

## WINDOWS WITHOUT BARS

Douglas Quirk and Reg Reynolds<sup>1</sup>

### Introduction

Have you noticed that Canada tends to lag about 10 years behind the United States of America. In most of the major cities, and in many of the towns of the U.S.A., private citizens, similar in every way to you and me, have installed bars over all their windows and doors. They are afraid of the criminals who seem to have taken over the streets. There certainly is some evidence that crime of certain kinds has been on the upsurge during the last fifty years. Indeed, by the mid-1970s, although the figure in Canada was closer to one in 700, the United States had reached the point where one person in every 200 born would be murdered. That means that most people in the U.S.A. have lost someone close to them to murder.

Meanwhile, things have been fluctuating indecisively backwards and forwards in the ways in which we treat criminals. To conserve costs to the public purse, the pressure has been to house as many offenders as possible in minimum security settings, and to release

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<sup>1</sup> Although Doug and I spent most of our lunch hours for many years trying to solve the various riddles of the universe and, in the process, discussing everything from soup to nuts, I don't remember participating in the writing of this particular thinkpiece, in spite of the fact that it has my name on it. On the other hand, I suspect that much of it is in the paper "Assessment and Large Group Treatment of Criminality." I haven't had time to do very much with it. It is not a finished paper. Nevertheless, I am posting it to the website, in case anyone might be interested in it, or in Doug's thinking process. RMR

as many as possible to community supervision under Parole. At the same time, the public mood, created by media hype about sensational crimes, has demanded increased security and punitive handling of offenders. This has created pressure to refrain from early release, to increase security and to put behind bars at least those repeat offenders whose crimes are against-the-person.

Most governments and institutions react strongly to pressures such as these. But some do not. In 1973, when crime rates had reached their peak, the Government of Ontario opened a new prison for male offenders in Brampton. This institution was designed to serve as the 'flagship' of correctional facilities in Ontario.

The Ontario Correctional Institute (O.C.I.) was to offer treatment as its primary correctional programme, and it was charged with the task of developing, testing and exporting effective programmes to other correctional centres. It was provided with 220 beds, organized into one 54-bed intake/diagnostic unit and five 30 to 34-bed treatment units. It was supplied with basic resources, including a small staff of psychologists and social workers, and a degree of freedom to experiment with novel ways of undertaking the correctional task with provincially-sentenced (less than 2 years) male incarcerates.

During the first five years of its operations, quite by accident, it was given the additional advantage of receiving an entire defined population of incarcerates. During those first five years, it received all male first incarcerates from across the province, in the 16 to 24-year age range, who had at least a nine-

month sentence. That is, it received for assessment and classification all of the young, first time offenders with "interesting" offenses. This afforded a wonderful opportunity, at first hand, to study criminality in the making, not yet confounded with the effects of institutionalization.

You may wonder why this was such a wonderful opportunity. When the O.C.I. came into being, following at least a hundred years of efforts in all societies to figure out how to stop offenders from doing crimes, the predominant point of view throughout the justice system was that 'nothing works in corrections' -- a position expressly taken, following a review of the research literature on the subject, by a forensic scientist, a psychologist named Martinson. If nothing had worked, and if we were to try to find out what might work, it was obvious that we had to start all over again testing out other approaches. This might mean that we could not climb on the shoulders of other scientists to build on their work. We needed to start out with our own observations, looking as closely as possible at criminals-in-the-making.

And we did. We assigned half of our psychologists, social workers, teachers and vocational trainers, as well as a large group of correctional officers to the task of observing and recording, testing and interviewing and reporting on about a thousand of these young adults per year. The Chief Psychologist, Reg Reynolds, brought in a friend and colleague of his, Doug Quirk, to serve as Senior Psychologist and to direct this intensive effort in our maximum security diagnostic unit. Here was a very real opportunity for us to learn something about criminals.

PART I  
BEGINNING THE TASK  
Chapter 1  
What Came Before?

Naturally enough, you would think there must have been something known about criminals before we started our work. Strange to say, there really was precious little known. What there was had been based largely on observing a highly select group of offenders who had performed pretty sensational crimes, and the main purpose of the observations were to provide expert opinion in court. Other than that, everybody thought he or she knew the who, what, why, when and where of crime.

The justice system knew that crime was performed for personal gain or advantage, and was an act of wilful abuse of others. The more reactionary members of society knew that criminals were just bad or evil people who deserved to be brutalized in return for their misdeeds and to carry the 'mark of Cain' forever. The more liberal members of society knew that criminals were poor people who had received fewer opportunities and more abuse than other people,

and who needed the opportunity to learn how to get along and succeed in society. Everybody knew that criminals lacked something like a conscience, and that they needed to be made to feel guilty, remorseful or penitent, if need be in penitentiaries. The trouble was that science had not been able to verify any of this knowledge.

In fact, about the only things that scientists knew about offenders was that (1) they shared with people with severe mental disorders a higher than normal incidence of minor physical anomalies (MPA), (2) they exhibited a few peculiarities of their bio-chemistry, (3) they had a tendency to be less efficient in verbal than in task-oriented kinds of intelligence, (4) they displayed a less than normal level of moral reasoning development, (5) they revealed a few familial characteristics diminishing their experience of intact family life, and (6) their histories showed relatively intense and prolonged exposure to media violence. These facts, although only accounting for a small amount of the variance of crime, were at least fairly firmly established.

In addition to these solid but scattered items of knowledge, 'authoritative' psychiatric opinion had formed a picture of a person called a 'psychopath' or 'sociopath'. This picture had been abstracted from interviews and observations of people charged with pretty awful, often sensational crimes, who were pleading 'not guilty by virtue of insanity' or whose crimes led the prosecution to doubt their 'sanity'. Insanity is a legal term applied if the court is convinced that the offender, at the time of his offence, 'did not know the nature and quality of his act, and that it was wrong'. Some of these offenders fit the criteria for psychosis

(the psychiatric term for 'crazy'), and some did not. The ones who did not fit the criteria for psychosis, often displayed some characteristics of 'psychopathy'. Although 'psychopathy' is considered as a diagnosis, it is important to remember that, like most psychiatric diagnoses, it refers to a cluster of symptoms and not to an illness or any disorder with known etiology, pathology, treatment or course.

Vancouver's Robert Hare has achieved international renown for his work on the psychology of psychopathy. He has developed a rating procedure called the Psychopathy Checklist (PCL) by which to estimate from case history and interview material the degree of psychopathy in an offender's personality. The psychopath is seen as glib and superficially charming. He has a grandiose sense of his own worth. He needs constant stimulation and excitement. He lies with delight. He is manipulative and enjoys scams. He lacks remorse or guilt. His feelings seem shallow. He is callous and lacks concern for others' feelings. He leads a parasitic lifestyle. He has poor control over his behaviour. He tends to be promiscuous sexually. He usually exhibited early behavioural problems. He lacks realistic, long-term plans. He is impulsive. He is irresponsible. He denies responsibility for his own actions. He may have many short-term marital relationships. He probably has an early history of juvenile delinquency. He tends to end up having parole he has been granted revoked. He exhibits a good deal of criminal versatility.

Everybody working in the justice field understands that not all offenders are psychopaths. That concept is reserved for the

few offenders charged with particularly heinous and meaningless crimes, and who display a sufficient number of the above symptoms. What are other criminals like?

There is a place in Washington, D.C., called St. Elizabeth's Hospital. Like the maximum security hospital in Penetang, Ontario, it is a psychiatric hospital in which are kept people who have performed some very serious crimes, but who have pleaded 'not guilty, by virtue of insanity'. The main legal issue is not whether they did the crimes, but that they are said to be insane.

The Director of the Program for the Investigation of Criminal Behaviour at St. Elizabeth's Hospital was Samuel Yochelson. For some years, he and Stanton Samenow, a colleague who is a clinical research psychologist, undertook an extensive phenomenological (which means impressionistic) study of criminal thinking. In 1976, they published the results of their studies in two thick books entitled, The Criminal Personality. They claimed to have identified the errors of thinking which they said characterized the criminal mind. They divided the thinking errors which they had observed into three broad clusters.

The first cluster, comprised of 16 thinking errors, they called 'Criminal Thinking Patterns'. They noted that the criminal is extremely energetic and that he directs his energies towards maintaining a constant state of excitement. His fear is wide spread, persistent and intense throughout his life, but he hides his fears because he doesn't want to be thought of as weak. His over-riding fear is a fear of being a 'nothing', and when this fear overtakes him it seems as if it will last forever. The criminal is

chronically angry, particularly in response to either criticism or opposition. He has a sense of pride based on something like a need to be macho. He wants power because it bolsters his sense of self-esteem. The criminal is very sentimental but, again, doesn't acknowledge it for fear of being considered weak. His idea of religion is quite primitive. His thinking is concrete, similar to that found in 'borderline personalities'. His life seems fragmented, and he jumps from one activity to another. Throughout, he experiences a sense of uniqueness, of being different from others. He feels so unique that he believes no one else could understand him, and that the laws of society were made for others, not for him. He is a perfectionist. He is suggestible, particularly when the suggestion coincides with what he already wants. Because he believes that being open exposes him to being taken advantage of, he remains a loner. His sexual relations are very performance oriented; he regards himself as irresistible, and he thinks of his partner in terms of ownership. Finally, he has made lying an essential and justifiable part of his life and constantly lies about things even when there is nothing specific to be gained.

A second cluster of thinking errors was labelled 'Automatic Errors of Thinking'. The authors claimed that the criminal believes there is nothing he can't do if he wants to, but that he uses the position 'I can't' as a way of avoiding responsibility. He portrays himself as a victim. He lacks time perspective. He lacks empathy. He lacks consideration. He fails to assume obligations. He fails to assume responsible initiatives. He



believes that, if he wants something, it is his, and that people are pawns who can be made to do what he wants. He harbours both fear and contempt for fear. He lacks trust. He keeps a 'closed channel' with people. He refuses to be dependent. He lacks interest in responsible behaviour. He is pretentious. He fails to endure adversity. And he is poor at making decisions for responsible living.

A third cluster of thinking errors, 'From Idea Through Execution', was concerned with the actual execution of criminal activity. The authors concluded that the criminal regards crime as his career, and that he can only temporarily be deterred from it when the penalty for a particular crime is very severe and the risk of getting caught seems high. When considering a crime, he eliminates both internal and external deterrents by contemplating his scheme until the desire to act outweighs his fears. His overly optimistic view that everything is going to work out just the way he thinks, seems to cut through any other obstacles to acting as he wishes. He seems to have some kind of automatic cut-off of thought that allows him to act the way he wants to, and sometimes it happens so quickly that the act might be viewed as an impulsive act or a crime of passion. He continually needs to build up his idea of himself as a basically good person, so that he doesn't have to rationalize or justify himself either before or after the crime. He seems to be able to postpone 'the big score'. He also seems to be able to postpone going straight, and to be able to postpone assuming any of the responsibilities that would interfere with his life of crime. Interestingly, with some kind of self-protective

irrationality, he may hallucinate the voice of God or the voice of his mother telling him not to do a particular crime. However, he isn't frightened by it since he regards it as a form of protection. Although he manages to suppress it most of the time, fear may emerge during the actual execution of a crime, but only enough to ensure that he takes precautions against getting caught. When a criminal does remain unapprehended, his fear of immediate danger gives way to a feeling of triumph at having succeeded. He likes to celebrate his success, 'partying it up' with friends. If he is apprehended, he asks himself 'Why did I do it?', meaning 'What went wrong?' Getting caught is an injustice, and he feels that he has every right to escape if he can. He tells self-serving stories to justify his behaviour, even to the extent of portraying himself as mentally ill. However, if he does manage to be excused from his crime by reason of insanity, as soon as he is hospitalized he sets about trying to demonstrate his rapid recovery from the mental illness that he never had. Criminal behaviour is not as impulsive as many criminals would have you think. It is premeditated, and it pervades the criminal's entire life. And in general, the risks of being caught and punished just add to, rather than detract from, his execution of the crime.

These three clusters and the behaviours they subsume seem to have a certain face validity. Cluster 1 attitudes and feelings such as excitement bred of autonomic arousal, denial of fear, concreteness of thought, the need to appear macho, the feeling of being different, the weak relationship capacity and the readiness to distort the truth, all seem familiar to those working with

offenders. Cluster 2 characteristics, such as portraying himself as a victim, lack of time perspective, lack of empathy or consideration, weak responsibility, unwillingness to trust or be dependent and pretentiousness, all have a familiar ring. And Cluster 3 ideas such as crime as a career, rumination about crimes, viewing himself as a good person, viewing his actions in an overly optimistic way, celebrating successes and telling self-serving stories, seem to be recognizable features of offenders. Of course, such Cluster 3 items as portraying himself as mentally ill and then setting out to demonstrate a rapid recovery would most likely be seen among the criminally insane (the very kind of offenders Yochelson and Samenow were studying). But, regardless of whether or not these characteristics really portray criminal thinking, or whether they are merely general attributions which could be acknowledged by many other people as well, workers in the criminal justice system were quick to recognize in these descriptions the offenders with whom they were familiar.

A year after their phenomenological treatise on the criminal mind, Yochelson and Samenow published a description of a treatment programme they designed to modify these supposedly criminalistic patterns of thought and behaviour. Their treatment programme places the criminal in "a group with three to five participants. Attendance in this group every weekday is part of a disciplined life in which time is programmed. ... The group meets for three hours a day, five days a week, for at least a year." [italics added] (Yochelson and Samenow, Vol II, pp. 179, 180). That is, the minimum treatment time is estimated as 750 hours of intensive work

with 3 to 5 people. Their work is primarily cognitive in nature: "In summary, we work with the raw data of thinking. We extract thinking errors, establishing the fact that each error is part of a broader criminal pattern. We teach the criminal new corrective, responsible thinking patterns here and now, and prepare him for future situations." (op. cit., p. 176). Success is reported in terms such as the following: "As of May 1976, thirteen men who were hard-core criminals are now living in the community and fulfil our strict criteria of responsible functioning." (op. cit., p. 436).

Ignoring for the moment the fact that this doesn't tell us anything at all about the proportions of participants with whom this approach was successful or unsuccessful, or the nature of the 'strict criteria of responsible functioning', it is apparent that the treatment as described is very labour-intensive. But, since the picture painted does add dimension to the image of psychopathy, perhaps their conceptualization of criminal thinking could stand on its own merit, irrespective of its application to treatment.

Unfortunately, that seems not to be the case. Yochelson and Samenow's (1976) work quickly came under attack from a variety of directions. Academic psychologists, in particular, expressed concern about the fact that no comparative or contrast data were presented. That is, no control group was used. Moreover, it was remarked that the criminally insane criminal group on which they had based their studies was unlikely to be representative of the criminal population in general. That is, it was evident that these authors had generalized far beyond the limitations of their data. In a later publication, Samenow (1984) responded to this criticism

by saying, "Well, I'm talking about criminals. This is the way criminals think, and if someone who is incarcerated doesn't think this way then he is not what we would call a 'criminal'." Such tautological reasoning hardly serves to correct for the deficiencies in their data.

What is clear is that Yochelson and Samenow provided an important and seminal, if flawed, study expanding on the nature of criminality. And while the pejorative quality of some of their descriptors must raise doubts about the objectivity involved in the phenomenological method of observation which they employed, the descriptions given have found strong support among many people employed in the justice field.

#### Let's Add Science to the Picture

While the debate over the relative merits of Yochelson and Samenow's work was fermenting, one of our students, Bhardwaj-Keats (1986), decided to test the validity of their observations by attempting to construct a paper-and-pencil psychological test to measure forty-six of the criminal thinking errors Yochelson and Samenow had identified. This research, which subsequently became her doctoral dissertation, demonstrated a robust difference in the scores obtained on her test by normal community college students and by men incarcerated in provincial correctional facilities. That is, she seemed to have demonstrated that not only the criminally insane, but 'garden variety' incarcerates as well, could be said to possess 'the criminal mind'.

In her study, Bhardwaj-Keats found a remarkable correspondence between the three factors that emerged from factor analysis of the

scores from her 46 separate scales and the three clusters identified by Yochelson and Samenow. Fifteen out of their first sixteen thinking errors loaded on her first factor; thirteen out of their second sixteen thinking errors loaded on her third factor; and all fourteen of the remaining thinking errors loaded on her second factor. And in each case, where a thinking error did not load where it should, it could be argued that this was due to poorer reliability of that particular scale. Yochelson and Samenow's phenomenological observations seemed to have been astute. And the test which Bhardwaj-Keats developed to sample the thinking errors seemed to differentiate clearly between criminals and non-criminals, well beyond the ability of any other measure that might have been used for that purpose.

But there were problems with Bhardwaj-Keats' test. Some of the items were sexist. One item read, "My idea of good sex is to conquer a woman's body," which would make it less than ideal for use with females. Another item was, "When I'm doing crime, I've more energy than most people," which might presuppose what the test was attempting to discover. Some thinking errors were represented by scales composed of as few as two items and others by scales of seven or eight. In some scales, all of the items were keyed for answers in the same direction. Although it seemed to offer a means by which to observe criminality, each of these features would diminish the test's psychometric value in clinical applications.

#### Clues Found So Far

The first step in any scientific investigation is to find a way to make the subject matter being studied observable. The

courts determine whether or not a particular person performed a particular crime. The court decision makes substantive the fact of a crime and the identity of a criminal. And performing one crime is a fairly good, if inexact, predictor that other crimes may be committed by the person. But that doesn't tell us what causes the crime(s). Some of the causes will be external conditions acting on the offender, but most will be characteristics of the offender which are carried with him or her into any circumstances. And these characteristics are invisible. If we are to discover the causes of crimes within offenders, then the invisible internal qualities which predispose the offender to perform crimes have to be made observable. Yochelson and Samenow proposed some of the characteristics of attitude and habit which might be worth examining in offenders as possible features which predispose them to crime. Bhardwaj-Keats began the task of trying to make those characteristics observable and even potentially measurable.

## Chapter 2

### Reconstructing the Psychological Profile

The purpose of science is to understand and to control the things or events it studies in order to improve the quality of human life. Without the ability accurately to observe and measure the things it studies, science cannot even investigate an object or event, let alone find out what controls or causes it.

There were some things which we soon discovered to be wrong with Bhardwaj-Keats' test of criminal thinking. In a factor analysis of one version of her test, a three-factor solution was found, in accord with her earlier findings. In this analysis, fifteen of the scales loaded on the first factor, but only six of those scales were drawn from among the sixteen thinking errors that made up Yochelson and Samenow's first cluster. The other nine were drawn from their second cluster of items. The second factor was made up of sixteen scales which were distributed almost evenly across the three broad clusters defined by Yochelson and Samenow. The third factor was composed of ten scales, most of which, it is true, were drawn from Yochelson and Samenow's third cluster.



The test as a whole readily distinguished between normals and offenders, but only the first two of the three factors separated the two groups. The two groups did not differ on the sum of the scores from the third factor, comprised primarily of those scales designed to sample thinking errors involved in the actual execution of crimes, and which was the only cluster which whose items were identified in our new analysis.

The scores obtained by non-offenders and by sentenced offenders (incarcerates) on each of her forty-six scales were examined separately. It was discovered that the groups differed significantly on only twenty of the forty-six scales, and in three of these scales the difference was in the wrong direction! That is, non-offenders scored significantly higher on three of the scales which discriminated the groups statistically. But all of the scales were written and scored to represent criminal thinking errors. It was clear that Bhardwaj-Keats' test was both less than satisfactory for clinical use, and subject to identifiable errors.

At this point it was decided to 'go back to the drawing board' and to look at the percentage endorsements by criminal and non-criminal groups on each of the items in the test. Now you might think that, given a good test item, as many as 90% of the criminals and as few as 10% of the normals would answer in the scored, or criminalistic, direction. No single item even approached that result. In a majority of items there was at least a 15 percentage point differential between the criminal and non-criminal groups, and in a majority of these items the

difference was in the expected direction. That is, proportionately more of the criminals answered the item in the scored direction. At the same time, for a sizable minority of items, the normals were more likely than the criminals to respond in the scored or 'criminalistic' direction.

Yochelson and Samenow (1976) had observed that if a criminal wants something badly enough, he sometimes begins to feel that it is already his. This did indeed appear to be true for some 35% of our criminal sample, but it also appeared to be true for 60% of our normal sample. Yochelson and Samenow wrote about the tendency of criminals to experience non-psychotic hallucinatory deterrents. Thus, for example, they might be expected to respond True to an item such as: "I still hear my mother's voice telling me not to do things that are wrong." In fact, 30% of our criminals did respond in the scored direction to that particular item, but so did 56% of our normals. These examples illustrate one of the dangers in a study such as Yochelson and Samenow's, in which observations are made about a particular population without reference to any control or comparison group. Apparently, some of their so-called criminal thinking errors are even more likely to occur among normal people.

The differential endorsement strategy for item selection proved to be very productive. Old items were examined and new items written and tested until a set of items was obtained which discriminated normals and criminals stably over repeated samples. In our item-selection studies, only about two dozen normals and as many criminals were used for each successive sample. However, only those items which survived cross-validation over successive samples

have been retained in the current (eighth) version of the test. In the end, the new test retained only two of the 181 items from Bhardwaj-Keats' test in their original form, and about a dozen or so in altered form.

#### How Far Have We Progressed Now

In science, it is not enough to have tools which permit things to be observed, recorded and measured. The measures also need to be pure. The sources of errors affecting scientific devices have to be identified, and then means have to be found to get rid of any sources of impurity.

The present version of the test by which we will observe the otherwise invisible criminal mind, is called A Survey of Thoughts, Feelings and Behaviours (STFB). It is comprised of 100 items, each of which refers to an element of what goes to make people perform crimes. The 100 items contain 50 pairs of items, each pair serving as a scale to represent a kind of thinking error. Of the two items in each scale, one is scored if answered in the True direction while the other is scored if answered in the False direction. All of the items in the new test would seem to be appropriate for all the kinds of people with whom it might be used. That is, the main psychometric limitations of the earlier test have been corrected.

Although all these details may seem rather picky, the key to scientific progress and to any kind of investigation is precision and making sure that all the details are taken into account. We now have a means by which to study our subject matter, namely, what makes people criminals.

## Chapter 3

### Extracting the Real Issues to Observe

We were sure that the items of the STFB separated criminals from non-criminals. But suppose that the items just asked people to tell us whether or not they were criminals, even if we had not noticed how our questions were asked. If so, it is possible that the test would not work with criminals who did not want to tell us they were criminals. Many offenders are thought to be dishonest. If this were true, you might expect some of them to try to 'cover up' their participation in crime or in a criminal group. If the test is to be used to help recognize criminals, it would be well to be sure that the test could recognize even those who are careful to hide their criminality under a mask of normalcy.

In psychological test construction, the mask of normalcy is called 'social desirability', or the tendency of some people to hide their 'real' nature by answering questions asked of them in the way they think is the socially desirable way to respond. So the next question to be addressed would have to be that of the 'social desirability' of the test items.

Social desirability refers to the extent to which a given response is perceived, by some reference group (in most cases, 'normals') to refer to a desirable or undesirable trait. It is important in test construction because of the possibility that test subjects may respond to the items in such a way as to try to create either a 'good' or a 'bad' impression. Such a test-taking attitude is referred to as a 'response set'.

A socially desirable response set means that the individual's responses to the test items were influenced by a conscious or an unconscious attempt to present him- or herself in a favourable, or 'socially desirable' light. Most people could understand wanting to do that. But why would anybody seek to present him/herself in a socially undesirable light? Actually, there are several reasons why they might do so. First, and most likely, they may truthfully be reporting characteristics which they have which are socially undesirable. Second, some people want to make it clear that they need help. This leads these people to 'over-react' to the test items in order to ensure that they communicate every possible problem to their psychologist. While this purpose is laudable, its effect is to create a picture of the person which is not strictly comparable with the normative samples which permit the psychologist to measure the 'real' variations among the respondent's personality characteristics.

It is impossible to prevent people from adopting various, desirable or undesirable, response sets -- unless the test is comprised of stimulus elements whose purpose and nature the

respondent cannot understand (as in the case of tests such as the Rorschach). But, since a response set which has been adopted by a person will surely bias or distort the resulting picture from the test scores, and thus lead to misinterpretation of the test, some method has to be found to assess the presence of any response set which the subject may have adopted. The measurement of response sets is one of the most important means by which the 'validity' of the test results can be evaluated for test interpretation.

Given the usual expectation that criminal offenders might occasionally adopt response sets related to 'social desirability', it seemed necessary to develop validity scales for the STFB to address this risk. Fifty students from a university psychology class were asked to rate the STFB items for their social desirability, using the following seven-point scale:

- 1 = Very Socially Desirable
- 2 = Moderately Socially Desirable
- 3 = Slightly Socially Desirable
- 4 = Neutral with respect to Social Desirability/Undesirability
- 5 = Slightly Socially Undesirable
- 6 = Moderately Socially Undesirable
- 7 = Very Socially Undesirable

From among those items judged to be relatively neutral with respect to Social Desirability (mean ratings between 3.5 and 4.5), sixteen items were selected such that eight of the items were scored if answered in the True direction and eight were scored

if answered in the False direction. The mean Social Desirability ratings for these 16 items was 4.00 on the above scale.

From among those items judged to be most social undesirable, another sixteen items were selected such that half of the items were scored if answered in the True direction, and half were scored if answered False. The mean rating for these 16 items on the above seven-point scale of social desirability was 5.8. This task was undertaken in order to provide a means by which to identify respondents' tendency to adopt a response set which might exaggerate either the positive or the negative interpretation of the test results (analogous to the 'F' scale in the MMPI).

It is important to discover whether the test as a whole really works to separate groups of people and, if so, whether it continues to work if the socially desirable or 'normal' response is obvious (eg., on the Socially Undesirable items) and when it cannot be detected (eg., on the Social Desirability Neutral items). But before we do that, we ought to make the task we are setting out to perform with our microscope on crime, the STFB, a bit harder for it to accomplish.

We aren't just interested in whether our test can perform the job of distinguishing between non-offenders and offenders. If the STFB is any use to us at all, it will have to distinguish pretty clearly among groups of offenders. One of the psychologists working at the O.C.I. had also worked for many years in a federal penitentiary where he got to know the more serious offenders, many of whom seemed to be making a career out of crime. He interviewed about half of the offenders admitted to the O.C.I. He agreed to

identify each of the 'career criminals' he encountered in his O.C.I. work so we could isolate a group of them to contrast against the 'garden varieties' of offenders which formed the main bulk of our intake. We now had a group of non-offenders ('Normals'), a group of 'garden variety' offenders ('O.C.I.') and a group of 'career criminals' ('C.C.') with which to test out our test.

Table 1 presents the means of the scores for the three groups of subjects (Normals, O.C.I. and C.C.) on the Total Score for the STFB, on the Social Desirability Neutral scale, and on the Social Undesirability scale. Of course, the mean score ranges differ from scale to scale. The Total Score is based on 100 items, and the other two scales are based on 16 items each. If you look across the table, you can see that the scores get higher, and by large enough steps that the groups look as though they can be distinguished by the three kinds of measures.

Table 1: Means for three groups on the STFB Total, Neutral and Undesirable Scales.

<u>STFB SCALES / GROUPS:</u>	<u>N</u>	<u>NORMALS</u>	<u>O.C.I.</u>	<u>C.C.</u>
<u>STFB TOTAL SCORE</u>		31.63	44.50	58.37
<u>STFB NEUTRAL SCORE</u>		6.33	8.43	10.03
<u>STFB UNDESIRABLE SCORE</u>		4.50	5.24	8.47

Analysis of Variance revealed that each of these three groups differed statistically from the others beyond the .05 level of confidence. It would appear, therefore, that the STFB is measuring something related to criminality, and that it is also measuring some aspect of criminality other than social desirability. This last statement follows from the observations that it continues to distinguish the groups when the items allow respondents to



recognize the 'normal' or socially (un)desirable response and when respondents cannot detect which is the socially desirable response (i.e., on the 'Neutral' scale).

It may be noticed in Table 1 that the mean scores of the three groups tend to be lower in for the STFB Undesirable scale than on the STFB Neutral scale. This means that the responses of all three subject groups are influenced by a tendency either to suppress socially undesirable responses or to accentuate socially desirable responses, or both. That is, for all three groups, responses are influenced by a 'social desirability' response set.

Table 1 does seem to suggest that the STFB can distinguish non-offenders and garden varieties and career offenders, and the statistical tests run verify that the differentiation is statistically reliable. However, before we proceed to the many other checks and counter-checks we will have to do if the test is really any good, we really ought to find out just how well the STFB performs in identifying individuals' group memberships. If it can't do that, it won't be much use to us for refined work in examining the causes of crime. The determination of individuals' group memberships is called 'discriminative validity', and it is done by means of Discriminant Function Analysis.

Table 2 presents the results of Discriminant Analysis using the 50 scales comprising the Total STFB score. The table shows the percentages of each group's subjects correctly identified or 'predicted' by the statistical method to be from their 'actual' or real group. It is clear that the STFB performs quite as well as we might have hoped for it. 100% of the non-offenders and 0% of the

offenders were identified/predicted as being 'normal'. Given that only about half of the O.C.I. group was seen by the psychologist who identified the 'career criminals', some of the O.C.I. group should have scored as 'C.C.s' as they did. And the fact that some of the C.C.s scored in the O.C.I. range may only serve to emphasize that the upper ranges of the scale represent phenomena relevant to being a criminal. Nevertheless, the over-whelming numbers of each of the groups were correctly identified for their group membership.

Table 2: Discriminant Function Analysis: Scales by Groups

ACTUAL	PREDICTED		
	NORMALS	OCI Offenders	CC Offenders
NORMALS	100%	0%	0%
OCI Offenders	0%	95%	22%
CC Offenders	0%	5%	78%

Percentages of Subjects correctly predicted in each group

#### Clues Found To Date

So far we have found a way to make at least some of the qualities which predispose to criminal behaviour observable. We have zeroed in on 100 test items all of which allow some aspects of criminality to be recorded. We have checked to make sure that our means for observing criminality really do represent offenders as a group, even to the point where we can pretty accurately find out in which group of people (normal or offender) the person belongs. And we have figured out ways to see through any cover under which the offenders may be hiding. The STFB looks pretty good so far as a microscope under which we can see the otherwise invisible qualities of offenders.

We're beginning to get where we want to go. But the job isn't finished. We have ways of observing and recording criminality, but

we still don't know how good our observation and recording device is at measuring the amounts of each aspect, and we haven't yet found out which aspects of criminality it measures.

## PART II

### Forensic Lab Work

#### Chapter 4

#### Analysis to Component Elements

It's just too easy to make mistakes in an investigation if you take appearances at their face value. You need to examine the fit among the various items of evidence you find. The 50 scales developed to represent "thinking errors" might have provided a kind of conceptual meaning about the underlying nature of criminality. However, although scale items meaningfully differentiated our criminality criteria, the real structure of criminal thinking (i.e., what the pieces are and how they fit together) had never been determined objectively. Science is reductionistic by its nature. Its search is always for the elements or parts of any thing studied. Consequently, the next step was to analyze the STFB into its components. One way to do this is by Factor Analysis.

Groups of 24 'normal' non-offenders, 312 inmates admitted to the Ontario Correctional Institute (O.C.I.), and 19 career criminals (C.C.'s) were assembled. In this sample, factor analysis of the fifty scales produced an acceptable six factor solution which accounted for 67 percent of the variance (we'll explain this later when we get around to trying to figure out how to prevent

crime). The factor loadings, along with a slight adjustment for scale content, produced six interpretable 'factor scales'. The internal consistencies of these six 'factor scales' ranged from  $\alpha = 0.75$  to  $\alpha = 0.85$ , which was judged to be satisfactory for present purposes (we'll return to this when we talk further about scale reliability).

Basically, what the last paragraph means is that the analysis found for us 6 main elements which appear to control the major part of crime as we have been privileged to observe it. And it gave us 6 new scales ('factor scales'), each comprised of a different selection of the 100 items, and each representing or measuring one of the elements.

As a bit of news, that's great! But it then raises a whole lot of questions which have to be answered before we can use the identified elements. So, before we can meaningfully tell you what those elements are, we will have to discover how dependable they are, how closely they are related to other indicators of criminal conduct, and how they are structured or comprised. This is a big job involving several steps, so you'll have to be a bit patient as we work our way through the forensic analysis of our observations.

#### Dependability

The first question of importance has to do with how well we can depend on the 6 new STFB Factor scales to measure their 6 factors or elements. Dependability or reliability is based on the relative (1) stability of a measure, (2) internal consistency of a measure, and (3) precision of a measure. Each aspect of reliability is estimated in a different way.

(1) Stability is estimated from the relationships among the same people's scores when they are re-tested with the same measures. The STFB was administered to inmates on two to four different occasions, with the tests separated by intervals averaging between two to three months.

The STFB was administered to all inmates within a couple of weeks of their admission to the O.C.I. from jails and detention centres. At this point, they have all recently been sentenced, they have all been pretty thoroughly indoctrinated into the inmate subculture, they are all pretty disheartened, and they have not yet decided what they will do with their sentence time or whether or how they will relate to the treatment opportunity which will be presented to them. They are all 'at loose ends'.

The second STFB administration took place after they had decided they would accept treatment, after they had become established on a treatment unit and had started to relate each to his own treatment programme. Depending on their duration of time on a treatment unit, those available were tested a third and a fourth time with the STFB.

The correlations obtained between scores on the 6 Factor scales, the Total scale and the two Social Desirability scales, for the successive pairs of STFB administrations are shown in Table 3 (Appendix A). These correlations provide information about the stabilities of the STFB scales. They are interesting to us, and very much what we would expect and want. What these correlations reveal is that, when the inmate is moderately stably involved in a fairly stable life setting, the stability indices are satisfactory.

They are not as high as they are for some psychological measures.

This fact appears to be due to three things. First, and most importantly, their relative instability seems to be due to their ability to measure change. This can be seen very clearly in their utterly unstable performance between the intake testing and the first treatment unit testing. These pairs of correlations approach zero, or no concomitance at all. The fact that the correlations all rise dramatically for the second and third pairs of testings shows that the conditions involved have produced the instability.

Second, the stability indices achieved by most personality tests are usually due to the use of a high percentage of 'historical' items which, once answered in a given direction, cannot truthfully thereafter be answered differently. In order to ensure that the test items could be used to measure changes occurring in people, we expressly set out to avoid 'historical' items in the STFB.

Third, variations in stability are exhibited on some of the Factor and Social Desirability scales. This is not a surprise. Factor 4, which yields the least stable Factor score, is comprised on only 8 items. Part of what we later learned about Factor 4 was based upon its weak stability (see under meanings of the Factors). The statements in its items express difficulty of understanding and of generalization. People with such difficulties (high Factor 4 scores) find it hard to maintain consistent responses across life situations (instability); those who do not have such problems (low Factor 4 scores), do not understand 'what is the problem' posed in the test items (again, weak stability). The other scale exhibiting

weak stability is the Social Desirability Neutral scale. This scale is comprised intentionally of those items whose nature is such that the respondent cannot easily identify the social context of the statement made. Consequently, he is likely to base the context of response on his changing social circumstances, with the result that his responses are likely to change, or become unstable, across time.

So, we were satisfied with the stability indices we obtained, at least until we can determine whether the scales can record experimentally induced changes. Until that time, we are delighted with the level of stability achieved as it suggests that the scales may be able to record change, and are sufficiently stable under fairly stable life conditions.

(2) Internal Consistency is best measured by the correlations between responses to each item and the total test score (alphas). We have already reported that the alphas for the Total STFB score range between .75 and .85. These are not as high as alphas obtained with some psychological tests. What this means is that the items are not quite as equivalent to one another as those used in some other tests. Again, this is partly due to our intentional avoidance in test construction of 'historical' items, which cannot be changed once affirmed.

Of course, we wondered how much internal consistency there would be on the part of the Factor and Social Desirability scales. The repeated testing with the STFB described already, offered a nice opportunity to check the scales' internal consistencies under varying life conditions. Table 4 (Appendix A) displays the

internal consistency alphas for the various STFB scales at each of the four testing occasions. As if to confirm that the explanation given for the initial instability of the scales across the first pair of testings, there is no reduction in the dependability (alpha) indices when the estimate used does not involve the passage of time. The internal consistency (item to scale correlation during a single test) estimates remain pretty constant regardless of the administration considered. And, although the alphas are not as high as some tests achieve, we are content that this may at least justify the hope that the scales will measure change.

Again, the lowest (alpha) dependability indices occur with Factor 4 and the Social Desirability Neutral scales. The reasons why this is to be expected have already been given. The explanations apply equally well to stability and to internal consistency estimates. For both of these scales, relative to the others, the items (alpha) and the collection of the items into scales (considered under stability), minimize respondent (Factor 4) and social (STFB Neutral) context for responding, and thus are likely to minimize scale dependability. However, these facts are the very issues which these scales set out to estimate. That is, Factor 4 may be said to estimate an aspect of the dependability of the respondents responses, and the Neutral scale may be said to be constructed to estimate the dependability of the person's reliance on his social context for his responses.

Once more, then, we are far from being displeased with the dependabilities of the several STFB scales. They seem to us to afford both enough instability and inconsistency to warrant the



expectation that they may be able to measure change in people. And yet they are sufficiently stable and consistent to warrant some trust in their dependability as measures.

(3) Precision, however, is the main issue in science bearing upon the dependability of an instrument. Without precision or accuracy, an instrument is at best a pre-scientific novelty. Precision is estimated best by what is called the standard error of the mean. The idea is that if a measure is to be considered precise, the average measures it takes on repeated samples of measurements ought to be pretty close to one another. They ought to be 'bang on' and not highly variable (having lots of 'error'). In the usual case with behavioural scales it is hard to obtain a series of samples of the measures to see just how variable (error-prone) are the sets of measures taken. Consequently, several statistical methods have been demonstrated to provide adequate estimates of the standard error of the mean from the performances of single samples.

One of these estimates of the standard error of the mean is calculated by squaring a reliability coefficient (i.e., an alpha or a stability correlation coefficient). Squaring a number which is less than one (true of all correlation coefficients) results in an even smaller number. But the size of the result of squaring is much less reduced as the number squared approaches one. So, in principle, the lower the dependability indices, the lower will be the estimate of the standard error of the mean, and thus the weaker the precision of the instrument. Based on this method of

estimating precision, our relatively low dependability indices (see Appendix A) should mean that the STFB scales are quite imprecise.

However, a moment of thought might remind us that we are not in the position where we have to estimate the standard error in our data. We have taken repeated samples, so we are in a position to determine directly just how variable or imprecise are the real performances of our scales. We don't have to guess from a calculated statistic. We can observe the performances of our scales directly. In principle, if our scales are imprecise, the statistics describing their behaviour should vary all over the place. And there should be even more variability (all over the place) for 'independent' samples (different people involved) than for 'dependent' samples (the same people involved). And, if you look at Tables 3 and 4 (Appendix A), you would certainly get the impression that the correlation coefficients reported vary all over the place, suggesting very low levels of precision.

But careful examination of the correlation coefficients, considering each scale's coefficients separately, changes the picture quite a bit. True, Factor 4 and the Neutral scales' coefficients add strongly to the picture of variability among the coefficients presented. But, with the exception of the stability measures for the first pair of tests, each scales' coefficients, including those for Factor 4 and the Neutral scale, are really quite consistent within themselves. Each scale seems to have its own range in which its coefficients tend to lie. And there is no apparent difference in the coefficients obtained from 'dependent' (eg., the repeated testings of the same people) and 'independent'

(eg., intake testing taken alone or single testings for other samples than the repeating ones) samples. In fact, compared with the performances of most other kinds of repeated samples with other tests, the amount of inter-coefficient consistency (or precision) achieved in the varied samples taken with the STFB scales is really quite remarkably good.

Given the observations in the last paragraph, we are not only satisfied with the precision of the STFB scales, we are impressed with their probable high precision. We are reminded of the old saying: 'things aren't always what they seem'. Of course, we will not be absolutely sure about the precision of the STFB scales unless and until it can be demonstrated that they can measure minor changes created in people under controlled conditions with adequate accuracy. We will find out if they can do that later.

#### Relationship to Other Indicators

The last section talks about the dependability or reliability of the STFB and its scales. This section is concerned with the verification or validation of the STFB and its scales as measures of what makes people criminals. There are five different ways in which the validity of a measure can be evaluated, and each is again expressed in its own ways. A measure can be evaluated by examining (1) its face validity, or whether it looks as though it ought to measure what it sets out to measure, (2) its discriminative validity, or whether it discriminates among groups having different amounts of the quality it is supposed to measure, (3) its concurrent validity, or whether it measures its quality in ways similar to other measures of the same quality, (4) its predictive

validity, or whether it can be used to predict states or changes of the thing it is intended to measure, and (5) its construct validity, or the extent to which it fits a theory about the thing it measures and/or can be shown to behave as the theory underlying it would suggest it ought to behave. We will have to comment on all of these necessary aspects of the validity of the STFB and its contained scales. All of the types of validity are critical to the assurance that we have, in fact, identified a way to observe and measure important elements of what leads to crime.

(1) Face Validity is not something we can demonstrate in a report such as this one. But it can be argued. The items were selected objectively by finding things which were responded to differently by offenders and non-offenders. Therefore, the items may or may not 'appear' to be related to criminality. However, as we explained, all the items of the test were derived empirically, starting with items written to express the kinds of criminal 'thinking errors' described by Yochelson and Samenow. If you can agree that the kinds of 'thinking errors' proposed by those authors, which we took the time to describe earlier, are indeed attributes of criminals, then the 'face' validity of the STFB is confirmed as far as it can be.

(2) Discriminative Validity has already been reported for the STFB Total and Social Desirability scales (Tables 1 and 2, in the text). We have not yet reported on the discriminative validity of the Factor scores. Table 5 (Appendix B) presents derived mean scores on the 6 Factor scales for the same three groups ('Normal' non-offenders and 'O.C.I.' and 'C.C.' offenders) reported earlier.

Again, the progression of the means suggests that each of the Factor scales measures something related to criminality.

Again, Analysis of Variance was calculated to find out if the visible score differences between the groups are reliable or more apparent than real. All of the differences between the three groups were statistically significant, except for the difference between the 'Normals' and the 'O.C.I.' offenders on Factor 1. We are not yet clear in our own minds about the reason for the single exception on Factor 1. However, it can be said with confidence that almost all the Factor scores do perform the kinds of discriminations they should. Consequently, their discriminative validity has been verified.

(3) Concurrent Validity is a much more complicated problem. There are many different kinds of measures related to criminality against which the STFB might be examined. Part of the problem is that we already know that the STFB does a better job of discriminating criminals than any other available measure. So it will be a little hard to know what to make of results when the STFB's scores are compared with those from other measures. Still, this task must be done.

One of the sets of measures which has been used to classify various sub-groups of offenders is taken from the MMPI, North America's most frequently used psychological test. Megargee worked with some colleagues to develop a classification system for criminals based on their results on the main clinical scales of the MMPI. Each of the classes of offender types is represented by a letter of the alphabet known as the Megargee code or typology.

Megargee codes were identified from the MMPIs of 335 inmates, to whom the STFB had also been administered. The Megargee codes were rank ordered according to the inmates' STFB scores, such that Megargee codes associated with low STFBs were on the left, and those associated with high STFB scores were on the right. This rank ordering is shown as Table 6 (Appendix B). The order corresponds pretty closely to the order which would reflect severity of criminality from Megargee's descriptions of his types.

To confirm this correspondence, the ranks based on the order of STFB scores were compared (using Spearman's rho) with the ranks derived from Megargee's descriptions. The correlation obtained was indeed high and significant. To test this further, the rankings of the code types found by Megargee on a series of offender-related measures (Table 7, Appendix B) were compared with the STFB scores and those measures. The resulting correlation matrix is shown in Table 8 (Appendix B). The decimals are omitted due to space constraints. However, only one of the correlations is negative (that between Violence of Offence and STFB Factor 4:  $r = -.02$ ), and most of the correlations achieved are robust and significant.

Finally, it seemed appropriate to discover just how the various available measures of criminality were related to each other. In a sample of 150 inmates, a factor analysis was undertaken of the whole range of available other scores related to criminality. The purpose of this exercise was to determine which measures are related to each other, and how many different clusters of scores there might be suggesting weak relationships among measures. Table 9 (Appendix B) presents the results of this factor

analysis. Five factors emerged, each containing some of the main available measures related to criminality. We were pleased to see that the STFB scores (except the maverick Factor 4) clustered in the first factor (A) with most of the MMPI criminality scales, given that we have been impressed with the clinical utility of the MMPI scales.

The second factor (B) is the familiar lack-of-well-being factor which has emerged as the first factor in most studies of psychiatric populations or of offenders undergoing treatment during their incarcerations. The third factor (C) seems to collect most of the Millon Multiaxial Inventory's (Millon, 19 ) scales. We have felt for some time that the MMPI and the MCMI measure different types of variables, so that they are not inter-changeable clinical tests. The fourth factor (D) picks up the Hare Psychopathy Checklist (PCL) along with weak development of moral reasoning and violence of offence. This observation and others we have made, suggest fairly definitely that Psychopathy is only weakly related to the STFB (they measure different things), and that Psychopathy, in a manner consistent with its history, measures criminal violence. The fifth factor (E) is related to aggregate sentence or offence seriousness (Quirk, et al, 1991) and both unremitting criminal behaviour and STFB Factor 4.

It would seem that, although the STFB is centrally related to the main-stream of variables related to criminality, a complete picture of criminality may be more complex (many more types of variables) than most of us had imagined. If that is true, in order to characterize crime completely, a complex of measures may be

needed. Nevertheless, the data we have presented does seem to verify firmly that the measures provided by the STFB are centrally related to the kinds of measures of criminality already available, and that the concurrent validity of the STFB has been established.

(4) Predictive Validity is rather difficult to test without the passage of considerable intervals of time. It requires that the measures being evaluated are capable of predicting information not in evidence at the time of testing, and/or are capable of predicting changes which are introduced into the thing measured. Although the test has not been in existence long enough for either of these two requirements to be met fully, indirect evidence concerning the predictive validity of the STFB scales is available from two sources.

Although insufficient time has elapsed since the first inmates were tested with the STFB to permit adequate follow-up of their subsequent criminal conduct, sufficient time has elapsed for inmates tested with another test. MMPIs had been administered to 360 inmates, most of whom were later followed-up to determine whether they had subsequently been convicted of crimes. But these people had not had STFBs administered to them. The raw MMPI items from another group of 340 inmates who had also received the STFB, were factor analyzed with their STFB Factor scores. The MMPI items which factored with the 6 Factor scores were examined to find sets of MMPI items which might provide estimates of the STFB Factors. In this way, 6 MMPI-STFB-Factor scales were assembled from the MMPI items. These MMPI-STFB-Factor scales were then used, as though they were the STFB scores, to predict follow-up criminal conduct of



the subjects. The results of this indirect attempt to evaluate the predictive validity of the STFB are presented in Table 10 (Appendix C). Although, being indirect measures, the MMPI-STFB measures do not finally confirm the predictive validity of the STFB, the results do suggest that the STFB Factor scales will eventually be shown to predict future crime validly.

The second evaluation of the predictive validity of the STFB was undertaken in association with a treatment study which we will report later. The idea of the study was that, if we had correctly understood the nature of each of the 6 STFB Factors, treatments used to modify the nature of each of the Factors should result in pre- to post-treatment changes in the related STFB Factor scores. If treatment effects could be demonstrated specifically on the Factor scores at which they were aimed, two conclusions should be justified. If the results sought could be demonstrated, the first conclusion would be that the STFB Factor scales' predictive validity is strongly supported. That is, the scales would have been shown to predict changes in them brought about intentionally and under controlled conditions.

(5) Construct Validity would also be evaluated as a second conclusion should the results sought from the treatment study be realized. That is, although this statement cannot be made unless the treatment study turns out as we might hope, if it can be shown that the theory we have to develop about each of the Factors in order to treat it, is verified by treatment changes in the Factor scores, then the essence of construct validation will have been demonstrated. For the present, however, we are not able to provide

any information about construct validity of the STFB's measures.

Although Predictive and Construct varieties of validation of the STFB remain undemonstrated, we have shown that the STFB and its Factor and Social Desirability scales are valid as discriminators of criminal characteristics and as measures firmly related to most of the other available measures related to criminal conduct. That is, most of the evidence required for the validation or verification of the STFB measures has been provided.

## Chapter 5

### Component or Element Analysis

The next task is to find out what the 6 Factors or elements of criminality are and how they are 'put together'. We have shown that the 6 Factors are not just meaningless variables we have derived by chance, but are dependable as measures and have solid bearing on the nature of criminality. It now becomes meaningful to try to say what they are, or to characterize them.

But how should we do this? We could just take what offenders are telling us about themselves in the ways in which they respond to the STFB items. If we did this, we would capture the socially "undesirable" ideas they have of themselves and their attempts to present themselves in super-good ways, so that we would end up with pictures of offenders similar in type (whether or not in detail has not yet been shown) to the descriptions of offenders given by Hare in describing 'psychopaths', and by Yochelson and Samenow in describing their image of the 'criminal personality'. So, what would be wrong with doing that?

Actually, there would probably be several things wrong with doing that from our point of view. First, Hare, Yochelson and Samenow were interested mainly in describing characteristics, and their purpose was to provide ways in which to recognize or

'diagnose' psychopathy or the criminal personality. We are interested in that, but we are also interested in understanding and treating criminals. If we start out talking about anything using pejoratives (critical descriptives), most of us continue in that way. Now nobody is going to suggest that criminal conduct should not be criticized, put down and faulted. It should be. But the roots on which it is based, being parts of a person's personality, are less appropriately faulted, and criticizing them may make real understanding difficult, and treatment of the people to whom they belong essentially impossible. Moreover, describing the elements as they appear on the surface, may make us feel we have reached our understanding before we have really examined anything important. And, like Yochelson and Samenow's descriptions, any descriptions we might make of surface qualities might well be taken as a revised picture of the 'criminal personality', with the emphasis on the word criminal, which is just a symptom of something deeper. So we think there could well be several problems involved in just describing what we found on the surface. We want to be very careful about how we proceed at this step too.

You may remember that, in order to test predictive validity of the Factor scales, in a group of 340 inmates we factor analyzed the answers given to the 566 items of the MMPI along with the STFB Factor scores. Lots of MMPI items tended to cluster with each of the 6 Factor scores. At this point we had to rely on 'computer number 1' -- our own brains. On a board room table we laid out slips of paper, each one containing an MMPI or an STFB item, in such a way that all the STFB items contributing to each Factor were

grouped together with all the MMPI items related to that Factor. What we quickly observed was that, in a manner consistent with the ways in which the two tests had originally been constructed, the STFB items tended to refer to behaviour (or actions) and to cognitions (or beliefs and attitudes), while the MMPI items tended to refer to motivations (or feelings and emotions) and to psychopathology (or strange or unusual experiences the person might have had).

The task we set ourselves was to re-sort the items in each grouping in several ways. First, as far as that was possible, we put the items into an order from the ones referring to early life experiences to one referring to later life experiences. We shuffled the items until they followed a chronological sequence of development, with items which had no clear reference time grouped in the present. Then we did some more internal shuffling to order them further into a chronological sequence based on our combined knowledge of human psychological development. Then, within each group from each chronological period, we re-arranged the items so that issues relating to the same kind of psychological process appeared together. This last statement means that we grouped together things related to thoughts, things related to feelings, things related to actions, etc. Then we group them separated them and grouped them further still to bring together similar kinds of reactions. This brought depressed, or guilty, or angry reactions together. Finally, after some more 'fine tuning' and combing through the items, we established a picture of how each of the 6 Factors must have developed and grown in those people who scored at

high levels on the Factor.

The pictures we had assembled of the developmental psychology of the 6 Factors of crime were written down. The pictures came out as follows:

Factor 1: Rejection of Guilt Feelings. Based on the items comprising and associated with Factor 1, it would appear that the dynamics, or the motivational history of how it developed, took a course similar to the following:-

(a) Guilt-Tripping: A significant other was perceived by the child as continually pointing out the child's mistakes and wrong-doing in a critical or punitive fashion.

(b) Felt Rejection, Guilt Sensitivity, Guilt Proneness: The child reacted with a sense of rejection, a sensitivity to guilt and a readiness to feel guilty.

(c) Compulsive Cautiousness and Depression: The child accepted the felt guilt and felt rejection, and reacted with a kind of compulsive cautiousness, with depressive over-tones, which led to some inhibition of activity.

(d) Resentment, Anger and Paranoidal Feelings of Mistreatment: The felt rejection, combined with the inhibition of activity and energy use, fostered in the child a build-up of resentment and anger at the perceived injustice of his situation, feelings which also could not be expressed too directly.

(e) Guilt Intolerance, Affect Inhibition and Boredom: The combination of guilt and anger feelings created strong negative feelings about emotions, with a suppression of

emotions, which, in turn, may have led to boredom. Nevertheless, anger could not be suppressed fully, and it was evoked particularly by the elicitation of guilt feelings, which were immediately rejected.

(f) Excitement Seeking: The elicitation of guilt and anger feelings created increased Autonomic Nervous System (ANS) arousal, and the 'denial' of guilt seemed to override the previous inhibition of action. The result involved a heightened excitability of the person, an increased intensity of anger, and a search for relief in excitement-seeking activities, some of which others might consider to lead naturally to guilt feelings.

(g) Anti-Social/Criminal Behaviour: The excitement-seeking and/or the angry pursuit of guilt-provoking action enhanced the risk of involvement in criminal behaviour.

Factor 2: Rejection of Failure and Inferiority Feelings. Based on the items, it would appear the dynamics took the following course:-

(a) Attention Deficit Disorder/Hyperactivity/Paroxysmality and Punitive Reinforcement: It would appear that this factor is a result of inability of parents or teachers to tolerate high-energy, active children who present problems of discipline. Indeed, this factor seems to be associated in particular with the consequences of parent/teacher responses to Attention Deficit Disorder, Hyper-activity and/or delayed cerebral maturation. The child's undirected hyperactivity and related fluctuating attention and 'paroxysmal' tantrums elicited from significant others responses which the child perceived as

frustrating, critical and punitive.

(b) Failure Experiences and Felt Rejection: The child perceived that he could not do anything 'right', became conscious that he 'failed' most of the time, and felt that he was not acceptable to his parents and/or teachers.

(c) Inferiority Feelings, Victim Identity and Depression: The failure experiences increasingly created in the child a sense of incompetence and inferiority and/or a sense of being victimized or brutalized by others, and both reactions were at least tinged with depression.

(d) Anger and/or Paranoidal Feelings of Mistreatment: The sense of inferiority was reacted to with frustration and then anger, and the sense of being victimized transformed into an almost paranoidal sense of mistreatment and vengefulness.

(e) Hypomanic Grandiosity, Egocentricity and Attention-Seeking: Anger and depression in the context of inferiority feelings are difficult for the child to tolerate, and they seem to have been reacted to defensively with something like hypomanic grandiosity, egocentricity and attention-seeking behaviour.

(f) Risk-Taking and Impulsiveness: The needs for grandiosity and egocentric attention-seeking, which are apt to result in careless risk-taking and which often resulted in harrowing experiences, conditioned a propensity for excitement-seeking and risk-taking. Meanwhile, the depressive undertone characteristically increased the risk of impulsiveness. This



latter refers to the fact that depressed people tend to feel that 'nothing could be worse than the way I feel right now, so it doesn't matter what I do'. That is, depressives are not well regulated by future consequences.

(g) Anti-Social/Criminal Behaviour: The excitement-seeking/risk-taking, coupled with egocentricity and impulsiveness, each enhanced the probability of anti-social or criminal acts.

Factor 3: Rejection of Insecurity. Based on the items, it appears that the dynamics of this factor may take the following course:-

(a) Impaired Mothering, Autonomic Nervous System Reactivity and Emotional Distress: Anxiety/stress and/or social/emotional isolation of the mother may have led to impaired mothering, which may have communicated her heightened ANS reactivity to the susceptible child, thus leading to emotional distress on the part of the child.

(b) Felt Rejection, Closeness Anxiety, Discouragement/Distrust/Disappointment and Emotional Distancing: The strongly-felt, arousal-tinged sense of rejection, provided the basis for learning anxiety about close, emotionalized involvements which, in turn, fostered discouragement, mistrust, disappointment and emotional distancing.

(c) Introversive Hostile Fantasies, and Feelings of Guilt and Inferiority: The felt rejection and mutual isolation may have stimulated in the child the production of hostile, distancing fantasies, which seem to have been reacted to with enhanced feelings of guilt and inferiority. These reactions may then have been accentuated by the child's labile ANS arousal. All

of these arousal-producing trends created an intolerable degree of emotional arousal and distress.

(d) Guilt Intolerance, Affect Inhibition and Boredom: The combination of guilt and anger created strong negative feelings about emotions, resulting in the suppression of emotions which, in turn, may have led to boredom.

(e) Social Withdrawal and Obsessional Defence: The intolerance for feelings and emotional upset, which are maximized in social relations, led to a generalized social withdrawal and to the development of obsessive inhibitive defenses such as over-rationality, emotional coldness and, perhaps, a felt need to control others.

(f) Accumulation and Periodic Expression of Rage: Inhibitive defenses block activity, and thus energy use. This creates felt frustration, from which rage accumulates within. Such pent-up rage is apt to be expressed periodically in moodiness or anger, careless or impulsive acts and/or rages or tantrums.

(g) Anti-Social/Criminal Behaviour: Periodic acting out may result in potentially harmful offenses, especially given that there is a strong pressure of underlying disturbance and distress. Moreover, the inhibitive quality of the defenses suggests that acting out in these people may be fostered by the use of disinhibiting substances.

Factor 4: Rejection of Sensitivity. Based on the items, it would appear that the dynamics take the following course:-

(a) Low Intellect confronting Societal Expectations/Demands: It appears that this factor, which is negatively related to

I.Q., may result from the child's feelings of inadequacy in response to his perception of his inability to live up to societal demands.

(b) Failure Experiences and Felt Rejection: The child felt he could do nothing 'right', became conscious of repeated 'failure', and felt unaccepted by his parents or teachers.

(c) Inferiority Feelings, Victim Identity and Depression: The experienced failure increasingly created in the child a sense of incompetence and inferiority and/or a sense of being victimized or brutalized by others, and both reactions were at least tinged with depression.

(d) Anger and/or Paranoidal Feelings of Mistreatment: The sense of inferiority was reacted to with frustration and then anger, and his sense of being victimized transformed into an almost paranoid sense of mistreatment.

(e) Affect Inhibition and Boredom: The combination of anger and inferiority feelings created strong negative feelings about emotions of caring for others, with the resultant suppression of emotions which, in turn, may have led to boredom.

(f) Social Withdrawal and Obsessional Defence: The sense of failures, with associated inferiority feelings, are most likely to be maximized in academic settings, in which the child is also most likely to be developing his social interaction skills. The emotional distress from his sense of failure seems to have become associated with social

interactions such that he began to withdraw socially into fantasy, with the accompanying development of obsessive-like inhibitive defenses such as emotional aloofness and insensitivity to others' feelings.

(g) Dependency/Independency Conflicts and Withdrawal from Academic Interests: Whether the child acquiesced to perceived demands or rebelled against them, he likely developed conflicts over dependency/independency as well as impaired interest in academic pursuits.

(h) Accumulation and Periodic Expression of Rage: To the extent that the inhibitive defenses block energy use in activity and thereby allow rage to built up within, that pent-up rage is apt to be expressed periodically in moodiness or anger, careless or impulsive acts and/or rages or tantrums.

(i) Defensive 'Isolation': In this type of defence, used by compulsives, the 'connectedness' among events is ignored such that each event is almost seen as having its own existence, almost without cause or relationship to other events.

(j) Concrete, Simplistic Thinking: One result of the use of defensive isolation is that thinking becomes relatively simplistic and concrete, being concerned with specific events as if they were unrelated (failing to notice the forest for the trees). The person may still excel in activity-oriented tasks such as sports.

(k) Failure to Learn from Experience: To the extent that events are isolated or considered separate, it is obviously difficult for the person to learn well from experiences.

Generalization and transfer of training are impeded, so that associations between events become hard to grasp.

(1) Anti-Social/Criminal Behaviour: Whether as dependent 'follower' or 'independent' leader, this factor may lead the rather unthoughtful, simplistic, activity-oriented and socially isolated person into associations with other social misfits, and thus into involvements in criminal activities.

Factor 5: Rejection of Conformity. Based on the items, it appears that the dynamics of this factor take the following course:-

(a) Routinized, Rationalizing, Rule-Governed Parenting: Parenting which might be characterized as militarily correct, perhaps with a Law and Order style of morality, seems to underlie this factor.

(b) Emotional Insecurity, Closeness Anxiety, Discouragement and Emotional Distancing: The child's felt inability to elicit warmth from his parents engendered emotional insecurity and a sensitivity to close, emotionalized involvements which, in turn, fostered discouragement, and the defence of distancing himself from emotions and emotional involvement.

(c) Victim Identity, Distrust/Disappointment, Introversive Hostile Fantasies and Feelings of Guilt and Inferiority: The felt rejection stimulated feelings of mistreatment, distrust and disappointment in the child, along with the production of hostile, distancing fantasies which seem to have been reacted to with enhanced feelings of guilt and inferiority. These, latter, fostered withdrawal into ruminative behaviour, thus accentuating existing introversive (later obsessive) features.

(d) Distress Intolerance, Affect Inhibition and Boredom: The combination of emotional insecurity, depression, inferiority, guilt and anger feelings created strong negative feelings about emotions, with suppression of emotions creating boredom.

(e) Social Withdrawal and Obsessional Defence: Ambiguity and uncertainty (the most universal stimuli for anxiety) are maximized in social relations, which thereby acquire a high potential to arouse emotional distress. The intolerance of emotional states in this child, led to a generalized social withdrawal and to the development of obsessive inhibitive defenses such as over-rationality, emotional coldness and a felt need to control others.

(f) Rationalized, Rule-Governed, Dichotomous Thinking: Partly modelled after the parenting, and partly as a consequence of his introversive-obsessive cognitive style, thinking becomes over-rational, rule-governed and characterized by dichotomy or polarization (black-and-white), and mental energy is poured into cautious self-justification for hostile feelings.

(g) Accumulation and Periodic Expression of Rage: The inhibitive defenses block energy use in activity and allow rage, bred of frustration, to built up within. The pent-up rage is apt to be expressed periodically in moodiness, anger, rages or tantrums.

(h) Anti-Social/Criminal Behaviour: Periodic acting out may result in potentially harmful offenses, especially given that there is a strong alienation from others. Moreover, the inhibitive quality of the defenses suggests that acting out

may be fostered by the use of disinhibiting rationalizations and/or substances.

Factor 6: Rejection of Discipline. Based on the items, it appears that the dynamics of this factor take the following course:-

(a) Lack of Parental Discipline: Either through absence or neglect, a lack of effective parental control and discipline seems to underlie this factor.

(b) Under-Controlled, Under-Disciplined: The result of the felt lack of parental attention was an under-controlled child who could not delay gratifications effectively, who tended to be demanding and to act out to meet momentary needs.

(c) Neglected/Rejected, Depressed/Discouraged and Angry: Subjectively, the child felt neglected, rejected, depressed and angry in response to his plight.

(d) Distress Intolerance, Affect Inhibition and Boredom: The feelings of neglect, rejection, depression, failure and guilt, combined, created strong negative reactions to emotions, with the consequent suppression of emotions leading to boredom.

(e) Failure Anxiety, Distrust and Sensitivity to Others' Attempts to Provide Controls: Feeling rejected, depressed and angry, he seems to have become sensitive to his own failings; angry at his parents, he reacts negatively to others, particularly with mistrust for any (now perceived as uncaring) attempts to discipline him.

(f) Anti-Social/Criminal Behaviour: It seems likely that the resentful intolerance of rules and regulations, along with the extra pressure of seeking to avoid depression, which is itself

coupled with a sense of mistreatment, may result in criminal behaviour which is widespread and invasive.

Is there any validity in these formulations? Some of our speculations about the nature of the parenting received by the child, and some of the inferences drawn about the kinds of criminal involvements to which these factors may predispose offenders are, to be sure, speculative. However, although ordered to suit a kind of psychological view of development, the various steps in the sequences offered are taken fairly directly from the contents of the items endorsed by offenders who scored in the upper ranges of the factors. Of course, the real importance in such formulations lies in their contribution to construct validation through their heuristic value in directing the treatment and prevention of the thinking, feelings and behaviour implied in each of the factors. And, the importance of the formulations can only be verified by the eventual determination of the effects, if any, of the derived interventions in reducing or extinguishing the criminal behaviours represented by these elements of criminality.

In effect, we are asking the question: if there is any validity to these formulations, what could we possibly do about the underlying phenomena? In fact, there is probably a great deal that could be done about them. To the extent that criminal behaviour is motivated, fuelled or 'driven', by a sensitivity to (and, hence, a rejection of) feelings of guilt or failure, for example, then that is the problem which should be addressed. If Closeness Intolerance is the issue, then it is anxiety about human closeness which requires treatment. Each factor, if it has been appropriately



identified, would need to be addressed in treatment for its essential features in order to modify what seems to underlie criminality. At the same time, if treatment of the suggested 'underlying condition' results in changes in factor scores, any such changes would provide strong evidence of the construct validity of the formulations on which the treatments were based.

The six Factors identified seem to represent ideas about criminals which people have held for a long time. Criminals are not known for strong conscience development, or for acknowledging much guilt feeling. In fact, they have often been characterized as deficient with respect to guilt feelings. They do seem to resent others trying to 'put them on guilt trips'. They have often been referred to as sensation seekers looking for excitement. They are inclined to be somewhat overly self-satisfied, sometimes even superior or grandiose in their manner. They tend not to be happy about any inferiority feelings they experience. They do seem to put on a "macho" front, and to find it hard to tolerate strong feelings or emotional warmth toward others. Restraint is not one of their strong suits. They have been known for years to be somewhat less effective in verbal-intellectual skills than other people, and they often do not seem to exercise much planning or fore-thought. They often can be hostile, and they certainly appear to reject dependency on others. They are frequently full of rationalizations to explain their actions, and they often don't behave in very responsible ways. Of course, some of these characteristics probably occur (also) in many of us non-offenders.

So, does the picture we got from our examination of the six

Factors of the STFB offer anything new? At first blush, it does not. However, it's really too early to tell. There is much more to be discovered about criminality. So far we have just scratched the surface. What we have accomplished thus far is to confirm that we have fairly dependable and valid measures which recognize definable and meaningful elements of criminals.

## Chapter 6

### Reduction to Simple Structure

#### Second Order Factors in the STFB

It is one thing to characterize each of the identified six Factors of criminality in terms of their dynamics. It is an entirely different thing to try to treat those dynamics. There are simply too many variables involved in the development of each Factor to permit treatment of all of them to be undertaken within a manageable or practical period of time. Of course, it is likely that at least some of the identified developmental 'steps' involved in each factor would be transitional steps. Still, even these transitional steps were apparently important enough to exert recognizable effects on people's adult test responses, and it seems likely that they would at least have contributed to establishment or consolidation of the subsequent habits of response of the each succeeding (lettered) stage of personality organization.

However, for practical treatment to be possible, it seems necessary to find some meaningful way to characterize the Factors in as simplified a structure as possible. Several factor analyses were performed with the STFB Factor scores with and without the

STFB Total score. In these analyses, it was observed with some regularity that Factors 1, 3 and 5 grouped or factored together, and Factors 2, 4 and 6 factored together. The consistency of this finding demanded explanation. Meaning was attached to these two groups of STFB Factors based on the MMPI and other scores with which they clustered. It was concluded that Factors 1, 3 and 5 tended to represent a higher-order or 'meta-factor' (A) of rejection of any kind of control exercised from within the person, while Factors 2, 4 and 6 tended to represent an equivalent 'meta-factor' (B) of rejection of any kind of control exercised from the outside world. That is, STFB Factors 1, 3 and 5 (Meta-Factor A), taken together, appear to represent a sense of the burden of inhibition afforded by thought and/or introversive traits which create self-control (from F1-guilt, F3-emotional disturbance, and F5-closeness). In a parallel vein, STFB Factors 2, 4 and 6 (Meta-Factor B), taken together, appear to represent a sense of the burden of restraint afforded by external authority and/or rules and regulations which form external controls (from F2-depreciating judgements of failure, F4-sensitivity to others' judgements about 'stupidity', and F6-external discipline).

These observations led us to organize some of our thinking about the six STFB Factor scores into two qualitatively different groups, and to focus our understanding and treatment of each Factor around its relevance to 'internal' or 'external' controls.

#### Simple Conceptual Structure

As we began to understand the developmental process underlying the various criminality factors, it became increasingly apparent

that the rejecting reactions common to all the Factors represented an intolerable sense of 'burden' or 'dismay' about the states and feelings represented in each Factor. This notion slowly began to create a cognitive shift in the views we held of the basic or underlying message being communicated in each of the Factors. The nature of this cognitive shift needs to be explained.

Like most people who have dealings with offenders, we began our investigations harbouring negative attitudes and feelings toward each individual's offenses, in spite of any liking we may (or may not) have felt for the person himself. It was easy, therefore, to accept the rather negative attitudes of many justice system workers, and the pejorative descriptions of criminals implied in the concept of psychopathy and in the writings of authors such as Yochelson and Samenow. Of course, we could grasp some of the pains experienced by individual offenders, such as those implied in the dynamics of each of the STFB Factors. However, we had not grasped that these pains were wide-spread among offenders, and we were still inclined to view their consequent behaviours (i.e., the last steps of each developmental series) as implying deficiencies, inadequacies or insufficiencies in them of (F1) guilt, (F2) adequacy, (F3) emotion, (F4) insensitivity, (F5) relatedness and (F6) discipline. And, like most people working in corrections, we tended to think of the task of treatment or correction as one of increasing or enhancing each of these features (guilt, adequacy, emotion, empathy, relatedness and discipline) to the end of increasing the person's future socialization and community adjustment.

The cognitive shift we experienced seemed most centrally organized around the concept of "intolerance" which began to be formulated in our minds. With that concept, a new understanding began to take shape. Like many others, we had often considered offenders to have characteristics similar to the "neurotic" patients with whom we had worked during the early parts of our careers, except that offenders tended to reject their felt distress (as it were, acting it out, rather than accepting it within). But we had not really been clear about how the difference came about. What if offenders merely had reached the point at which they felt the distress of each of the Factor's dynamics too strongly, and simply could not tolerate the negative experiences related to the dynamics? Or what if the intolerable pressures which they had experienced occurred at developmental stages more appropriate to acting out than to tolerance or acceptance of the neurotic distress. Of course these ideas were hardly novel. Many other authors had written in this way, for example, concerning 'neurotic character disorder'.

When the wide array of measures of criminality had been factor analyzed (while concurrent validity of the STFB was being studied), we had all but overlooked a simple fact. The second factor (see Table 9, Appendix B), and that accounting for the second largest amount of the variance, was the familiar lack-of-well-being factor which had emerged repeatedly as the first factor in studies of psychiatric patients and in populations of offenders undergoing treatment. Essentially, we considered its appearance in our samples to represent the fact that the bulk of our offenders were,

in fact, undergoing treatment during their incarcerations. But what if this second lack-of-well-being factor (Table 9) represents a ('neurotic') 'proneness' to experiencing disturbance and disruption? If so, then the strongest factor (the first of the five factors in Table 9, on which all but one of the STFB scales loaded) may represent the reaction of 'criminality' -- that is, may represent an 'intolerance' for the disrupting and disturbing (i.e., lack-of-well-being) feelings and effects of the features associated with each STFB Factor.

If this was an appropriate view of the message in each of the STFB Factors then, far from seeking to increase the Factors' central themes, the task of treatment might rather be seen as one of seeking to reduce the Factors' central themes. That is, treatment might most properly attempt to reduce any (hyper) sensitivity to (F1) guilt, (F2) inadequacy, (F3) distress, (F4) sensitivity, (F5) closeness and (F6) restraint. Each of these might be 'the problem' underlying and motivating the commonly observed defensive (F1) rejection of guilt feelings or proneness, (F2) over-compensatory, attention-seeking grandiosity, (F3) rejection of emotional experience, (F4) rejection of human sensitivities and empathy, (F5) rejection of relatedness, (F6) rejection of discipline.

If the reader does not experience any sense of confusion from what has just been said, perhaps he or she has not yet grasped the problem with which we were struggling. If the reader experiences some cognitive dissonance in contemplating what is being suggested, we can only express our sympathy. The cognitive shift involved in

adapting to the view of the treatment problem which slowly formed itself in our minds also came to us with some difficulty. The view of offender treatment which finally dawned on us was essentially diametrically opposed to that practised in most areas of the justice system, and it did require almost a 180 degree shift in the direction of our thinking. Still, we were determined to be led as far as possible by our data in seeking the 'simple structure' needed to prepare ourselves to treat criminality.

The ideas that emerged from our thinking about the data with which we were confronted led us to reformulate the 'meanings' of the six STFB Factors as a series of 'intolerances' of the subjective states expressed in the Factors' dynamics. In turn, this led us to consider the task of treating each Factor as involving the attempt to decrease the pressure in the essences of each Factor's dynamics, rather than seeking to enhance or increase the antithetical or defensive reactions -- the latter being the strategy offenders have apparently already adopted, which had led to their criminal conduct.

But even that was not enough. Suppose we were to set out to decrease the pressure of guilt, inferiority, distress and the like, how could we expect to be able to talk understandably to the offenders undergoing treatment? If we were right both that they had experienced intolerable levels of each of the Factor's essences, and that they then rejected experience of these essences in their 'intolerances', they could hardly now be expected to acknowledge or experience such feelings or states. And, surely, it would be necessary for them to acknowledge the underlying, but

rejected, feelings in order to be able to decrease the intensities of the feelings. Moreover, if we set out in treatment to increase their awareness of such feelings, in order to be in a position to reduce the feelings, we realized that we might well have the counter-therapeutic effect of increasing their intolerances defensively, thus increasing their criminality. If we could not expect to be able to reduce the underlying negative feelings for want of the inmates' awareness or acknowledgement of the feelings, and if we could not properly take the chance of trying to increase their awareness of the feelings to permit us then to reduce them, how might we proceed?

We considered the treatment possibility of increasing the opposite condition in the person. That is, perhaps we should try to increase our offenders' sense of (F1) innocence, (F2) success, (F3) well-being, (F4) cleverness, (F5) emotional distance and (F6) freedom from restraint. It took no time at all to realize that if we were to attempt treatment aimed in such directions we would at once earn ourselves the disapproval, if not the enmity, of our correctional colleagues. Moreover, if we attempted to approach the treatment task in that way, we would probably again be fostering the very sorts of attitudes and behaviours adopted defensively by the offenders -- which had led to their criminality.

The dilemma seemed incapable of solution. We felt forced to accept two paradoxical conclusions. Treatment would need to reduce the offender's distress about feelings in each of the Factor's dynamics and to increase his acceptance and toleration for the central issue underlying each Factor, in the face of failure to



acknowledge any such problem. At the same time, treatment would have to avoid stimulating the experiences he could not tolerate, and also avoid enhancing the approaches or attitudes he had already adopted which were opposite to the feelings he could not tolerate.

Having formulated the problem in these terms, it seemed to us that the solution to the dilemma we had posed for ourselves lay in accepting the contradictory character both of the substrate of each Factor and of the treatment problem. The result was to express both each Factor's simple structure and the treatment for each Factor in conflict-enhancing, cognitively dissonant terms. The cognitively dissonant terms adopted can be seen in the simple structure 'labels' for each Factor, and 'titles' for each Factor's treatment which are listed below.

<u>Factor</u>	<u>Simple Structure Label</u>	<u>Associated Treatment Programme</u>
1	Guilt Intolerance	Enjoying Guilt
2	Failure Intolerance	Enjoying Failure
3	Distress Intolerance	Enjoying Distress
4	Sensitivity Intolerance	Enjoying Sensitivity
5	Closeness Intolerance	Enjoying Closeness
6	Restraint Intolerance	Enjoying Restraint

At this point, it seemed to us that we had achieved a sufficient degree of simplification of the structures involved in each of the STFB Factors that it might be possible to set about the task of trying to design both practical treatments to address each of the Factors and a study to evaluate the effects of the designed

treatments. Before proceeding to that task, however, there was one more point in the development of our thinking about criminality which had to be addressed.

### PART III

#### DESIGNING THE NEXT STEPS

#### Chapter 7

#### Mode of Treatment

If the attempt was to be made to evaluate any treatment undertaken and at the same time to evaluate the modifiability of the STFB Factors, it was obvious that (1) a large number of offenders would have to be treated, (2) each in the same way, and (3) over relatively short intervals of time. We considered the minimum number of offender subjects we would have to treat in order to permit a fair evaluation of both the treatment and the modifiability of the Factor scores. We were shocked at the number of possible questions which would have to be answered and the number of practical considerations which would have to be built into the design of the study. The numbers of subjects needing to be treated grew with each new question and consideration. Some of these questions and considerations need to be explained briefly, since they do affect the design of both the treatments and the evaluation study.

Question: Is it necessary to examine the modifiability of each STFB Factor separately? Yes it is, if modifiability of the dynamic underlying each Factor is to be evaluated. This means that groups of subjects would have to be assembled each to receive only one Factor's treatment programme.

Question: Is it necessary to examine the relationship between any modifications of Factor scores and later (future) criminality? Yes it is, if it is to be argued that modification of criminal conduct is possible by modifying the components of criminality, and if the amount of treatment required to pass the threshold and influence actual behaviour is to be assessed. This means that one or more groups of subjects should receive some and/or all of the treatment programmes for the Factors, if sufficiently robust effects of treatment are to be achieved.

Question: How many offender subjects will we need for any group in order to permit later statistical analysis? That depends on which analyses we are considering. Essentially, we ought to have a minimum of 8 in a group, let's say 10 or more for safety.

Question: Inmates' total time served at the O.C.I. averages about 6 months, and any particular inmate may be granted parole so that he may be lost to a group in mid-treatment (even if the average six months stay is sufficient for the treatment). What does that do to the formation of groups? Obviously, depending on the amount of the overall programme to which the person is assigned (affecting the length of time over which he is needed), the size of his group will have to be increased at the outset to allow for attrition due to parole and other unforeseen exigencies. This

probably means that groups running across the whole programme time would have to contain as many as 20 or 21 subjects each.

Question: How will it be possible to afford practical treatment of large enough numbers of inmates within a six month (average) period of stay in the correctional treatment centre?

The present authors had been working for some years on an experiment to determine the upper limits in size of a treatment group which might be conducted without loss of therapeutic effects. They began with 20 inmate participants, increased to 25, increased to 35, increased to 50 and, finally, increased to 75 -- the largest number which could be accommodated in the largest group room to which they had access. Each, successively larger, group was administered a battery of monitoring tests before and after treatment to measure therapeutic changes, if any, which took place. The results obtained in these 'large-group' 'treatment workshops' shook us to our boots. In treatment programme after (same or different) treatment programme, far from finding a 'ceiling effect' above which treatment effects could not be demonstrated (measured), it was observed that as group size was increased, so did the measurable amounts of therapeutic benefit to the average inmate subject. That is, average group change measures increased with number of participants (Quirk and Reynolds, 1991). It seems that some sort of mobilizing (we call it the 'riot') effect increases with group size. Eventually, we concluded that satisfactory treatment effects could theoretically be accomplished in groups of any size which could be accommodated in a suitably appointed room -- a conclusion which would not be inconsistent with the

large-group results which have been achieved by the commercial Smokenders programme.

Moreover, within limits, the duration of a treatment programme could apparently be extended to fill a full working day. The limits appeared to bear upon subjects' attention spans. That is, a day-long programme could be run without loss of therapeutic effects as long as ample provision was made for 'breaks', as long as no session lasted more than 75 minutes (for most purposes, 60 minutes was better), and as long as ample provision was made to capture and maintain both attention and motivation in the participants. These requirements, however, turned out to be little more than quite manageable technical issues.

Given our experiences in these 'large-group treatment workshops', it seemed as though they might be the ideal vehicle through which to attempt to treat the phenomena underlying the six STFB Factors, while also meeting the requirements of the previously outlined questions and problems. But a critical question remained.

Question: How much treatment time would be required for each of the treatment programmes in order to be able reasonably to expect enough therapeutic change to permit change to be recorded on the STFB Factor scores? The problems which had to be considered in answering the question about the amount of treatment time to be devoted to each Factor's issues are only peripherally related to the treatment task itself. Suffice it to say that, with a rashness which did not do justice to the painstaking work done in the development and validation of the STFB, the decision was made that

we would devote only one full-day's large-group programme to the issues to be addressed for each STFB Factor. And in practice, it turned out that it was only possible to arrange for about four hours (four 1-hour sessions) of treatment time for each day-long programme, given the existing schedules affecting inmates' time.

Actually, the contact time involved was just short of five hours, but about 25 minutes of that time, in the morning and again in the late afternoon, had to be (we felt) devoted to administering the monitoring tests we had used in previous treatment workshops. It was felt that we might need measures of mood, affect and motivation to use as co-variates to extract the role of active participation on the part of the inmates attending the treatment programmes, especially in view of the decision for such minimal programmes to address each STFB Factor.

The decisions had now been made which would govern what we were going to treat (the Factors' simplified meanings), how we would approach the treatment (the titles of the treatment and the orientations to be taken to the Factors' issues), how we would organize provision of the treatments (in large-group treatment workshop format), and how much time we would devote to each treatment (about four hours). It remained to design the treatment and test evaluation studies, and to design the treatment programmes themselves.

## Chapter 8

### Designing the Treatment Programs

Based on the understanding of criminality outlined above, day-long programmes were designed to address the motivations presumed to underly each of the six criminality Factors. These day-long programmes were presented in large-group treatment workshop format. Changes in Factor scale scores from before to after treatment were examined to determine our success in modifying criminal thinking. Six separate treatment-of-criminality workshop programme plans (each one addressing a different factor of criminality) were developed, as follows:

1. Guilt is the target of the first workshop, and the attempt is to be made to reduce the amount of guilt feeling and guilt proneness -- on the assumption that this will have the effect of reducing guilt intolerance. Methods to be used in each section of the day are:

- 1) Orientation to Guilt Feelings: Guilt as unrealistic as it seeks to change the past; and as a self-judgement after-the-fact when things could not have been different. All are perfect. Guilt is unnecessary. Proportions of time during

which you were good and bad. Guilt trips are only painful if you accept the judgement by the other.

2) Reframing: Negative format statements and guilt trips. How do you make yourself feel guilty? Semantics of guilt talk. Time-Line to a guilt-evoking event -- walk through it. Swish for a guilt- evoking image.

3) Squash & Relaxation: Squash for Guilt/Innocence, Bad/Good, Crime/Being Straight. Relaxation training.

4) Desensitization: Phobia Cure & more Time-Line for guilt-tripping, criticism, feeling guilty.

2. Failure is the target of the second workshop, and the attempt is made to reduce the amount of failure feeling and proneness -- on the assumption that this will have the effect of reducing failure intolerance. Methods for each section of the day are:

1) Orientation to Failure Feelings: Failure as a result of acceptance of others' judgements. You never failed except to meet others' inappropriate standards for you. Reframing: Assumptions involved in the need to compete.

2) How do you make yourself feel like a failure? Semantics of failure talk. Time-Line and situation -- walk through it.

3) Phobia Treatment: for failure situations.

4) Discussion: of questions & more Orientation. Swish for failure situations.

3. Distress is the target of the third workshop, and the attempt is made to reduce the amount of felt distress (affect) and distress proneness -- on the assumption that this will reduce distress intolerance. Methods for each section of the day are:



- 1) Orientation to Distress: Stress/Anxiety Management orientation and physiological self-regulation methods.
- 2) RET and Assertive Training: as means to deal with felt distress/discomfort. Coping with distress and reducing it.
- 3) Time-Line: for a significant emotional experience. Rapid Phobia Method to deal with emotional experience.
- 4) Relaxation & Desensitization: Relaxation training, and start systematic desensitization (with and without eye tracking) for distress situations.

4. Sensitivity is the target of the fourth workshop, and the attempt is made to reduce empathy or sensitivity to others -- based on the assumption that this will reduce sensitivity intolerance.

Methods for each section of the day are:

- 1) Orientation to Empathic Sensitivity: Musterbation and the beliefs derived from attitudes and actions of adults. It is impossible to hurt another person emotionally by what you do. The error of anger. Assertive training.
  - 2) Concept Formation & Reframing: Abstraction training and how concepts/ideas are formed. How do you make yourself feel you have hurt another person? Swish to neutralize sensitizing situations.
  - 3) Time-Line & Resources: Time-Line and walk through some situations of being told you hurt another, this time with resources brought back.
  - 4) Relaxation & Desensitization: Relaxation and use of the 'fast phobia' movie method for 'you hurt me'.
5. Obsessive Rumination is the target of the fifth workshop, and

the attempt is made to reduce introspection and worries -- on the assumption that this will reduce the associated closeness intolerance. Section methods are:

1) Orientation to Thought Pressure: Introversion and verbal mediation of experience. How do you make yourself think and worry? Uncertainty intolerance. Anger inhibition. Self-restraint and rage. Assertive training.

2) Activity & Zen: The reciprocal inhibition of thought and action. Thought as anticipation (fear) or reminiscence (depression). Living in the present. Zen principles.

3) Meditation & Thought Regulation: All thought is useless. Meditation orientation and practice.

4) Boredom & Enjoyment: Habits of long intervals of concentration -- boredom. Short-interval timetabling. How to enjoy life and finding 'good' things.

6. Discipline is the target of the sixth workshop, and the attempt is made to reduce (experienced) external discipline and increase freedom -- assuming that this will reduce discipline intolerance. Section methods are:

1) Orientation to Discipline: Attitudes toward punishment as reward and as rejection. The evidence you were loved. Evidences of love. Purposes of discipline. How do you make yourself feel rebellious?

2) Cognitive Therapy & RET: Common mistakes of thinking. Correcting self-talk. Reframing others' actions.

3) Relaxation & Swish: Relaxation training. Swish for restrictions-discipline/freedom images.

- 4) Desensitization: Desensitization for discipline events.

For reasons peripheral to the treatment of these specific criminal thinking Factors, but as part of the same treatment research project, these six criminal thinking workshops were supplemented by two 'Values' workshops, as follows:

7. Values Re-ordering is the topic of this workshop, and the attempt is made to re-order values -- assuming this will reduce rebellion against 'external' controls. Section methods are:

- 1) Orientation to Values' Structure: Orientation to the structure of values. Listing personal values.
- 2) Imagery characteristics: The nature of reality and its images. Changing image sub-modalities.
- 3) Altering Position of Values: Sub-modalities shifting and restructuring values. Re-evaluation of values.
- 4) Relaxation & Imagery: Relaxation training. Relaxed consideration of constructed images (life style, relaxed personality, social competence, etc.)

8. Values Healing is the topic of this workshop. The attempt is made to correct conflicted values images -- assuming that this will reduce rebellion against 'internal' controls. Section methods are:

- 1) Orientation to Values: Values orientation. Listing of personal values. Values images.
- 2) Squash: Healing conflicted values.
- 3) Time-Line & Relisting Values: Time-Line trips to find source beliefs and review them. Relist values.

4) Squash: More healing of conflicted values, with Programming-Relaxation.

One further 'control' workshop was added at the beginning of the series. It was an orientation to Relapse Prevention which was thought unlikely to affect any of the criminality Factors.

## Chapter 9

### Designing the Treatment Study

#### The Context of the Study

Any study has meaning only within the context in which it was undertaken. Consequently, it will be necessary first to describe the setting in which the present study took place, and the types of offender and non-offender subjects who contributed their time and efforts to provide the information we required. This information is basic to all that follows.

For about twenty years each, the present authors served, respectively, as Chief Psychologist and Senior Psychologist at the Ontario Correctional Institute (O.C.I.) in Brampton, Ontario, Canada. It was during the years while they worked in those capacities in that setting that the bulk of the present studies were undertaken.

#### The Setting of the Study

The Ontario Correctional Institute (O.C.I.) is a 220-bed correctional centre opened in late 1973. Its mission statement commits it and all its staff to direct service, research and

community education in the areas of classification, assessment, treatment, training and safe confinement of adult male incarcerated offenders. Its inmate population is composed primarily of alcoholics, drug addicts and sex offenders. To accomplish its mission, it is afforded a staff of correctional officers, kitchen and maintenance personnel, a few recreational officers, a few teachers and trainers, a librarian, administrative personnel and their support staff, a few nurses, part-time dental, medical and psychiatric professionals, six social workers, and one research and eight clinical psychologists. Its clinical resources are about one-quarter of the minimum called for in hospital staffing standards for a treatment centre of its size, but it is considered to be well-staffed compared to the majority of the correctional centres in the Canada.

The Ontario Correctional Institute (O.C.I.) is a "medium security" institution. Its beds are organized in six units, each with its own staff who rotate from unit to unit approximately every two years, and each unit is comprised only of a day-room, staff office space and dormitory accommodations. There is a large, 54-bed intake and classification or assessment unit to which all inmates are admitted, and on which newly-admitted inmates receive up to sixteen one-hour "orientations" to the various components of the assessment and treatment programmes, observations by and interactions with correctional staff, and interviews and testing by the Psychology staff. There are five 30- to 34-bed treatment units to one of which each inmate classified on the intake unit may or may not be transferred at the end of his intake and preliminary

screening assessment -- treatment is neither mandatory nor guaranteed, and the inmate may be transferred to another correctional centre following classification at his own request or as a decision by staff.

Each treatment unit has its own associated living facilities and treatment and group rooms in which its "core" (common to all inmates on a unit) programme is conducted. One of these treatment units is reserved for inmates considered to function at a level of socialization insufficient for adequate group interactions in the other units, and the programme on this unit is slightly less confrontive and more supportive than that on the other units. The remaining four 34-bed treatment units receive any other inmates on the basis of bed availability at the time of classification from the intake unit, and their "core" programmes involve a great deal of democratic group interactions in unit meetings, and periodic peer reviews and conferences concerned with each inmate's treatment needs, plans and progress.

The central component of the "core" programme, to which all inmate residents have access, revolves around the relationship between the inmate and his assigned case manager. Every staff correctional officer serves as a case manager, and he or she is assigned a case load of four to six inmate residents. In addition to the usual custodial functions inherent in the Correctional Office role, each "case manager" has a duty to establish a human relationship with those inmates assigned to his or her case load. This relationship has the effects of (1) creating in the inmate's mind a human, rather than a stereotypical ("guard" or "screw")

image of the correctional officer, (2) creating a human relationship component (in addition to any physical or structural security that may be present) to the security within the Institute, (3) providing the opportunity for the case manager to help and counsel those on his case load (the case manager is designated as the "prime change agent" in the facility), (4) establishing a caring rather than critical relationship as the fertile ground in which emotional, attitudinal and behavioural change can take place, and (5) affording the opportunity for each correctional officer to play an active and central role in the main mission of the Institute -- a fact which has repeatedly been shown to result in a constant, approximately 17 percent reduction in two- to three-year recidivism rates of offenders incarcerated at the O.C.I. as compared to other similar inmates who would be suitable for the O.C.I. but who serve their sentences in other provincial correctional centres.

In addition to the "core" programme, all inmate residents, regardless of the unit on which they reside, may participate in "specialized" services. These include educational, health and psychological services. Referrals for "specialized" services may be initiated at the point of classification from the intake unit to a treatment unit, or they may be initiated by the case management team which includes the inmate, his case manager, the correctional unit manager, and the unit social worker who functions as case coordinator. Of course, some health and psychological services are initiated, without benefit of referral, on the basis of the need recognized by relevant professionals. And, in the case of the

assessment and treatment work to be reported in this volume, prior agreement with the case management team permitted inmates to be accessed for these purposes without referral.

In summary, the Ontario Correctional Institute (O.C.I.) is a correctional centre of the Ontario Ministry of Correctional Services, whose main correctional programme is the "treatment of incarcerated adult male offenders".

### The Subjects of the Study

To qualify as "adult", in this jurisdiction offenders are 18 years of age or older, although for the first several years that the O.C.I. was open, "adult" was taken to mean 16 years of age or older. Thus, although some 16 to 17 year-olds provided early information which will have shaped our attitudes toward our tasks, the actual studies of offenders to be reported in this work are limited to inmates 18 years of age and older. The oldest inmate who was involved in any of this work was 67 years of age.

All of the offenders admitted to the O.C.I. are serving "provincial" sentences. In this jurisdiction, this means that their maximum imposed sentence is two years less one day (i.e., less than two years of imposed sentence), plus any additional probation time which may have been imposed upon sentencing. This does not mean that any of these offenders will actually serve all of their (maximum two years) imposed sentence. For every day he serves, each offender can earn a half-day of "Earned Remission" off his sentence. This means that most offenders actually serve about two-thirds of their imposed sentences -- or up to a maximum of 16



months. Moreover, the time that they actually spend "behind bars" may be further reduced by being granted Parole. By one-third of the time into their imposed sentences, offenders who might be transferred to the O.C.I. qualify to be considered for parole by the Ontario Board of Parole. If parole is granted, the person may actually serve only one-third of his imposed sentence. For an inmate with a sentence of two-years-less-a-day, this would amount to no more than eight months.

The above administrative issues affect the results of our studies in a number of ways. Although, among the offenders studied, offenses ranged from murder and rape, through the full range of offenses, to minor theft, indecency and failure to appear, the more serious offenses tended to involve acts of impulse or passion, and most of the offenses did not involve serious injury to a victim. These offence-related facts are as one might expect given the length of the maximum sentences imposed on these offenders. It is also true, however, that in a sizable minority of cases, the sentence which would have been imposed for an offenses would have been very much longer had the judge not concluded that the offender required treatment, and that the only way for him to receive the needed treatment was by imposing a "provincial sentence." In addition, in light of the fact that the primary specified correctional programme at the O.C.I. is "treatment," it needs to be noted that all of the offenders admitted to the Institute were deemed by someone to require at least consideration for assessment and/or treatment -- by a judge, the Ministry of Correctional Service's classification personnel, or Ministry rules

of classification. This too will have affected the nature of the actual population from which the offender subjects were drawn.

Offenders receiving "provincial sentences" are sent by the Ministry's classification system to the O.C.I.'s intake unit for consideration for treatment based on a number of criteria. These include: (1) any sentenced inmate in the provincial correctional system who applies voluntarily for treatment as his correctional programme, (2) any inmate concerning whom the sentencing judge has recommended any kind of (psychological or psychiatric drug or alcohol) assessment or treatment, (3) any inmate convicted of arson (for assessment of institutional arson risk), a sexual offence (for sexological assessment), or a pattern of escalating violence (for dangerousness assessment), (4) any inmate considered to exhibit any psychosocial problems or difficulties potentially warranting treatment, (5) any inmate considered to have a serious problem with drug and/or alcohol abuse, particularly if he seems willing to accept help with his addictions, and (6) any inmate who is seen to pose any particular kind of problem for classification within the Ministry's facilities.

Voluntary application for admission to treatment is a necessary pre-condition for transfer to a treatment unit from the intake unit at the O.C.I. Once an inmate has undergone the orientation and assessment process on the intake unit, he stands a ninety percent chance of being transferred to one of the O.C.I.'s treatment units. Those who do not apply, and those whose applications are turned down, are transferred to another of the Ministry's correctional centres. Applications are accepted

if the intake unit staff conclude that (a) the inmate is willing to fulfil the requirements of treatment on a treatment unit, and (b) the inmate can be managed reasonably well in the relatively open, dormitory-style accommodations on the treatment units without disrupting the treatment efforts of other inmates on the unit.

As a result of this selection process and the nature of the O.C.I., the composition of the inmate population on the treatment units at any given time has been, within modest limits, reasonably constant and definable.

- Over 98 percent of its inmates are deemed by the case management staff to possess some qualities of criminality -- under two percent were deemed not to exhibit any noteworthy criminalistic traits, and these were sex offenders, and usually incestuous offenders.

- Over 75 percent of the O.C.I.'s inmates exhibit evidence of significant drug and/or alcohol abuse -- for example, as measured on the MAST (alcoholism) and DAST (drug abuse) scales, which measure the costs in disadvantage or discomfort which the person is willing to suffer in order to use the given substances.

- Approximately 35 percent of the treatment units' inmates have been convicted of sex offenses, ranging from rape, child molestation or incest to contributing to the delinquency of a minor, indecent exposure or indecent act -- the "relationship-security" component of the O.C.I. programme affords sufficient safety for all offenders that inmates who would ordinarily require "protective custody" can be managed quite satisfactorily in the general population at the Institute.

- Approximately 30 percent of the inmates have been convicted of numbers of property offenses, often associated with the attempt to acquire support for addictions -- including break and enters, robberies, thefts and fraud.

- Approximately 20 percent of the inmates have been convicted of violent offenses in which at least some injury was inflicted upon a victim -- in domestic violence, aggravated assaults, assaults causing bodily harm, bar fights, or during robberies.

- Approximately 15 percent of the inmates are deemed by staff to be relatively primitive in their social functioning, resulting from the effects of being moderately to slightly developmentally challenged, noteworthy social anxieties and depressions, or (in a few cases) a major psychiatric syndromes ("illnesses") -- these inmates are admitted to the one treatment unit set aside to manage their special needs.

- Under 5 percent of the inmates have been convicted of offenses including arson -- although the proportion of these offenders has been dwindling over recent years, perhaps due to a contemporary tendency on the part of judges to impose increasingly severe sentences for arson offenses.

- Under 1 percent of the inmates are considered to be "career criminals". The determination of an inmate's status in this category of offenders was made in every instance by one psychologist who is an expert in inmate classification, having had wide experience with both "provincially sentenced" and "federally sentenced" (2 years or more) offenders. And this psychologist made his determinations, without the benefit of test data, exclusively

on the basis of the offence history and interview(s) with the offender. Few of these career criminals remained at the O.C.I. for treatment, and those who did were likely to be shipped out as a result of misconduct while on the treatment units.

- A majority of the inmates (which varies considerably from time to time) were recidivists at the point at which they were admitted to the O.C.I. -- with significant numbers exhibiting long histories of criminal involvements of many types.

It will be seen that the population of offenders available to be sampled for the present studies is reasonably varied and, with the exceptions of the fact that it contains a disproportionate number of sex offenders, a slightly higher than usual proportion of socially disadvantaged offenders and somewhat fewer "career criminals", it would seem to be fairly representative of offenders in general.

#### Sampling Considerations

Beyond any biases affecting the populations of offenders at the O.C.I. as they may be revealed in the foregoing description of the offenders from among whom our samples were drawn, there were no recognizable biases in the samples employed. In every case, whether affecting test development and validation or treatment groups, the groups of offender subjects used were all successive admissions to the O.C.I. over the period of time in which the data for that part of the overall study were being collected.

While we would affirm that the subjects used in these studies constitute a reasonably broad cross-section of what is ordinarily understood to be "the criminal population", less clarity of

definition can be claimed for the "normal" or non-criminal samples that we have used. Our "normal" samples, acquired as they were by various assistants soliciting participation from any of those present in various types of public places (restaurants, beaches, city streets, the Ontario Science Centre, and the like), can only be characterized as "accidental" samples -- although so many similarities were found between "business students" and our criminal population that they were specifically excluded from our normal samples. At the same time, the variety of settings in which our "normal" subjects were acquired, although subject to the biasing effects always associated with soliciting volunteer subjects, might support the view that our "normal" subjects may be considered to be a reasonably representative cross-section of volunteer subjects in general.

In addition to their volunteer status, however, there was another clear source of bias affecting our normal subjects. In a public place, volunteers who are likely to be willing to give some of their time to psychological research are most likely to be people with some psychological interests and who are likely, on the whole, to be educated to higher levels than the average normal citizen. In order to deal with this recognizable probable source of bias, data relating to "normal" subjects have been split by age and educational achievement and are reported separately for the resulting groups.

#### Design of the Evaluation Study

Inmates are admitted to the O.C.I., and from the intake unit

to the treatment units, on the basis of bed availability as inmates in the treatment units are released upon sentence completion. The constant turn-over of the beds, week after week, suggests that, at any given time, the discharge dates of the inmates at the O.C.I. are random with respect to any known factors of criminality. Consequently, the assumption was made that assigning inmates to groups according to their discharge dates would provide a satisfactory basis for randomization of group assignment. Thus, on a particular day, the inmates who were residing at the O.C.I. were listed in order according to their discharge dates -- after first having excluded those half dozen inmates identified by their case management staff as possessing too little by way of criminalistic traits to warrant their inclusion in a criminality treatment programme. Then all the sufficiently criminalistic inmates were assigned for experimental purposes to groups as follows:

CC1: 25 inmates were due to be discharged before they could have attended any of the STFB-related treatment programmes. They were assigned to Control Group 1 (CC1).

EC1-6: 72 inmates with the next discharge dates were assigned in (progressively advancing discharge dates) groups of 12 to experimental groups each of which was (to be) invited to attend only one of the six STFB-related treatment programmes (EC1, EC2, EC3, EC4, EC5 and EC6).

EB1-2: 40 inmates with the next discharge dates were assigned to two experimental groups of 20 subjects each, one of which (EB1) was (to be) invited to attend only the first, third and fifth STFB-related programme (for factors 1, 3 and 5), while the other

(EB2) was invited to attend only the second, fourth and sixth STFB-related programme (for factors 2, 4 and 6).

EA1-2: 42 inmates with the next discharge dates were assigned to two experimental groups of 21 subjects each (the increasing sizes of groups reflects the expected increasing risk of group attrition with advancing discharge dates), both of which were (to be) invited to attend all six STFB-related programmes. Two groups were selected for exposure to the whole programme in case it was necessary to add further treatment programmes to the series (if something went wrong with any of the programmes). That would permit one group (EA1) to receive only the six programmes, and another group (EA2) to receive any needed additional programmes as well.

CC2: 25 inmates with discharge dates beyond any of the others were assigned to a second control group (CC2). This control group was added in case it was later found that discharge date introduced any bias into the group assignment process.

The 50 Control Group subjects (CC1 and CC2) were not invited to attend (and did not attend) any of the STFB-related treatment programmes -- although, like all the other inmates, they were attending their own regular treatment programmes, and some of them were given an "orientation-style" programme on Relapse Prevention.

The Experimental group subjects were invited to attend the STFB-related treatment programmes as indicated for each of the groups. Six 12-subject groups were invited to only one programme each, two 20-subject groups were each invited to a different



alternation of programmes, and two 21-subject groups were invited to attend all six of the programmes. Thus a total of 74 inmates were invited to each programme, comprised of (EA1=21) + (EA2=21) + (either EB1 or EB2 = 20) + (one of EC1 or EC2 or EC3 or EC4 or EC5 or EC6 = 12) = 74.

Attendance was recorded at the beginning of each 1-hour block of treatment time during each of the treatment days in order to permit determination of the actual "amount of treatment" received by each inmate subject (the "independent variable" in the treatment-research study). Although, as expected, there was some group-size attrition due to parole and other exigencies, the announcement of each successive programme, which was sent to the units one week prior to each programme, invited attendance only of those inmates qualified to attend according to their group membership as defined above.

All inmate subjects had been tested upon admission (intake battery) with psychological tests as follows: Raven Progressive Matrices (IQ estimate), ABLE reading test (literacy estimate), a Problem Rating Form (Scapinello, 1993), the MMPI (for descriptive clinical and criminality-related measures), Beck Depression Inventory (BDI), Cattell Anxiety Scale (CAS), Michigan Alcoholism Screening Test (MAST), Drug Abuse Screening Test (DAST), and the STFB. The intake battery served as the source of the first administration of the STFB.

In so far as possible, every inmate subject completed up to four administrations of the STFB: (1) during the intake battery, (2) if possible, 2 months prior to STFB-related treatment, (3)

about 1 month prior to STFB-related treatment, and (4) about 1 month following any STFB-related treatments he received. In some cases, circumstances demanded that #2 STFB be administered one month prior to treatment, and that #3 be administered either during the course of treatment or following treatment. In some cases, with relatively early discharge dates, only two or three STFBs could be administered. However, all tests were carefully identified for their administration dates and their pre- or post-treatment status.

In addition to the above tests, the following battery of "monitoring" tests was administered to all experimental group subjects attending any workshop, both first thing in the morning of the treatment workshop and again last thing in the afternoon of the workshop: Willoughby Emotional Maturity Scales (WEMS), Dynamics Arousal Questionnaire (DAQI), Depression Apathy Questionnaire (DAQIII), Subjective Units Rating Ergometrics (SURE), and a Workshop Evaluation Form (Quirk and Reynolds, 1991).

All these test data, plus hours of attendance at each treatment workshop, offence information and subject identification data were entered in a single data bank.

#### Results of the Treatment Workshops

Given the brief time allowed for each treatment programme (just over four hours, minus pre- and post-treatment "monitoring" test time), it was concluded that for any treatment benefit to be possible for an inmate he should have attended a programme for at least three of the four hour-long segments (i.e., at least 3

hours). Groups were assembled for analysis containing only those inmates who had attended either for at least 3 hours, or for 0 hours of each treatment programme, to serve as the independent variable in this study of treatment effects.

Scores for all six STFB factors, the Total, Neutral and Undesirable scales were computed for all of the STFB's administered to each inmate. The dependent measure used to record change was constructed as follows: In the main analysis of the resulting data, the nine STFB scores were transformed to their T-score equivalents -- T is distributed with a mean of 50 and a standard deviation of 10, and conversion to T tends to normalize distributions slightly -- to correct for age differences among the workshop participants. The pre-treatment T-scores for each scale for each inmate were then averaged to maximize stability of the measures, and the post-treatment T-scores (if more than one administration of the STFB followed treatment) were averaged for the same reason (although the same results as those reported below were achieved using the raw difference scores, or residual gain scores, for the single most proximal pre- and post-treatment STFB administrations). The pre- to post-treatment differences between these T-score means were then computed, and these served as the dependent measures in this study. The results of these analyses are shown in Tables 31 through 43.

Examination of the relation between change in STFB Total score as a function of total hours attended at criminality treatments found that change (decrease) in criminality was directly related to the total number of hours of treatment received, as shown in Table

31. It can be seen that improvement in the Total criminality score is directly related to the total number of criminality treatment workshop hours received.

Next, change (decrease) scores were examined for each STFB factor for each workshop, to see if the treatments chosen for inclusion in each workshop were appropriately selected or differentially effective. These change scores and/or their levels of significance are shown in Tables 32 through 38. It can be seen that the overall differences from pre- to post-treatment on all six STFB factor scale scores were significant beyond the .01 level of confidence, for comparisons between those inmate subjects who received all or most of the particular criminality treatment workshop (3-4 hours) and those who received no criminality-related treatment at all.

These tables present the results of t-tests of the effects of each treatment (labelled A to F to represent the treatments for STFB Factors 1 to 6, respectively) on each of the STFB factor scores. The tables present the probabilities of t for each treatment's effect on each test score. The main issues of interest are in the 6 by 6 arrays (summarized in Table 38) displaying treatments A through F on STFB factors 1 through 6.

In order to emphasize the rather arresting pattern of results obtained, significant probabilities are highlighted in the tables. These treatment results clearly indicate that at least reasonably appropriate treatments were selected and that, to a considerable

extent, "differential treatment" was accomplished. All six of the treatments modified primarily the STFB factor scores at whose underlying phenomena they were directed. Quite apart from the unusual demonstration of almost "surgical accuracy" in targeting the intended phenomena, and essentially only the intended phenomena, the results provide information on another issue.

The conclusion of importance to the present task which may be drawn from these data is that all the STFB factor scores are clearly modifiable by carefully designed treatments. These findings add an aspect of predictive validity to the already demonstrated other psychometric properties of the STFB, as reflected in the demonstrated modifiability of offenders' test scores through treatment.

In these tables, significant differences are highlighted. Significances at the  $p < 0.10$ , two-tailed (i.e., at  $p < 0.05$ , one-tailed) level of confidence were accepted for the effect of a treatment workshop on its targeted (hypothesized) STFB factor score (i.e., Workshop A on Factor 1, Workshop B on Factor 2, etc.). And significances were accepted at the  $p < 0.05$ , two-tailed level for the effects of all other criminality workshops on other STFB factor scores (i.e., those which were not targeted or hypothesized to be changed in a given direction by the particular workshop, that is, Workshop A on Factors 2 through 6, Workshop B on Factor 1 and Factors 3 through 6, etc.). For the sake of clarity, N's given in each table are for the targeted factor comparison. N's for other comparisons often differed slightly.

As can be seen from these tables, workshops were generally

successful in effecting change in their targeted criminality factors, and occasionally effective in changing other criminality factors as well (mainly Factor 6). The only exception to this finding was Treatment E, which does not appear to have managed to affect its targeted STFB factor to any significant degree. As can be seen from the following three tables, however, this failure of Treatment E to effect changes in its targeted STFB factor is more apparent than real.

#### The Effect of a "Control" Treatment

STFB pre- and post-treatment data were available on a sub-group of the No-Treatment-Control subjects from this study who, although they received no criminality-relevant treatment (i.e., zero treatment in workshops A to F), attended a 4-hour Relapse

Prevention workshop between STFB administrations. These subjects' STFB scores were processed as described earlier concerning the experimental groups' STFB's. T-test results are presented in Tables 39 through 41 for the STFB factor scores for subjects receiving:

- three or more hours of criminality treatment (Table 39),
- three or more hours of Relapse Prevention Workshop only (Table 40),
- no treatment workshop at all (Table 41).

These tables show that subjects who participated in three or more hours of each of the specific criminality treatments showed a significant decrease in the STFB factor targeted by that

treatment; subjects who participated in three or more hours of the Relapse Prevention workshop (and no other criminality treatment hours) showed a significant decrease in STFB Factor 5, and no change in any of the other STFB factors; and subjects who received no treatment workshop hours at all showed no change in any of the STFB factors at all. That is, Treatment E did effect changes in Factor 5, and the initial apparent failure of Treatment E to affect its targeted STFB factor can be attributed to the fact that Factor 5 was also modified by the Relapse Prevention programme received by some of the no-criminality-treatment controls -- which, of course, blunted the statistical test comparing experimental (affected by Treatment E) and control (affected by a Relapse Prevention programme) group subjects.

Another interesting side-light on these data is offered by another non-criminality-related programme comprised of another two day-long workshops which were attended by carefully balanced sub-groups of the experimental subjects (but not the control subjects) in the present study. This pair of workshop programmes was presented after all the criminality-related treatments were concluded. These additional and following programmes, which addressed "values", were presented for some of the subjects as a kind of "control" treatment, to see if treatment generally might (also) affect the STFB factors.

"Values" programmes were selected because the programmes appeared to be "good" programmes bearing on important aspects of people's daily living and quality of life.

The effects of the "Values" treatment workshops on the STFB factor

scores are displayed in Tables 42 and 43. In this case, the comparison is between inmate subjects receiving 3 or 4 hours of each of the "values" workshops and those receiving none of the criminality-related or "values" treatment workshops.

Tables 42 and 43 show that the treatment effects of these "values" workshops on the STFB factor scores is much less pronounced, is limited to the relatively volatile (see Table 38) STFB Factor 6 (see Table 42), and is probably due to the increased intolerance for control shown by those inmate subjects who did not receive the "values" workshops.

The contrast between the results exhibited in Tables 32 to 41 in comparison to those seen in Tables 42 to 43 underscores the idea that, to be effective, treatments selected must be appropriate to the underlying psychological phenomena (i.e., problems, needs, factors, causes the person exhibits) and not just "therapy" which is (or is not) aimed at something else.

#### Predictive Validity of the STFB

The fact that treatments based on the dynamics speculated to underlie and "drive" each of the aspects of criminality measured by the STFB resulted in significant changes on each of their targeted factors might be said to provide some support for the predictive validity of the STFB. Of course, ultimately we will have to investigate of this aspect of the test further through follow-up of the participants in this study. That is, we must await the release and subsequent offence or non-offence of those inmates



who (1) showed change in their criminality measures, and (2) had high and/or low scores on the criminality factors at the end of the treatment workshops (which will require that we wait about two years before doing follow-up on the treatment sample). In the meantime, however, there is reason to believe that lower STFB scores will be related to lower recidivism rates. This further support for the predictive validity of the STFB was derived as described below. MMPI-STFB scales were constructed composed of MMPI items associated with high scores on the various STFB factor scales (see Beyond "Criminal Thinking" above). These derived (not in fact STFB) scales were scored for a sample of 279 first-incarcerates (who had not received any known criminality-related treatment) on whom one-year post-release follow-up was available, and correlations between these STFB-equivalent MMPI scales and the available outcome statistics were examined. The correlations between the MMPI-STFB-equivalent factor scales and two main follow-up variables are shown in Table 44.

Table 44 suggests (but does not verify) that STFB scale scores may well predict to future crime. But Table 44 also suggests another reasonable possibility. If the STFB scale scores do predict future crime, then the probability is greatly enhanced that reducing the STFB scale scores as a result of effective treatments (already demonstrated to be possible) may also reduce criminal recidivism, that is, later crime. This prospect is indeed an exciting one. Follow-up of the actual treatment workshop participants will be required to determine whether STFB scores,

which have been lowered as a result of treatment, will also result in lowered recidivism rates and seriousness of crime. Of course, that would be expecting a great deal. After all, four hours in one day isn't very much treatment! In the meantime, the interim effect reported in Table 44 provides at least presumptive evidence of the predictive validity of the STFB.

APPENDIX B

Table 5: Derived Means of the 6 Factor scales in three groups.

STFB Factors / GROUPS:	NORMALS	O.C.I.	C.C.
STFB Factor 1	6.88	8.17	11.26
STFB Factor 2	7.04	10.97	13.68
STFB Factor 3	4.42	6.92	9.74
STFB Factor 4	2.67	3.71	4.79
STFB Factor 5	4.96	7.14	10.00
STFB Factor 6	5.67	7.64	8.89

All Factor Scores converted to common base values for comparisons

Table 6: Megargee Code Types of 335 inmates ranked according to their STFB scores, with lower STFB scores presented to the left.

STFB Total	E	I	D	G	B	A	H	C	F
Factor 1	E	I	D	B	H	G	A	C	F
Factor 2	E	I	G	D	B	A	H	C	F
Factor 3	E	I	D	B	G	A	H	C	F
Factor 4	E	C	D	G	I	H	A	B	F
Factor 5	E	I	D	A	G	B	H	C	F
Factor 6	E	B	I	G	D	H	A	C	F
S.D. NEUTRAL	E	I	D	C	B	H	G	A	F

Table 7: Offender characteristics on various variables (taken from Megargee and Bohn, 1979). The code types are ranked (with lower scores to the left) for their relevance to the offender-related variables:

Adult Arrest and Conviction Record	I	G	E	A	F	D	C	B	H
Violence of Offence	D	B	I	G	A	E	F	C	H
Psychologists' Assessment of Aggressiveness	E	I	G	B	A	D	H	C	F
Aggressiveness of Behaviour while Incarcerated	E	B	I	A	G	D	F	H	C
Quay's Psychopathic Delinquency Scale	E	I	D	G	A	B	F	H	C
Prisonization	I	E	G	D	B	A	C	H	F
Irresponsibility	E	I	G	D	A	B	H	C	F

Table 8: Correlations between a number of different measures of criminal qualities associated with Megargee and Bohn's work (1979).

STFB Tot.	Tt	F1	F2	F3	F4	F5	F6	Nt	AR	VO	Ag	AB	QD	Pr	Ir
Factor 1	92	--													
Factor 2	98	87	--												
Factor 3	98	95	95	--											
Factor 4	53	45	52	47	--										
Factor 5	95	85	92	93	50	--									
Factor 6	87	88	88	90	33	73	--								
Neutral	75	83	68	78	73	68	67	--							
Adult Rec	57	27	63	47	23	60	30	18	--						
Viol.Off.	60	48	55	63	00	53	52	38	30	--					
Aggress.	90	78	95	88	37	85	90	57	63	47	--				
Aggr.Beh.	75	68	77	80	03	73	83	40	48	55	87	--			
Quay Del.	93	78	92	90	38	93	71	57	73	60	83	77	--		
Prizoniz.	95	80	97	92	52	88	82	70	70	62	92	72	88	--	
Irrespon.	97	82	98	92	53	95	80	63	70	50	93	73	93	95	--

The Variables in the following order are:

STFB Total Score, Factor 1, Factor 2, Factor 3, Factor 4, Factor 5, Factor 6, STFB Neutral Scale, Adult Criminal Record, Violence of Offence, Aggressiveness, Aggressive Behaviour Rating, Quay Delinquency Scale, Prizonization, Irresponsibility.

Table 9:

The database for one version of the STFB contained scores on 150 inmates from selected scales of the Minnesota Multiphasic Personality Inventory (MMPI), the Millon Clinical Multiaxial Inventory or MCMI (Millon, 1977), morality scores derived from the Gibbs and Widaman (1982) modification of the Kohlberg Moral Development Scale (Kohlberg, 1976), the Hare Psychopathy Checklist (Hare, 1990), information about the violent or non-violent character of the inmates' offenses, number of violent institutional Misconducts, Age, IQ, Reading Grade-equivalent and socio-economic status. Factor analysis of this data base produced a five-factor solution with factor loadings as shown in Table 9.

Table 9: Relationship of STFB Factor Scores and Selected Other Variables to Factor Loadings in a Five-Factor Solution

FACTOR A		FACTOR B	
STFB Total Score	.81	MMPI Poor Morale	.78
MMPI Impulsivity	.78	MMPI Ego Strength	-.76
MMPI Violence	.77	MMPI Depression (TSC IV)	.75
MMPI Responsibility	-.76	MMPI Resiliency	-.72
MMPI Manifest Hostility	.74	MMPI Anxiety (TSC VII)	.72
MMPI Self Control (R-)	-.71	MMPI Social Delinquency	.71
STFB Factor 1	.70	MCMI Avoidant Personality	.70
MMPI Anger (TSC V)	.70	MMPI Denial Defence	-.65
STFB Factor 6	.69	MCMI Schizotypal Person	.64
STFB Factor 2	.68	MCMI Schizoid Personality	.63
MMPI Habitual Criminality	.65	MMPI Anhedonia	.57
STFB Factor 3	.64	Eysenck: Neuroticism	.57
STFB Factor 5	.60	MCMI Histrionic Personal	-.55
MMPI Drug Abuse	-.54	MMPI Dominance	-.54
MMPI Alcoholism	.49	Eysenck: Extroversion	-.48
Age	-.46		
MMPI Recidivism	.39		
FACTOR C		FACTOR D	
MCMI Passive-Aggressive	.91	Hare Psychopathy Total	.84
MCMI Borderline Persona.	.83	MCMI Dependent Personality	-.80
MCMI Paranoid Personality	.78	Hare PCL Scale 2	.80
MCMI Antisocial Persona.	.71	Hx: Federal Incarcerate	.73
MCMI Drug Dependency	.70	Violent/Non-violent Offence	.70
Raven P.M. IQ	-.69	Number Violent Misconducts	.67
MCMI Alcohol Dependency	.65	Moral Development Level	.58
MCMI Self-Defeating Pers	.65	Hare PCL Scale 1	.55
MCMI Aggressive-Sadistic	.63		
ABLE Reading Grade Level	-.49		
MMPI Empathy	-.41		
FACTOR E			
Main Offence Sentence	.63		
Main Offence Seriousness	.58		
Aggregate Sentence	.56		
MCMI Narcissistic Pers.	.50		
Hx: Provincial Incarcer	-.46		
Hx: Juvenile Incarcerate	-.37		
STFB Factor 4	.36		

## Content of the Treatment Programs

Factor 1: ENJOYING GUILT (Treatment A)

Hour 1: Orientation:

(a) Pre-Tests, with the monitoring battery.

(b) Cognitive Restructuring/Reframing: Guilt feelings are experiences in which everybody shares. Guilt is learned early in life as a result of reproof and criticism, and it serves as a means to remind the child to inhibit some actions in order to avoid pain from future reproof. The reproof is offered as an act of love, seeking to protect the child from injury and embarrassment, but it is commonly misunderstood as evidence of absence of love. It, and the incorporation of self-depreciation and fearful avoidance of other's judgements about "mistakes," may be taken to heart. Consequently, most of us know more about our "bad" than our "good" selves. Each of us has been "bad" for much less than 1 percent of his or her life. Others' and our own guilt-provoking judgements are simply wrong. Guilt is the judgement now that a past event should have been done differently. But it could not have been done differently. Everybody always does the very best he or she can at every moment, given the circumstances and the person's condition. Therefore, since nothing could have been done differently, we are all perfect. Indeed, perhaps the only real sin is guilt itself. The loving intention behind a guilt-trip, and the fact that the judgement made is always wrong, suggests that guilt-trips could be enjoyed.

Hour 2: Tools for Self-Help:

(a) "Personal Development" Goals Development (Quirk, 1993): To discover your perfection, take on the job of noticing and rewarding your "goodness" so that you become your "Ideal Self". List all the qualities you would like as your ideal self. Under each quality, list a half-dozen observable behaviours which define that quality. Each morning read over the behaviours to remind yourself of them. During the day reward yourself ("pat on the back"), and even record, every time you notice yourself, even for an instant, doing any (even) approximation to any act on your lists. You will soon discover how good you are, and become your ideal self.

(b) Values Development: List all your values -- everybody has lots -- and extend them to include as many "replicative" (positive only) values as you can. If unfamiliar with considering your values, you might consider those listed in the multiple-choice values checklist (Quirk, 1992) -- made available to the participants. Values are the most general guides for living, the best means for self-definition, the motivators which determine how we use our time, the means by which we evaluate how we have done (thus underlie guilt feelings), and the most abstract or general issues affecting everything in our lives. It is well worthwhile discovering and developing your own values.

### Hour 3: Healing:

(a) The "Visual Squash" (James, 1987): Consider "guilt" and its opposite (e.g., "innocence"). What picture pops to mind when you think of guilt? What picture pops to mind when you think of its opposite? Close your eyes and hold out your hands, palms up. Choose one hand on which to place the picture of "guilt." Place the picture of its opposite on the other hand. They are both "parts of you" (images through which you process personal experiences) and they are placed on your hands to externalize them so you can talk to parts of you and know which parts you are talking to. Ask the "guilt" part what its highest intention for you is ... and why does it want that for you? ... Ask the opposite part what its highest intention for you is ..., and why does it want that for you? ... (Proceed according to the method outlined by James).

(b) The "Swish" (Andreas and Andreas, 1987): Picture a common situation in which someone tries to "lay a guilt-trip on you". Set that picture aside for the moment. Picture yourself feeling just the way you would want to feel -- confident, relaxed, etc. Now, with the camera of your eye, zoom the picture off into the distance, way off until it is just a dot on the horizon. Bring the "guilt-trip" picture back in front of you, then zoom it out to the horizon at the same time as you zoom the other picture (the one of yourself looking just the way you would wish to feel) back in again. Look at it closely Let that scene fade away, and then do it all over again, but faster. Picture a common situation in which someone tries to "lay a guilt-trip on you". Set that picture aside for the moment. Picture yourself feeling just the way you would want to feel -- confident, relaxed, etc. Now, with the camera of your eye, zoom the picture off into the distance, way off until it is just a dot on the horizon. Bring the "guilt-trip" picture back in front of you, then zoom it out to the horizon at the same time as you zoom the other picture (the one of yourself looking just the way you would wish to feel) back in again. Look at it closely Let that scene fade away, and then do it all over again. Repeat this process, switching the pictures very, very quickly -- swish -- half a dozen times, or until even the very thought of guilt-trips makes you think of feeling confident and relaxed.

### Hour 4: Consolidation of Learning:

(a) "Time Line" (James, 1987): Everything exists in your mind, in images of the past, present and future. Imagine your past to be a long series of pictures stored in order so you can tell which came ahead of which. Imagine your future as a series of pictures of possible future events -- future memories, as it were. Imagine a line running forward through the past pictures, through the present, and on through the future pictures. Leave that line of pictures where it is, and drift up, way up, above that line. Look down and see the line below. Drift down to just above the line, and float back until you're over a time when you first felt guilty about anything (a time ...). Float farther back in time, say

another fifteen or twenty minutes or so, and turn so that you are facing the present with that memory below you and in front of you. Where are those feelings of guilt now? (If you still feel guilty ...). Step forward, with your adult understandings and resources, into that first experience, and notice how you feel. When you're ready, move on through similar events toward the present ...

(b) Summary of the day's programme with elaborations and additional examples and discussion to reminisce about and to consolidate the day's learnings. Each exercise can be done on your own.

(c) Post-Tests, with the monitoring battery.

Factor 2: ENJOYING FAILURE (Treatment B)

Hour 1: Orientation:

(a) Pre-Tests, with the monitoring battery.

(b) Cognitive Restructuring/Reframing: Everybody feels or thinks he has failed at times. Mostly, failure is a judgement made by others which we believe to the extent we value the others or their opinions. We expect to be punished or put-down by others for our failures, and we sometimes take on the role of judging ourselves either to avoid failures or to anticipate punishment (punishing ourselves). But, nobody ever fails, really. In addition to the fact that we all always do the very best we can, we are all magnificent learning machines, and everybody is always growing and improving his skills and actions every moment of every day. The trouble has been that we have been raised in a society which over-values competition -- in the family, at school, in sports, in activities, with friends, and even in court. For example, we in jail, are all failures in competing with the prosecution, i.e., defending ourselves before the Law. But society hasn't "got it": competition is one of the main sources of war and of crime. Another main source of these is what we think we learn from the media.

Hour 2: Tools for Self-Help:

(a) Media-Proofing: In adulthood, one of our most usual ways of comparing our lives with those of others is through the eye of the media, especially T.V. But the world as shown to us in the media is entirely make-believe. (Data on the distortions of reality found in the media, e.g., murder rates and characteristics, sex and race roles, etc., etc.) Our expectations are shaped by the lifestyles of people as they seem to be in the media. Life is just not like that. For example, each of you has heard and told stories about all the violent acts you and your fellow inmates have been involved with. For your own stories, you know they are rarely ever true; and the same is true of others' stories. We all believe there is much more violence out there than we have ever experienced. So we make up for the imagined deficiencies in our lives. (Data on the



effects of exposure to the media on people's lives and behaviours.)

(b) "Achievement" Goals (Quirk, 1993): The essences of a method to develop (linear) achievement goals, objectives and action plans for one's own life are shown, with special emphasis on checking off action plans as completed. Examples of today's accomplishments are given.

(c) Cumulative Frequency graphs: The use of cumulative frequencies to display all sorts of recorded actions and experiences is illustrated, and recording sheets and graphs are provided with suggestions about events to tally and how to use the tallies and the graphs.

#### Hour 3: Healing:

(a) The "Swish": Repeat procedure (shown for Factor 1 treatment under this heading), but for the situation of "failure", consideration of which most evokes pain.

(b) Cognitive Restructuring/Reframing: Identify (on paper) several repeating situations in which you most either feel like a "failure" or fear failing. Take each in turn and (1) reverse your view of failure in it into success -- enjoy the fun of trying to fail or make the mistake, and (2) reverse the contingencies involving failure -- enjoy trying as an objective to achieve the very thing you fear may happen (Use examples such as Ellis' "objective" of being turned down as often as possible in requests for dates.) Pair off in dyads to play the game of enjoying failing.

#### Hour 4: Consolidation of Learning:

(a) "Time Line": Repeat the procedure (shown for Factor 1 treatment under this heading), seeking to identify and to neutralize the pain of early "failure" experiences, and carrying with you your adult "resources" (skills, knowledge, understanding of how adults are and feel about children).

(b) Summary of the day's programme with elaborations and additional examples and discussion to reminisce about and to consolidate the day's learnings. Each exercise can be done on your own.

(c) Post-Tests, with the monitoring battery.

#### Factor 3: ENJOYING DISTRESS: (Treatment C)

##### Hour 1: Orientation:

(a) Pre-Tests, with the monitoring battery.

(b) Cognitive Restructuring/Reframing: Everybody feels a certain amount of distress every day, and a great deal of distress from time to time. Suppose you had no means at all by which you could

reduce your distress. You would live with it and tolerate it, right? In fact, one of the things that sets us up to risk becoming addicts is that we think we can't stand our distresses, and that we have to get rid of them NOW. (Examples, such as being scared while driving, and the consequences of stopping and leaving the car versus keeping on driving.) We can all tolerate distress just fine and, if we do, it passes -- almost never lasts longer than 90 minutes. In fact, let's have some fun enjoying distress.

#### Hour 2: Tools for Self-Help:

(a) Meditation: The largest source of distress for everybody is thinking -- our thoughts are what upset us. But how can you stop thinking? Don't think about a purple hippopotamus. To NOT think of it, you must think of it. In fact, nobody can do a not-do. But it is possible to reduce the pressure of thinking, and thus disturbance from thoughts, greatly. You can do it by thinking ... about something that has no meaning to you. But everything you can think of means something, right? One thing that means nothing might be a word from a language you don't know. Sanskrit in a dead language that nobody knows, so any word from it, listened to, might distract you from other thoughts. Some methods for meditation are explained and tried briefly, with a focus on Transcendental Meditation (T.M.).

(b) Stress Management Training: Explanation of how the ANS works, with particular emphasis on breathing IN as a sympathetic response and breathing OUT as a parasympathetic response. Long out-breaths (NOT deep breaths) are explained and practised for their effects in creating calmness.

#### Hour 3: Healing:

(a) Relaxation Training: Specific muscle-group progressive muscle relaxation training (Jacobson, 19 ) is selected to permit controlled group relaxation, and explanation and practice in it is provided.

(b) Systematic Desensitization (RIT: Wolpe, 1958): All participants are induced to relax, and relaxation-mediated (sometimes enhanced by eye-movement) desensitization is employed, using "standard hierarchies" of anxiety and distress stimuli common among offenders, and asking for hand-raising signals if anyone's SUD (Subjective Units of Discomfort) level exceeds 30. Any presentation is terminated when anyone in the group either raises his hand or exhibits "voluntary" restlessness.

#### Hour 3: Consolidation of Learning:

(a) Systematic Desensitization (RIT): The above procedure is repeated, both extending and repeating the stimulus presentations.

(b) "Rapid Phobia Treatment": Select a situation in which you might feel upset. Make a video movie of it, starting from when you

feel safe, and ending with you in a safe place. Make a theatre, and seat yourself in it looking at the screen. Drift up and out of yourself, leaving yourself in the theatre, and drifting up into the projection booth. Look down from the projection booth at the you in the theatre watching the screen to watch how the you in the theatre reacts. Ask the projectionist to run the film you made on the screen fairly quickly through in black-and-white. How did the you in the theatre seem to feel? (If uncomfortable, drift up and out of yourself in the projection booth and ...) Ask the projectionist to rewind the film fast, in colour so that everything happens in reverse. How did the you in the theatre seem to feel? Repeat the process several times. Drift back down to sit beside the you in the theatre and watch that you more closely. Repeat the process. Drift back into yourself in the theatre. Repeat the process. Drift up into the action on the screen, playing your role in it. Repeat the process.

(c) Summary of the day's programme with elaborations and additional examples and discussion to reminisce about and to consolidate the day's learnings. Each exercise can be done on your own.

(d) Post-Tests, with the monitoring battery.

Factor 4: ENJOYING SENSITIVITY: (Treatment D)

Hour 1: Orientation:

(a) Pre-Tests, with the monitoring battery.

(b) Cognitive Restructuring/Reframing: Wouldn't it be nice to enjoy being free ... to be warm, friendly, concerned and close with everybody. The trouble is you can't trust any person ... to be consistently caring the whole time. (Use the logic of Pascal's Wager to demonstrate it is always a mistake of thinking not to trust other people with your feelings.) (Use "the love test tube" model to explain how it gets to be hard to trust, and easy to create "distance" from others emotionally.) So we all make mistakes of thinking which create havoc and trouble in our lives. It might be well to examine some of our mistakes of thinking, and even how we could find ways out of our problems.

Hour 2: Tools for Self-Help:

(a) Rational-Emotive Therapy: Having handed out a Beliefs Inventory and a Resiliency Inventory to be completed (during the inter-hour break), the inventories are now self-scored, and common errors of thinking identified are examined. The suggestion is made that both inventories be repeated often, each time thoughtfully considering whether each item answered in the direction of "error" or "non-resiliency" could be thought of differently, and only changing the answer given if it is honestly believed to be in the other direction at that time. To the extent that you can "change your mind" on any item, to that extent you either reduce the extent

to which you upset yourself with "error" ideas, or increase the freedom and ease with which you adapt to life's changing circumstances. Either improves quality of living.

(b) Problem Solving: How many of you are "stuck" in acting or thinking in a particular way, or cannot solve a problem in your lives? How come? The answer is simply that we keep using the same strategies in life over and over again, or that we have not yet found the right strategies to achieve what we want to do. The role of language and words in creating and perpetuating problems is outlined. The role of sentence syntax, especially negative format instructions, is outlined and solutions suggested. The consequent reliance on avoidant strategies is outlined and alternatives discussed. The role of externalizing responsibilities and control is illustrated and reframed.

Hour 3: Healing:

(a) "Time Line": Repeat the procedure (shown for Factor 1 treatment under this heading), seeking to identify and to neutralize the pain of early "failure" and "hopelessness" experiences, introducing into those experiences resources which are drawn from experiences on this very day.

(b) Empathy Training: Methods from Assertive Training are used to enhance "empathy" in responses (sending messages), and extended by training in effective listening and in non-verbal reception and expression. Participants try out listening dyads.

Hour 4: Consolidation of Learning:

(a) Enhancing Functioning: (In that a central theme in Factor 4 has to do with concrete and simplistic thought, apparently associated with motivated insensitivity), some training is offered in intelligence functioning to foster improved success in problem-solving and human interactions. A few exercises and strategies are introduced to enhance concept-formation and thus abstract thinking, perceptual acuity and discrimination and thus accuracy of responses, and mnemonics and thus success in retention and retrieval of information.

(B) Summary of the day's programme with elaborations and additional examples and discussion to reminisce about and to consolidate the day's learnings. Each exercise can be done on your own.

(C) Post-Tests, with the monitoring battery.

Factor 5: ENJOYING CONFORMITY: (Treatment E)

Hour 1: Orientation:

(a) Pre-Tests, with the monitoring battery.

(b) Cognitive Restructuring/Reframing: Quite apart from the fact that most participants didn't really even get to understand the terms "conformity" or "introspection", we carried on regardless. Thought is the single main source of personal distress and thus interpersonal and other trouble. Thought is always a waste of time. In fact, when we are wasting time, the way we keep ourselves from boredom is commonly by thinking. Thought, however, never has to do with reality, if only in that by the time we think about the present, the present is already past. What happens to many of us, who have been taught that we ought to think and that our thoughts should be organized, is that we confuse ourselves trying to organize our thoughts. Another use we often make of thinking is to manufacture faults in ourselves and others, and we justify our fault-finding on the grounds that we have been trained that it is desirable to maintain a critical attitude of mind -- it is not. By finding fault we manage to find ways to disrespect others, and thus to justify our cold and distant attitudes toward others by which we avoid "getting close" to others. Finally, we often use thought to find justifications, rationalizations, excuses and intellectualizations about ourselves and what we do. Of course, since there are as many different logics as there are people, nobody except ourselves is convinced by our impeccable arguments and incisive logic. Just because thought is a waste of time does not mean that cautiousness and precision should not be used in the things we say and do. We can enjoy being cautious and precise. But we don't need any "self-control", or to concern ourselves about the ways we think others want us to "conform". Our brains are already programmed beautifully, so that we will do what we are going to do whether or not we have thought it through first, and no matter how much self-control we exercise. Of course, self-control too can be fun. Use it for that purpose. Most of what we believe and say is achieved through the exercise of what we are pleased to call "common sense". All that "common sense" really tends to mean is that we jumped to a conclusion on the strength of impression, emotional attitude and imagined consensus of opinion -- that is attitudes we think are in fashion or are popular. Common sense commonly misleads us all. It is probably true that if a million people believe something, it is bound to be wrong.

## Hour 2: Tools for Self-Help:

(a) Assertive Training: In addition to the usual elements of assertive training programmes (the nature of assertiveness, "I" statements, 3-part statements, etc.), a particular emphasis is placed on (1) the use of bodily energy (in exercise, vocal impact on the environment, definiteness of statement, clarity of enunciation, etc.), and (2) the syntax of linguistics in sending communications (brevity of sentences to exclude explanatory clauses, positive and permissive statements to counter negative format statements and criticality, decisiveness in instant response to counter rumination and foster trusting of the good programming of one's brain, rapidity of repartee to enhance activity and energy use, etc.) "Mottos" are offered as aids to application, such as: 'Never explain. Your friends don't need it, and your enemies won't

believe it anyway'.

(b) Divergent Thinking: In order to reduce the fixity of ideas commonly encountered in introversive-obsessional-conforming people (part of what Factor 5 seems to represent), encouragement is offered to employ divergent thinking actively, both to provide alternative points of view and to view events with humour and objectivity -- Factor 5 people act as though they were "objective" to create "distance" from emotions and from others, but in fact view events in highly subjective ways. Various tools for divergent thinking were offered, including fragments from a Dictionary for Divergent Thinkers (Quirk, 1989).

Hour 3: Healing:

(a) Systematic Desensitization (RIT: Wolpe, 1958): Relaxation-mediated anxiety desensitization (as described for Factor 3 under this heading) is employed to extinguish some (of the Factor 5's) ambiguity or uncertainty distress. A number of social and other situations involving ambiguity in the situation or uncertainty about outcomes (eg., coming Parole Board decisions) are presented for desensitization.

Hour 4: Consolidation of Learning:

(a) The "Swish": Both concepts and images of rage and violent outcomes (which appear to terrify Factor 5 inmates) are evoked and subjected to the "Swish" procedure (as described under that title for Factor 1) to create a sense of "safe distance" from these feelings (using an existing skill of Factor 5 people) -- since "bad thoughts", commonly about destructive rages, are strongly represented in Factor 5, presumably as a result of the inhibitive effect of thought on action, and thus on use of the body's energies.

(b) Summary of the day's programme with elaborations and additional examples and discussion to reminisce about and to consolidate the day's learnings. Each exercise can be done on your own. (d) Post-Tests, with the monitoring battery.

Factor 6: ENJOYING RESTRAINT: (Treatment F)

Hour 1: Orientation:

(a) Pre-Tests, with the monitoring battery.

(b) Cognitive Restructuring/Reframing: We are all in jail. This means that our freedoms and choices have been denied us, and we are restricted from doing anything interesting or useful, right? Wrong! There is just as much freedom in jail as in any other life setting. Freedom is only the freedom to choose or decide. But we can't decide freely to go home or any number of other things. Of course we can. The only thing that restricts us is our own unwillingness to accept the consequences of making certain choices.

We restrict ourselves because we aren't willing to pay the costs of making certain decisions. But that's always true for everybody, at every moment of his life. Moreover, in jail we actually have MORE freedom than on the street. We are free from the requirements of supporting ourselves, those complexities which we don't handle well of deciding how to use our leisure time, the demands of life's distractions by which we prevent ourselves from pursuing our own best interests and things which might later contribute to the quality of our lives and, for some of us, from the constraints imposed by our relationships with others -- that is, we are free to make new lives for ourselves with new choices about those we will relate to in various ways. So, maybe it's time, while you have the opportunity freely to feel confined, to enjoy your restraints.

## Hour 2: Tools for Self-Help:

(a) Cognitive Restructuring/Reframing -- The Sources of Confinement: All confinement and restraint comes from within ourselves. Even when prevented movement of our bodies, we are free to exercise our minds -- where all of anybody's reality exists. Inhibition comes mainly from thought, but also from habits of self-control and of avoidance. Since action and thought compete with one another, the confinement that comes through thought impedes the use of the body's energy -- the body is just an energy-producing machine. The felt restraint from this source creates an increased pressure for bodily energy to be used, which can eventually lead to a sense of rage. To combat rage, use up the body's energies in actions (restlessness, pacing, exercise or any vital activity). Self-control is necessary, right? It is not. We are well-programmed to act as we will act, and all the extra burden of self-control does is increase the ANS-stress arousal which increases anger. Trust your well-programmed brain and enjoy doing crazy things. Avoidance habits are learned to keep us from doing things we fear, but the fear and the avoidance result in situations and reactions of ours which result in robbing ourselves of joy and justifying for ourselves hostile attitudes and feelings toward others. We live in an engineered safe society. There is nothing to fear, except the effects of fear itself.

(b) How to Achieve Joy: (1) Respect everyone. If you choose to respect everyone, you will discover the good in them (always vastly exceeds anything else). But the gifts which flow from giving respect are NOT given to the other person, they are given to yourself by yourself -- you find yourself living in a world full of goodness which, contrary to expectations, makes you feel good. (2) Trust everyone. If you choose to trust everyone, contrary to expectations, you will feel safe in life and in human relationships, and the gift of trust is NOT given to others, it is given to you by yourself in feeling safe. (3) It is then possible to love everyone. If you choose to love everyone, your body's energies become invested in everyone and everything around you. The gift of loving is NOT given to the other, it is given to you by yourself, as you find joy for yourself.

### Hour 3: Healing:

(a) Assertive Training II: Personal rights, common to many assertive training programmes, are presented and explained, along with extended focus on freedom in using the body's energies, particularly the energies of emotions and loving. Participants list recurring situations, in which discomfort, joylessness or strong negative emotions are felt. Under each, 16+ alternative possible responses in the situation are listed, ordered in a hierarchy from most aggressive to most under-assertive, with most in the middle. Each list of responses is committed to memory. When one of the situations recurs, stop, run quickly through the associated list of responses, choose the one you would be comfortable with, step one step down from it and deliver that response.

(b) The "Swish": Repeat the procedure (shown for Factor 1 treatment under this heading), but for situations involving, first, an authority (judge, correctional officer) invoking restraint, then a situation of being confined, then a situation of feeling forced to abide by restrictive regulations, and then one of feeling free.

### Hour 4: Consolidation of Learning:

(a) Achieving Freedom: Jump up and fly in the air around the room. Accept fair returns for what you have given others -- whoops, we all get many times more than we give. Put a sign on your weekly canteen supplies: "Steal all of this". Wear a sign on your back: "Kick me". Do you think that's funny? You do, good! You have begun to achieve freedom. Whenever you have to do something, play it as a game. Could you do that? You could, good! You're well on your way. Do you think it's right that people should treat each other as equals? Could you be the first person to act that way? Could you keep it up? You could, good! You're almost there. Could you start practising the three steps to joy? Could you find three different things you like every time you are moving from one place to another, as a start? You could, good! When you've done those things for a few short weeks you will have arrived. You will know what freedom is.

(b) Summary of the day's programme with elaborations and additional examples and discussion to reminisce about and to consolidate the day's learnings. Each exercise can be done on your own.

(c) Post-Tests, with the monitoring battery. Overall Plan for Evaluation of the Treatment Outcome Data It was planned that the data would be analyzed in two discrete steps. The first step was undertaken as soon as all testing had been completed following completion of the STFB-related treatment programme. Its task was to determine whether any or all of the treatments had successfully modified any of the STFB Factor and other scales or scale combinations (i.e., Factors 1+3+5 to represent "meta-factor A", and Factors 2+4+6 to represent "meta-factor B"). The purposes of this first step in the analysis were: (a) To determine whether or not



we had selected appropriate treatments, and had made adequate provisions (in mode and time of treatment) for treatment effects to be recorded. The question posed by this purpose would be answered affirmatively if we were able to demonstrate any significant change effects, in the appropriate direction, on any STFB scales' scores. (b) To determine whether the factor and other STFB scores, with or without the change results from the motivation-assessing monitoring tests partialled out, were affected significantly by attendance at any, any combination, or all of the STFB-related treatments. To the extent that this question could be answered affirmatively, it could then be argued that the STFB factors were modifiable to the degree justifiable by the results. (c) To determine whether "differential treatment" was achieved with any of the STFB factor-related treatments. To the extent that the specific factor-related treatments affected (only) their STFB factor scores, it could be argued that differential treatment had been achieved -- that is, treatment precisely targeted for the specific problem addressed, and no other. The second step in the study would require that we wait for two years following the releases of inmate subjects to retrieve and enter the data from their cumulative correctional system records. This step would permit determination of their recidivism status and, if they had recidivated, the resistance to recidivism they had evidenced and the seriousness of their offenses. A two-year follow-up period had been established in all of our work due to the earlier discovery that it was not until that amount of time had elapsed that the bulk of all those who would eventually recidivate had recidivated. The purposes of this second step in the overall study were: (a) To determine whether criminality, as represented in future criminal conduct, could be predicted by the STFB and its factors (i.e., predictive validation of the STFB). (b) To determine whether criminal conduct, as represented in future criminal behaviour, could be modified by treatments designed to address criminality in the rather cognitively dissonant manner which had been suggested by our final view of the nature of the STFB factors' dynamics (i.e., validation of our understanding of the nature of criminality). (c) To determine whether any modification of future criminal conduct, which might be associated with any modifications achieved of the STFB factor scores, had occurred -- if so, then it could be argued both that criminality is modifiable, and that modification of the STFB factors is associated with the modification of criminal conduct (i.e., the final "construct" validation of the STFB). Discussion Crime is widely understood to be the most destructive force in society. It is the most common "external" source of human distress in the victims which every crime produces. It is also the single largest source of cost to the public purse, to the corporate sector and to private individuals. And it represents the greatest single factor contributing to disruption in community life. Even when the victims of "break and enters" are not present during the crime, they often suffer for many, many years because of a heightened sense of their own vulnerability and the risks of personal injury and of repeating the loss of precious possessions. And even when there is no apparent cost to a given individual, corporate and public costs always end up being paid by individuals.

The personal consequences of crimes on victims are incalculable. It is, perhaps, easier to calculate the economic costs of crime. Surely, everyone is aware of the enormous annual losses sustained by individuals and corporations due to criminal acts. Many may not consider the costs of law and customs enforcement and police investigations, however, or the costs of legal fees and prosecutions in the courts, of incarceration and community supervision of offenders, of welfare support required by families of offenders while they are incarcerated, or of the costs of health services required by victims, offenders and their families associated with any given offence. In fact, any act which contravenes the law may be viewed as a crime. War (which offends against international law and order), terrorist acts (either international or intra-national terrorism), poaching (killing protected animals), and pollution of the environment all contribute to the costs of crime. Careless wastage of irreplaceable resources (as in an oil spill), and everyday traffic accidents (accidents, properly construed, are inevitable occurrences resulting from the action of immutable, and mostly known, universal laws) might also be regarded as criminal acts, since all of these events invade the rights and property of individual people. All create victims, and all carry an immense cost. These costs include the expenditures to support a military establishment (the police to enforce international order) and the materials and supplies needed in the event of a war -- demanded by the beliefs of all nations and governments that they must protect themselves from other nations. These, too, may be included in the costs of crime. Surely, it may be argued, not all of these issues are specifically related to crime. Traffic and other accidents, for example, are usually not the responsibility of those involved, other than sometimes resulting from ignorance or carelessness. Similarly, it may be argued, warfare can hardly be included within the purview of crime, particularly when it results from the efforts of people and their governments resisting infringement by other people and their governments upon the former's territory. While that may be true, it is also true that it is always difficult to affix the responsibility for any act of war. Both sides commonly claim provocation and incursions from the other side, and most acts of war are considered, as in the case of individuals, to be retaliatory in nature. It may well be that a group of like-minded people of any size might develop some of the personal characteristics (such as the characteristics of criminality adduced in this work) which predispose them to pursue a course of action which could lead to war. Certainly, large groups of people are known to perform frenetic activities, many of which are demonstrably criminal, as in riots, vandalism or looting. Although probably more organized and more dangerous than these kinds of events, how does war really differ from these other crimes? It is not our intention here to offer any solutions to these broader issues. It is not even our intention to claim that we have investigated these other issues. Our purpose in suggesting these extensions to what is usually considered to be the realm of crime is merely to raise questions, some of which might well yield to approaches of the types used and reported above. With that said,

it is now time to explore the narrower topics of crime, criminals and criminality.

#### Quarrelling With the Media:

If you ask almost anybody to tell you about criminality, you are likely to awaken images of tough and macho men whose lives are selfishly committed to the violent exploitation of others. Alternatively, you may evoke images of the sleazy and weaselly, or of silent conspiracies, of drug abuse and addiction, of police chases and shoot-outs, and perhaps of helpless women unable to escape from prostitution and sexual slavery. Or you may evoke images of courtroom dramas and the bars of prison cells. Surely, this is what crime is all about. Actually, of course, these images have very little to do with real crime, criminals or criminal behaviour. They are merely the images implanted in us by repeated exposure to the staggering amount of violence portrayed for us by the media which, itself, is one of the greatest causes of crime, as a result of the modelling by impressionable youngsters and the desensitization of adults to media violence. Contrary to the image of crime portrayed in the media, the less serious a crime, the more common or frequent it is likely to be. That is, contrary to the appearances as revealed through all media sources, murder and rape remain extremely rare events. For example, in the world's most violent nation, the United States, one person in 200 born will be murdered; in Canada, the figure is more like one in 700 births. Stated more concretely, in over 60 years of the life of each of the present authors, working extensively with criminals (a few of whom were later murdered or performed murder, and some of whom had performed murder) and mentally ill people, and knowing many thousands of people, only one acquaintance of one of them was murdered -- and he was living in the United States. Nevertheless, such events, rare though they may be, receive media attention because of their "sensational" nature.

#### Quarrelling With "The Law":

A crime is merely any act which contravenes the law. The particular laws which may be broken in any given jurisdiction at any given time are those prohibitions against acts which are enacted by a particular group of legislators. Legislators are politicians who, in seeking to be re-elected, enact laws which they believe either to represent the contemporary majority or popular views of the electorate or to represent their own personal interests, convictions, or personal understandings of "expert" opinion. There is nothing universal or timeless in the acts which these people choose to prohibit. Laws are highly relative to the culture and the politically "correct" fashions of the times. However, there are two features which seem to be common to most, if not all, laws. The first of these features needs to be mentioned because it bears upon one of the external "causes" of crime to be addressed later. In nearly all jurisdictions, legislators (politicians) tend to hire lawyers or other "experts" to prepare the language in which the statutes to be enacted will be stated.

The reasons for using these "experts" are to ensure that (1) the proposed statute will not contradict existing statutes, that is, will conform with the content of existing laws, (2) the proposed statute will be capable of being enforced, and (3) the proposed statute will stand up in court, that is, will conform to the court rules of procedure in prosecution of an offender. One of the consequences of these requirements is that laws are likely to be written in prohibitive terms. It is much easier to prove that a person performed a prohibited act than it is to prove that he failed to perform or offended against a permitted act. Hence, laws have traditionally be written in the form of an injunction: "Thou shalt not ...." The second feature common to most laws is that they prohibit any person from invasion of another person's property without permission. For this purpose, "property" includes the person's body and, more recently, the person's sensitivities (sense of harassment or abuse), and the person's possessions, including his or her ownership of contracts and agreements (owned by both parties to an agreement). Invasion or breach of, or even unpermitted contact with, any of these personal properties is deemed a criminal offence, the seriousness of which tends to be measured in terms of (a) the extent of penetration or confinement of the personal property involved, and/or (b) the presumed defencelessness of the identified victim. Thus, kidnapping and rape are considered more serious than rape without kidnapping, and the latter is considered more serious than sexual assault; and break and enter is considered more serious than theft, which is considered more serious than shop-lifting. Similarly, sexual assault upon a child is considered more serious than equivalent assault upon a woman, which, in turn, is considered more serious than sexual assault upon a man; and robbery (as with a weapon -- which implies defencelessness of the victim) is considered to be more serious than theft (with stealth), and theft with stealth is considered to be more serious than stealing, say, an unattended bicycle. Yet all of these acts, since they invade the property of another, would generally be considered to be crimes. Quite apart from the image and definition of crime, it is important to the present work to examine the "causes" of crime.

The present work, however, is not concerned with those causes of crime which are external to the individual. Rather, it is the causes of crime which exist internally within the individual which form the main subject matter of this book. Nevertheless, it is be important at the outset to recognize that there are causes of crime which are not addressed in this book, and it is to a brief consideration of these "externally" causes of crime that we now turn. If you were to ask the average individual what he or she deems to be the causes of crime, the answers you might receive would likely fall in either of two clusters. Some people would focus on the "internal" causes of crime, and they might offer such explanations as greed, self-centredness, lack of conscience, mental illness (or craziness), lack of caring for others' feelings, an excessive sense of self-importance, or even weak appreciation of the future consequences of one's actions. Others would focus on the "external" causes of crime, and they might offer such

explanations as poverty, bad parenting, experiences of abuse by others or by the system, racial minority status, or even opportunity to perform an act undetected. The justice system, including the police, although sometimes recognizing such personal or environmental characteristics as providing the motivational fuel for a criminal act, tend to construe the individual as intending or deciding wilfully to perform his or her criminal acts. Of course, the justice system, including the police, the courts and the correctional system, probably has to view the causation of crime as wilful, if only in order to permit it to act toward the offender as if he was responsible for his actions, so as to justify the punishment which it dispenses and, hopefully, prevent or deter future criminal acts which the person might otherwise have committed. We will not seek to imply that the offender is not at some level in full possession of his faculties, nor that he has not performed an offence wilfully, nor that he should not be held fully accountable for his offenses. However, although some of these explanations of crime do contain a grain of truth, none appears to account for much of the field of criminal behaviour. What, then, are the real "external" causes of crime?

The first "external" cause of crime, which has been verified consistently in literally hundreds of variously designed scientific experiments (including a major series of studies funded by the United States' Surgeon General), is exposure to violence and crime in the media. Since many people still pooh pooh the idea that simply viewing media crime and violence causes anything, especially such a complicated phenomenon as crime, a few words of explanation may be in order. Human beings are amazingly good "learning machines". We all learn immense amounts every day, no matter how young or old we may be. Learning involves the establishment of connections in the nervous system (in the brain) between stimulus events and responses of our bodies -- both those of which we are aware and those of which we are not. The latter include those events inside our bodies such as the autonomic nervous system and appetitive arousals which fuel or motivate our actions. These motivational events going on within us are the things that advertisers work away at to try to get us to buy their products -- and advertisers are business folk who would not bother trying to influence us if their efforts did not work. The connections between stimuli and responses "take hold" within us partly as a result of repetition, but mostly if we receive or anticipate receiving benefits or rewards perceived as resulting from those stimulus-response connections. It is the rewards or benefits which work on us in the most subtle way. At an obvious level, one of the best ways for politically-conscious or attention-seeking people to get the attention of large numbers of other people is to perform an act which media personnel will consider sufficiently shocking or sensational to be deemed "newsworthy", and may therefore report in the media -- hence, no doubt, the increasing aggressiveness (which captures the media's attention) we have been witnessing in many sports. At a less obvious level, in stories and the news, those criminals and police who are presented as violent, or even most "crooked", are commonly depicted as "heroes" or as accumulating

wealth or sexual partners who are particularly attractive or desirable. The implication is that such violent or criminal behaviour earns the approval and the visible rewards which our society seems most to value. The result for almost every viewer is at least some learning by vicariously rewarded modelling. Studies show that the single greatest external and, therefore, manipulable cause of crime is exposure to media violence. This means that, in the imprecise language of media-gab, the media are purveyors of what are probably the most hazardous materials in our common environment.

The second most influential external cause of crime likely lies in the language in which most law is couched. This statement seems to implicate the Law itself in the causation of crime. It is intended to do so. The fact is that the Law uses prohibitive or "negative format" statements, that is, statements couched in the form: "You shall not ...". The trouble with prohibitive statements is at least threefold. First, they tend to be critical, evaluative or guilt-evoking -- we will encounter the problems associated with this later in this book. Second, there is a subset of people at large who just cannot handle or react appropriately to the self-contradictory nature of negative format instructions. These people seem to have to respond to both parts of a contradictory statement -- doing the action and then trying to undo it. For example, if these people try to follow the injunction: "Do not touch that object", they are likely to reach out and touch the object, and then pull their hands back almost with a start. Third, prohibitive statements, as instructions, tell the person to do something (the verb) and prohibit the action. This gives the person only two options of response: to do the prohibited action, or to do nothing (the only specified option). If the person has any motivation operating within him, it will be easier to do the action than to do nothing. Permissive statements, in contrast, provide three options for action, only one of which is prohibited, and the prohibited option is not suggested in the instruction. An illustration of the above would seem to be in order. An example of a prohibitive instruction might be: "You shall not be rude to your mother-in-law". This affords the person only two options of conduct: to be rude, or not to be rude. It reminds the person of rudeness, and may even lead him to be rude if he cannot handle contradictory instructions. And it implies that if he is rude he ought to be considered reprehensible and thus should feel guilty. The parallel example of a permissive instruction might be: "You shall be polite to your mother-in-law". There is no internal contradiction in this instruction. There is no guilt (only self-satisfaction) in following its words. And it increases the person's freedom of choice by offering three options of response: to be polite, to be rude, and to be neither -- for example, presumably turning his back to his mother-in-law to say something to someone else is neither polite nor rude. But the use of negative format or prohibitive statements in Law is only the beginning of its contribution to crime. Although it is deemed much easier to enforce and adjudicate a prohibitive than a permissive law, the use of prohibitive laws also tends to demand an

adversarial approach to the enforcement and adjudication of the Law. The adversarial approach in court fosters competition, and eventually cynicism among most lawyers. It also sets the community, as represented by the prosecution, against the alleged offender. This creates conflict between the community and the offender, who is said to have "violated" a law, and who the court may "punish". And it seeks to define the offender out of the community of which he is a member, as an "outlaw". What is the alternative to the adversarial approach? While the answer to this question is beyond the scope of this book, it might be appropriate to hint at a partial answer. It is known that in cultures such as some of those in the Pacific islands, where permissive laws were practised, the actions which we would designate as crime essentially did not happen. Partly, this seems to have been due to the fact that an offender was not defined out of the social order, and that the society seemed to seek to offer the offender support in helping him to learn how to act in a socialized fashion. And, although to convert to permissive laws would require training a whole new generation of justice system personnel who would approach their tasks in quite different ways, the enforcement of permissive laws should be almost as easy in the end as the enforcement of prohibitive laws.

The third "external" cause of crime has less to do with "bad parenting", and more to do with an insufficiency of "good parenting". While it may be moderately difficult to eradicate the effects (if any) of "bad" parenting (a task which is equivalent to psychotherapy for any emotional disturbances), the effects of "good" parenting are mainly those of enhancing the person's socialization -- into pro-social, as opposed to anti-social habits. Any limitation in the amount of "good" parenting experienced by an individual, and thus of the socialization of his behaviour and his ability to form meaningful relationships, can be supplemented at any time in the person's life in any consistently caring human relationship -- which is the basis for the kind of "relationship security" that allows the Ontario Correctional Institute, for example, to demonstrate a consistent reduction of recidivism compared to other Correctional Centres. It seems clear to us that, from the perspective of its causal effects on crime, the issue of the amount of good parenting affects in particular those offenders whose offenses are "against the person" and, most specifically, is associated with sexual and spousal offenses. A criminal is merely anybody who has been found "guilty" of having performed a crime. There has come to be a kind of enhanced mystique about the concept of "criminal", due no doubt to the use of this word in the media, most usually associated with heinous or serious crimes. In fact, a person who is found to be guilty of shop-lifting, not showing up in court when ordered to do so, or taking pads and pens home from work is no less a criminal than one who performs a murder, a rape or kidnapping of a child. At the risk of appearing too light-hearted with respect to a serious matter (the seriousness with which we approach this matter can be inferred from the fact that it has engrossed the major part of our professional careers), it might be said that criminals are people who have failed to

defend themselves adequately in court -- and have therefore been found to be "guilty". Those who have succeeded in defending themselves in court so that they were found to be "not guilty", whether or not they actually performed the crime, are not designated as "criminals". From another perspective, it happens that some criminalistic people have not performed the crimes which would mark them as criminals. In spite of the greater ease of finding guilt with a prohibitive than a permissive law, for example, it is still difficult in many cases to prosecute an offender. Consequently, plea bargaining is often employed to obtain convictions. So that, if taken to its logical conclusion, it may be said that some criminals did not perform the crimes of which they were convicted. These confounding considerations need to be taken into account in formulating any comprehensive view of "criminals". In fact, the whole notion of "criminals" should probably be abandoned, since it rarely has any definable meaning in relation to the crimes the person has actually committed. The problem with the term, as it refers to an individual, is that it tends to carry a pejorative meaning, which may not be justified by what the person actually did or did not do. In contrast, the term "criminal", may be meaningful when it is used to modify another term. "Criminal law" or "criminal justice" refer to those segments of the Law and of the courts which bear upon the Criminal Code of a particular jurisdiction. But "criminals" may or may not have performed the criminal acts of which they have been convicted; and non-criminals equally may or may not have performed criminal acts although they have not been convicted of them. Since the term, as it refers to individuals, has at best uncertain meaning, it will not be used extensively in this treatise.

#### Quarrelling With Education:

The fourth, essentially "external" cause of crime is really an internal factor over which the person has little control, and which may be mediated by the punitive responses of others. Some people are subject to biological malfunctions, including interference with brain functioning (commonly due to irritative electrical activity of their brains, associated with partial or complex seizures), or developmental or constitutional bodily insufficiency, (due to inadequate early nutrition, or genetic influences) . Any of these conditions, some of which can be corrected later in life, may result in slow learning of social skills, or in distracting hyperactivity, or in periodic outbursts of poorly controlled drives or feelings. Parents and teachers may well react with frustration or punitive actions in trying to deal with children exhibiting such behaviours. Either or both of these malfunctions and the reactions of others to their consequences may later predispose the person to crime, or serve as causes of crime. We will encounter this group of causes again later in this work. However, at this point, it should be noted that schools traditionally teach to those who are advantaged with respect to verbal and numerical abilities -- because most jobs require a modicum of verbal and numerical ability -- and that incarcerates tend to be above average in spacial and/or mechanical skills and below average in verbal and numerical



abilities. The result is that proportionately more of those students who are destined to become incarcerated experience a greater-than-average number of failure experiences at school, with consequences as detailed in our explication of Factor 2, above.

#### Quarrelling With Religion:

Crime has not always been understood as we now tend to understand it. In most tribal societies, the chieftain or king made the rules, and judged and sentenced offenders. Although usually decided with wisdom and thoughtfulness (if his leadership was to be extended), those acts which were considered to be offenses were selected arbitrarily by the ruler and usually seem to have involved acts which were perceived as being disloyal. And the personality characteristic most likely to be associated with "criminality" in those days would have been disloyalty. With the dawn of the written word, things began to change. The ruler's edicts were recorded, and a patchwork of laws began to emerge in many cultures -- laws which might well survive the particular ruler. Although most of these laws continued to deal with issues in which the ruler might become involved, they tended to become increasing wide-ranging as the ruler was called upon to adjudicate among his subjects. At this point, presumably because too much of the ruler's time had to be devoted to the squabbles between his subjects, surrogates were appointed to serve as judges representing the ruler's authority. In most cases, so as not to appear disloyal, these judges appear primarily to have been preoccupied with serving the interests of the ruler, and only secondarily with regulation of the special interests of the people. What sets the Mosaic Code (based on the ten commandments) apart from other early efforts at codifying law was the fact that the interests being served were the will of God, and His will was seen to regulate not only the relationship of humanity to God, but also the relationships between ordinary people. Suddenly, the importance of the will of the ruler was diminished, and the relationships between ordinary people were assigned importance secondary only to reverence to God. In traditions deriving from the Mosaic Code, the characteristics associated with criminality became less those involved in disloyalty, and more those relating to a lack of religious zeal and reverence to God, and a lack of consideration and love for one's neighbour, and even humankind in general.

#### Quarrelling With Psychiatry:

Secular law, however, was not entirely accommodated in the Mosaic Code. Rulers and their judges, still demanded loyalty, protection of the ruler's (national) interests, societal control, and regulation of contractual and business transactions among the citizenry. Many experiments were tried in the codification of the Law, culminating in the Napoleonic Code, which has served as the model for codified law almost since it was conceived. The Napoleonic Code, although it assumed the basic practical tenets of the Mosaic Code, was certainly a secular code. Being born of the French Revolution, with its tripartite demands for liberty,

equality and fraternity, the Napoleonic Code sought to regulate the relationships of individuals within the society, seeking security from interference for all as equals, while also establishing the rights of the state to supersede personal rights when they infringed upon the rights of others or of the state itself. Within the defined limits, however, each individual was permitted to choose and to act freely in his own interests, without fear of reprisal from the state. So wide ranging were the laws and freedoms deriving from the Napoleonic Code, that it became difficult to define a priori the characteristics of people which might predispose them to criminality. It became necessary, if criminality was to be characterized, to examine the definable psychosocial qualities of those who were found guilty of criminal offenses, as compared to those who were not, which brings us to the modern era of criminology and of research into the characteristics common in "criminality". The search for guidance concerning the nature of criminality which was undertaken in the early years of scientific development, turned to the existing experts who might be expected to have some scientific understanding. But psychiatry, which was practising a kind of descriptive or classificational science in which observed (more often inferred) behaviours and reported subjective (phenomenological) experiences of patients (those presenting for attention from this specialty branch of medicine) were classified, often according to the setting in which the patients were encountered, did not have the benefit of any existing science on which to base its conclusions. The "science" which grew from this approach, therefore, involved a rather arbitrary set of classes of "syndromes," considered to be "illnesses," comprised of symptom clusters containing a few observable actions and several internal states to be inferred from the patients' self-descriptions and judgements concerning his or her own experience. This approach to understanding human beings has always created some serious difficulties which have impeded progress. Probably the most serious difficulty which has most impeded advance beyond the classification stage of development of the science of "mental abnormality" lies in an easily overlooked limitation in how the classification task was undertaken. In order to be able properly to define a class of events, it is necessary to define both when an event is and when an event is not a member of the class. The latter part of this requirement has never been fulfilled in psychiatric classifications. This has prevented adequate scientific investigation of psychiatric classes and, perhaps of equal importance, it has been impossible to determine when a person ceases to "have" the "illness" -- that is, when his behaviour and experience are no longer of that class of events. One of the consequences of this latter fact has been that most psychiatric "illnesses" are considered to be chronic, or incapable of "cure". The other difficulties with any approach adopted to psychiatric classification of symptoms include both the inferential nature of the "patient's" statements concerning his symptoms and the inferential nature of many of the psychiatric acts of symptom attribution. Perhaps it will suffice to comment on the first of these other difficulties. Adults, in describing their experiences, commonly seek to explain their experiences in ways which are likely

to be misleading. The scientifically naive patient frequently adopts (1) response sets which may seek to present his experience in exaggerated, "call for help" or restrained, "malingering" form, (2) embedded explanatory elements which are apt to confound pure descriptions of experience with his attempts to understand the experience in terms of early life experiences ("initial causes"), frequently vaguely remembered or distorted through the filter of adult interpretations of childhood events, and/or purposes of actions ("final causes") which seek to explain "why", (3) inexact concepts due to the use of imprecise and often ambiguous words from everyday language, and (4) other unspecified perceptual, cognitive, motivational and habitual responses. All of these confounding sources of error tend to be adopted without being recognized by the patient, and they have then to be accepted as if meaningful by the listener. The result of all these and other sources of error in symptom definition/recognition and in classification cannot fail to make psychiatric "diagnoses" of limited value, particularly in the understanding of criminality.

Nevertheless, in good faith and with a willingness to seek to understand the psychological status of offenders, psychiatrists did examine many criminal offenders. In doing so, however, they tended to restrict their examinations at first to those who had performed fairly sensational or extreme actions, and those claiming not to be aware of what they were doing during their offenses -- that is, those cases where the court might most wish to obtain help in understanding how such an act could be committed. Possibly as a result of the subject matter examined at the outset, the image of the offender developed within psychiatry was the rather extreme picture of the conscienceless, superficial, self-serving, impulsive and aggressive "psychopath". As psychiatrists were increasingly called upon to examine a wider and wider range of offenders, although the image presented by them did not vary greatly from that established in the early years, the symptom descriptions and the "diagnostic" labels were softened progressively. They grew through the addition of symptoms such as the smooth-talking con image of the "sociopath", through the hard-done-by and depressive picture of the "character neurosis", to the socially inadequate and conflicted (rather weakly focused) portrait of the "personality disorder". Perhaps the most noteworthy feature of this progression of images and "diagnostic" labels is the impression that, as psychiatrists came into contact with a wider range of types of offenders, their concepts of offenders have become increasingly less clear and less definite.

#### The Psychology of Criminality:

While there are other "external" causes of crime which might be listed here, those mentioned appear to us to be the main causes with which the present work is not (or is only peripherally) concerned. The above examples are noted primarily in order to seek to be clear that the present work does not seek to address these kinds of "external" causes of crime -- that is, to define a class of events to which the present volume is not specifically devoted.

Criminality is that set of personal or internal attributes which predisposes or "causes" an individual to become engaged in conduct which, if he or she is apprehended, will be labelled as criminal conduct. It is comprised of those characteristics of the individual that provide the bases upon which he can permit himself to perform criminal acts, or by which he may be motivated or "determined" (causally) to perform such acts. These personal or "internal" characteristics may be made up of his ways of perceiving events, of his cognitive processing (thoughts, beliefs, attitudes) of events, of his memories of his past or aspirations for his future, of the drives, feelings or motivations he has developed (i.e., learned), and of his habits of action, reaction and response. Every individual carries his or her own sets of all of these characteristics wherever he or she goes, whether or not his or her characteristics predispose him or her to criminal conduct. So the concept of criminality contains all those particular personal qualities of the individual which predispose him or her to crime. It is criminality, rather than criminals and crime, that is the subject matter of this book. This does not mean that we have managed to identify all of the internal causes of crime. Any study has its limitations, and no study is able to account for 100 percent of the variance of any multi-determined or multi-faceted phenomenon. However, it has been possible to characterize enough of the variance of that which differentiates offenders from non-offenders, and serious offenders from less serious offenders, that it is possible both to account for the major part of offenders' individual differences, and to account for the major part of offending (and, if we consider the role of some of the "external" causes of crime, some of which have already been discussed briefly, assembling together both the "internal" and "external" causes which have been identified, it seems likely that we could account for nearly all of the variance of crime).

Nevertheless, even while we were carrying out these analyses, we were aware that even the most optimistic person could hardly expect that all, or even any, of the rather grandiose purposes envisioned by our treatment research design could be met, particularly given the relatively small amount of treatment provided for any of these criminality factors. To say that we were pleased with the differential nature of the results obtained with the treatments, therefore, would not entirely capture the extent of our excitement. These results meant a great many things to us. First, of course, we were absolutely delighted with the apparent "surgical precision" of the differential treatments in affecting nearly all, and essentially only, the factors of criminality at which each was aimed. Indeed, we would contend that these results, along with any other results showing differential treatment effects which others can demonstrate, are probably the only kind of basis on which Psychology can finally emerge as a recognized and widely accepted field of application. We would like to expand briefly on this point.

The problems with which Psychology has had to contend in achieving acceptance in the eye of a psychologically-naive (unlike the other

major sciences, school curricula do not include courses in anything recognizable as Psychology, regardless of the labels attached to some course) citizenry have been of several kinds. Most people seem to have great difficulty grasping the idea that such an ephemeral thing as behaviour, especially when it seems to be controlled by free will, could be subjected to scientific inquiry (as that is commonly understood) because it seems not to have any "stable" or solid substance or reality which could be identified and modified in any but very subjective and non-technical ways. Part of the reason for trying to anchor the STFB to measurements and hard data in the foregoing was to demonstrate its "solidity", or its objective and repeatable status, in spite of its reference to temporally-distributed behavioural phenomena (instead of the more familiar spatially-distributed nature of the physical universe). Also, part of the reason for seeking to demonstrate differential treatment effects on these "solid" scales, by using brief (four hours), cost-efficient (large-group) treatments, was to show that treatment can be applied in a quite non-subjective and technical way aimed at specific phenomena. We believe that it is just such demonstrations which are needed in order to alter the subjective, judgemental and esoteric common image of Psychology which has prevented psychological application from being widely recognized and capable of addressing specific human issues. It is not that Psychology has not been capable of performing in this way for many years. It is just that Psychology has not been seen to perform in this way, if we are understanding popular attitudes correctly.

The second major thing which the differential treatment results meant to us had to do with the stated purpose of the treatment study concerned with the modifiability of the STFB factors. That is, regardless of whether the STFB was able stably to measure or objectify various dimensions of criminality, it would be of little value if its dimensions or factors could not be modified. Of course, if we had been unable to demonstrate modification of the STFB factors, that might merely mean that we had chosen "the wrong" treatments for the purpose. It was to meet this contingency that we included the second whole-treatment subject group (EA2) -- so that at least one group could be used to provide continuity with the treatments already done in case we had to try other treatments to modify specific ones of the STFB factors. However, if, no matter what we tried, the factors were not modifiable, either we would have had to argue that we did not yet know how to modify them, or we would have had to conclude that criminality, at least as it is represented in the STFB was indeed intractable -- as much psychiatric thought would contend. Fortunately, the STFB factors were modifiable which, in turn, suggests that the criminality which they index is also modifiable.

The third main thing these data meant to us was that the meanings we had attached to the STFB factors seemed to be verified or validated. It will be recalled that we experienced considerable difficulty in constructing suitable meaning and then simple structure for each of the STFB factors. And we had even more difficulty in achieving the cognitively dissonant shift of attitude

required to move from an "insufficiency" view of criminality to an "excess" view which seemed to demand our strange way of conceptualizing the treatments, and decreasing rather than increasing guilt, inferiority, distress, sensitivity, conformity and discipline. It was with many misgivings that we set ourselves the tasks of approaching our offender subjects in a way which, then and now, seems diametrically opposed to that which is commonly used by most workers in the justice system. However, in so far as the STFB and its factors really do represent criminality (as verified in the large bulk of data presented in this work), the fact that the STFB scores were modified by treatments designed to address the theoretically-based constructs on which they were presumed to be based, offers strong support for the view of the meanings which we developed for them. That is, even before being in a position to verify the effects of the treatments undertaken on future criminal conduct, it can be stated with considerable confidence that the approach we adopted is a valid one. The fact that inmates who received the STFB-related treatments, in contrast to those who did not receive these treatment, shifted (albeit only slightly, but significantly) downwards on the factor scales shown to measure criminality is verification that the approach taken to the treatments was appropriate to the underlying nature of criminality. Thus, we are already in a position to argue with considerable justification that it is appropriate in correctional treatment to reduce, rather than to seek to increase, guilt, inferiority, distress, sensitivity, conformity and restraint.

The fourth main thing which the present results mean to us is that, in line with the contemporary fiscal restraint in all sectors of the economy, effective treatment for criminality can apparently be accomplished in highly cost-efficient ways. We are over-joyed to observe that, in contrast to the direction of growth in cost-inefficiency observed in some other areas of health care, there has been a fairly steady direction of growth in Psychology toward increasingly cost-efficient operations. In its treatment efforts, Psychology has steadily been moving from the almost interminable procedures of psychoanalysis, through the year or so of work required in client-centred and gestalt therapies, to the under-a-half-year of work needed for most behaviour therapies (all of which were largely undertaken in the labour-intensive efforts of individual psychotherapy), and now, possibly, to one four-hour day of treatment -- directed, with specific targets, at very large groups of people undergoing treatment at the same time. It may still be a bit too early to conclude that such limited and cost-efficient treatments really have profound effects on people's daily lives. But they do seem to have statistically significant effects on some test responses which have been shown to represent profoundly important aspects of people's lives and lifestyles.

Finally, these results mean to us, as stated earlier, that the STFB provides a high degree of precision of measurement, and has achieved satisfactory construct validation -- based on the data concerning its modifiability. This does not mean that there is nothing more to do in order to provide final construct validation

of the test. If follow-up reveals any robust effects in modifying criminal conduct, the final construct validation will have been achieved. However, the fact that the factor scores were modified by the treatments in groups of offenders, coupled with the amply demonstrated evidence that the STFB and its factors do measure major domains of criminality, offers further evidence of the validity of the STFB as a measure of the construct or concept of criminality.

#### The Tangle of Variables Involved:

Having completed the presentation of all the main data which we have to date, it is time to try to organize what we think we have learned, and then to launch into the realm of speculation. Hopefully, we will not be travelling too far from the facts as they have been revealed in our work. It needs to be said at the outset that criminal conduct of any kind is behaviour of individuals. This fact underlies the appropriateness of all justice system operations. Law enforcement is concerned with detecting and apprehending the individual(s) deemed to be responsible for the behaviour which is alleged to be a criminal act. The courts are concerned both with verification that the behaviour is a contravention of the Criminal Code, and of adjudicating the individual's responsibility in having performed the behaviour. And the correctional system is concerned with confining the individual for purpose of punishment for the behaviour as prescribed by the court, and of otherwise providing the individual with an opportunity of correcting the behaviours which tend to get him into trouble with the law. In all this, the individual and his behaviour are the exclusive reasons for the existence of the justice system. Psychology is the basic science of temporally-distributed behaviour, just as physics is the basic science of spatially-distributed physical events. The "distributed" natures of these two realms merely refers to the facts that if you look for an item of behaviour at the wrong time you won't find it, and that if you look for a physical event in the wrong place you won't find it. This means that, in contrast to physical events which tend to remain for repeated study more or less as they were over time, if an item of behaviour is to be studied repeatedly over time it has to be recorded at the time when it occurred. Quite apart from that explanation, the point being made here is that, since it refers to the behaviour of an individual, criminal conduct lies specifically in the field of Psychology, and it is the responsibility of the science of Psychology to explore, understand, measure, predict and modify or treat it. This point may help the reader to understand how a pair of psychologists, who have no training in the Law or law enforcement, and who have no training (only experience) in the field of corrections, have the temerity to expound upon the nature and modification of criminality, and now criminal conduct.

#### The Variables Involved in Criminal Conduct:

In the understanding we have reached, criminal conduct is seen to be a resultant of a number of types of variables. Each of these

types of variables deserves separate attention. The classes of variables involved are grouped below into (a) constitutional variables (those with which the person comes into life), (b) developmental variables (those which develop across the years of his growth), (c) social interaction variables (those bearing upon his everyday interactions with others), (d) societal variables (those associated with the manner in which the society and he interact), (e) cultural variables (those associated with the culture in which he is raised and/or lives), and (f) situational variables (those associated with the life circumstances with which, by accident or design, he comes into contact). While the above classes of variables are listed in their logical or chronological order, this order by no means represents the relative importance or influence of each class of variables in creating or causing criminal conduct. And, as far as we know, nobody is yet in a position factually or empirically to state the real relative importance of each of these classes of variables in the causation of crime -- although many of the "experts" believe that they know the relative contribution to crime of each class of events. Nevertheless, mostly for the sake of illustrating what we think we have learned about criminal conduct, and with at least as much basis for doing so as any other "expert", we feel justified in assigning weight or importance to each class in the presentation which follows -- organized in what we believe to be their reverse order of importance. But we would wish to emphasize in advance the caveat that any such weighting of the role of each class in determining criminal conduct is both premature and presumptuous. Situational variables (f), which we suggest probably account for about 3 percent of the variance of crime, include such factors as (i) being "a night person" (which is partly a constitutional variable but which functions usually a result of accumulating anxiety or stress during the day which increases alertness as the day progresses, and which enhances the risk of noticing opportunities to perform acts unobserved by roaming at night), (ii) level of supervision or scrutiny at home or work (that is, being or working more or less alone, being secretive or being involved in parataxic or parallel work or play activities mostly with peers), and (iii) amount of leisure time (either from seasonal or limited amounts of work, being "disabled" or lack of specific leisure activities with family and/or friends). Since these kinds of variables may well be recorded as apparently associated with a particular crime, or seem to absolve others of responsibility for a person's actions (occurring as they appear to do at random times), they tend to have been assigned, in the eyes of many, much more importance than they are probably due. Social Interaction variables (c), which we believe suggest probably for about 7 percent of the variance of crime, represent the first of three classes of variables which seem to contribute mainly to specific kinds of offenses. These include such variables as (i) the availability of consistent social support structures (represented by absence of consistently supportive primary or secondary families, social network systems such as friends at work or AA, and team-style organizations into which he has been accepted -- sports groups or service clubs, etc.), (ii) enforced social interactions



(represented by suppression of conversation among work peers, isolated or non-communicative relationships with family and friends, and enforced secrecy concerning any issue often involving unacceptable conduct on the part of family members or friends), and (iii) the degree of success achieved in remaining aloof from others emotionally (represented by the person's habits of interacting with others and degree of "chronic hostility" or fear of close emotional involvement with others, the strength of the person's dominance and related needs, and the rigidity of the person's moral attitudes -- largely related to his level of moral reasoning development). These variables, which certainly interact richly with the developmental (b) variables, seem to be associated mainly with the emergence of "offenses against the person", particularly sex offenses. Constitutional variables (a), which we suggest probably account for about 8 percent of the variance of crime, also seem to relate to a specific range of types of offenses. These variables include (i) variants in the morphological habitus of the person (represented by factors which alter the person's appearance, such as "ugliness" or genetic or acquired deformities, and minor physical anomalies -- MPA -- which seem to be outward or visible signs of imperfect biological habitus which might, among other things, impair learning of socialization, and which include such anomalies as wide-spread eyes or little curvature of the helix of the ear), (ii) genetic organ variants (represented, perhaps, by hermaphroditism, mental retardation, and damage or under-development of brain structures such as the temporal lobes), (iii) the type of alexithymia or related condition which prevents psychopaths from relation to others emotionally and, probably most importantly, (iv) functional or organic irritability of local brain electrical activity (represented most commonly, in the criminal field, by non-convulsive, partial or complex seizures affecting, in particular, the drive centre of the old brain). These variables, and particularly the last, appear to account in large measure for several kinds of repeating relatively dangerous criminal acts, including some arsons, some assaults and some rapes. Like the last class of variables, there is some interaction between these variables and some of the developmental variables. Societal variables (d), which we suggest probably account for about 10 percent of the variance of crime, include such factors as (i) the economic and domestic stability of the family unit in which a person is raised (represented by socio-economic level, commitment to church or religious affiliations, divorces and separations, number of residences, and types of residences -- apartment dwelling is likely to contribute more instability than ownership of a house), (ii) the characteristics of the educational system to which he is exposed (represented by its degree of permissiveness, prohibitions of staff from disciplinary action, early academic expectations of the person, and chance exposure to one or more "inspiring" teachers), (iii) the amount of exposure to media violence, especially during the formative years, (iv) experiences of prolonged exposure to corrective societal systems (including any health or justice systems), and (v) amount of exposure to urban living (represented by population per square mile, cliques among peers, and family mobility in terms of socio-economic and locality

of living). One reason that these kinds of variables have traditionally received more attention than seems due to them is that they are easily recorded as demographic variables, and they seem easy to talk about and maybe to alter through political action. Cultural variables (e), which we suggest probably account for about 12 percent of the variance of crime, also seem to foster fairly specific types of crimes. These variables include (i) cultural expectations relating to human interactions (represented by such variables as cultural attitudes governing the relationships between the sexes and within families, which may seem to permit spousal abuse or intra-familial sexual activities, and cultural role assignments to people, including the roles of partners in the family, and those assigned to social classes or castes), (ii) ascendant political perspectives at a given time (represented by such variables as attitudes toward weapon control and use, political repressiveness, and the permission or pressure to act in given ways by contemporary popular political persuasions), (iii) evolution of a culture's values (represented by such things as ascendance of individual enterprise versus social interdependency, felt needs for popularity and wide recognition, and experiential range versus moral constraint), (iv) degree of contemporary cultural transition (represented by the turmoil of shift from spiritual to secular authority, of contact between cultures having different values, and of urbanization of a society), and (v) cultural attitudes toward the use of addictive substances (represented by the cultural reliance on chemical substances or medications for "the quick fix", availability and cultural acceptance of addictive substances for unregulated use, and absolute amount of use of addictive substances). These variables also interact richly with the developmental variables (which create or foster learned needs (e.g., for anxiety relief or escape from reality, on which, for example, substance abuse feeds). These variables tend to be associated with criminal conduct which involves prevalence and amount of substance abuse, dangerous conduct (eg., driving offenses) fostered by substance abuses, and property offenses (break and enter, theft, robbery and fraud) often to support substance-related habits. Developmental variables (b), which we suggest probably account for as much as 60 percent of the variance of crime, include (i) the types of variables which have been addressed throughout this volume in considering criminality. In addition to those already identified through the STF, these variables include (ii) amount of exposure to disruptive media contents (represented by the relative amounts of violent and anti-social, versus pro-social, contents in the media to which the person has been exposed, the prevalence of such contents across the various classes of the available media, and the types of media to which the person has predominantly been exposed -- T.V., radio, newspapers, magazines and books of various kinds), (iii) the amounts and types of learning experience and skill the person develops (represented by intelligence and types of intelligence, such as verbal versus performance, and speed versus power versus extensivity, and conditionability, or rate of acquiring new and extinguishing old habits -- which affects learning retention and inflexibility of habits), (iv) health history (represented by

unremitting or chronic pain, long periods of convalescence, and unremitting psychological problems -- which predispose to hopelessness), and (v) traumatic events (represented by intense significant emotional experiences, and, perhaps even more importantly, by occurrences of sudden and apparently life-threatening events, particularly if unexpected or only weakly understood -- which are likely to result in traumatic conditioning of intense ANS reactions).

Many of these factors have effects on the person which are already included in the factors the STFB measures. Developmental variables, as we have seen in our earlier analysis of the dynamics of the STFB factors, create structures or habits of response which themselves tend to become springboards from which other, more complicated derived habits may emerge. Although the original single experiences might have been relatively fleeting, as each new level of habit organization emerges by higher-order and other conditioning, it tends to survive with increasing duration and pervasiveness, such that it feels increasingly that it demands solution (Quirk, 1993). Unfortunately, one aspect of this higher-order chaining of habits is that the person's own role or capacity in inducing or in resolving the felt "problem" becomes progressively less apparent to him, so that it is felt to refer to external causes, often viewed as requiring redress through external action. This latter may be how a sense of frustration in resolving intrapersonal problems often leads either to aggression, criminal behaviour and/or substance abuse -- as externally-focused "solutions".

While the foregoing is clearly not an exhaustive account of all the variables which may, to varying degrees, contribute to the occurrence of a crime, it is probably a necessary exercise in order to demonstrate the enormous range and complexity of variables involved in the causation of crime. To state that this or that variable accounts for, or is the cause of a crime, would obviously be subject to immense error. Uni-determined crime is probably a fiction which could be supported only in real media fiction. And yet the causes and determinants of crime must be identified if positive and effective action is to be taken to bring the contemporary prevalence and severity of crime under control -- or, better, to allow us to achieve any meaningful degree of peace for humankind.

#### Selection of Variables for Treatment:

Since, in the pursuit of the goal of crime prevention, it will obviously be impractical to modify or remove all of the immense tangle of variables implied in the foregoing limited and synoptic view of the causes of crime, some more practical means needs to be found. This means that action in crime-prevention must necessarily choose among the causes of crime to select a manageable number and type of causative factors. Most people consider it easier to modify or regulate "external" and "physical" causes of crime which can be altered through the exercise of force or power, than to seek to

regulate the "internal" and personal factors involved in the causation of crime. If "external" causes are to be addressed, the most necessary target would be the media. The evidence is clear that, of the "external" causes of crime, the contemporary media are far and away the most potent and immediate source of crime. However, but a moment's thought will rule out interference with this main "external" cause of crime. To seek to modify media contents would certainly require political action. And, quite apart from the enshrinement in law of "freedom of the press" (which, although commonly extended to all manner of freedoms and rights demanded by media personnel, was never intended to be extended beyond freedom from political interference and power), politicians, who rely on the media for their ability to achieve popularity and thus re-election, would be unlikely to consent to any infringement on the "rights" of the media for which they might be held responsible. Besides any infringement on the "rights" of the media is likely to be met with a furor of indignation based on the general abhorrence of anything even vaguely resembling censorship -- in spite of the fact that we, the public, are daily subjected to extreme censorship by the media people themselves, in the exclusion of almost all of life's events except those which are both abhorrent and "exciting." Are any other "external" causes of crime sufficiently important or powerful to warrant their nomination for regulation in place of the media? We believe that the answer to this question is a resounding "No". Most of the "internal" classes of variables (which really include the "cultural variables") are just as impractical to modify as the "external" ones. The "social interaction variables" are simply incapable of modification or regulation in a free society. And, although some of the "constitutional variables" are quite susceptible to modification or "cure" (in particular those associated with the brain's electrical mal-functioning), treatment of this class of variables depends upon identification and treatment of the anomalous state of affairs on a case-by-case individual basis. In so far as the above arguments are valid, by the method of exclusion, we might find ourselves restricted to addressing the internal psychological "developmental variables", or what we have been calling "criminality" throughout this work. And these would certainly be the variables we would nominate as the most practical target variables in any attempt to modify or expunge criminal conduct in society. Just how could that be accomplished? One way might be to provide cost-efficient treatment for criminality, such as that described earlier, for all those people who, by virtue of their in-court-proven former criminal conduct, are seen to be at relatively high risk of future criminal conduct. The costs of such an enterprise, once it had been implemented, would not be appreciably greater than (if, indeed, as high as) the present costs to the public purse of the various types of other correctional programmes. But initial implementation might prove to be almost insupportable, less because of the costs involved, and more because of such burdensome considerations as the attitudes and habits of conduct of existing correctional personnel -- this approach has yet to meet with acceptance within the Ontario correctional system, where it was pioneered -- the enormous numbers of personnel and

inmates whose habits and criminality would have to be addressed, and the fact of existing beliefs, on the part of politicians and justice personnel alike, that they already "know" what causes crimes and how to correct offenders, and that the present justice system and approach is the only one which will work -- especially given that our findings seem to suggest an almost diametrically opposite point of view of criminality.

## PART V: CRITIQUE AND RESPONSE

Given that the results obtained in this series of studies are unexpectedly good, there are bound to be some doubts raised in the mind of the reader, if only on the grounds that "If something is too good to be true, it probably isn't." This issue has already emerged in informal conversations with colleagues concerning the present results. The issues which have been raised demand response, and there may be others which have not been mentioned or which have not occurred to the present authors. This chapter is devoted to responses to the doubts which have thus far been considered. Belief The position has been offered that the results obtained are hard to believe. The authors see good justification for such a reaction. The problem they have in responding to this objection is that the possible reasons for disbelief are too numerous to be addressed one at a time. Of course, the fact that reasons for belief or disbelief are too varied for the issue to be addressed completely probably underlies the common reaction to disbelief, namely, 'We cannot be responsible for another's beliefs'. In the context of science, however, such a reaction to disbelief is just not acceptable. It is incumbent upon the person making an affirmation to provide the necessary evidence in the face of a denial of acceptance (or belief) by another. Accordingly, it is our intention to select a few of the more obvious bases for disbelief concerning our findings, and to respond in the best way we can to those positions. At the same time, we are aware that we will only be able to provide our own responses, which themselves may well be rejected or viewed as inadequate to their task.

Position #1: Counter-intuitive: The position which might be adopted here is that the point of view offered here concerning the nature of criminality and the approach to treatment proposed are counter-intuitive. That is, the point of view and approach taken contradict "common-sense". In our attempt to wrestle with this source of disbelief, we formulated several bases on which this source of disbelief might be founded, and a general observation of our own. The bases we considered included: (a) the justifiable sense of outrage at the conduct of offenders or of addicts, or (b) the possibility of personal experiences, breeding distress, which may seem to require a punitive response toward a perpetrator, or (c) the view that, for example, guilt serves an inhibitive or control function in social living which should be enhanced and not extinguished, or (d) the concern lest diminishing, for example, guilt might well foster, rather than reduce, the risk of future offending and thus further victimization. Each of these

identifiable bases is addressed briefly below after our general observation. In general, we cannot help but agree with the sense that our findings will seem, to some of our readers, to lead to counter-intuitive conclusions. We have already expressed our difficulties in this connection in speaking about our sense of cognitive dissonance, particularly while wrestling with an understanding of the criminality factors. Indeed, if our findings had merely confirmed what seems intuitively right, we would have published them as a couple of research reports in the literature of psychology or criminology. It was the unexpected variation of our findings from what "seemed right," in the sense of what is commonly believed, which demanded that we present our material in book form, where there would be space to address the counter-intuitive, and thus difficult to accept, nature of our findings. The general observation which might be made to justify at least tentative acceptance of our conclusions would be that the research literature does not offer any evidence of success in reducing recidivism rates deriving from what seems intuitively "right". That being the case, perhaps what appears to be "right" may very well be in error and something else worthy of consideration.

(a) Outrage: The present authors would certainly not wish to diminish in any way the appropriateness of outrage at offenders' and addicts' behaviours. The actions of many offenders are reprehensible and utterly unacceptable. Having said that, however, two other points might also be worthy of note. (i) Given that a particular action is be unacceptable, the next question of interest, surely, is how to prevent that action from being repeated and other people victimized. This question has many relevant elements subsumed in it, in addition to the issue of how to respond to it -- which is addressed later. A couple of the subsumed elements are selected for brief response here. Are all of an offender's actions reprehensible? The answer is obviously "No". It may be interesting to note that offenders and addicts, like most people, when asked to estimate the percentage of their lives during which they have performed unacceptable or "bad" things, tend to offer estimates anywhere from 15% to 95% of the time. Of course, the truth is that almost nobody has acted in "bad" or unacceptable ways for more than, say, 1% or 2% of their lives. At least 33% of life is devoted to sleeping; another 6% to 10% is taken up in eating; and other variable percentages of life are devoted to attending school, talking with family and friends, working, playing, being entertained and a host of other normal and acceptable pursuits. If one were to add together all the moments devoted by the "worst" person to planning and performing unacceptable deeds, the total would likely sum barely to days, let alone weeks or months. Allowing that the sum might even amount to two months (i.e., 24 hours per day, 7 days per week) that would still amount to less than 1% of life when one considers that an offender of 21 years of age has lived 252 months, or 1,092 weeks, or 7,670 days. Is it less appropriate to respond with appreciation (which is relatively rarely given) for upwards of the 98% of life involved in "good" behaviour (and which is hoped for in the offender's future) than it is to respond in pejorative and punitive

ways to the small percentage of life involved in "bad" behaviour? Are all criminal or addictive actions of an offender always reprehensible? Again, the answer is likely to be "No". Ghandi has been quoted as pointing out that there are "bad" laws, just as there are "bad" people. It may be that some people are needed by society to breach inappropriate or "bad" laws (like Ghandi, to brave imprisonment to draw attention to them). This, of course, leads to the question: "But who is to decide which laws are bad?" It has been argued that everybody behaves morally, according to his/her own views of morality. Perhaps reprehensible offenders share in views of morality which are basically wrong or in error. If so, is their conduct meaningfully different from the "naughty" or unacceptable behaviour of a child? And, if not, would it not be a superior idea to reprove them by retraining their conduct without "defining them out of" society, i.e., making them outlaws? But reacting with outrage at their conduct surely makes it difficult not to "define them out of" society. This does not necessarily mean that they or their conduct should be loved. It merely means that, as with the child, the mature or adult respondent serves best if he/she understands the roots of the unacceptable conduct and sets out to address those roots. (ii) Given that a particular act is reprehensible, another question which may be posed concerns the reaction of the individual who judges it to be reprehensible. Here, the writers speak only for themselves, as people who also judge most criminal acts to be reprehensible. The writers freely acknowledge that they too have performed impulsive, stupid, unacceptable and, yes, reprehensible acts. While this is not the place for confessions or personal revelations, it must be said that the responses of others which seemed typically to have the most curative impact on such actions are reactions which are tolerant, accepting and forgiving of us (though not necessarily of our actions), and which recognize our humanity rather than our faults. Success in clinical practice as psychotherapists has only served to justify this approach to people over more intolerant, punitive and unforgiving approaches. We found ourselves asking ourselves, "Are offenders and addicts possessed of less humanity than we are, and thus more than us to be denigrated?" We suspect that the issue with which we are trying to struggle here reduces to one of the individual's own moral reasoning development.

(b) Punitive need: Quite apart from the above, however, there is the question of how we might best approach or deal with an offender's unacceptable conduct. There are many who would argue that some form of punishment is necessary, if only to "get the offender's attention" or to communicate to the offender that his/her behaviour is unacceptable. Moreover, most victims want some retribution or some pain to be inflicted on the offender as a reasonable consequence of the pain he/she has inflicted on others. We believe that nobody would argue with the legitimacy of such feelings and attitudes. In our just anger, nearly everybody would feel that way. And there seems little doubt that sentences imposed do create at least some of the pain in offenders (and the natural results of addictive behaviour in addicts) at least partially to accommodate the requirements of such feelings and attitudes. But

at least two issues might properly be considered which are associated with these feelings and attitudes. (i) In our proper concern with the injury inflicted on victims of past crimes, it is easy to overlook the risks of injury which might in future be inflicted on other victims. There is little doubt, on the part of those who have worked closely with offenders, that pain inflicted in sentencing tends to be attributed to the action of external agents (the justice system or society) and that, having rationalized their own conduct, most offenders and addicts react to the pain they experience mainly with anger or its derivatives (depression, resentment, etc.), and it seems likely to many that much of the pain and anger experienced by offenders and addicts merely serves to fuel further offensive conduct when the opportunity to act in such ways presents itself. If true, then punitive actions toward offenders or addicts may serve mainly to create future victims. (ii) Nevertheless, one of the reasons in Law for sentencing criminals is that of punishment. Punishment seems to work to prevent undesired actions in children, why would it not do the same with adult offenders? A moment of consideration will provide several answers to this question. Perhaps the most obvious answer is that literally thousands of years of trying various ways to punish criminal offenses has surely demonstrated that it does not work to reduce crime, regardless of the kinds of punishments tried. The most clear evidence in support of this statement is to be found in the several demonstrations that dispensing with capital punishment does not increase murder rates and that reinstating capital punishment may, if anything, increase murder rates. Less clear, but more general, evidence is to be found in the apparent immutability of recidivism rates in the face of a host of, mostly punitive, initiatives tried to reduce them. Another, less convincing, observation might afford part of an answer to the above question. Children are aware of their reliance on adults and the disadvantages they have in any attempt to challenge adult authority or the exercise of adult will. By adulthood, however, people are mostly no longer subject to the will and authority of others, and are likely to challenge any exercise of what they consider to be arbitrary authority over them, especially if they do not see personal advantage in allowing such exercise. Children, in contrast to adults, are thus more likely to adjust themselves or their behaviours to the will of others. Moreover, although punishment may actually have an effect on an adult in inhibiting the punished behaviour while in the presence of the punishing agent, this too affords punishment little benefit in preventing crime or addictive behaviour. Crime is nearly always performed when the risk of apprehension is minimized, while most people are asleep or when few other people are present. In addition to provoking anger at what the criminal offender perceives to be unjust punishment, therefore, perhaps the main secondary effect of punishment on adults is to enhance caution and avoidance of detection. And there is yet another problem associated with the effectiveness of punishment. Even if the adult offender is willing to accept punishment by an adult, the question may properly be asked, just what effect does it have, beyond the anger, caution and secrecy already noted? One of the major predictive variables found



in our studies to be related to addictiveness was termed "punitive reinforcements"; and the second factor identified in our studies of criminality was termed "inferiority" or "failure" intolerance. These variables have in common a history of perceived punitive behaviour toward the child on the part of adults. Both variables express an expectation that others will respond critically and punitively, based on this perceived history. The result may very well be that punishment received may actually for these people represent (the only recognized kind of) positive attention with which they are familiar, and thus perhaps increase the habit strength of the actions punished. The most basic answer to the punishment question, however, is that, if punishment is to be effective in modifying conduct, it must be administered immediately (within a second or so) after the action which is punished. The effect of any kind of consequence on learning diminishes rapidly over time as the consequence is delayed. Punishment for criminal offenses is typically delayed many months until criminal culpability is established. Indeed, it might be said that by the time sentence is passed, what is actually being punished is the extra careful observance of the Law which has likely preoccupied the offender just prior to any appearance on charges in court. And even if apprehension were to be taken as the point at which discovery and punishment at least begin, the delay before apprehension is rarely less than hours, more likely to be several days or weeks.

(c) Control function: Guilt is commonly held to serve as a source of inhibition or control of behaviour, and this view is well represented in most people's personal experience. At least two observations seem relevant to this source of objection. (i) It may well be that guilt serves as one (we would argue, minimally effective) source of control over behaviour, perhaps even in a majority of people. However, research in child development has shown that guilt tends to be an after-the-fact emotion, a conditioned emotional response occasioned by severe punishment which does not prevent the response from occurring -- since it is already over and done with by the time the learning occurs -- but merely succeeds in causing the individual to feel bad about the things he has done. The emotional component of the reaction, furthermore, may well tend to keep the person's attention and thought concentrated on the very behaviour which is to be avoided or which is prohibited, or which is associated with the guilt experienced. (ii) It may also be that guilt is an effective control agent in some people, and not in others. Certainly, our results would seem to support the contention that guilt does not work well for everybody. At least one group of those for whom it does not work well would seem to be those who, having experienced guilt feelings too poignantly (at least for them) to tolerate, have reacted to it by rejecting guilt-trips (defensively) out-of-hand such that they now deny, and do not clinically manifest, guilt feelings. Our data suggests to us that people who adopt this kind of guilt intolerance are prone to behaviour which are likely to get them in trouble with the law and, hence, to become criminalistic. This position is in no way different from the commonly recognized

observation that (many) offenders do not seem to experience strong guilt feelings. All that our data suggests as a supplement to this conventional wisdom is that the reason for the reduced or "impaired" susceptibility to guilt feelings is that the root of the inhibition of guilt awareness is an intolerance for too strongly felt guilt feelings. Indeed, the only issue we would take with the common view of offenders as immune to guilt is the idea that their guilt feelings are "impaired." Their guilt is, in fact, alive and active (if also covert and implicit), and fuels defensive intolerance of any attempts on the part of society to provoke it.

(d) Risks involved: A basic requirement of treatment is that, if no way is known to achieve a therapeutic result, it is incumbent upon the therapeutic agent to do no harm. We would agree that if there are no alternatives available to a proposed approach to understanding and treatment, to do nothing is a better choice than to do something which there is reason to suppose might do harm. And, indeed, it does seem possible that reducing, for example, guilt feelings might well diminish control, and thus may well enhance the risk of future crime. That certainly was the position we would have adopted before our analyses of the scores from our tests of criminality and addictiveness.

How, then, did we abandon that obvious and conservative position in our work? The answer, of course, is that we decided that our approach had to be data-driven, rather than intuitively-driven, once we had solid data to guide us. In our view, we could do no other. Of course, the fact that it is not even theoretically possible for the inmate to experience a non-program, i.e., to have no experiences, while incarcerated, with all the negative consequences which that typically entails, also had something to do with our decision. And, of course, it is precisely in order to explain the bases on which we felt driven to adopt our counter-intuitive approach, that we deemed it necessary to present the bewildering array of data in the fore-going text -- and the details of the steps we employed in order to confirm and re-confirm the conclusions which we felt the data forced upon us. If these data lend themselves to conclusions or approaches different from those we adopted, we would be more than grateful to hear what they might be. Moreover, it needs to be pointed out that there is a related reason for the approach to treatment we adopted. When it came to considering "how much" treatment we would deliver of the kinds we felt justified by the data, we made our choices based partly upon the "risks" involved in what we were doing. The choice we had was to attempt to perform "treatment-to-criterion" (i.e., continuing treatment until the measures could be shown to have been modified in the "normal" direction sufficient to warrant the expectation that the offenders treated were now functioning as if they were normal) or to perform "experimental treatments" (i.e., treatment sufficient to demonstrate statistically significant effects on the dependent measures). We concluded that, until we had evidence to conclude both that the variables objectified in the tests were capable of being modified by treatment, and that modification of those variables at least did not enhance the risk

of future criminality (i.e., the very risk we are discussing here), it would be safer to use the "experimental treatments" approach. Of course, it would have been more satisfying to be sure that therapeutic benefits, in reduced recidivism and relapse rates, would be achieved by our treatment work by treatment-to-criterion. However, in spite of the elaborate efforts we had made to ensure that we were "on the right track," we too had to consider the possibility that we may have overlooked something or made a mistake of which we were not aware. Consequently, we chose the more conservative approach to treatment. Given the foregoing, it might well be asked whether our misgivings are now dispelled. To a certain extent, they are. But, surely, the obvious rejoinder to any such flat statement would be that there has not yet been any follow-up to confirm that criminal recidivism has not been enhanced by the treatments. The answer to that rejoinder is to be found in a quick review of the evidence already presented in the foregoing text. In science and logic, a basic premise is that two things which are each equal to a third thing are equal to each other. Perhaps the issue involved here can best be expressed in the form of the basic logical syllogism. It has been shown that: - the treatments used significantly modify the STFB/DAQ scales; - the STFB and/or DAQ scales measure criminality or addictions; - therefore, the treatments used modify criminality/ addictions. The purpose of the planned two-year follow-up on the offenders treated is not to determine whether or not the treatments modified criminality, which we believe has already been demonstrated, but only to discover the "amount of treatment" required to exceed any threshold involved and to modify criminal recidivism. It was for this latter reason that the elaborate arrangements were made, in both the criminality and addictions projects, for several experimental groups between which "amount of treatment" delivered was varied.

Position #2: Might want to, but can't: A perfectly legitimate reason for disbelief is the degree of cognitive or emotional commitment to a competing belief. In science, it is generally assumed that a new belief will not automatically be established simply because the evidence for it is significantly greater than that for the competing belief. It often takes time for the new formulation to be established and accepted, as people gradually begin to consider to evidence for the new position which has been proposed. To this end, we would refer those who are committed to their old belief to consider that the position which we have proposed may be confirmed: (i) by reference to the data from these projects, which are contained in existing client and data files at the Ontario Correctional Institute accessible to other professional personnel through that setting, and (ii) by the results of the follow-up on the experimental and control subjects from both projects which we will endeavour to publish when they have been obtained. Beyond this, we are certainly able to understand if the reader requires time and thought to adjust his/her views of criminality and addictions in light of the evidence presented thus far. To the extent that other than the expected demand for sufficient evidence is involved in disbelief, it becomes more difficult to respond to disbelief meaningfully. We have been able to identify only a limited number of options to

account for such a basis for disbelief. We would like to address briefly here each of those options we have identified.

(i) Personal Experiences: By "personal experiences" here we intend to recognize that some individuals (among whom we include immediate family members of one of the authors) have been personally traumatized by crime and/or addiction. We would not wish to offend any such person either by diminishing the importance of that experience or by seeking to convince him or her of anything which contradicts the way he or she feels. We simply acknowledge and respect any such feelings.

(ii) Personal Point of View Concerning Morality: By "morality" here we intend to recognize that many individuals' moral scruples, beliefs and/or understandings may differ from ours, and that our approach may possibly offend these people. Again, we will not seek in any way to convince these people. We acknowledge and respect anybody else's morality. However, it should be stated that adherence to a "punishment" response to the criminal is most likely to reflect either Stage 3 or 4 on Kohlberg's Moral Development scale, and that professionals working with moral issues should probably seek to develop their own powers of moral reasoning beyond that level.

(iii) Personal Point of View Concerning Psychopathology: There are those who have committed themselves to particular points of view concerning the causes and roots of human conditions. For example, there are those who believe that criminality and/or addictions are caused by genetic or biochemical factors, and not by learning. Obviously, that is true for some conditions, including some kinds of episodic violence, which is driven by a kind of sub-clinical epilepsy, and probably psychopathy, itself (Hare, 1994). Although we would be prepared to contend that there is no satisfactory evidence at all to support, for example, genetic or biochemical bases for criminality in general, we are content not to seek to convince these people either of the limitations of their perspective or of the evidence favouring ours. We would contend that their perspective has almost certainly led them to learn skills which would compete with the skills necessary to practice competent psychotherapy. Consequently, we think it likely that it would serve the community best if they continued to pursue the consequences of their perspectives, rather than seeking to apply the knowledge presented in this work.

(iv) Personal Point of View Concerning Psychotherapy: Personal and professional experience in psychotherapy is known to be self-reinforcing with respect to the methods employed. The observations made and recorded in memory, using any given kind or limited range of psychotherapies, are apt to be consistent with the therapeutic methods employed. For example, if the method(s) used involve long-term interactions of a conversational nature -- the approach used by Yochelson and Samenow -- the focus of interest is likely to be on the personality-as-a-whole, and thus the criteria for change may very well be rather general and non-specific.

Alternatively, if the method employed is fairly directive and/or short-term, the focus of interest is likely to be on the presenting symptom which, although specific, is likely to ignore the underlying causative factors. In the former example, reinforcing successes are likely to be moments of insight or emotional responses, while in the latter example, they are likely to be indications of symptomatic relief. The immediacy of the reinforcements for the therapist will tend to convince him/her repeatedly of the ultimate appropriateness of what he/she is doing. The result tends to be that there is very little room for expansion of therapeutic methods in other directions. The present authors have experience with a wide variety of treatment approaches, both psychodynamic and (cognitive-affective-) behavioural, and prefer to apply each as may, at any given time, appear appropriate. In our experience, there is no convenient way to assist entrenched methodological preferences to yield to other methods. The only comment which can meaningfully be made here is to point out that the changes demonstrated in these studies were not (yet) symptomatic changes, that they were changes in measured causative factors, and that the changes were measured about a month after the treatments were completed. The data speak for themselves, and one can only encourage others to subject their methods to empirical investigation and statistical test.

### Position #3: Historical Background:

One problem of belief that a reader may encounter in this work might have been minimized if the scholarly task of referencing a background in the work of others had been undertaken. Of course, this work did not emerge without a history in the research literature and in the training and experiences of the authors, although little reference to that history has been made in the foregoing text. We will not seek to excuse our limited references to the rich literature in both criminality and addictions, but merely to point out that we are clinicians rather than academics. To reference the literature would have been more time-consuming than the setting would have allowed, and would not have provided the threads of development in thought which would bear directly on the present work. Reference was made to the main original source from which the criminality project emerged. It was instigated through a rather unsuccessful attempt to test the hypotheses about criminal thinking advanced by Yochelson and Samenow (see Background). However, from that point on the study was driven by only two phenomena, namely, the clinical inventiveness of the clinician-researchers and the data emerging from the studies undertaken. It might have been appropriate to review such elements of literature as the many studies which have failed to reveal many special or discriminating features of criminality, or to review the broader literature surrounding such concepts as "psychopathy." The former did not contribute to the development of the present material, and the latter was quickly found (and reported in the main text) to be orthogonal to criminality as we were privileged to encounter it. Presumably, psychopathy scales measure phenomena relevant to only a small, although extremely important, sub-set of

the criminal population, mainly relevant to violence of offenses. That is, the literature which was used was tracked as it was used, but the study itself was not literature-derived and, to be truthful, there was precious little of it anyway to assist our enterprise in criminality. We acknowledge that some readers will consider the lack of a fairly complete review of the relevant literature to be an impediment to acceptance of the materials presented. We would expect that most of those who might adopt such a view would be scholarly academics for whom, quite understandably, literature reviews are a central part of their daily working lives, and of their student-assistants. The lack of an appropriate level of concern with the literature is recognized to be a characterological flaw found in some applied psychologists.

#### Training-to-Test:

Quite apart from the question of belief, there is a basis for doubt about the present results in the possibility that the authors' treatments may have involved training their subjects to respond in new ways to the test items (training-to-test). Obviously, if any part of the treatments employed "taught" the experimental subjects how to respond in the favourable direction on test items, and if reinforcement contingencies supported the application of such learning, there would be little difficulty in achieving results of treatment such as those reported in the previous text. This very proper doubt demands response since, if we had trained-to-test, the results would certainly be flawed, and we would probably be liable to censure as scientists. Unfortunately, at this point in time, having failed to anticipate this question, we are unable to prove (e.g., by having taped our treatment sessions) that we did not train-to-test. We cannot even be absolutely sure that we did not train-to-test without being aware of having done so. Of course, we affirm that, to the best of our knowledge, we did not train-to-test. And we would wish to make those points we can make now to verify our contention that we in fact did not do so.

(i) Standard Methods: The first point to be made is that, as the descriptors presented concerning the contents of the treatments used indicate, the methods employed were standard and conventional ones from the psychotherapy literature. Of course, they were applied in ways which the authors have found to be useful in their extensive therapeutic practices. However, the methods follow the main outlines as depicted in the literature. The methods employed were not designed to suit the requirements of the criminality factors. Instead, they were selected to address the needs represented in the factors and axes. And the methods employed had been used by us (in the forms in which they were used here) on many occasions in former treatment workshops addressing other psychological issues. Indeed, we were using them before we had reached any understanding of the nature of the criminality factors or the addictions axes. It is true that, during the orientation phase of a few of the day-long treatment workshops, reference was made to the idea that the treatments were being mounted as part of a programme to address criminality. And, during the

orientations to a couple of workshops, reference was made to the target variable involved. This was done mainly in talking about the nature of guilt and failure. However, these kinds of references were general and were not referred in any way to the specific components of the tests used as the dependent measures.

It might be argued that the titles assigned to the treatment workshops shaped in some measure the changes in the test responses. Titles such as "enjoying guilt", "enjoying inferiority", "creating innocence" or "creating satisfaction" might have suggested ways in which to respond to the tests. However, the subjects would hardly be expected to know which test's responses to adjust appropriately, confronted as they were with several different tests to complete.

(ii) Retest Timing: Although it seems possible that any unintentional "priming" references might affect test responses directly following any given treatment, the delay in retesting should make this kind of "priming" effect extremely unlikely. The pre-tests were administered, on average, about a month prior to the subjects' participation in any of the treatments. Re-testing was done, on average, about a month after the subjects had concluded the treatment programmes to which they had been assigned. The interest span of offenders for verbal test materials is not notably long. If anything, we have noted (impressionistically) rather weak practice-effects among our offenders across repeated administrations of tests. We would argue that the approximately one month interval between completion of treatment and re-administration of our dependent measures, not only precludes the possibility that any unintentional "priming" of our subjects affected the measures, but even that it enhances the meaningfulness of the effects which were obtained. The latter point is based on the idea that the changes effected might be assumed to have permeated the overall personality organization (and not just a temporary cognitive set) to some degree in order to be recordable on test items a month following treatment.

(iii) Double-blind: There was no possibility of meeting the requirements of "double-blind" (lack of knowledge of the group membership of subjects on the part of the experimenters) in this kind of work. It was not even attempted. The experimenters, who were also the therapists, obviously knew that anybody attending a treatment programme was an experimental subject. But there is one fact which might be mentioned, which is related in a general way to both "double-blind" and "training-to-test". In the criminality projects, only one of the two therapists even knew which test items loaded on the separate factors or axes. Of course, this does not preclude the possibility that the therapist who did know the items in the scales might have "primed" subjects in his part of the treatment work. However, specific two attempts were made to compensate for any effects of knowledge of items or subjects' group memberships. The first attempt made was to determine the treatment effects on the dependent measures of administering a separate treatment workshop to part of the control group. The intention was that this program would be little more than an orientational or informational program, and it was expected that it would have no

effects on the dependent measures. From the point of view of experimental control, it was unfortunate that it did have a significant effect on STFB Factor 5 (see Table 32) -- that is, on one (16%) of the six statistical tests performed. For present purposes, this fact may have been less unfortunate. It suggests that the treatments were effective even when they were not intended not to be so. That is, if unintentional "priming" effects occurred in these data, they were even present when it was intended that they should not be present. The second attempt made involved the addition of two "control" treatment programmes for some experimental group subjects. The idea was to determine whether general treatment of a kind which was deemed to have powerful effects (partly based on previous results on other measures in former groups) would affect the dependent measures even though this treatment was not particularly germane to the STFB variables. And it should be stated here that the "general treatment" selected for this purpose was deemed by the experimenters to be both an effective kind of treatment and one in which they believed. That is, any unintentional "priming" of the subjects by the experimenters "ought" to have been maximized during these "control" treatments. Although there was a statistically significant effect from one of these two "control" treatment programmes, only one (8%) of the twelve statistical tests run achieved significance (see Tables 34 and 35). This suggests that any unconscious "priming" effect which might have been present during our treatment efforts did not occur (almost precisely) where it might most be expected.

(iv) Paradoxical Issue: Perhaps the most telling evidence to confirm that no priming was done, either unintentionally or otherwise, lies in the nature of the criminality variables, themselves. Consider STFB Factor 1, "guilt intolerance," for example. The method of treatment adopted (which raised the question of disbelief and thus led to the present critical analysis) involved seeking to reduce guilt feelings of offenders. But guilt intolerance also involves the attempt, on the part of the offender himself, to reduce his guilt feelings (defensively). If we had communicated in some way to the experimental subjects that they ought to express less guilt feelings (or more resistance to guilt) on the tests, they would likely have scored higher on STFB Factor 1. In fact, they scored lower on each of the STFB scales, including Factor 1. The issue being addressed here is the same one discussed in the main body of the text while we were talking about our own sense of bewilderment in examining our data. The data seemed to demand the cognitively dissonant interpretation that the apparent lack of, for example, guilt feelings on the part of offenders was due to too much, poignantly felt guilt which the offender would not tolerate. It was in light of this interpretation that we set out to perform the rather paradoxical therapeutic task of reducing unacknowledged guilt feelings. With the exception of STFB Factor 6, "discipline intolerance", all the STFB factors share in this kind of paradox. Given the paradoxical nature of the therapeutic task, as we came to understand it and as we approached it, we found it very difficult even to formulate titles to express to ourselves what we were setting out to do. In



fact, it took over a month to settle on the "enjoying ..." titles we selected. In light of this fact, it seems reasonable to argue that it would have taken considerable and conscious thought to figure out just how to "prime" the experimental subjects to alter their test responses in just the right way to achieve the results obtained. Although nobody can be "sure" just what hidden messages he/she may be sending to another, it is our consciousness of the point made in the last sentence, and the fact that we did not give any conscious thought to how we might "prime" our subjects, which convinces us that we did not "train" our subjects "to test".

Complexity Perhaps the most obvious source of difficulty with the report of the criminality project is its complexity. Again, we can certainly understand if the complexity poses a difficulty for the reader. We shared in that difficulty as we worked on these projects. The complexity comes from more than one source. (a) Number of Variables: In most studies an attempt is made to minimize the number of variables considered. This is partly to permit clarity of report, partly to permit experimental control, and also because by chance alone, at the 5% confidence interval, five percent of the statistical tests run will achieve statistical significance spuriously. Minimizing the number of variables operating is not as easy in dealing with an applied problem. Moreover, in the case of this study, the attempt was being made to address a large part of a whole field of scientific investigation, namely, the field of criminality. While it is, therefore, no surprise that considerable complexity was encountered and required to be reported, it is understandable that it does not make for clarity of communication or ease of understanding. Perhaps the best statement that can be made in the face of the resulting complexity is that it will not be surprising to anyone that criminality is multi-determined phenomena which could not be expected to yield to simple solutions. Having acknowledged the complexity of the presentation, we found ourselves unable to do much about it. What we tried to do, and in fact were constrained to do in order to generate treatments, was to reduce the multivariate information we obtained to simple (and relatively abstract) structure. It is possible that we might have picked other "simple structures" to account for the plethora of variables involved. We are inclined to the opinion, however, that we picked at least one set of appropriate simple structures from our data. We justify this conclusion by noting that the treatments selected to address the simple structures we derived were successful in modifying the scales whose composition we sought to express in "simple structure". At the same time, we were not willing to limit the reader's opportunity to generate (and test) other possible "simple structures" to account for the variables. Accordingly, we felt it was important to list in detail the relatively specific variables which appeared to be associated with each scale (e.g., under the developmental history or "dynamics" of the STFB scales).

(b) Variety of Analyses:

The large number and wide range of the analyses undertaken, producing the extensive tables, is also relatively rare in

scientific reports. In most scientific investigations, the several analyses presented here would be referenced in the historical background of the given study. The measures used would normally be established in the literature, and the interventions employed would usually be of a particular kind whose nature could be referenced to books describing the method. There is little by way of historical background to the work reported here, and the treatments used covered a wide range of components of treatments. These facts mean that these reports are necessarily going to be relatively complex. Again, there seemed to us to be little we could do about these sources of complexity. What we did attempt to do about them was (a) to break the presentations down to steps, each of which could be examined for its own sake, and (b) to minimize the amount of complexity at the points in the arguments where that could be done without detracting from the solidity of the presentations. The minimization seemed most meaningfully done in relation to the specifics of the treatments undertaken. It seemed less appropriate to minimize the information presented concerning the scales employed, mainly because the argument stands or falls on the robustness of the measures used. (c) Detail of Information Derived: The same ideas as those expressed above apply to this source of complexity in our presentations. Once more, the solution to the problem we felt constrained to adopt was to present the evidence of the solidity of our findings to provide sufficient information for the reader to judge for him/herself whether critical steps in the process were adequately robust, or whether we had solved the questions raised in justifiable and appropriate ways. Again, however, we acknowledge this source of complexity in the presentation. This time we would add that we anticipate a readership with fairly diverse backgrounds and this implies a diversity of types of information needing to be provided. (d) Unconventional Conclusions Reached: We recognize that unconventional ideas and conclusions add appreciably to the impression of complexity. When conventional views are expressed, a reader tends to reference existing habits of thought and subjectively to simplify a presentation. It is as though the views being considered are merely assigned a check mark, and the self-talk involved may be something like, "Right". When unexpected views or information are expressed, the mental task of the reader becomes much more complicated. The immediate response is apt to be either disbelief and rejection, or laughter in the face of cognitive dissonance, these being the easiest ways in which to process material which contradicts common sense or conventional wisdom. If the information presented is not dispelled by these reactions, complexity of processing is progressively increased, first by an evaluation task to examine the admissibility of the information, second by the process of entering or learning the information, and third by the process of assimilating and integrating the information with other components of existing knowledge. We acknowledge that we did not facilitate these later steps of incorporation of the information presented. We did not "deal" with the natural objections to what we were suggesting when we presented our findings and conclusions, preferring not to disrupt the flow of the presentation until we were ready (here) to

address objections in a separate section. Nevertheless, we would now wish to remind the reader of the "fit" between our findings and the conventional wisdom concerning criminality and addictions, into which our findings can be fit.

Criminality has traditionally been viewed as being characterized by insufficiencies (note, we are not saying deficiencies) of accessibility to (1) guilt feelings, (2) realistic self-evaluations, (3) acknowledgement of realistic distress, (4) consideration or empathy, (5) realistic need for intimacy with others (or fore-thought, or thoughtfulness) and (6) acceptance of authority or discipline. These characteristics, stated slightly differently, are precisely the ones addressed in the six STFB factors. Our findings concerning addictions do not fit quite as neatly within an existing framework concerning society's appropriate response to criminal behaviour. However, without belabouring the point further, we hope that our readers will eventually be able to incorporate into their belief systems these findings, too.

(e) Contradictory Nature of Treatment Requirements:

While the remarks in the last paragraph hopefully diminish the problem the reader may have in considering the factors identified in our material, there remains another related source of complexity in processing our conclusions about criminality. That additional source lies in the cognitive effort required to deal with the paradoxical nature of our approach to treatment of the criminality factors. This problem has been touched upon repeatedly both in the main body of the text and in addressing problems of acceptance in this chapter. For some readers it may be sufficient here to remark that the paradoxical nature of the treatment task we encountered is really little different from that encountered in attempting to deal with any kind of defensive or conflicted behaviour in human living. For others, this summary statement will not suffice. For these others, a brief digression may be needed to explain how conflict and defensiveness works in human afflictions. (i) Conflict can be seen in its simplest form in rats placed in a tunnel leading to a goal-box in which they have been punished and/or rewarded. If an electric shock is given each time a rat enters a goal-box, the rat will seek to avoid the goal-box, pulling to get away from it in inverse proportion to its distance from the goal-box (the "avoidance gradient"). If a rat is fed each time it enters a goal-box, the rat will seek to approach the goal-box, pulling to get to it in inverse proportion to its distance from the goal-box (the "approach gradient"). If a rat is alternately shocked and fed in a goal box, how it acts will depend upon the distance from the goal-box at which it is placed in the tunnel leading to it. Since the avoidance gradient is always steeper than the approach gradient, if it is placed in the tunnel close to the goal-box, it will run away from it; if it is placed in the tunnel at a considerable distance from the goal-box, it will run toward it. If it is placed in the tunnel at the point at which the approach and avoidance gradients intersect, being pulled equally toward and away

from the goal-box, it will both approach and avoid it -- that is, it will run around in circles. It is in conflict. People act in much the same way. Conventional wisdom correctly recognizes that, for most people, if they feel guilty about something, they avoid that something when they are near to it or in a position when they might do the guilt-provoking thing. When they are not at risk of doing that thing, they may be quite fascinated with it. For example, notice the apparent fascination of many people with news reports of other people's unacceptable sexual or violent acts, or notice the popularity of stories about crime and violence. If guilt provocation is repeated often enough without the person being able to avoid his/her sense of guilt, a kind of cusp may be reached at which the self-inflicted, learned pain of guilt is "switched off". The model for this sort of event is probably similar to that used in studies of "learned helplessness". In that model, dogs which have been shocked on a timed basis in both sides of a shuttle-box, almost inexhaustibly jump back and forth in the shuttle-box as though to avoid anticipated shock. In the present (perhaps related) situation, the guilt-provoking event seems both to be done and then undone (ruminative guilt), or misbehaviour no longer carries its former guilt-evoking valence or meaning. If a person's motivations or behaviours involve conflict, the person characteristically displays both persistence (unremitting behaviour in spite of experience) and a self-defeating quality (behaviour which maintains the preoccupation with or the re- evocation of the distress-producing issue) in his/her conduct. If, for example, the person is anxious about close emotional involvement with others (wanting closeness, but fearing it), he/she is likely to behave in ways which drive others to reject or avoid him/her (maintaining emotional distance from others -- avoidance while others are available for approach) when with other people, and to ruminate painfully about others' rejecting behaviour (the rumination implicitly draws the person, when alone, toward other people -- approach while far removed from others). Both of these processes, by creating subjective distress, can be said to be self-defeating and persistent. Treatment of conflicted motivation or behaviour typically requires dealing with the paradox which demands both approach and avoidance at the same time. It usually involves reducing the strength of the avoidance gradient, while avoiding direct involvement with the conflicted stimulus. The general model for treating conflict is best expressed in Wolpe's (1958) method for reciprocal inhibition therapy. The person is isolated (in the therapeutic setting) from the source of his/her conflict. A competing response (commonly relaxation) is induced so that the avoidance (anxiety) drive or action cannot easily occur. Then the approach drive or response is evoked, by introducing the conflicted drive stimulus at a great psychological distance (as it were, far down the tunnel). Repetition, with slowly increasing degrees of stimulus proximity, permits the avoidance (anxiety) component of the conflict to be unlearned or extinguished. That is, in the therapeutic task the person is essentially being asked to react as though he/she were far removed from the drive stimulus, while at the same time seeming to be in direct contact with the drive stimulus. This paradoxical way of dealing with paradox is likely

central to most effective therapeutic interventions addressing conflict.

(f) Complexity of Treatment Interventions:

Again, there seemed to be no convenient way to avoid having to employ a good deal of complexity in the treatment interventions used in the project. In addition to the conceptual complexity associated with the foregoing discussion of conflict and its treatment, there were two other sources of treatment complexity which were encountered. (i) Multiple Variables: Criminality, as has already been remarked, is caused by a plurality of factors or variables. These variables differ from each other. Consequently, it would be expected that different treatments would be required to modify them. Certainly, we assumed that we would have to use different treatments for each of the variables to be treated, and the differential treatment results obtained would seem to offer justification for this assumption. Perhaps a common treatment might have been found which would modify all of the variables identified in each of the two phenomena. However, even if such a common treatment were to be found, it would seem reasonable to guess that it would be comprised of elements to address each of the separate variables. In seeking to identify those elements, the same treatment complexity would be encountered. (ii) Multiple Treatments: In addition to the above, it is noteworthy that we sought to modify each of the variables with more than one "kind" of treatment intervention. We considered this to be necessary on two counts. First, we were unable to find any single treatment method which was designed to address the very types of issues which we thought was involved in any of the factors or axes. Indeed, if there had been any such existing treatment, it seemed likely that the variable involved (and, thus, at least part of criminality) would already have been shown to be modifiable by means of (that type of) treatment. Given the understanding of the factors and axes which seemed to emerge from our data, we found it necessary to assemble several treatment methods which seemed each to address another aspect, or a peripheral issue, apparently associated with each factor or axis. Second, we were and are not sure whether the criminality factors act within different individuals in different ways, or even whether combined or single factors or axes are necessary or sufficient to institute criminal behaviour. Pending further research on these matters, we resolved the problems expressed in these possibilities in an indecisive (wait and see) way. We fixed on several different types of treatments for each of the factors partly in order to provide varied methods to allow subjects with different capabilities and modes of understanding to obtain treatment to which they might be able to relate. And we chose treatment methods which might be expected to have some impact on another one of two other factors to address each of the factors, in order to "broaden" the impact of each treatment programme on the overall group of factors. Although this latter provision for our uncertainty was intended to extend the effects of treatments to other factors, we were gratified to obtain the "differential treatment" effects which were reported in the main text partly

because they implied that "overlapping" treatment elements had not had profound effects on the other factors targeted. Our own conflict concerning the matter of 'how many' factors would need to be addressed to modify criminality can be seen clearly in the contradictory nature of the last sentence. It also reveals another part of the complexity involved in the treatments employed in the project, and it may serve to reassure the reader who is bewildered by the complexity of the presentation that he/she is not alone -- the authors remain somewhat bewildered too.

#### Generalization:

There are several questions which need to be raised concerning how widely the present findings can be generalized. These questions take various forms. (a) Population: The population sampled in these two projects is obviously a basic issue affecting how far the results may be generalized. The population from which the samples were drawn is hard to define in relation to the population of offenders in general. The bases or criteria used to select inmates for admission to the O.C.I. have already been specified in the main text, while describing the Subjects. There is no doubt that our samples contain many more sex offenders than would be found in the general correctional or offender population. Also, there is no doubt that our samples contain relatively few offenders convicted of the kinds of very serious crimes which command long sentences - - who are selected out of the provincial and into the federal correctional system in Canada. Certainly, our samples do not contain offenders found to be "not guilty by virtue of insanity", such as those studied by Yochelson and Samenow (1976) for their report on "the criminal personality". We are not yet clear about any other variants of our samples from those of the general offender population. It seems clear that any particular jurisdiction could quite properly argue that our samples do not represent its offender population well, and that this could be said no matter which samples we had selected into our studies. The only solution which has occurred to us to meet this appropriate source of criticism would be to select balanced groups of various definable classes of offenders and determine the applicability of both the measures and the treatments separately for each. Whether or not this idea will be feasible waits to be determined based on several other practical issues. (b) Sample Bias: The sampling methods employed in these studies are easier to speak about. We simply accepted into both projects all the inmates who qualified for each phase of the study who were incarcerated at the time of that phase in the relevant parts of the Ontario Correctional Institute (O.C.I.). If subjects were to be tested only, all successive admissions to the intake unit were tested until the number of subjects required had been collected. If subjects were to be treated, all the inmates in all the treatment units were selected who qualified for the purpose. In each situation, if the qualifying subjects were to be assigned to different groups for experimental purposes, they were assigned to groups strictly according to their Discharge Possible Dates, as a randomizing method. Since inmates were

admitted to treatment beds strictly on a first-come-first-served basis as treatment beds became available, it had been concluded that, on any given date, the discharge dates of the inmates in the treatment beds would be random -- having no significant systematic effects affecting them. As it turned out, quite apart from the above noted sources of bias affecting the (O.C.I.) population sampled, there was some bias affecting the sampling. Although this fact does not appear to have affected the measurable effects of the treatments significantly in either direction, it was determined that there is a significant association between Discharge Possible Dates (the "randomizing" variable) and length of imposed sentence (known to be strongly related to seriousness of crime, Quirk, et al, 1991). However, this issue applies only to the treatment studies (not to the measurement studies) where sampling was based on discharge date and, perhaps surprisingly, it does not appear to have affected any of the findings (to date) significantly. It may, however, have effects (to be determined) on the results of the follow-up phase of these projects where, although group assignment is expected to be of central importance, it may have less effect on generalizability of the data.

(c) Predictive Validity: One aspect of the present studies which might be considered to be of crucial importance to their wide-scale applicability (generalizability) would be the predictive validity of the STFB scales. Fortunately, the presently available information about the predictive validity of the STFB is less subject to limitations and bias than any other aspect of our work. It will be recalled that the main indicator of the STFB's predictive validity was obtained using derived MMPI-STFB scales from a sample for which MMPIs and some follow-up data were available. The derived MMPI-STFB factor estimates were shown to predict future criminal conduct in this sample. The sample employed for the above purpose should be reviewed briefly here. For the first five years of its existence, the O.C.I. received an entire defined population of offenders. All (i) first incarcerates, (ii) sentenced anywhere in Ontario, (iii) in the 16 to 24 year age range, and (iv) with sentences between 9 and 24 months, were sent to the O.C.I. for assessment and classification. These were all the young, first incarcerates who, presumably, were not yet subject to any confounding effects on their criminality from institutionalization. About a thousand of these young men were processed each year during that period of time. A random sample of 400 of these men was drawn for follow-up from the total seen during a two year period (1977 and 1978). It was this sample which was used for the study of predictive validity reported earlier. We would contend that this sample was fairly representative of offenders. Although not really of seasoned criminals, these first incarcerates were in no way first offenders. On the average, they had been sentenced to three terms of probation before finally being sent to prison.

(d) Treatment Methods: The treatment methods do not appear to us to pose much of a problem for generalization. Their main problem might be that of specification. That is, we applied rather standard treatment methods in ways which probably reflect our own personal preferences and biases. This

fact, however, will apply equally to any other study of treatment effects. Even where workbooks are employed as the main treatment aids, there will (necessarily) be wide variations among the applications and the ways in which they are used by different therapists. In light of this rather obvious state of affairs, we would argue that our applications of each of the methods employed would have been just as representative of the method as anybody else's applications, and therefore just as generalizable as the results of any other treatment study -- and probably no more so.

(e) Treatment Effects: The problem of generalizability of the treatment effects noted needs also to be mentioned. It is not common practice to question separately generalization of treatment effects achieved in a study. We believe it is appropriate to do so on two grounds. Of course, the main issue involving generalization of treatment effects rests on generalization of the effects within the individuals such that follow-up does or does not reveal changes attributable to the treatments. That is, do the measured effects of treatment survive and become generalized to other (non-test) behaviours? That is a matter that only follow-up can (and will) determine. But what about the generalizability of treatment effects from one sample of people treated to another? This kind of generalizability rests on two, and not one, issues. The more obvious issue is the question of the extent to which the sample on which a study is done is representative of the population from which it is drawn. That question has already been addressed above in speaking of the our uncertainties about the degree to which the O.C.I. samples treated are or are not representative of the general offender population. It was to address this source of uncertainty that we are considering a further study to measure and treat balanced groups of offenders convicted of various types of offenses. At the present time, we are unable to provide any other answers to questions relating to sampling effects on treatment effects. But there is another issue, bearing upon two theoretical matters which are not commonly addressed directly. First, it is standard practice to consider psychometric properties of measures which affect a measure's generalizability. This practice is usually not considered in studies of treatment effects. In considering a treatment procedure, it might be appropriate to consider attributes such as concurrent validity (i.e., does it perform functions similar to other methods having known properties), predictive validity (i.e., does it have any catalytic effects on the effects of other interventions), reliability-stability (i.e., does it have regular incremental effects on re-application to the same individuals), reliability-precision (e.g., what is the standard error of the mean of its effects, especially if recorded repeatedly over follow-up time), generalizability (e.g., does it affect other measures than those at which it is targeted, or does it affect other populations than that for which it was intended) and risks of the various types of errors (i.e., what are the risks of not performing the treatment, or Type II errors; what are the risks of performing the treatment, or Type I errors; and/or what are the risks to the person of undertaking the treatment, or complications of treatment). Many psychotherapists would consider these



questions far-fetched, even grotesque. We are not so sure answers to such questions are not demanded of us on grounds of ethics and propriety. We do not claim to have answers to these questions yet. However, having asked ourselves these questions, they are among those which preoccupy us as we continue to generate data and to analyze them.

Into the Future:

We are aware that we have raised more questions than we have managed to answer. However, in our above attempts to address some of the perfectly proper questions and doubts which we realized a reader might harbour, we hope we have managed to provide some answers to some of his/her doubts. Being close to the data and having worked on them for a long time creates a two-edged sword. On the one hand, it does make it possible to anticipate, grasp and explain some of the data in relation to those questions we have asked ourselves. On the other hand, it tends to blind one to some (perhaps obvious) issues which we might have considered. If we have failed to address issues with which the particular reader is concerned, we offer our apologies. We hope that our forthright approach to the questions raised will at least indicate that any omissions occurred as oversight rather than obfuscation.

#### SUMMARY AND CONCLUSIONS

Summary and Conclusions: This text describes the development of a new test of criminality and the treatments for criminality which follow from it.. First, a test was developed to measure criminal thinking errors based originally on those reported by Yochelson and Samenow (1976). Second, these thinking errors were factor analyzed and the resulting six factors represented by factor scales. Third, data were presented demonstrating the various types of reliability and validity of the Survey of Thoughts, Feelings and Behaviours (STFB) and its factor and "validity" scales. Fourth, personality test items associated with high scores on each of the factor scales were identified. Fifth, examination of the criminal thinking items comprising each of these factor scales, along with their associated personality test items, led the author to postulate a set of psychodynamics underlying each scale and to characterize the essence of each scale's dynamics. Sixth, treatment programmes were devised to address the psychodynamics postulated to underlie each of the factors of criminality. Seventh, analysis of the effects of those treatment programmes on the STFB factor scores found them to be effective in reducing the aspect of criminality being measured by each of the six factor scales. Since the treatments were designed to address the dynamics which appeared to underlie each aspect's criminality, rather than just criminal thinking, motivation or behaviour itself, the fact that each treatment reduced its targeted aspect of criminality may be taken as presumptive evidence for the validity of this approach to the understanding and treatment of criminality. Eighth, lower scores

on STFB-equivalent MMPI scales were found to be associated with a decreased likelihood of re-offending and with a lower number of convictions during the first year post-release in a sample of 279 first-incarcerates. This last observation suggests that the treatment workshops may, on follow-up, be found to result in lower recidivism rates for those inmates who took part in them. In any major series of studies, those involved learn a number of things which may not be specifically germane to the results of the studies themselves. These items of "wisdom" are frequently lost due to the fact that scientific reports are necessarily focused around the specific information they are structured to address. Accordingly, referencing the evidence presented in this text, some accessory conclusions, which appear to be justified by the results obtained in these studies, are offered below.

1. Treatment Selection for the Factors of Criminality: Although each of the treatments performed is a standard part of the psychological treatment repertory (watching the therapists' performances, some might say "repertoire"), the evidence presented seems to show both that the treatments selected, to be effective, need to be relevant to the subject matter they are to address, and that the treatments selected were at least moderately appropriate to the task they were selected to undertake. That is, not only does the information presented indicate that treatment selection can be inappropriate to achieving given therapeutic ends, but also that, using rather conventional psychological wisdom, appropriate treatments can be (and were) selected.

2. Validity of the concept of "differential treatment": Although many psychologists still employ non-specific psychotherapy with their clientele, and although many would still affirm that specifically-directed psychological treatment is neither possible nor appropriate (i.e., it may be seen as "controlling" the client or as "too directive"), it is evident from the foregoing that targeted differential treatment, which modifies one phenomenon and leaves others unchanged, is at least possible. That is, the concept of "differential treatment" is at least a valid one, whether or not it is always appropriate.

3. The use of psychometrics to identify "causal" factors: Granting that it may be appropriate and desirable to modify given psychological/behavioural anomalies or problems, at least in certain clientele, and given the above demonstrations of the possibility of providing "differential treatment", it would seem to be important to be able to identify the underlying phenomena which need to be addressed in treatment. The evidence offered indicates that the STFB is capable of identifying at least some of the "causative" factors underlying criminality and of leading to effective means for treating its identified substrate.

4. The need to explore the underlying factors in some depth: Had those working on the treatment project described above accepted at "face value" the original (labelled "tentative") apparent natures of the STFB factors they would likely have proceeded in treatment

with "the obvious" task of seeking to modify the inmates by (F1) seeking to reduce the conversion to stimulus hunger, perhaps thereby increasing felt guilt, or (F2) seeking to reduce the conversion to hypomania, perhaps thereby increasing inferiority feelings. From the perspective of the foregoing results, it seems likely that, if such treatment initiatives had been used, the results would have failed to address criminality, probably resulting instead in an increase in the intolerance of guilt or inferiority, and thus in increased criminality through enhanced stimulus hunger or hypomania. That is, the findings reported justify considerable caution in interpreting observations too concretely, instead of pursuing the psychological foundations or "dynamics" underlying them before (also) generating simple structure through which to address the issues at stake. Again, one of the lessons learned during this series of studies has been that "things aren't always what they seem", and that, at least in designing treatment, some "depth" of understanding is needed.

5. Interactions of cognitions, motivations and behaviours: Anything which enhances wisdom can't be all bad. Many psychologists focus almost exclusively on behaviour ("I am a behaviourist"), or on thinking ("I am a cognitive ..."), or on motivations ("I am a dynamic ..."). If there is one thing which seems to underlie most of the findings in these studies, it is that all three elements perpetuate or seed one another (A tip of the hat to Albert Ellis, who has been saying the same thing for years). Focusing too completely on one element in these studies would likely have led to monolithic non-solutions. For example, focusing on the criminal behaviour alone might have led to pejorative and punitive measures, thus enhancing guilt, inferiority, etc. Focusing on the cognitions alone might well have resulted in the approach employed in the example in the last paragraph. And focusing on motivations alone might well have resulted in psychopathological formulations which, in the case of criminality (e.g., "personality disorder") might well have discouraged any treatment initiatives at all.

6. The structure of criminality as seen through the S.T.F.B.: The fact that treatments, which were selected and guided by theory derived from the STFB and the MMPI, worked differentially to effect changes in their targeted criminality factors provides strong evidence that the structure of criminality (at least those aspects of it which are validly estimated by the STFB) is validly represented by the composition, as well as the derived characterization, of the STFB factors. Also, the fact that the Relapse Prevention and Values workshops did not contribute appreciable treatment effects adds even further support to this contention.

7. Large-group, day-long, targeted treatment workshop format: The large-group, day-long treatment-workshop approach to treatment appears from the evidence to be a viable means for treatment and, undertaken in specifiable ways, appears to be capable of both appreciable therapeutic benefit and "differential treatment" application. This perhaps unexpected, even surprising, fact had

perviously been demonstrated by the present author and his colleagues in equivalent kinds of treatment for stress management, anger management, conflict management, and relationships and sexuality in an inmate population (Quirk and Reynolds, 1992). This treatment format has now been shown to be effective in the treatment of criminality-related factors. Wouldn't it be Really Nice If ... Someday ... If, as we have indicated in this work, criminality's dimensions or factors can be both understood and treated, is it conceivable that those same dimensions or factors could be prevented from developing into criminal conduct? Of course, we are not yet in a position to verify the possibility of this utopian hope. However, we have been working on an, admittedly premature, plan which might well make criminality preventable, and without infringing on anybody's rights or freedoms. The idea is a simple one. At least in the developed world, universal and mandatory education of children is now widely practised. That is, an educational system is already in existence, its teachers are mostly possessed of a mind-set which would facilitate preventive work of this kind, and it could cost little to employ that system to prevent crime. Obviously, if measurable reduction in the identified six factors or dimensions of criminality can quickly and easily be achieved through the kinds of procedures detailed above, it should be possible, even more effectively, to modify those self-same six factors to even greater degrees if a programme (course) of 72 hours in duration (instead of 24 hours) were to be run -- that is, 2 hours per week for the 36 weeks of an academic year. And, if such a programme were introduced into the curriculum at two or three levels of the educational system, with students experienced repeated exposure to the materials, how much more effect might there be, surviving for how much longer in the person's life? The possibilities are intriguing. Of course, there could be expected to be problems to be addressed in instituting any such programme in any system, including the educational system. However, involved as they are in the whole process of education, teachers, for the most part, are ready and willing to learn and to try new things. And they are usually willing to evaluate how they are doing, as through repeated testing of their pupils. But they would have to be taught how to undertake the kind of course envisioned. There are two main difficulties involved in training teachers to use these materials and to mount courses using them. The first difficulty arises from the fact that teachers have relatively little training in Psychology. Most people seem to think that they already know anything which could be known in the field of Psychology. And introductory psychology courses do little to dispel this notion, designed as they are to fit the information they wish to communicate into the existing knowledge of the student, in order to make the transition to understanding of the new subject matter as straight-forward as possible. The reason why this approach is necessary with respect to Psychology, in contrast to most other university courses, is that students arriving at university, for the most part, have no prior training in Psychology. Unlike with most other disciplines (Physics, Chemistry, Mathematics, Biology), the few token courses offered in Psychology at the secondary (or, sometimes, primary) school level

are commonly "taken on" by teachers who are specialists in the so-called Humanities (English, History, Geography, Guidance) without the advantage of any appreciable training in Psychology. Consequently, the courses offered, although using textbooks often written by psychologists for the given level of education of the pupils (and often taught by psychologically unsophisticated teachers), are little more than popular views of what Psychology "must be~ about, dealing largely with popular issues such as common sense notions about marital relationships, child rearing and courting activities. Essentially, the problem being addressed here is the limited availability of teachers who have themselves been adequately trained in Psychology. One of the best evidences of this last fact lies in the still-existing tendency on the part of most teachers to draw children's attention to their errors. It seems to be believed that children learn best by reducing their errors (increasing precision and self-criticism) rather than by increasing the range of their interest, motivation, knowledge and skills -- best accomplished by rewarding their successes. This particular indicator is especially important if teachers are to provide courses in crime and criminality prevention. The second difficulty is the fact that the kind of course envisioned here would be quite a departure from the kinds of courses standardly employed in the schools. The appropriateness of this last statement can easily be confirmed by a quick review of the brief synopses of the treatment programmes offered in Chapter 7. It is not much of a departure in such terms, as might have been anticipated, of the need for the teacher to become skilled in managing group process, or in eliciting and responding "therapeutically" to personal reminiscences on the part of the child. It does represent a major departure in the types of materials addressed and in the approach which would need to be taken in such a course. And it would require much more complete and intensive training in Psychology than most primary or secondary school teachers now have. Indeed, it would probably require that, in addition to those having specialists in the existing secondary school disciplines, teachers be acquired having a specialty specifically in Psychology. And part of their preparatory training for such a specialty, presumably, ought to include training in the sorts of materials and approaches needed to undertake the kind of course we have envisioned. With these two related issues adequately addressed, it seems to us that prevention of crime could reasonably be expected to be possible through courses in the regular educational system. Of course, as stated earlier, we are not yet in a position to demonstrate the validity of the possibility enshrined in our vision of the possible future.

## APPENDIX A The Developmental Psychology of Criminality

It is extremely rare that anyone gets in trouble with the law simply because of current environmental pressures such as unemployment. Rather, people get in trouble because of the way they think, and the way they think is intimately related to their developmentally-based psychopathology. It is the development of this criminality-relevant psychopathology which is the subject of the following dissertation. as demonstrated by Rene Spitz in his famous paper on Anaclitic Depression (1946). Spitz observed children in a number of institutions and found a rather striking pattern of child development, or perhaps it would be more correct to say lack of development, in children deprived of interpersonal interaction during their first years of life. The pattern went something like this: First, they would tend to be weepy rather than outgoing and happy. After a time, this weepiness would begin to give way to withdrawal. They would lie quietly in their beds, faces turned to the wall, refusing to take an interest in their surroundings. This weepy withdrawing behaviour would persist for two or three months, during which time they were as likely to lose weight as to gain it. All showed an increased susceptibility to colds. In time, the weepiness subsided, to be replaced by a sort of frozen rigidity of expression. Now these children would lie or sit with wide-open expressionless eyes, frozen immobile face, and a faraway look, as if in a daze, apparently not seeing what went on around them. Contact with children who had reached this stage became increasingly difficult and finally impossible. The most that could be elicited was screaming. The rate of development, which had at first slowed down, actually began to decline, so that by the end of the second year, they were more than a year retarded in their growth. By the age of four, with few exceptions, these children were unable to sit, stand, walk, or talk. I think it fair to say that this is one of the reasons we now have so few foundling homes.

early types of projection. That is, there is a tendency on the part of the infant not to identify with bad experiences but to perceive all his bad experiences as coming from without. It isn't pleasant to feel bad about oneself, and the infant has considerable difficulty in incorporating the idea of badness into himself. He may if he is forced to, but he won't like it. familiar with the unfamiliar, feature by feature. In children for whom the symbiotic phase has been optimal and in whom "confident expectation" of need satisfaction has prevailed, curiosity and wonderment are the dominant features of their inspection of strangers. By contrast, among children whose basic trust has been less than optimal, an abrupt change to acute stranger anxiety may occur, or there may be a prolonged period of milder stranger anxiety, which transiently interferes with the pleasurable inspection of others. Even this stranger anxiety, however, is not a step backward but rather reflects the infant's increased sensitivity to differences between familiar people and unfamiliar ones. He is not easily directed by verbal commands; his understanding: of words is very limited indeed. If you expect very little of him and give very close and rather constant physical supervision, you can probably get along well, but in some households the phrase "bad boy" is used so often

that the child probably thinks that it is his name. his mother. One cannot emphasize too strongly the importance of the optimal emotional availability of the mother during this stage of development, for we believe that it is the mother's acceptance of the toddler's ambivalence towards her that enable him to invest his own self-image with love. Depending on her own adjustment. the mother may react to the child's demands during this period either with continued emotional availability or with a gamut of less desirable attitudes. However. the mother's continued emotional availability is essential if the child is to give up his reliance on magical omnipotence. Predictable emotional involvement on the part of the mother seems to facilitate the unfolding of the toddler's thought processes, reality testing, and coping behaviour by the end of the secured or the beginning of the third year. If the mother is "quietly available," if she shares the toddling adventurer's exploits, playfully reciprocates, and thus facilitates his attempts at imitation and identification, then internalization of the relationship between mother and toddler is able to progress to the point where, in time, verbal communication takes over. On the other hand, the emotional growth of the mother in her parenthood, her emotional willingness to let go of the toddler, to give him, as the mother bird does, a gentle push and encouragement towards independence, is also enormously helpful and may even be the sine qua non of normal, healthy individuation. For during this stage of development. The results are different, of course, depending on the age at which difficulties in relationships with the parents develop. We believe that the Psychologically, these individuals are characterized by the failure of development of any integrated self-concept; the development of contradictory character traits, which results in chaotic interpersonal relationships; failure to develop an integrated picture of others (that is, others tend to be seen as either good or bad) with resultant inhibition of, or limited development of a capacity for understanding of or empathy for other persons; failure of neutralization of primitive affects such as rage, with poor control over impulses; and impairment of the development of conscience, with reduced potential for finding satisfaction in pro-social activities. Now, this discussion of the development of criminality is not concerned with those psychotic personalities who become involved in crime but, rather, with the borderline personalities and character disorders who make up the bulk of the criminal population. Another attempted solution is found in narcissistic, promiscuous men who unconsciously seek revenge against the frustrating mother through pseudo-genital relationships with women, which are actually an attempt to both express aggression sexually and to obtain the love and acceptance which wasn't available from the mother. the 15- to 18-month-old infant was extremely difficult to manage let alone to consistently love. Many parents are just not emotionally equipped to deal with the child at that stage of his development, and this is one of the ages at which child abuse is most likely to occur. The negativism of the one-and-a-half-year old child, however, is an essential part of his development. At this age, the child is being pulled in two directions: towards asserting himself and developing some independence, and towards remaining dependent. For this stage

to be mastered, the parent must be able to provide him with the security which allows him to venture out on his own and yet the control that keeps him from exceeding his own or his environment's limitations . If the mother has been able to handle the demands of the toddler and the ambivalence of the rapprochement crisis about the middle of the second year, and has been able to nurture her baby and developing child to the point where he is able to establish a stable sense of self and sense of reality, but not until an integrated self-concept is achieved and the separation of "good" and "bad" self-images is mended, the foundation has been laid for the development of the character disorders, the narcissistic personalities, and the antisocial personalities who make up so much of our criminal population. The main characteristics of the narcissistic personalities are their grandiosity, their extreme self-centredness, and their remarkable absence of interest in and empathy for others, in spite of the fact that they are so very eager to obtain admiration and approval from other people. Their emotional life is shallow, and they obtain very little enjoyment from life other than from their own grandiose fantasies. They feel restless and bored when external glitter wears off and there are no new immediate sources to feed their self- esteem. They envy others, and tend to idealize those from whom they expect to receive narcissistic supplies (that is, feeding their self-esteem), and to depreciate and treat with contempt those from whom they do not expect to receive such supplies. They have a basic need to identify with an all-good, all-powerful person and hence be protected from the world of hostile persecutors images which exist within themselves and which are projected onto others. They attempt to control the aggression they see in others through a variety of mechanisms, as well as to control the idealized objects, to use them, and to tame their aggression through such mechanisms as projective identification and ingratiating. Having a true interpersonal relationship exposes them to humiliation, loss, and shame, with consequent envy and rage. The contempt and devaluation that are prominent in the paranoid personality are also a central feature in the narcissistic personality. The instinctual component is the same as the component described for the paranoid personality - expulsion of the shameful, worthless self-image and its projection onto the victim. Not only do these individuals lack emotional depth and fail to understand complex emotions in other people, but their own feelings lack differentiation as well, and they are prone to quick flare ups of emotion which quickly die out. They are particularly lacking in genuine feelings of sadness, and this incapacity for experiencing depressive reactions is a basic feature of their personalities. When abandoned or disappointed by other people, they may show what on the surface looks like depression, but on further examination it usually turns out to be anger and resentment, loaded with revengeful wishes, rather than any real sadness for the loss of a person whom they actually appreciated. In general, their relationships with other people are clearly exploitative. Behind a surface which is often very charming and engaging, one senses a basic coldness and ruthlessness. Although they may be superficially sociable, on a deeper level their interactions reflect intense, primitive



conceptualizations of interpersonal relations with a marked inability to depend on others. It is as if, when it came time for an integration of the individual's good and bad self-images, the bad self-images were sufficiently strong that they could not be integrated into the individual's self-concept and had to be projected onto the outside world, and the self-concept becomes based only on the good self-images. In the normal course of events, internalizations of parental do's and don'ts becomes the basis for the child's developing conscience. In the case of the narcissistic personality, however, it is as if only the idealized parent is internalized and incorporated into the child's self-concept along with any good images which he may have had of himself, and everything that is bad is placed into the outside world. Thus, the individual becomes very "independent" of any need to rely on others. If parental prohibitions are internalized, they have an aggressive quality and are easily re-projected. This tendency to structure the situation in such a way that others can be perceived as punitive and unfair underlies much of the behaviour of the narcissistic personality. The antisocial personality, or psychopath as he is sometimes called, may be considered as one extreme form of the narcissistic personality, and in order to understand the psychopathic personality, it is essential to understand our evolving conceptualizations of the narcissistic personality. What we are postulating is a "core" personality type, an individual of narcissistic character structure with particular and severe deformations of ego as well as superego. He has a characteristic quality of interpersonal relations, with specific intrapsychic conflicts, defenses, and structure, with distortions in his relations with others arising from a chaotic mother-child relationship, with difficulties becoming particularly prominent toward the end of the rapprochement stage. Some twenty years ago, Cleckley (1976) offered a clinical profile of the psychopathic personality which is in accord with most other descriptions of them. The following symptoms are taken from his "The Mask of Sanity": superficial charm and good intelligence; absence of delusions or other signs of irrational thinking; absence of "nervousness" or psychoneurotic manifestations; unreliability, untruthfulness and insincerity; lack of remorse or shame; inadequately motivated antisocial behaviour; poor judgment and failure to learn by experience; pathologic egocentricity and incapacity for love; general poverty of major affective reactions; specific lack of insight; unresponsiveness in general interpersonal relations; fantastic and uninviting behaviour with drink and sometimes without it; suicide rarely carried out; sex life impersonal, trivial and poorly integrated; and failure to follow any life plan (4, p. 337). At the time, it was common to attribute the psychopath's severe superego defects to "constitutional psychopathic inferiority." It wasn't long, however, before Kaufman and Steiner (1959) suggested that the public sees only the hedonistic behaviour and its results and is unaware of the misery that the behaviour conceals. Schmideberg (1949) reported her clinical impression that antisocial development and psychopathy were largely due to disturbances of "object relations" rather than of superego. West (1969) documented that socially deprived,

unloving, erratic, inconsistent, and careless parents tend to have badly behaved boys. And Eissler (1949) noted that there is an almost invariable feature of magical thinking among delinquents that "serves to enhance or to restore an inflated feeling of omnipotence which is essentially different from the feeling of mastery ...." All of these observations have helped to lift our understanding of the psychopath beyond the simple assumption of "constitutional inferiority" or a simple focus on lack of conscience; and the inconsistencies in his behaviour are now more readily apparent. Where there is (infantile) feelings of omnipotence and self-acknowledged ability to extract narcissistic supplies, there is also likely to be evidence of a poor self-image, and feelings of entitlement, of having been injured, deprived, harmed, etc. And even where the psychopath is materially successful, his behaviour is likely to contain components which result in repeated failure, self-harm, and punishment. For example, his identification with other rebellious individuals or merely his own poor control may carry him into dangerous, reckless behaviour. Where enough ego strength is present, such reckless behaviour and risk taking can result in gain and even recognition and success within the community. Frequently, however, it results in some sort of self-destructiveness as well as harm to the community. When the psychopath does seek treatment, his sense of emptiness and aloneness, so that the world appears empty and devoid of meaning, may be described as "depression". However, underlying this so-called "depression" is a sense of worthlessness, which is intimately connected with his deviant ego- superego development and even inability to experience real depression. It is important, perhaps, to emphasize that these individuals can be helped, although treatment is by no means easy. The therapist's good intentions, positive feelings, friendly behaviours, and external help are received with suspicion and tend to be tested in a provocative fashion until hostile, destructive expectations are confirmed. Therapists tend to be viewed as extensions of the self rather than as individuals in their own right, and when they can no longer be manipulated, controlled, or extracted from, they are likely to be discarded and/or rage ensues, depending upon the state of the transference at the time. Individual psychotherapy, as is well known, may very well not be the treatment of choice.

## APPENDIX B Internal and External Control Intolerance in the STFB

Data from tests administered at the Ontario Correctional Institute is routinely assembled into computer files for use in research and, at the time of construction of the STFB, there was available a computer file containing the raw MMPI data from 1150 inmate-subjects admitted to the Ontario Correctional Institute for treatment of sexual offenses, alcoholism and drug addiction. When examination of the MMPI items associated with high scores on each of the STFB factor scales revealed that it would be possible to select a group of sixteen MMPI items to represent, in the MMPI, each of the criminality factors measured by the STFB, it was decided to factor these MMPI STFB- equivalent scales, as a group and separately, along with the basic clinical scales and a group of about 80 other MMPI scales which are used routinely at the Ontario Correctional Institute. This analysis was carried out, and the results appear below. Factor analysis of these new (STFB) MMPI scales along with the basic clinical scales and the Tryon, Stein and Chu scales resulted in a first factor with loadings from those MMPI scales primarily indicative of internal conflict, such as Sc, Pt, the Tryon, Stein and Chu (TSC) Scales VI (Autism), V (Anger), IV (Depression), VII (Anxiety) and III (Distrust), and with the new (STFB) MMPI scales loading as follows: Scale 5 (0.89), Scale 3 (0.89), Scale 1 (0.83), Scale 2 (0.81), Scale 4 (0.80), and Scale 6 (0.70). Factor analysis of these new (STFB) MMPI scales along with the other MMPI scales routinely scored at the Ontario Correctional Institute resulted in a second factor with loadings from those MMPI scales primarily indicative of external conflict, such as Wiggins' Hostility, Responsibility - Revised (negative), Wiggins' Authority Conflict, Violence, Conscience (negative) and Self Control (negative), and with the new (STFB) MMPI scales loading as follows: Scale 6 (0.86), Scale 2 (0.81), Scale 1 (0.79), Scale 4 (0.62), Scale 3 (0.59), and Scale 5 (0.54). Scale 5, which was least associated with this "external conflict" factor, actually loaded more heavily (0.67) on a factor defined by lack of Resilience, low Ego Strength, Self-Doubt, Phobias, Health Concerns, and the like. When the STFB Total (MMPI) scale was included in a factor analysis of all of the MMPI variables, it became the marker variable for the "internal conflict" clustering referred to above, with a communality of 0.97; and when the STFB Total (MMPI) scale was excluded from this analysis, the clustering reflected the "external conflict" grouping referred to above. One aspect of the treatment-research programme from which these criminality studies were drawn, previously noted only in passing, involved the desire to utilize a variety of treatment methodologies. This desire, combined with the implication of the analyses reported above that Scale 5 is less concerned with external conflict than it is with internal conflict (low ego strength and a lack of resilience) persuaded the experimenters to decide to target subjects' "internalization" (e.g., as expressed in introversion, obsessive rumination and the like, in Workshop E for STFB Factor 5), instead of sensitivity to either closeness or rejection. This was done under the title of Enjoying Conformity. The consequences of that decision have been discussed in the earlier-reported results of

treatment outcome. The results may now be supplemented by consideration of the effects of the treatment workshops on a set of criminality scores derived from various combinations of the STFB criminality factors chosen to represent the "rejection of internal controls" (Factors 1, 3 and 5) and "rejection of external controls" (Factors 2, 4 and 6) secondary or meta-factors postulated to be underlying criminality. It will be recalled that, in the design of the study, two groups of twenty subjects each had been chosen to attend the first, third and fifth criminality-treatment workshops and the second, fourth and sixth criminality-treatment workshops, respectively. It is to an analysis of the results obtained by those two groups that we now turn our attention. These results are shown in Table 45.

APPENDIX F

## APPENDIX G Normative Standards

Volunteers were contacted through a number of agencies and businesses, and from contacts in public places, and they were asked to complete the STFB. The sole criteria for selection for the (separate male and female) normative samples was "no criminal record," although separate norms were developed for subjects with different educational levels. Tables 16 through 19 present summary information about the performances on the STFB scales of the several groups of subjects studied. In these tables, raw scale scores are converted to range from 0 to 10, so that values might be compared across scales. This was done by dividing the scores by the number of items contributing to the scale and then multiplying by ten. In order to return to the "real" raw scores, the process used would have to be reversed. For example, because the test consists of 100 items, the mean raw score on the "Total" scale for young male normals without college education is ten times the value shown, i.e. 41.0. In order to perform the reverse conversion, the number of items in each scale are given:

STFB Total Scale 100 items STFB Factor 1 Scale 20 items STFB  
Factor 2 Scale 22 items STFB Factor 3 Scale 18 items STFB Factor 4  
Scale 8 items STFB Factor 5 Scale 18 items STFB Factor 6 Scale 14  
items STFB Social Desirability Neutral 16 items STFB Social  
Undesirability Scale 16 items

In the following tables, F 1 through F 6 refer to the six factor scales within the STFB. "Neut" refers to the sixteen item "Social Desirability Neutral" scale. "Undes" is comprised of the sixteen items which make up the Social Undesirability scale. The numbers of subjects in each of the samples of younger and older males and younger and older females was 55, 34, 16 and 16, respectively. In general, males scored higher than females, and younger adults scored higher than older adults on most of the scales. As might be expected, these differences were less noticeable on the Social Desirability Neutral scale. Normative Data for College-Educated Men and Women Means for college educated men and women are given in Tables 20 through 23. The numbers of subjects in each of these samples was 29, 59, 30 and 46, respectively. The same score conversions of the raw scores obtained (dividing by the number of items in the scale and multiplying by ten) were applied in these tables as in the preceding tables. As can be seen from these tables, in most cases, males score higher than females, younger adults score higher than older adults, and non-college educated people score higher than college educated people on these scales. The major exception to this pattern occurs with older college educated females, who tend to score slightly higher than might have been expected. Normative Data for Males Incarcerated at the O.C.I. Scores for the O.C.I. incarcerated male population are displayed in Tables 24 to 26. The O.C.I. population is comprised of sex offenders (mainly incest offenders), offenders displaying escalating violence, alcoholics and drug addicts and property offenders (but excluding identified career criminals) admitted to a correctional treatment centre. In so far as they were recognized

(through interviews and history alone, without the benefit of test results), inmates identified as "career criminals" are excluded from the O.C.I. samples and their results are presented separately. In contrast to the Normal sample, differences between the O.C.I. 30 to 44 age group and 45+ age group warrant separate reportage. One explanation may relate to the growing evidence that there has been a shift upwards from the ages of 30 to 45+ at which most offenders seem to "graduate" out of crime. A more likely explanation for this difference may be that, in the O.C.I. population, extent of criminality may be related to type of offence (i.e., sex offenses versus property- or addiction-related offenses) which, in turn, may vary with age. That is, although contrast data are reported for the O.C.I. population, they may not be very meaningful, since the population may be unique. Comparison of these scores with those reported for Normals reveals that the young male incarcerates tend to score higher than their Normal (non-incarcerated) counterparts, and that scores tend to decline with age, most dramatically with respect to the extent to which the older incarcerates are willing to admit to socially undesirable attitudes. To some unknown extent, this is probably due to the fact that the younger O.C.I. residents tend to be drug addicts while the older O.C.I. residents tend to be incest offenders. That is, in all likelihood, the addicts seem to be more overtly criminalistic, while the incest offenders are more covertly so. Normative Data for Career Criminals Scores obtained by male inmates judged (by a psychologist expert in offender classifications, working without access to any test data) to be career criminals are presented in Table 27. Only scores for the young adult group are presented because of the dearth of older "career criminals" processed through the Ontario Correctional Institute.

As can be seen from a comparison of these tables, male career criminals tend to score higher on these scales than the rest of the male O.C.I. population who, in turn score higher than their Normal counterparts. Mean T-Scores Obtained for Normal Males, O.C.I. and Career Criminals For illustrative purposes, Tables 28 through 30 show the T-score means for Normal (non-incarcerated) males, the male O.C.I. sample (excluding identified Career Criminals) and for (identified) Career Criminals. In these tables, the T-score means which are most relevant for comparison purposes are highlighted. For the most part, the T-scores derived from the normative data merely confirm the age- and education-related progressions apparent in the previously-reported normative data. However, it may be meaningful to note that, in the 18 to 29 age group, college-educated males appear to score slightly higher on the Social Desirability Neutral scale than on the STFB Total or Undesirable scales, while in the 30 to 44 age group, college-educated males appear to score slightly lower on the Social Desirability Neutral scale than on the STFB Total or Undesirable scales. In the 18 to 29 age group, O.C.I. males appear to score slightly lower on Factors 1 and 2 than might have been expected. And the 30 to 44 age group of college-educated males scores slightly higher on Factor 1 than might have been expected. These data seem, at the same time, to offer further support concerning

the concurrent validity (i.e., relevance to existing offender status) of the STFB and to provide



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Reliability From our perspective, the above noted facts mean that most of the inmates' STFB scores could be expected to change appreciably, but more or less randomly, from the first (admission) test to the second (in-treatment) test -- due to the different programmes to which each inmate might be admitted, and to his individual responses and adaptations to the setting and to its orientation and treatment programmes. The constant time interval between the second and the third testings, occurring as they did while the inmates were stably involved in their own treatment programmes, might lead one to expect fairly slight (or at least consistent) changes between the second and third testings -- thus probably exhibiting much higher retest stability scores. Some of the inmates received (parts of a) specific STFB-targeted treatment between the second and third testings, while others received (parts of) that treatment programme between the third and fourth testings. In both of these, treatment-interpolated, instances we might expect that the common treatment programme would maintain the level of retest stability from second to third, and from third to fourth testing, and might even enhance it slightly. Tables 6 and 7 present the test-retest reliability indices from the pairs of testings described above. It will be noted that the expectations suggested above, generally speaking, were met. Moreover, although the stability of measures is shattered on transfer from the intake unit to a treatment unit, by the time inmates are settled into their treatment programmes, all the scales' retest stability indices are both robust and yet essentially "middle of the road" (except for the Factor 4 and Social Desirability Neutral scales), which would seem to justify the conclusions of sufficient stability for purposes of dependability and sufficient instability to permit the test to measure meaningful changes. This last hope is justified in particular by the apparent instability of the STFB in recording the fact of changes in random directions from the intake test to the first retest -- while the inmates are undergoing orientations and involvement (or non-involvement) in their own treatment programmes.

Precision "Standard Error of Measurement", as an estimate of an instrument's precision, is probably the best single reliability index. Among the ways by which it can be estimated is to square any validity or reliability coefficient -- which results in lower values than the original coefficients (which are always less than 1, so that squaring results in a smaller quantity). Standard error of measurement can be estimated most simply by examining the correlation coefficients obtained. If they are already weak, they will shrink to possible insignificance. With the exceptions of Factor 4 and the Neutral scales, it has been concluded already that the coefficients obtained, although relatively modest, are satisfactory for our purposes, permitting both adequate dependability and an adequate provision for the measurement of change. However, they tend to be toward the lower limits of what would usually be accepted as evidence of "sufficient" for purposes of consistency and stability. This last fact should mean that the estimate of standard error derived from squaring the stability and consistency values would yield rather "too low" standard error of estimate reliabilities. But, like most things in life, there are various ways of both estimating and

understanding the standard error as a method to determine reliability. Other aspects of the standard error method will be addressed later. However, a particular perspective on it can be seen in these data. The standard error estimate is really an inferred estimate of the reliability of the mean (the mean best represents any sample of data) in repeated samples - - that is, of the precision of the scale in making the same group estimates each time it is applied. In the above Tables 11 through 16, repeated samples have in fact been taken -- three dependent retests for the "STFB treatment study" and one testing for each of three other independent samples: Normals, O.C.I.s and C.C.s. Consequently, it is unnecessary merely to estimate the reliabilities of repeated samples. The repeated samples have been taken, and the scales' performances can be observed directly in them. Once more, uncritical thought might lead one to conclude that, while some of the scales might have modestly good reliabilities, at least the Factor 4 and Neutral scales do not. A second thought is often worth the effort. The real issue of standard error in repeated samples is whether or not the scale behaves in the same way in repeated sampling. And they all do, including the apparently maverick Factor 4 and the Neutral scales. That is, regardless of their only modest stabilities and internal consistencies, given the fact that all of the scales behave in very consistent ways across various types of samples (that is, considering each scale by itself), there is at least some reason to believe that the scales may all be much more precise than they may at first seem. Given the low reliability coefficients of at least the Factor 4 and Neutral scales, that doesn't seem to make much sense. Acknowledging that there could well be some differing opinions on this point, it is our contention that, however, that while the two variant scales' coefficients do tell us something important about them, the consistencies in the behaviour of the coefficients for all of the scales across varying samples indicate that the scales are indeed highly reliable - - and much more so than their obtained coefficients would suggest. The apparent contradictions within the last paragraph demand explanation. We would contend that the relatively slight variations in the performances of the several scales across repeated samples indicates that the scales are really very precise. However, among themselves and under differing known conditions, the scales do vary in their stabilities. Their capacity to measure change, as one aspect of stability or instability, will be addressed later when we are considering the modifiability of criminality. But there is another aspect of scale stability which requires brief discussion and illustration. The STFB Neutral scale was intentionally developed using just those items which least provide the respondent with a reference context which might permit him or her to judge the "meanings" of his or her responses in terms of social desirability. In turn, this means that the context of responding on these items is more likely to be provided by the changing circumstances of the person's life and by the context afforded by surrounding items in the test than is true for the other items in the test. Consequently, he or she can be expected to respond to these items with relatively little (clear or stable) understanding of the criminality-relevant thrust of the

questions, so that his or her responses over time can be expected to be relatively unstable. That is, the Neutral scale, in effect, is composed of items which are constructed by design to be relatively unstable. By the same token, quite apart from the fact that Factor 4 is comprised of only eight items (which will certainly limit its reliability measured in any way), the items contributing to STFB Factor 4 are items which appear to exert a particular pull or valence among those people who think rather concretely and who do not grasp generalities or relationships among events well. This means that some people (high Factor 4) responding to these items will respond in unstable (bewildered) ways because they do not have or exercise much abstract or generalization ability, so that their responses to anything are likely to vary from time to time and situation to situation. Some other people (low Factor 4) responding to these items may well respond in an unstable (also bewildered) way because they do have and exercise adequate abstract or generalization ability, so that they do not understand "what is the problem" presented in the content of the items. That is, Factor 4 is composed of items which, in effect, tap or assess another major source of response instability within people. From the perspective of these two particular STFB scales, therefore, the usual considerations involved in estimates of scale stability and internal consistency may not meaningfully apply. This underscores the view that using single stability and consistency coefficients as a basis for assessing precision (i.e., standard error of estimate) would be quite inappropriate. But, as we have shown above, demonstrating a high degree of mutual consistency in the behaviour of multiple stability and consistency coefficients may very well offer one way of assessing precision. This does not mean, however, that we are prepared to leave the question of the precision of these scales only partially (and perhaps contentiously) answered. We will return to this issue later to show that the scales are unexpectedly precise. But before we can do that we need to consider several other issues. Validity As with reliability, there are several aspects of validity, each of which needs to be considered carefully. In general, the question of "validity" is concerned with the extent to which an instrument or scale measures what it was intended to measure. 1. Discriminative Validity One aspect of validity has already been addressed. The STFB and its scales have already been shown to discriminate both effectively and efficiently between non-offenders and offenders, and between "garden variety" offenders and "career criminals". This earlier demonstration provided evidence that the STFB was indeed a valid means to discriminate some fairly general attributes of criminality which could be represented conveniently in separate groups of people, and to discriminate the membership of individuals in each of these groups. Indeed, the earlier demonstration of the discriminative validity of the STFB and its scales afforded evidence both of the validity of the STFB as an indicator of criminality, and of the precision of the STFB. This last statement is based upon both the fact of precise group and individual discriminations and the fact that the statistical tests of these discriminations employ the calculated standard error of the mean -- which has to be small

enough to allow group and individual differences to emerge as "statistically significant". seems to represent that concept fairly well. Table 14 shows the correlations obtained in the preceding factor analysis between the STFB and a number of other criminality-relevant variables, including the Hare Psychopathy Checklist. While there are a few significant correlations in this table, for the most part they are unimpressive (although the factors or sub-scales of both the STFB and the PCL do correlate well with their respective total scores). It seems clear that the STFB and the Hare Psychopathy Checklist (PCL) are measuring different aspects of habitual criminality. Nevertheless, for the sake of completeness, the PCL was subjected to the same analyses (looking at its relationships with other criminality-related variables as filtered through the Megargee criminality code typology from the MMPI) which were reported above for the STFB scores. The purpose of this exercise was to determine whether other common aspects might be found for these two tests. The Megargee code types were ranked according to the offenders' scores on the PCL and its factor scales, as shown below. Again, groups with lower scores appear on the left. PCL Total scores ranged from 14 for Group B to 25 for Group D. Groups A, B, F and I occur in varying order for low PCL scores. Groups C, E, G and H occur in varying order for the higher PCL scores. And Group D occurs with the highest PCL scores. This pattern is close to a reversal of the picture found both with Megargee and Bohn's (1979) data on other criminality indicators (as presented previously) and with the STFB scales.

PCL1 B F I A G H C E D PCL2 A F B I H C E G D PCL  
 Total B A F I H G C E D Again, for completeness, correlations were computed between the ranks derived from these three PCL scores and the same variables taken from Megargee and Dorhout's data which were used earlier for the STFB scales. The correlations obtained are shown in Table 15. From this table, it is clear that the PCL generally does not rank order the Megargee code types in the same way as do these other criminality-related variables reported upon by Megargee and Bohn (1979). Indeed, this analysis, far from helping to understand the relationships between the STFB and the PCL, merely indicates once more that the two tests appear to be measuring, at best, different aspects of criminality. In addition, it appears that the STFB provides information about criminality which is comparatively much closer to the mainstream views of criminality than does the PCL. In the foregoing, we have attempted to verify the concurrent validity of the STFB by demonstrating (1) its ability to distinguish effectively among normals, and "garden variety" and "career" offenders, (2) its ability to distinguish efficiently among individual members of these groups, and (3) its ability to measure various types of criminality-related variables in ways which are equivalent to the main other measures of such variables (except for Hare's concept of psychopathy). We would argue that the above demonstrations indicate that the STFB has excellent concurrent validity as a source of measures of criminality. 4. Predictive Validity "Predictive" validity refers to the capacity of an instrument to be

used to predict events related to the issue (criminality) which are not in evidence at the time the test was administered. It is to this task that we now turn our attention. The basic prediction which a test of criminality ought to be able to perform is the prediction of future criminal conduct on the part of people scoring at high levels on the test, as well as, if possible, predicting an absence of future criminal conduct on the part of people scoring at low levels on the test. In one sense, the demonstration of the STFB's ability to distinguish "normals" (non-offenders) and offenders provides preliminary evidence of its "predictive" validity. That is, the fact that low STFB scores tend to "predict" non-offender status, while higher STFB scores tend to "predict" offender status would offer some only partly "direct" evidence of the test's predictive validity. The discriminant function analysis reported earlier under Discriminative Validity provides more direct evidence of the test's predictive validity. That is, the test has been shown to be able efficiently to predict individual's membership in "normal" and "criminalistic" groups. Since the STFB is an entirely new test, its predictive validity is yet to be established. However, undaunted by the impossibility of determining the predictive validity of the STFB in the usual direct way, two additional attempts have been made to approximate an assay of the test's predictive validity. These two studies are discussed below. The first study attempted to estimate predictive validity by means of indirect measures. One-year follow-up data were available on a large group of inmates who had formerly served time at the O.C.I., but who had not been tested with the STFB. However, they had been tested with the MMPI. The idea was that it might be possible to create scales comprised of MMPI items which would permit estimates of the STFB Total and Factor scores. If that could be accomplished, the MMPI data from those former inmates, for whom follow-up data were available, might be scored to create the needed estimates of the STFB scales, so as to determine whether those scale estimates would predict the former inmates future criminal conduct. Those MMPI items were identified which displayed disproportionate differences in their endorsement rates among inmates scoring at high (above the normal- subject T-score of 65) and at lower (below a T-score of 65) values on the STFB Factor scales. Although the contents of the MMPI items, identified in this way with each of the STFB scales, did not appear at face value to be similar to their STFB item counter-parts, it was possible to find a group of MMPI items which appeared enough related statistically to each STFB scale to warrant trying the planned comparison. Sixteen MMPI items were selected in this way to represent each of the STFB scales. Parenthetically, it might be noted that sixteen items have repeatedly been selected (when there was an option in picking numbers of items) throughout this work because experience has shown that this is the optimum number of correlated or homogeneous items to maximize predictive efficiency. The MMPI scales developed to estimate the STFB scores were then computed for the O.C.I. sample for which follow-up data were available. Correlations were computed between each of these MMPI-STFB scores and 1-year Recidivism and Number of recidivist Offenses during the first post-release year. The results of the

correlations between these variables are presented in Table 16, in which the statistically significant findings are highlighted for the sake of ease of reading. In spite of the fact that the scales used are only estimates of the STFB scales, nearly all of the MMPI-STFB scales provide a robust prediction of post-release criminal behaviour. Even the MMPI-STFB Factor 4 result may be illuminating. Given its small number of items and their susceptibility to unstable measurement (discussed earlier), the STFB Factor 4 scale, of all the STFB scales, ought to be afforded the weakest predictive validity. This seems to have been true of the derived MMPI-STFB Factor 4 scale, as seen in Table 16. The fact that any significant relationships were found offers considerable encouragement that, when true STFB scores are available on offenders who have been followed up, the results will confirm the predictive validity of the STFB. We can only wait to verify this expectation. But a second study also offers indirect evidence of the predictive validity of the STFB. If the STFB could measure changes in inmates resulting from criminality-related treatment, even although the effects of the treatment on future criminal conduct were unknown, then the reduction in criminality measures from pre- to post-treatment might represent a kind of prediction of future test scores, and thus might provide further suggestive and indirect evidence of the STFB's predictive validity. This additional indirect evidence is reported in the next Part of this volume concerned with the modifiability of the STFB scores. Suffice it to say at this time that the results presented in that Part may also bear upon the predictive validity of the test. For the present, however, it must be stated again that we are unable at this time to offer any direct evidence concerning the predictive validity of the STFB. Before moving on, there is one more aspect of validity which should be addressed. This next task involves the delineation of its standards of measurement which, by displaying any variations in scores obtained by various definable groups, can be used to examine the sensitivity of the scales to meaningful demographic characteristics of people.

**Normative Standards (Sensitivity)** Volunteers were contacted through a number of agencies and businesses, and from contacts in public places, and they were asked to complete the STFB. The criteria for selection for the first set of (separate male and female) normal samples were: 1. no criminal record (as self-reported), 2. education below college level (and excluding college students), so as to be relatively comparable, educationally, to the incarcerated group. The mean (most representative) scores for these normal subjects appear in Tables 17 through 20. In the tables which follow, F 1 through F 6 refer to the six factor scales within the STFB. They contain from 8 to 22 items per scale. "Neut" refers to the sixteen item "Social Desirability Neutral" scale which, it should be noted, is not entirely neutral with respect to social desirability, since the items which comprise it range from a rated 3.5 to 4.5 on a 7-point scale of social desirability. "Undes" refers to the sixteen item Socially Undesirable scale comprised of items rated high on social undesirability. The numbers of normal subjects on which Tables 17 to 20 are based are 55, 34, 16 and 16, respectively. It is important to note that, in these tables, the



scores reported are "converted" scores, and not so-called "raw test scores". In these tables, all the STFB scale scores were converted to range from 0 to 10. This conversion was carried out so that values might be compared across scales. To determine the "real" scale scores to which these norms refer, it would be necessary to multiply one-tenth of the table value by a factor based on the number of items contributing to the scale. For example, because the whole test consists of 100 items, the "real" mean raw score on the "Total" scale for young male normals without college education is ten times (i.e., one-tenth times one hundred) the value shown, or 41.0. In general, it will be noted that males score higher than females, and younger adults score higher than older adults on most of the scales. These kinds of group differences, and meaningful variations among the scales in defining these differences, provide indications about the scales' sensitivities. For example, as might be expected, these gender and age differences are less noticeable with the Social Desirability Neutral scale. Parenthetically, it should be noted that, since this book is not intended as the Manual for the STFB, no attempt is made here to provide the means by which test scores can be converted either to the values presented in these tables, or to standard T-scores. The purpose of these tables is illustrative rather than being intended for applied professional use of the STFB.

Means for college educated men and women are given in Tables 21 through 24. The criteria for selection into this second set of normal samples were: 1. No criminal record (as self-reported), 2. College level or higher education. The same specifications and conversions apply to these tables as to those for the first set of normative tables. The numbers of subjects in these samples were 29, 59, 30 and 46, respectively. As can be seen from these tables, in most cases, males tend to score higher than females, younger adults to score higher than older adults, and non-college educated people to score higher than college educated people on these scales. The main exception to this pattern occurs with older college educated females, who tend to score slightly higher than might have been expected, particularly on a few of the scales where they actually score slightly higher than the younger females. The pattern of these last observations is not immediately meaningful, but may possibly be attributable to random sample fluctuations. Scores for the O.C.I. incarcerated population, as defined earlier under Subjects (i.e., many sex offenders, who are frequently incest offenders, alcoholics and drug addicts, but excluding identified career criminals, who were admitted to a correctional treatment centre), are shown in Tables 25 through 27. In contrast to the Normal samples, differences between the O.C.I. 30 to 44 age group and the 45+ age group warrant separate report of their norms. One possible explanation for the differences in these groups may be that, in the O.C.I. population, extent of measured criminality may be related to type of offence which, in turn, may vary with age. That is, the younger O.C.I. inmates tend to be substance abusers and property offenders, while the older O.C.I. inmates tend to be incest offenders without other evidences of criminality. Comparison of these scores with those reported for Normals reveals

that the young male incarcerates tend to score higher than their Normal (non- incarcerated) counterparts, and that scores tend to decline with age, most dramatically with respect to the extent to which the older incarcerates are willing to admit to socially undesirable attitudes. That is, in all likelihood, the addicts and property offenders are more overtly criminalistic, while the incest offenders are more covertly so -- note the Social Desirability Neutral scale scores. Thus, although data reported for the O.C.I. population may not be entirely meaningful, they at least continue to display the discriminative sensitivity of the STFB scales. Contrast Data for the STFB on an Offender (O.C.I.) Male Sample Mean scores of inmates judged to be career criminals are presented in Table 28. The determination of an offender's "career criminal" status was made by one psychologist expert in offender classifications, working independently, with access only to interview information and correctional records (without employing any test data). Only scores for the young adult group are presented because of the dearth of older career criminals at the Ontario Correctional Institute. As can be seen from a comparison of these tables, career criminals tend to score higher on these scales than the rest of the O.C.I. population who, in turn score higher than their Normal counterparts. The break-down of subject groups by their demographic characteristics in the above tables is intended to reveal some further information about the sensitivity of the STFB which, in turn, extends the demonstrations of the test's precision (reliability) and its discriminative power (validity). That is to say, an imprecise instrument cannot be expected to serve as a source of scores which regularly and discriminably sort groups of people according to meaningful criteria (such as gender, age, education and offender status). The precision in discriminating groups having various definable characteristics, which is revealed in the foregoing tables, is encouraging further evidence concerning both the reliability and the validity of the STFB.

### Part III: THE MODIFIABILITY OF CRIMINALITY

#### Chapter 5

The Roots of Criminality In the foregoing, we have attempted to supply information about a test, the STFB, which appears to fulfil all the basic requirements which might be wished for in an instrument for measuring criminality. It is now time to begin to examine how it might be used. Of course, after ensuring that the test can be used to recognize and identify criminality, the next thing we might want such a psychological test to do would be to help us to understand how criminality develops in a given individual. That is, as suggested earlier, we might want the test to help us to develop a theory about the development of criminality. This is the task of the present chapter. But there are other things we might want to do with a test of criminality. We might want to be able to use it to measure change in a person as a result of treatment or other correctional programmes. This too will be addressed in a later chapter of this Part. If we were

living in Utopia, it might also be nice if the test could help us find ways to prevent criminality. We will consider that issue in the final Part of this work. And along the way, we might even be able to find other helpful applications for the STFB. However, the first of these tasks is to see if the STFB can help us to understand how criminality develops. Is there any validity in these formulations? Some of our speculations about the nature of the parenting received by the child, and some of the inferences drawn about the kinds of criminal involvements to which these factors may predispose offenders are, to be sure, still speculative. However, although ordered to suit a particular kind of psychological view of development, the various steps in the sequences offered are taken fairly directly from the contents of the items endorsed by offenders who scored in the upper ranges of each of the factors. Besides, many of the features noted under each of the factors are familiar attributes commonly recognized among offenders. And this is particularly true of those features which are noted in the dynamics of more than one of the factors. Thus, for example, the sense of having been mistreated, the diminished availability to experience of emotions due to inhibitive defenses, the often observed resultant sense of boredom (underlying much of the sensation-seeking risk-taking), and other features, have frequently been included in descriptions of offenders. Of course, the real question of importance in any such formulations lies in their heuristic value. Do these formulations help in directing the treatment, and possibly the prevention, of the thinking, feelings and behaviour implied in each of the factors? Or do the formulations, or the test from which they spring, help in identifying the effects, if any, of interventions derived to reduce or extinguish those criminal behaviours which can be attributed to criminality? In effect, we are asking the question: "If there is any validity to these formulations, how could we possibly use them? In fact, there is probably a great deal that could be done about criminality if these formulations are valid. If, for example, criminal behaviour is indeed motivated, fuelled or "driven," by Rejection of Feelings of Failure, then that is the problem which ought to be addressed in treatment. Or if Rejection of Closeness is the issue, then it is the roots of such rejection which require intervention. Given this kind of guidance about the targets to be addressed in treatment, suitable interventions should be fairly easy to develop. However, before we turn our attention to that task, there is one more task which needs to be done. Simple Structure Accordingly, the next part of the task of determining the validity of the STFB factor scores was that of designing treatments which might be capable of altering the phenomena underlying each factor, and preferably also capable of demonstrating "differential treatment" effects on the six factor scores. Differential treatment would only be demonstrated if treatments designed to address each factor altered that factor's score, and not the scores of other factors. This task was approached through a succession of steps. The first step was seen to involve characterizing the essence of the phenomena underlying each factor. This step seemed necessary both to permit the development of a direct and relatively simple treatment strategy for each factor, and to extract the

redundancies observed in some of the dynamics of the several factors. Direct and simple treatments seemed demanded if treatment was to be less than interminable. The available inmate subjects served an average of six months at the correctional treatment facility (O.C.I.) in which the treatment would be undertaken, and the design requirements of an adequate treatment evaluation study would demand that relatively large numbers of inmates be treated. Indeed, given the dearth of treatment resources in most prison settings, it was felt that any adequate treatment must make relatively little demand on the few available treatment resources, take relatively little time to administer, and provide treatment for relatively large numbers of inmates at any one time. In practice, in this correctional setting, this meant trying to design treatments lasting approximately one day per criminality factor, and in a format which could be delivered to groups as large as 74 inmates at a time. The task of reduction to simple structure of the essence of each factor was facilitated by the observation that the factors had in common a kind of rejection of, or intolerance for, some kind of internal or external state, with Factors 1, 3 and 5 appearing to have an intolerance for "internal" (or intra-personal) controls, and Factors 2, 4 and 6 appearing to have an intolerance for "external" (or extra-personal) controls. The concept of intolerance was intended to contrast with the "proneness" or acknowledgement of such states commonly recognized in neurotic patients. One aspect of each factors' dynamics, which appeared to be central to the underlying phenomena, was then extracted to yield a single "simple structure" designation for the factor:- Factor 1: Guilt Intolerance Factor 2: Inferiority Intolerance Factor 3: Distress or Disturbance Intolerance Factor 4: Sensitivity Intolerance Factor 5: Closeness Intolerance Factor 6: Restriction or Discipline Intolerance

Next, a treatment model had to be constructed. At this point, the divergence of the STFB findings from conventional views of criminality and corrections suddenly came into sharp focus. Conventional views of offenders have often noted the absence of guilt feelings, the pretentious over-compensation for inferiority feelings, the projection of a macho image in place of any signs of emotionality or weakness, the inability to learn from experience, the unwillingness to conform with its need to be different, and the intolerance for discipline. However, conventional views have tended to conclude that these characteristics represented a lack of social development, or social inadequacy, on the part of the offender. This view has led correctional personnel to seek to increase remorse or guilt feelings (as in penitentiaries), "realistic" appraisals of self, internal emotionality as a human quality, much repetition of lessons to be learned, thoughtful self-examination as well as accommodations which limit privacy and demand a kind of closeness to and mutual reliance on others, and enforced external discipline. The analysis of the dynamics of the STFB factors, however, suggested a view which was almost the obverse of the conventional views described above. This analysis suggested that offenders may actually experience these states in particularly poignant ways, such that they can or will no longer

tolerate them. If this view is valid, then treatment interventions might best be aimed at reducing the felt intensity of each of these states, the better to reduce the associated intolerances of them. Was it possible that many correctional programmes have tended to increase criminality by increasing the intolerance and rejection of the very things which the correctional programmes set out to enhance? Admittedly, the view slowly taking shape represented more than just a minor divergence from conventional justice system wisdom and practice. However, determined to be driven by what the data seemed to justify, it was decided to "go with" the conclusions which appeared to be demanded by findings with the STFB and its factors and to set out to reduce or decrease participants' distress associated with feelings of guilt, inferiority, "appropriate" distress, sensitivity, other-centred closeness and discipline. But how could these needs or feelings be reduced? Should the effort be made to counter-condition an increase in the opposite needs or feelings, such as those of innocence, success, insensitivity to distress, empathic sensitivity, psychological "distance" and lack of discipline? To do so would certainly upset the staff in most correctional treatment facilities. It might also prove to be tantamount to enhancing the very same defensive (intolerant) behaviour which had already been adopted by the offenders and which had led to their criminality. Alternatively, we wondered if it might be possible directly to reduce the offenders' sensitivity to guilt, inferiority, distress, sensitivity, closeness and discipline. Part of the difficulty involved in doing that, of course, would be that offenders do not acknowledge these attributes. Accordingly, six treatments programmes were designed to reduce each of the six types of feelings differentially, under the following cognitively dissonant titles:-

Factor 1 Treatment: Enjoying Guilt Factor 2 Treatment: Enjoying Failure  
Factor 3 Treatment: Enjoying Distress Factor 4 Treatment: Enjoying Sensitivity  
Factor 5 Treatment: Enjoying Conformity  
Factor 6 Treatment: Enjoying Restraint

## Chapter 7

Modifiability of the STFB and its Factors The foregoing sections present the design of the study and the questions being addressed in this chapter. That is, the understanding of the material presented in this chapter assumes the material presented in the last chapter. With that proviso, let's see how we attempted to do the treatments, and the results, if any, of the treatments tried. Design of the Treatments There were six STFB Factors to be treated, and each, in turn, was to be addressed in a single, four-hour, day-long, large-group (up to 74 inmate subjects) treatment-workshop setting. The titles of the treatment associated, with each factor's simple structure which was finally derived, have been listed previously. A brief synopsis of each treatment's content is presented below -- in which descriptions we are assuming fairly wide familiarity with available psychological treatment methods on the part of the reader.

Well, so much for a brief synopsis of the treatment programmes run to try to address the underlying nature of the six STFB factors. Of course, the synopses do not do justice to the detail of what was actually done with the inmates. But that is in the nature of synopses. So what happened? Differential Treatment Results All the inmates who received more than two hours (i.e., 3 or 4 hours) of a treatment were compared on their STFB scores with those who received no treatment (0 hours) in any of the STFB-related criminality treatment programmes -- although similar results were obtained when the number of hours (0 to 4) of attendance at each workshop was used as the independent variable. The idea was that, given the severely limited time of treatment for each factor's problems, it would be inappropriate to expect any results without exposure to at least a majority of that treatment. That is, attendance at 3 or 4 hours as compared to attendance for 0 hours at any given treatment (A to F) served as the independent variable in this study. The dependent measure used to record change was constructed as follows: (a) The STFB raw scores (all six factor scores) were converted to their standard or T-scores -- T is distributed with a mean of 50 and a standard deviation of 10, and conversion to T tends to normalize distributions slightly. (b) The T-scores for each of the STFB factor scales were then averaged (i.e., the mean score was computed) across any and all of each subject's pre-treatment STFB administrations, and for any and all of his post-treatment STFB administrations which he was available to take. This was done, in order to smooth out any score fluctuations from particular test administrations. where more than one STFB was done either before or after treatment -- although the same results were achieved without all this care, simply using the raw score differences from the single most proximal pre- and post-treatment tests. (c) Finally, the mean post-test T-score was subtracted from the mean pre-test T-score for each STFB factor scale for each inmate subject. The resulting mean T-score difference was used as the dependent measure to express any change in any inmate subject's performances on the STFB. The overall differences from pre- to post-treatment on all nine STFB scale scores were significant beyond the .01 level of confidence. Examination of the relation between change in STFB Total score as a function of total hours attended at criminality treatments found that change (decrease) in criminality is directly related to the total number of hours of treatment received, as shown in Table 29. From Table 29, it can be seen that improvement in the Total criminality score is directly related to the total number of criminality treatment workshop hours received. "t"-tests of difference between the means for each STFB factor's dependent measure of change were computed for those 18 to 44 subjects (the numbers varied due to attendances and opportunity to obtain retests) receiving three or four hours of each kind of treatment, and the 68 subjects who received none (zero) of the STFB-related treatments -- i.e., the control group plus those who were invited but could not attend any treatments. There were six different criminality treatments, each evaluated in this way on each for the six STFB factor scales, resulting in 36 t-tests to serve as the main results. By experimental hypothesis, six of these 36 t-tests

would be predicted to attain significance, and thirty of the 36 would not be predicted to achieve significance. In spite of the complexity of explanation required later (see below) to clarify this matter, the significance levels reported in these tables are based on two-tailed statistical tests. The results of these t-tests, expressed as the probabilities of t, are presented in Table 30. Table 30 displays the probabilities of t for the main 36 group comparisons. By the strictest application of expectations for differential treatment, only six of these group comparisons should reach significance -- Treatment A and Factor 1, Treatment B and Factor 2, Treatment C and Factor 3, Treatment D and Factor 4, Treatment E and Factor 5, and Treatment F and Factor 6, running down the diagonal from upper left to lower right (these probabilities are underlined for ease of recognition). Five of the six differential treatment expectations (hopes) were quite clearly met -- we will return to the other one later. By chance alone, at the 5% level of confidence, one or two of the remaining 30 t-tests might be expected to achieve significance (the significant ones are high-lighted for ease of recognition). Four of the thirty which, under the strictest differential treatment requirements, "should not" have achieved significance, did reach significance. Close examination of Table 30 might seem to contradict the above statements about the results. Different criteria seem to have been used in evaluating the results of the 6 "critical" and the 30 other statistical tests. And they were. In the conventions of science, when something is hypothesized to occur in a particular way, a one-tailed statistical test is used. That is, the expected direction of change has been stated, and it is that direction (or "tail") of change which is being evaluated in the experiment. When no hypothesis is made concerning change, no direction of change is expected, and so the statistical test used, called a two-tailed test, evaluates the amount of change in either direction. When, as in the probabilities displayed in Table 30, all the statistical tests are two-tailed tests, then the existence of a direction-of-change hypothesis determines the "level of significance" which is accepted as indicating the confidence with which the "null" hypothesis of "NO effects" is rejected. For the six primary effects studied, where direction of effects were expected (i.e., the effects on each STFB factor of the treatment designed to modify it specifically), as explained above, the results are considered to be statistically significant in a two-tailed test if the probability expressed in the table is better than .10 (i.e., .05 in a one-tailed test). For the 30 other effects studied, where direction of change was not intended or predicted (i.e., the effects on each STFB factor of the five other treatments not designed to address it), a two-tailed test is appropriate, and the results are considered to be statistically significant only if the probability expressed in the table is better (less) than .05 (i.e., .05 in a two-tailed test). This caution in interpreting the probabilities shown is seen to be appropriate when it is observed that three of the 30 "other" statistical tests (and none of the primary tests) were in "the wrong" direction -- that is, the scores changed (although non-significantly) in the counter-therapeutically direction, i.e.,

toward slightly higher scores. Discussion of the Results We are not aware of any previous demonstration of the degree of "surgical precision" achieved in the present study. All but one of the expected (really hoped for) group comparisons can be seen to have achieved statistical significance, and very few of the other group comparisons achieved significance. Indeed, the relative numbers of "hits" and "non-hits" are themselves statistically significant. Each treatment (with the exception of one, perhaps -- see below) significantly affected its target STFB factor score, and almost none of the treatments significantly affected any factor scores at which they were not targeted. But what of the one treatment which "should" have worked to change its factor score but apparently did not? Further analysis showed what had "gone wrong" in the case of Treatment E and its expected effects on STFB Factor 5. As can be seen from the following three tables, this "failure" of Treatment E to effect changes in its targeted STFB factor is more apparent than real. modify Factor 4, in spite of their apparent wide effects on the other STFB factor scores. The same appears from Table 37 to be true of the STFB Neutral scale score, which also displayed relatively poor retest reliabilities -- and presumably for the same reasons (see Construct Validation in Chapter 4). At the same time, all but one (this time, not including Factor 4) of the factors' treatments are seen significantly to modify the (a) STFB Total and (b) Socially Undesirable scores. These last two observations are interesting, each for its own reasons. First, if valid (remember the changes made in treating the data for Table 37), the significant effects on the STFB Total score would be encouraging, in that they would offer some hope that, if "criminality" as a whole (represented best by the Total score) can be modified, criminal conduct as determined at follow-up may well also be modified by the treatments. And second, also if valid, the effects on the STFB Socially Undesirable score of seeking to induce inmates to "enjoy" various attributes, against which they (apparently) defend themselves in their criminal attitudes and conduct, might (quite understandably) include a tendency to reduce their readiness to adopt a negative response set about themselves in responding to a questionnaire such as the STFB. Among other things, this observation holds out other hopes. For example, if maintenance of a life of crime is in any way related to self-attributions (self-definition) of a socially undesirable nature, the modification of such self-attributions might potentially also serve to reduce the risk of future criminal conduct. Or, if modification of negative self-attributions is possible in this simple way, does that at least hold out some hope for offenders' improved self-esteem? Table 37 offers some other (possible) information, this time about the effects of combining treatments into groups of three -- based on their focus on intolerances for "internal" versus "external" controls. First, it extends the diagonal of "expected" effects of treatments under the "differential treatment" hypothesis (or hope). Second, it shows that the single treatments (B, D and F) aimed at the intolerances for "external" controls, indeed affected their combined STFB score targets (factors 2+4+6). However, the single treatments (A, C and E) aimed at the intolerances for "internal" controls, did not do as good a job -- Treatment A (but not C or E)



affected the combined STFB scores (factors 1+3+5), but so (unintentionally) did treatments B, D and F. This is more than interesting to us, since we felt that, on the whole, we did a better job in our treatments aimed at the "internal" factors' scores than with the "external" factors' treatments. Apparently, we were wrong. An alternative explanation of these observations about the effects of the specific treatments on their associated combined STFB factor scores might be that the "internal" intolerances were harder to modify than the "external" intolerances. Table 37 seems to suggest that this last explanation may not be the right one. Four out of six of the single treatments, or six out of eight single and combined treatments, affected the combined "internal" control intolerance scores (STFB factors 1+3+5); whereas only three out of six of the single treatment, or four out of eight single and combine treatments, significantly affected the combined "external" control intolerance scores (STFB factors 2+4+6). However, it does appear that the treatments aimed at the "external" meta-factor seem to have been targeted better than those for the "internal" meta-factor. Finally, returning once more to the "differential treatment" intention (hope), Table 37 offers another indirect way of evaluating our success in achieving this outcome. It might be expected that increasing the amount of treatment ought to increase the amount of the effect on the separate STFB factor scores; surely the more treatment, the greater the change in the target scores! Combining the treatments in groups of three, and thus tripling the amount of treatment and, presumably, its effects on participants, (seen in the two right hand columns of Table 37), resulted in one-third (4) of the possible twelve single-factor scores exhibiting significant changes. However, considering the effects of single treatments on the same single-factor scores, we find that more than one-third (13) of the possible thirty-six single-factor scores changed significantly. Apparently, once "enough" treatment of a differential or targeted nature was done to modify the STFB scores (i.e., their factors) significantly, increasing the amount of treatment (even presumably generally relevant treatment -- the associated "meta" factors) did not increase the effect on each of the factors differentially. And incidently, combining the treatments also does not seem to have increased the impact of treatment on the STFB Total score. It appears that it is appropriate treatment rather than amount of treatment which is the essential variable in effecting change.