992) demonstrated that the attributional dimensions of sex offenders change in a more adaptive direction during a cognitive-behavioural programme. However she did not assess emotions along with attributions.

Recent research and conceptual work in both the social cognitive and sex offenders area has highlighted the importance of integrating different models to deepen our understanding of relapse processes. For example the relationship between the AVE and cognitive construction is poorly understood. The concept of cognitive deconstruction was explicitly developed by Baumeister (1990, 1991) in his recent work on suicide, alcoholism, sexual masochism and binge eating. His key argument is that people attempt to escape from the burden or implications of self-awareness by narrowing their focus of attention to relatively concrete levels. A primary assumption is that when individuals' behaviour or situation falls short of their expectations, they will attempt to explain it, that is, engage in an attributional search. If a causal attribution is made to internal aspects of the self, the person compares the outcome to relevant self-standards. This results in heightened self-awareness and the subsequent experiencing of negative emotions if the self is perceived as inadequate and responsible for the failure. The individual may attempt to escape from this self-evaluation, and the associated negative emotions, by shifting to a lower level of meaning or action identification. In a cognitively deconstructed
state, self-awareness is more concrete, the time perspective is narrowed, and behaviour is guided by proximal as opposed to distal goals.

The AVE may show quite a complex relationship to cognitively deconstructed states. For example, once a person has lapsed, he may shift from a cognitively deconstructed state, begin an attributional search, and experience an AVE. This in turn has a number of effects on ongoing behaviour depending on its intensity and the type of attributional dimensions involved. Secondly, following a brief AVE, the offender may attempt to escape self-awareness and associated negative affect by further addictive behaviour or changes that increase the chances of addictive behaviour in the future (other high risk situations and apparently irrelevant decisions). Thirdly, an offender may not experience an AVE at all, remaining in a deconstructed state and continuing his offensive behaviour. Finally he may be fully aware of the situation but continue to offend even though he no longer experiences a state of cognitive deconstruction. This may involve, for example, blaming external factors or other persons for the lapse.

It would also be useful to integrate the RP model, essentially a social learning perspective, with the influential behavioural theories of relapse in the addictions area. The major behavioural models (as discussed above) emphasise the importance of the conditioned response in relapse when exposed to drug related cues (Niaura et al., 1988; Rohsenow et al., 1991). Besides withdrawal cues, the incentive value of drugs is increasingly thought to play a predominant role in substance abuse and relapse. The recent exponents of these models (Niaura et al., 1988; Rohsenow et al., 1991) view relapse as a complex process involving multiple cues and mechanisms, including cognitive factors. While Marlatt does include
conditioning processes in his RP model he tends to emphasise the primary role of cognitive variables. Future research could establish whether or not the behavioural models of relapse are applicable to sex offenders and, if so, how the conditioning and cognitive variables combine to lead to relapse.

It is necessary to clarify whether or not the various mechanisms thought to mediate the transition from HRSs to a lapse work collectively or independently. Perhaps, as discussed above, different mechanisms work in conjunction with different types of HRSs. Another area for future research concerns whether external HRSs are more likely to lead to a lapse. If this is supported by the evidence, then it may make more sense to label internal processes such as negative emotional states as risk factors and reserve the term HRSs for external situations associated with relapse.

Another important area for future research concerns the assessment of causal attributions in clinical settings. The method used in this thesis, while extremely useful, is somewhat time consuming. If offenders do display relatively stable attributions concerning their offending, then it may be just as clinically useful to simply administer a questionnaire such as the 4-ADS during assessment and following treatment.

As discussed above it is important to extend this line of research to outpatient populations of sexual offenders. This is necessary to establish whether the AVE occurs in all sex offenders or only in incarcerated (child molesters) offenders awaiting treatment. It is also necessary to extend this research to different ethnic groups and intellectually disabled or illiterate offenders, to clarify whether the AVE plays a role in the offending or reoffending of these men. We know relatively little about the cognitive processes that mediate other kinds of sexual offending, such as rape or exhibitionism. It would be useful to explore whether or not the AVE and
its related processes occur in these types of offences. Besides increasing our understanding of these serious and socially costly problems, such knowledge may well lead to more powerful treatment methods.

The methodology and analogue design used in the study could fruitfully be used to study the psychological mechanisms underlaying different types of addictions, for example, narcotic addiction. Considering the limited amount of empirical research investigating the AVE, this kind of approach could provide a valuable way of identifying the cognitive and affective processes that lead both to relapse and initial abuse. It could also be extended to some of the areas more recently included within the RP approach, such as violence and interpersonal problems, (Wilson, 1992).

The relationships between the attributional dimensions and specific emotions could be further investigated. This would require relatively large numbers and it may be easier to simply administer the attribution and emotion measures in questionnaire form, without creating vignettes. It would be particularly interesting to examine the relationship between external locus and anger in rapists or those child molesters who are particularly aggressive. As discussed in the criticism of Marlatt's version of the AVE, he appears to have missed some important attribution-lapse/relapse links, for example, where an offender either blames the victim for the offence or behaviour associated with it.

It would also be worthwhile to further investigate the validity and advantages of subdividing the external-uncontrollable dimensional pair into a non-person and person cause. As stated earlier, Weiner maintains that "controllable" means controllable by anyone. He views the person cause as an example of an external-controllable attribution rather than, as
assumed in this study, as an external-uncontrollable attribution (person cause). This is an empirical and conceptual issue and merits further study.

Concerning the issue of classification, it is imperative to replicate this study using more sophisticated typology's. Simon et al., (1992) suggest either using alternative conceptualisation's or modifying the Groth et al (1982) theory. This would require the introduction of a dimensional perspective and the incorporation of other important variables, such as the offenders prior nonsex criminal record, his age and his relationship with the victim.

Finally, the complexity of the processes associated with the AVE and their possible instability has already been alluded to. The next step is to increase our knowledge base concerning these and in addition, shed light on the more general cognitive and emotional mediators of sexual aggression. This knowledge will help to develop more powerful theories of initial offending and relapse, and in turn, lead to more sophisticated and effective therapeutic strategies. Ultimately these will reduce the prevalence of sexual offences and increase the safety and therefore the emotional wellbeing of both women and children.
References


APPENDICES

APPENDIX 1

Consent Form

Brief Description of the Project:

The aim of this project is to assess thoughts and feelings associated with sexual offending. It will involve you filling out some self-report scales, listening to an audiotape describing sexual offending and answering some questions about your reaction to this.

Risks Associated with Participation:

There are no particular risks associated with this research project. It is essentially an expanded assessment. However, time will be made available after each assessment session to talk through any distressing thoughts or feelings you may experience.

Time Required:

Approximately six hours.

Name of Researcher: Tony Ward

Supervisor: Dr S M Hudson
             Prof K Strongman

I agree to participate in the project described above on the understanding that, if at any time, I wish to withdraw from the project I may do so and this will not affect my access to treatment. All data will be kept confidential and the identity of participants will not be revealed.

Signature: ____________________________________________
APPENDIX 2

MODIFIED 4-ADS (Benson, 1989)

Name: ________________________ Date: ________________________
No:  1  2  3  4

This form helps us to understand more about peoples’ reasons for sexual offending. This is not a test and there are no right or wrong answers.

1. What is the reason for your behaviour right now?

________________________________________________________________________

________________________________________________________________________

Next, we would like to know what you think about the reasons you wrote down above.

1) Are the reasons you wrote down things that:

_____ Will stay the same over time;
_____ Can change only a little over time;
_____ Can change a fair amount over time;
_____ Can change a lot over time;
_____ Will change a lot over time.

2) Are these reasons things that:

_____ Don’t have anything to do with you;
_____ Have to do with you only a little;
_____ Have to do with you a fair amount;
_____ Have a lot to do with you;
_____ Have everything to do with you.

3) Are these reasons that you:

_____ Can completely control;
_____ Have a lot of control over;
_____ Have some control over;
_____ Have only a little control over;
_____ Cannot control at all.

4) Are the reasons you gave things that:

_____ Would happen only in this special situation;
_____ Would happen in a few similar situations;
_____ Would happen in some similar situations;
_____ Would happen in most similar situations;
_____ Would happen in this kind of situation and in other situations.

5) Are these reasons things that are:

_____ A lot about you;
_____ A little about you;
_____ About you and about the circumstance;
_____ A little about the circumstance;
_____ A lot about the circumstance.

6) Do you think the reason above would:

_____ Never again be present;
_____ Rarely be present again;
_____ Sometimes be present again;
_____ Usually be present again;
_____ Always be present.

7) Are these reasons things that happen to you:

_____ Very often in different situations;
_____ Often in different situations;
_____ Sometimes in different situations;
_____ Rarely in different situations;
_____ Very rarely in different situations.

8) Are these reasons for which:

_____ You are not at all responsible;
_____ You are only a very little bit responsible;
_____ You are a little bit responsible;
_____ You are mostly responsible;
_____ You are completely responsible.
9) Do you think that these reasons:
   ___ Could change only a little bit from one year to the next;
   ___ Could change a little bit from one year to the next;
   ___ Could change somewhat from one year to the next;
   ___ Could change a lot from one year to the next;
   ___ Could change very, very much from one year to the next.

10) Are these reasons:
    ___ Most about others;
    ___ Partly about others;
    ___ Both something about you and about others;
    ___ Partly something about you;
    ___ Mostly something about you.

11) Are these reasons things that:
    ___ You can completely control;
    ___ You can control very much;
    ___ You can control a fair amount;
    ___ You can control only a little;
    ___ You cannot control at all.

12) Would these reasons be:
    ___ True for you only in this special event;
    ___ True for you in this event and in some other similar events;
    ___ True for you in most similar events;
    ___ True for you in most areas of your life;
    ___ True for you in all areas of your life.

13) Are these reasons things that are:
    ___ Completely inside you;
    ___ Mostly inside you;
    ___ A little inside and a little outside of you;
    ___ Most outside of you;
    ___ Completely outside of you.

14) Are these reasons things that:
    ___ Will probably change whole lot during a year;
    ___ Might change a lot during a year;
    ___ Might change quite a bit during a year;
    ___ Rarely change even a little during a year;
    ___ Never change within a year.

15) Are these reasons true for you:
    ___ In most similar circumstances;
    ___ In many similar circumstances;
    ___ In some similar circumstances;
    ___ Only in this type of circumstance;
    ___ Only on this particular circumstance.

16) Are the reasons things for which:
    ___ You are responsible;
    ___ You are only a very little bit responsible;
    ___ You are a little bit responsible;
    ___ You are partly responsible;
    ___ You are very responsible.
APPENDIX 3

Differential Emotions Scale (DES)

Name: ___________________________ Date: ______________________

No: 1 2 3 4

This scale consists of 36 phrases which describe different emotions. Please indicate the extent to which each phrase describes the way you feel at the present time. Record your answers by circling the appropriate number on the five-place scale following each word. Presented below is the scale for indicating the degree to which each word describes the way you feel.

<table>
<thead>
<tr>
<th>Very slightly or not at all</th>
<th>Slightly</th>
<th>Moderately</th>
<th>Considerably</th>
<th>Very strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

In deciding your answer to a given item, consider the emotion connoted or defined by that word. Then, if at the present moment you feel that way very slightly or not at all, you would circle the number 1 on the scale; if you feel that way to a moderate degree, you would circle 3; if you feel that way very strongly, you would circle 5, and so forth.

Remember, you are requested to make your responses on the basis of the way you feel at this time. Work at a good pace. It is not necessary to ponder; the first answer you decide on for a given word is probably the most valid.

very slightly or not at all slightly moderately considerably very strongly

1) Feel regret, sorry about something you did.
    1 2 3 4 5

2) Feel sheepish, like you do not want to be seen.
    1 2 3 4 5

3) Feel glad about something.
    1 2 3 4 5

4) Feel like something stinks, puts a bad taste in your mouth.
    1 2 3 4 5

5) Feel you can't stand yourself.
    1 2 3 4 5

6) Feel embarrassed when anybody sees you make a mistake.
    1 2 3 4 5

7) Feel unhappy, blue, downhearted.
    1 2 3 4 5

8) Feel surprised, like when something suddenly happens you had no idea would happen.
    1 2 3 4 5
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>very slightly</th>
<th>slightly</th>
<th>moderately</th>
<th>considerably</th>
<th>very strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>9)</td>
<td>Feel like somebody is a low-life, not worth the time of day.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10)</td>
<td>Feel shy, like you want to hide.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11)</td>
<td>Feel like what you're doing or watching is interesting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12)</td>
<td>Feel scared, uneasy, like something might harm you.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13)</td>
<td>Feel mad at somebody.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14)</td>
<td>Feel mad at yourself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15)</td>
<td>Feel happy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16)</td>
<td>Feel like somebody is a 'good-for-nothing'.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17)</td>
<td>Feel so interested in what you're doing that you're caught up in it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18)</td>
<td>Feel amazed, like you can't believe what's happened, it was so unusual.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19)</td>
<td>Feel fearful, like you're in danger, very tense.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20)</td>
<td>Feel like screaming at somebody or banging on something.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21)</td>
<td>Feel sad and gloomy, almost like crying.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22)</td>
<td>Feel like you did something wrong.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23)</td>
<td>Feel bashful, embarrassed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24)</td>
<td>Feel disgusted, like something is sickening.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25)</td>
<td>Feel joyful, like everything is going your way.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>26)</td>
<td>Feel like people laugh at you.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>27)</td>
<td>Feel like things are so rotten they could make you sick.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>28)</td>
<td>Feel sick about yourself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>29)</td>
<td>Feel like you are better than somebody.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>30)</td>
<td>Feel like you ought to be blamed for something.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>31)</td>
<td>Feel the way you do when something unexpected happens.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>32)</td>
<td>Feel alert, curious, kind of excited about something.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>33)</td>
<td>Feel angry, irritated, annoyed with somebody.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Feel discouraged, like you can't make it, nothing's going right.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------</td>
<td>---</td>
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<tr>
<td>34)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feel afraid.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>35)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feel like people always look at you when anything goes wrong.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>36)</td>
<td></td>
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</tr>
</tbody>
</table>
Errata

There are misplaced apostrophes on p.2 line 1; p6 line 3; p.52 line 15; p.70 line 4; p.119 bottom line. On page 23 there should be an "and" before classical conditioning on line 11. On page 28, paragraph 2 should read "I will make some preliminary criticisms concerning Marlatts versions of ......."