"PSYCHOSOCIAL CORRELATES OF JUVENILE DELINQUENCY".

Thesis submitted in partial fulfilment of the requirements for the degree of DOCTOR OF PHILOSOPHY

AT

The Department of Psychology

UNIVERSITY OF STIRLING

BY

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ABSTRACT

The present thesis is a detailed and in depth examination of the reasons of re-offending, perceived by young offenders in custody, drawn from the largest Young Offenders' Institution in Scotland. Mainly materialistic and affective reasons were provided, in line with previous research, yet the issue of drugs abuse emerged as salient. The thesis focused on the immediate and more proximally related factors of re-offending, predicting young offenders' decisions to re-offend in the future. One hundred and fifty two young offenders were randomly selected and participated in a structured interview. The interview assessed several background characteristics, their perceptions of the costs and benefits of their future offending, their perceived normative influences in their future offending and their perceptions of desisting from future offending by controlling several criminogenic factors in the future. In addition, the participants completed two self-reported measures: the Parental Bonding Instrument (PBI) and the Moral Disengagement Scale (MDS). Intentions of re-offending in the future were predicted by perceived control and attitudes towards future offending. Background factors, related and predictive of recidivism and chronic offending, failed to contribute to the prediction of variation of intentions, over and above the contribution of perceptions of control and attitudes of re-offending. The results suggest that attitudes towards offending and perceptions of control over offending provide a parsimonious framework of assessing and predicting young offenders' intentions of re-offending in the future. Moreover, the detailed examination of the control and behavioural beliefs underlying the two constructs, perceived control to desist from offending and attitudes towards offending, can guide to the specific needs that are perceived as criminogenic by the young offenders and potentially inform the content and the direction of any intervention programs within the correctional settings of young offenders aiming at reducing levels of recidivism. Two dimensions of child-rearing practices, parental care and protection, were examined in relation to normative data, background characteristics and cognitive representations of future offending, and it was found that the relation between perceptions of parenting and intentions of re-offending were mediated by attitudes towards offending in the future. In addition, the associations of moral disengagement, as a failure of self-regulation of morality, with past recidivism rates and age of initiation of offending were examined, and were found, contrary to expectations, mainly unrelated. However, the overall score of Moral Disengagement of the young offenders was significantly higher in comparison to normative data. The results suggest that Moral Disengagement could be a factor differentiating young people involved in criminal activity and processed by the legal system from young people who are not involved in criminal activity and/or are unaffected by official monitoring. Moral Disengagement, however, might not be related with frequency of offending within groups of young people in the correctional institutions. Moral disengagement was also found mainly unrelated with background characteristics of the young offenders, suggesting that self-regulation of morality is relatively independent from influences from the social environment. Finally, the relations of Moral Disengagement and cognitive representations of offending in the future were discussed in terms of self-regulation of hierarchically organised feedback loops.
I would like to express my gratitude to the State Scholarship Foundation in Greece for their continuing financial support of the Ph.D.

I am also sincerely thankful to Professor Kevin Power for being my supervisor, for providing me with efficient guidance and for his constructive challenges during my studies. His professionalism will be a bright model for the future.

I would also like to express my thanks to Dr Ranald MacDonald and Dr Vivien Swanson for their advice with the statistical analysis of the studies.

Many thanks to my wife Androniki Kavoura whose inherent optimism and creativity was so helpful in making the period of the Ph.D a memorable, interesting and exciting experience.

I would also like to thank my father Pavlos and my mother Niki for expecting this from me and for their support, and my brother Theodoros for being my brother, and to all of them I owe everything I am.

I would also like to express my gratitude to Angela Palaiologou, my mentor and enlighter, for insisting to start this journey. I would also like to thank her for reminding me that the Ph.D. is not the end but only the start.

Last but not least, I am indebted to Mr Mark Wilson for his help in Polmont and all the young people who participated in the research and were willing to share their experiences and thoughts with me. They made the data collection phase the most enjoyable part of the research.

This Ph.D. is wholeheartedly dedicated to my grandparents Stavros and Smaragda Alexopoulos and Theodoros and Alexandra Kiriakidis for sharing their endless wisdom with me.
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PART I

LITERATURE REVIEW
CHAPTER 1:

SOCIAL-COGNITIVE REPRESENTATIONS OF RE-OFFENDING: THE THEORY OF PLANNED BEHAVIOUR AS A FRAMEWORK FOR THE STUDY OF THE PROXIMAL COGNITIVE MOTIVATIONAL FACTORS OF RECIDIVISM
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OF RECIDIVISM

1.1 Definitions of Recidivism

Recidivism has been defined in a number of ways usually incorporating, as a core
notion, the re-offending of the subjects within a given time frame. Myner, Santman,
Cappelletty and Perlutter (1998) defined it as the number of convictions of 138
convicted juvenile males starting from their first conviction until they were eighteen
years old and under juvenile jurisdiction. Hanson et al (1984) defined recidivism as the
juveniles’ total number of arrests divided by their age to get an index of their recidivism
level. Ganzer and Sarason (1973), in a study comparing non-recidivists and recidivists,
defined the latter as those juveniles who have been held in juvenile rehabilitation
institutions and have re-offended during the 20 months after they have been released
from a centre. Knight and West (1975) in a similar study comparing juvenile
delinquents with those that continue their antisocial activities after entering adulthood,
defined continuous delinquents or recidivists as those individuals who, as adults, have
received at least one criminal conviction and/or admitted on a self report inventory
(West and Farrington, 1973) that they have been engaged in at least one offence.
Niarchos and Routh (1992) defined recidivism in terms of a return to court or detention
within 1 year of the data collection, and recidivism was based on arrests that were
referred to Juvenile Court excluding any arrests that were resolved, in any other way, by
local police stations.

1.1.2 Measurement of Recidivism

Recidivism has been assessed in a number of ways including parole failure, re-arrest,
re-conviction, re-custody and reconviction for serious offending (Thornton, 1985). The
indices of re-offending vary in the way they tap into the problem behaviour and this is
evident when comparing re-arrest, sensitive to the rate but not the seriousness of an
offence, and re-custody, which is more sensitive to seriousness than to rate. Deciding
which one to use leaves an aspect of recidivism untapped and any decision about the
definition of recidivism is to be based on what the research is about, mainly interested in
frequency or seriousness, and given that the two are negatively correlated it is expected
that an indicator will have sensitivity only to one or other (Thornton, 1985).
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The different ways of assessing recidivism imply certain methodological issues that need to be taken into consideration in both applying research in this area or evaluating existing literature. According to Thornton (1985) there may be sources of bias in the results obtained depending on the supervision that released inmates are subject to. The author continues that, results derived by different ways of assessing recidivism are not easily generalised as certain indices tap frequency or seriousness of re-offending often one at the expense of the other as is the case with re-conviction or re-custody which reflects a problem of sensitivity as well.

1.1.3 Definition of Juvenile Delinquency.

Rutter et al (1998) noted the difficulties of providing a precise definition of juvenile delinquents or young offenders to refer to young people who are offending. Rutter et al (1998) argued that in general juvenile delinquents, in terms of age, are defined in a way that “the lower limit is set by the age of criminal responsibility and the upper limit by the age when young people can be dealt with by courts for adult offenders”(ibid: 2). Rutter et al (1998) also noted that a precise definition of juvenile delinquents is further complicated by variations in these limits between different countries, over time and for different kinds of offences. Rutter et al (1998) reported that the age when a young person can be prosecuted by the criminal justice system varies considerably from the age of 7 (e.g. Ireland, U.S.A) to the age of 18 (e.g. Belgium, Peru, Syria) while in most European Countries the median age is 14-15 years. While similar variations exist in terms of the age when a young person can be dealt with by the adult criminal justice system, which is usually the age of 18, it is common for young people between the ages of 18-21 to be dealt with modified procedures in comparison to the adult criminal justice system. For these reasons Rutter et al (1998) proposed that a review of the literature about issues of young offenders should rather loosely and more realistically focus on those between the age of 10 and 20, while recognising the fact that development does not stop at the age of 20, rather it is extended up to the age of 25 and, usually, antisocial behaviour starts in childhood before the age of legal prosecution, and that research extending over this period of age might be informative in studying issues of juvenile delinquency in general.
1.1.4 Correlates of Recidivism in Juvenile and Young Offenders

A number of studies had been conducted in an attempt to specify certain correlates of continuous re-offenders mainly due to the fact that a large percentage of criminal activity among young offenders is attributable to a small number of individuals who continue their crimes (Wolfgang, Thornberry and Figlio, 1987; Tarling, 1993).

Hanson et al (1984), tried to investigate, among other things, the relationships of certain demographic, individual and family characteristics of 163 continuous juvenile males offenders, based on a retrospective analysis of the offenders' records and utilised an index of recidivism derived from the total number of arrests of each adolescent divided by his age. They revealed that socialised-aggressive behavior was the most potent predictor of repeated and serious offences, a behaviour that means a strong and loyal commitment to a gang or a delinquent peer group, followed by the age of first arrest, low intellectual ability and family disorganisation.

Ganzer and Sarason (1973), compared one hundred males and one hundred females retained in young offenders institutions, from 11 to 18 years old, from which half in each sample were identified as recidivists based on offending for 20 months after release defined as “… the return to a juvenile institution as either a parole violator or a recommitment, Superior Court conviction with resulting probationary placement, or conviction and incarceration in an adult correctional institution” (p. 1). Consistent with the results of Hanson et al (1984), age at first arrest was significantly related with recidivism for both males and females and from the diagnostic classifications only sociopathic personality discriminated between recidivists and non-recidivists males and females. Verbal intelligence did not differentiate between the two groups in both the male and female samples, which is inconsistent with the results of Hanson et al (1984).

Knight and West (1975), in a longitudinal survey of a representative sample of boys from a working-class neighbourhood report on 81 boys -the most delinquent fifth of the sample defined as such both by official convictions and self-report measures of delinquency. Recidivism was assessed as the occurrence of any conviction or self reported delinquent act since the boys were 17 years old until they were interviewed by the age of 18-19. They report that prior convictions of the boys predicted re-offending and in an attempt to control possible confounding relationships between this variable and other predictors, they matched the groups on the number of prior convictions and
resulted in 27 pairs. Recidivists attributed their offences to rational motives while non-recidivists to enjoyment, they had committed their offences alone, continued to be involved in the same peer group of their adolescence while non-recidivists said they had abandoned it. Significantly more continuing offenders had a family member with a criminal record and came from a deprived socio-economic background rather than temporary ones and all the above relationships remained significant after controlling for number of juvenile convictions. Another interesting finding reported by the authors is that although I.Q. scores and aggression proneness successfully discriminated between delinquents and no-delinquents in general, these two variables failed to discriminate between recidivists and non-recidivists.

Myner et al (1998), examined offenders who reached age 18 and remained in juvenile jurisdiction until then and defined recidivism as the number of their convictions since they committed their first offence until they reached their 18th birthday. The sample was composed of 138 male juvenile delinquents and data collection relied on the offenders' probation report and mental health file while two raters quantified the variables of interest from the information available in the case files of each participant. The results of this study has shown that the younger an adolescent engages in offending the more likely he is to continue offending and age at the first conviction was the most potent predictor of subsequent re-offending followed by alcohol abuse, status conviction, length of first incarceration, group home placement and birth order. In this study, socio-economic status was not related to recidivism, a variable that, in the general literature of delinquency and the most specific of recidivism, emerges as controversial not only because of its theoretical value of the general sociological perspective which regards socio-economic status as a key theoretical variable in the explanation and prediction of recidivism, but because it is inconsistently related with recidivism.

Niarchos and Routh (1992) in a study of 234 male juveniles, ranging in age between 8 and 18, with a mean age of 14.6, randomly selected from among those arrested and evaluated by the Juvenile Court Mental Health Clinic, attempted, in a longitudinal prospective study, to predict recidivism, defined as return to Juvenile Court within 1 year after the data collection, based on information about several legal, sociodemographic and psychological variables available from the juveniles' assessment reports of a child guidance facility. From a host of variables, recidivism rate could be
predicted by the number of prior arrests, level of academic achievement and recommendation for placement in residential care by a psychologist, with the number of prior arrests capturing most of the variance predicted. The amount of variance, however, that could be predicted by these three variables, was modest, as Niarchos and Routh (1992) noted and was about 25% of the total variation of recidivism, suggesting that several other factors, not measured in the study, could be operating, as well, in subsequent recidivism.

Niarchos and Routh (1992) also noted that, contrary to their expectations, age of onset of delinquent involvement, as measured by the age of the juveniles’ first arrest, did not predict future recidivism, although the age of onset of criminal activity has been found a significant and potent predictor of persistent offending in adolescent and adulthood (Andrews and Bonta, 1984). They, however, noted that the design of the study might not have allowed such a relationship to be revealed, as the time frame of recidivism was relatively short and recidivism was based on official information from the court records. According to Niarchos and Routh (1992), the combination of the short time frame, insufficient for many delinquent acts to be recorded and official records as the measurement of delinquency, which usually underestimate the frequency of criminal activity, might have restricted the range of involvement in offending, thus preventing a relationship between age of onset of delinquency and subsequent recidivism to be revealed.

Gendreau, Little and Goggin (1996), conducted a meta-analysis of studies between 1970 and 1994 with the focus on adult offender recidivism. Their review concentrated on studies employing a longitudinal design with a follow-up period of at least 6 months, with adult samples (18 years or older) and recidivism was operationalised as “arrest, conviction, incarceration, parole violation, or a combination thereof” (p. 579). It has to be noticed, however, that only published studies were included in the meta-analysis, a fact that does not address the file drawer phenomenon, that is, the inclusion of unpublished studies that do not report significant results and may change the image created by published studies only. In sum, 131 studies were used in the meta-analysis generating 1,141 effect sizes with the criterion variable of recidivism. The authors categorised the variables employed in the study into 18 categories i.e.: risk scales, static predictors such as age, criminal history, history of antisocial behaviour, family
criminality, family rearing practices, family structure, gender, intellectual functioning, race and socio-economic status and dynamic predictors such as antisocial personality, companions, criminogenic needs, interpersonal conflict, personal distress, social achievement and substance abuse. (p: 583).

The results from that analysis revealed that each predictor was a significant one of recidivism with risk scales being the most potent ones (.30) followed by delinquent companions (.21), antisocial personality (.18), criminogenic needs (.18) and adult criminal history (.17). Overall, comparing static with dynamic factors, a categorisation employed mainly by Andrews and Bonta (1984), in the prediction of recidivism they concluded that dynamic factors were better predictors of recidivism 54% of the time, a not very impressive finding yet statistically significant and one recognising the usefulness of employing the measurement of dynamic aspects of the individual offender in predicting his/her subsequent re-offending an aspect mainly neglected in the recidivism literature (Andrews and Bonta, 1984). Apart from the potential aforementioned usefulness of employing dynamic factors in the prediction of recidivism, the identification of certain correlates or predictors of continuing criminal offending, can possibly inform professionals working in penal settings, and, especially those responsible for the rehabilitation of the offender, that these aspects of the inmate are potentially amenable to intervention programmes which concentrate on the individual and try to provide him with means of better adjustment after release (Andrews, Zinger, Hoge, Bonta, Gendreau and Cullen, 1990). Socio-economic class, a controversial variable of delinquency in general, emerged as a predictor, yet only as a weak one, and the same outcome was obtained for intelligence and personal distress. The authors conclude that the results of the meta-analyses provide additional support for theories of differential association and social learning theories, which deal with criminogenic needs, and delinquent associates as key variables while theories of strain, anomie and subcultural ones received weaker support. The limited support obtained for social class as a predictor of delinquency leads the authors to estimate that social class theories will need to consider inclusion of variables related to the individual. This is an estimation in the same line of arguing of Binder (1988) who supports that the dominance of sociology on the explanation of juvenile delinquency witnessed in the 20th century, mainly due to the reluctance of the American cultural elite intellectuals to tolerate the notion of the individual responsibility for offending, especially for young
offenders, while blaming society as a whole for the phenomenon appeared more appealing, has started to be considerably challenged. However, this conclusion could be premature since socio-economic status is a variable that is rather skewed in prison populations, and it is possible to assume that socio-economic status can lose its predictive power in terms of predicting recidivism if it represents a constant variable. Howell (1992) argued that for relationships between variables to be revealed and for prediction to be achieved, there has to be a degree of variability in the variables of interest.

With regard to the recidivism of criminal and violent offending among mentally disordered offenders Bonta, Law and Hanson (1998) conducted a meta-analysis in order to investigate whether the predictors of recidivism for offenders with mental disorder differ from those predictors examined for non-disordered offenders. They included both published and unpublished manuscripts, from 1959 to 1995, in their study and only those that employed a longitudinal prospective design. Fifty-eight studies were included in the meta-analysis dealing with 74 predictor variables having been grouped by the authors in four main categories, i.e.: “personal demographics, criminal history, deviant lifestyle-history and clinical” (ibid: 125) and providing 548 correlations with the criterion variables. They assessed general recidivism as “any evidence of a new criminal offence (arrests, convictions), including a recommitment to a psychiatric hospital because of law-breaking behaviour” (ibid: 125-126) and violent recidivism as “criminal re-offending of a violent nature” (ibid: 126). General recidivism was predicted by age, gender and single marital status, as well as criminal history variables. Moderate, yet significant, results are reported based on poor living conditions, family dysfunction and drug abuse. Within the domain of clinical variables, only antisocial personality and recurrent psychiatric admissions were predictive of recidivism, a finding in line with that reported by Gendreau et al (1996). Socio-economic status, race, seriousness of the offence, education and employment problems failed to predict recidivism. This study showed that predictors of recidivism for non-disordered offenders are the same for offenders with mental health problems and that applied for general as well as violent recidivism. Socio-economic status did not predict recidivism and they argue that the results of the meta-analysis support a social psychological perspective of criminal activity based on the key notions “an established history of benefiting from criminal activity, a social environment that encourages and tolerates crime and criminals,
personal attitudes and values supporting criminal behaviour and a personality style that finds high-risk behaviour rewarding” (p. 138). Yet, they acknowledged the need for further work in examining the interrelationships and the degree of overlap between variables as well as the identification of possible main latent constructs connecting these elements together.

1.2 Definition of Chronic Offenders

Loeber, Farrington and Waschbusch (1998), noted that while obviously chronic offenders can be differentiated from non-chronic offenders in terms of frequency of offending, they nevertheless noted the difficulty of defining chronic offenders as there is not a widely acceptable consensus of the cut-off point that could differentiate the two groups. Operationalisation of chronic offenders varied in terms of number of offences committed, the data source employed in research, either officially recorded offences such as police arrests and/or court referrals or self-reported offences, with reliance on self-reported data producing higher numbers of chronic offenders in comparison to officially recorded offences, in terms of persistence of offending over time, and the time frame employed for re-offending (Loeber et al, 1998).

Hagell and Newburn (1996) noted the difficulties of studying the extreme end of juvenile delinquency and that much of that difficulty derived from the lack of a consensus of the definition of chronic offenders, resulting in a variability of operational definitions of chronic juvenile offenders thus making the comparability and integration of existing findings of different studies rather difficult. They reported that for the description and identification of those young re-offenders who are responsible for a disproportionate number of offences, several terms have been used as “frequent”, “chronic”, “serious” “persistent”. Hagell and Newburn (1996) also argued that frequency of offending does not necessarily mean seriousness, as many frequent offenders do not commit serious offences, rather, they limit their criminal activities in less serious forms of offending. Loeber et al (1998), however, argued that offence frequency, seriousness and variety used as criteria for classification of mainly juvenile offenders are often correlated and that homogeneous and exclusive categories of offenders are not easily identified and a considerable overlap is expected between serious, violent and chronic offenders. Loeber et al (1998) cited the results of the Pittsburgh Youth Study, based on police records and highlighted that “...about a third
(35.6%) of the chronic offenders (with three or more serious offences) were also violent offenders, but just under half (44.8%) of the violent offenders were also chronic offenders. Moreover, a third (35.1%) of the serious offenders were also chronic offenders” (ibid: 18). Similar results are reported by Snyder (1998) based on analyses of the court records of 151,209 young people, that is, about one third of chronic offenders were violent offenders, half of violent offenders were chronic offenders (defined as those juveniles with four or more juvenile court referrals). Loeber et al (1998), based on these results, which were derived from different sources of juvenile delinquent involvement, police and court records, concluded that there is considerable overlap between violent, serious and chronic offenders and these results overall are indicative of juvenile delinquency patterns of offending. Loeber et al (1998) however argued that for those young people who have not gone through their criminal careers, these patterns might not apply to younger populations of delinquents who are at the beginning or in the middle of their criminal career.

It could be noted that while it is not clear whether frequency of offending is related to seriousness it could be argued that the two aspects represent different dimensions of delinquent involvement and even if there is an overlap between the two, as Farrington (1994; 1996) has suggested, that frequent offenders are more likely to commit serious and violent offences simply because they commit more offences, it is still possible to measure and examine the two aspects of offending either separately or in combination, depending on the focus of interest, while keeping in mind that findings regarding frequency of offending are not readily applied to seriousness of offending and vice versa.

1.2.1 Proportion of Criminal Activity Attributed to Chronic Young Offenders

Tarling (1993) summarised results of frequency of offending from longitudinal cohort studies to examine the extent of chronic offenders and the percentage of total criminal activity attributable to them. Tarling (1993) argued that this kind of information could only be derived from longitudinal cohort studies and not cross-sectional ones as the total sample is at the same age and every individual at the same point of their criminal career. Tarling (1993) presented data from the Wolfgang et al (1972) cohort study of boys (cited in Tarling, 1993), followed-up at age 18, showing that 52% of the total arrests could be attributable to 6.3% of the boys with five or more
arrests who were identified as the chronic offenders of the sample. Tarling (1993) continued with the Home Office Research and Statistics Department cohort study of males born in 1953 and showed that 7% of the boys with 6 or more offences were responsible for 65% of the total number of convictions of the cohort. Similarly, Farrington and West (1993) reported that from the 411 boys participating in the Cambridge Study of Delinquent Development, 24 boys, that is 5.8% of the sample, accounted for 48.8% of the total number of convictions of the sample up to the age of 32. Tarling (1993) argued that chronic offenders should be better considered as a proportion of offenders rather than the general population, since while around one third of the males of the 1953 cohort were convicted at least once, the vast majority of two thirds were not, and if chronic offenders are seen as a proportion of offenders they represented around 18% of the offenders in comparison to 7% of the entire cohort.

Rutter, Giller and Hagell (1998), argued that while not many studies have examined specifically chronic offending there are several conclusions that can be inferred, with the first and obvious fact, from a statistical point of view, that a small proportion of delinquent youth account for a large proportion of criminal activity. According to Rutter et al (1998) this fact is not surprising and it well established as well as rather expected, if involvement in delinquent activities is normally distributed in a population.

This point was further advanced by Rutter et al (1998) in discussing recidivism crime and they noted that, as crime is actually distributed in a J-shaped way in the population, it is statistically obvious that a very small proportion of individuals engaging in higher rates of criminal activity, would account for most of the offences in the population. What is not well established according to Rutter et al (1998), is the exact percentage of criminal activity that can be attributed to chronic or persistent offenders and this mainly reflects the heterogeneity of the operational definitions of chronic offenders that have been employed in the literature.

1.2.2 Genetic Influences In Persistent Offending

Farrington (1995), in summarising key findings from the Cambridge Study of Delinquent Development, a prospective longitudinal study of delinquent development and antisocial behaviour in 411 high risk boys, noted that “less than 5% of the families accounted for half of all the convictions of all family members” (ibid: 939). Delinquent boys were more likely to have convicted parents and siblings in comparison to non-
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delinquents. Farrington (1995) also noted that family criminality, in terms of convicted parents and siblings, was an independent predictor of both juvenile delinquency and persistence of offending in adult life, up to the age of 32.

These findings, according to Rutter et al (1998), indicate that although modelling effects might be operating, it is also plausible to assume that part of the relationship of persistent criminal behaviour in juveniles and young offenders is likely to be the result of genetic influences transmitted from parents to their siblings. Rutter et al (1998) from a review of studies examining the effects of genetic influences on juvenile and adult delinquency concluded that “environmental factors are very important in relation to transient (but possibly severe and persistent for a while) antisocial behaviour that arises during the growing years, but play a much smaller role in relation to the persistence of such behaviour into adult life” (ibid: 131) suggesting that genetic effects in persistent offending are likely to operate in criminal behaviour that persists into adult life.

A similar conclusion was reached by Rutter et al (1990b) who reviewed a number of twin and adoptee studies examining the relation of genetic influences in adolescent and adult delinquency. Rutter et al (1990b) concluded that there is a significant genetic factor in adult delinquency, however, it appears to be greater for recidivist petty crime than for serious and violent offences. It has to be noted, however, that these results should be interpreted with some caution as both twin and adoptee studies are likely to underestimate the effects of parenting in the development of juvenile and adult delinquency as they are likely to sample a restricted range of family environments, as argued by Stoolmiller (1999), and is further expanded in section 2.4 of the present thesis.

Rutter et al (1990b), based on the evidence of twin and adoptee studies, concluded that any genetic influence on delinquency is evident mainly for criminal activities that persist into adult life and not for juvenile delinquency which usually does not persist into adult life, which means that for transient juvenile delinquency, environmental factors appear to be the main sources of influence.

1.2.3 Need for Early Identification of Chronic Young Offenders

A further point highlighted by Rutter et al (1998), is that in terms of policy decision making, the identification of a small number of young people responsible for many
offences early in their careers, would result in a considerable reduction of criminal activity if those individuals could be identified and be selectively incapacitated and/or be the focus of intervention. Rutter et al (1998) argued that the identification of such a group is much easier when followed up longitudinally for research purposes than the prediction, identification and selection of those individuals likely to be persistent offenders in their life by the justice system early in their careers, as "[r]elying simply on frequency of offending as a distinguishing feature means that, for any given moment during their adolescence, it will be very hard to tell which offenders will be recidivists over long periods of time and which will engage only in a short period of adolescence-limited repeated offending" (ibid: 122) and as persistence of offending does not necessarily mean seriousness of offending prolonged incarceration would not be easily justified.

1.2.4 Differences Between Chronic and Non-Chronic Juvenile Offenders

Farrington and West (1993), based on data from the Cambridge Study in Delinquent Development, a longitudinal study of 411 males, described the penal and criminal histories of 24 participants, who by the age of 32, had committed half of the offences of the whole sample as measured by official records. Those who by the age of 24 had been convicted for six or more offences, according to conviction records, had been identified as chronic offenders. These 23 chronic offenders represented 17.4% of the total sample yet they were responsible for 49.1% of the total number of officially recorded convictions and for about one third of self-reported offences, such as burglaries and motor vehicle thefts. In a later analysis Farrington and West (1993) identified, as chronic offenders, those males who by the age of 32 had committed nine or more offences. They were 24 participants who represented 5.8% of the sample and 15.7% of the offenders and similarly accounted for almost half of the recorded offences (48.8%). Farrington and West (1993) noted that while direct comparability of the chronic offenders derived from the Cambridge Study is not possible since at different phases of the study the definition of chronic offenders differed, 19 out of the 24 males identified as chronic offenders by the age of 32 were among those 23 that were identified as such by age of 24, suggesting a rather considerable overlap in the group of people identified as chronic offenders even though different definitions of persistent offending are employed.
Chronic offenders did not commit more serious offences in comparison to non-chronic convicted offenders, even though chronic offenders averaged 13.9 offences and non-chronic offenders 2.7%, the average age of commitment of offences did not differ between the two categories and the peak period of the frequency of offences for chronic offenders was between 14 and 20, a period similarly identified as reflecting a peak for the number of offenders overall. In addition chronic offenders were not specialised in any kind of offending they were quite versatile.

Knight and West (1975) explored the factors that could discriminate young offenders who continue to be delinquents and young offenders who stop their delinquent acts by entering adulthood. The data were derived from the Cambridge Study of Delinquent Development and focused on the 83 most delinquent boys of the general sample, according to both self-reported and official delinquency indices and constituted the fifth most delinquent boys of the sample. From those 83, one group of 33 boys was defined as temporary delinquents who “up to the time when they were interviewed at age 18-19 had acquired no criminal convictions since turning 17 and, ...denied that they had committed any such offence in the previous year” (ibid: 43) and a second group of 48 boys was defined as continuing delinquents if they as adults had been convicted or admitted committing an offence. Two of the 83 boys could not be interviewed. As expected the continuing delinquents had more convictions as juveniles in comparison to temporary delinquents, consistent with the view that past offending is predictive of subsequent offending. However, this factor could be spuriously related to the rest of the findings in the analysis so it was taken into account by matching temporary and continuing delinquents on number of previous convictions as juveniles, resulting in 27 matching pairs. Temporary delinquents said that they committed their offences because they were exciting, significantly more than continuing offenders, were less involved in delinquent groups in comparison to continuing delinquents, had less family members, on average, convicted before they were ten years old, and come from less deprived backgrounds, in terms of social handicaps in comparison to continuing delinquents.

Several psychological variables such as IQ and aggression, while predictive of delinquency, failed to further discriminate between temporary and continuing delinquents. Further temporary delinquents admitted that custodial experience in juvenile years had a deterrent effect on their subsequent behaviour, while continuing
delinquents said that custodial sentences did not influence their behaviour later, suggesting a differential effect of penal measures to different groups of juvenile delinquents. The picture emerging from research on persistent and less persistent young offenders suggests that, mainly, the variables that have been found predictive of delinquency in general can further differentiate groups of juvenile or young offenders in terms of persistence of offending, with the most persistent groups showing even more disability and disorganisation and the difference to be one of degree and/or accumulating effects of several risk factors in the more persistent groups. However at the same time other variables, generally predictive of delinquency, did not differentiate between persistent and transient juvenile or young offenders mainly due to the interrelations among the variables associated with juvenile delinquency where independent effects are more difficult to find.

Rutter et al (1998) in summarising the literature on persistent young offenders concluded that, broadly, they do not differ substantially from other offenders who commit offences at a lower rate, and that in general the same risk factors that differentiate offenders from non-offenders distinguish persistent offenders from non-chronic ones. Chronic offenders usually score higher on measures of adversity, suggesting that the difference between the two groups is one of degree of the same criminogenic factors, and there are no factors specifically related to chronic offending that are not associated with less frequent offending. Thus persistent offenders are just more deviant in terms of both social and individual characteristics in comparison to one time offenders.

1.2.5 Prospective Longitudinal Studies of High Risk Samples Predicting Chronic Juvenile and Adult Offending

Farrington and West (1993) further attempted to examine the predictive role of certain variables measured when the sample was between the age of 8 to 10, with the aim to predict chronic versus non-chronic offenders, offenders versus non-offenders and chronic offenders versus the rest of the sample, with the status of offenders or chronic offenders according to recorded offences. They reported that chronic offenders compared to the rest of the sample could have been predicted by earlier application of measurements of troublesomeness, having a delinquent sibling, daring and having a convicted parent. Chronic offenders compared to offenders could have been predicted
Chapter 1

by earlier measurements of troublesomeness, having a delinquent sibling, daring, low social class and coming from a Roman Catholic family. In general convicted offenders in comparison to non-offenders could have been predicted by early measurements of having a convicted parent, low junior school attainment, poor housing, separation from a parent, high dishonesty and coming from a Roman Catholic family, while social isolation in terms of having no or few friends and having a well-educated father, could be regarded as protective factors as they were inversely related to becoming a convicted offender.

Farrington and West (1993), however, noted that the construction of a prediction measure for chronic offenders based on these factors found uniquely related to chronic offending, would not be suggested as such a measure would capitalise on chance in predicting chronic offenders and would attenuate the degree of predictive efficiency. As a more realistic alternative, they proposed a combination of five basic characteristics measured at age 8 to 10 reflecting certain deprivation features such as “low family income, large family size, a convicted parent, low non-verbal IQ, and poor child-rearing behaviour” (ibid: 512) which are less likely to overestimate predictive efficiency. Sixty three participants in the sample could be identified as “vulnerable”, that is having three or more of these characteristics, and from these 63 “vulnerable” participants 14 became chronic offenders, (having been convicted 9 or more times according to official records), 32 became non-chronic offenders and 17 were never convicted, while from the 154 males without any of these adverse features at age 8 to 10 only 3 became chronic offenders, 34 were at some point convicted and the majority of 117 were never convicted.

Farrington and West (1993) thus argued that most of the chronic offenders, by the age of 32 in the Cambridge Study of Delinquent Development, could have been predicted on the basis of the knowledge of existence of these five simple predictor variables at the age of 8 to 10. They further attempted to investigate any factors with protective effects, that is, any factors in the background of the vulnerable boys who were not convicted in comparison to those boys that have been convicted, and they identified social isolation, having few or no friends and being shy or withdrawn at age 8 to be acting as a protective factor against conviction to those boys with general vulnerable backgrounds and they proposed that, as juvenile delinquency is often committed within
a group context, boys without a delinquent peer group were less likely to have many opportunities or peer pressure to engage in delinquent acts. In general however, by the age of 32, those males from vulnerable backgrounds yet socially isolated who have not been convicted were not leading successful lives, suggesting that social isolation might have been a protective factor in terms of delinquency in these males yet it was still related to general social dysfunction in adult life as those males were likely to be living in dirty home conditions, not having a family of their own, having never been married, were not home owners, lived alone, were in conflict with their parents, had large debts and had low status and low paid jobs.

1.2.6 Cross-Sectional Community Studies of Frequent Juvenile Re-Offenders

A different approach to the study of frequent juvenile offenders was followed by Hagell and Newburn (1996). They chose to study those young re-offenders who, in a year, have been arrested three or more times, aged between 10 and 16 years old. The selection of the base sample or of the population of interest was based on official records, specifically, police arrest records of two different geographical areas in England. The study was designed to explore certain issues regarding the social background and perceptions of a group of young re-offenders, and was different from previous studies on chronic and/or persistent young re-offenders as it did not rely solely on incarcerated populations. At the same time, it allowed for a significant number of potential interviewees to be included, in contrast with general population studies which generally rely on cohort or high risk populations, studies that generally identify a small number of persistent offenders, unless a very large number of youngsters is studied. However, while approximately 531 young people were identified as re-offenders and an attempt was made to interview almost half of them, due to difficulties of obtaining cooperation, either from the families of the children or the children themselves only 74, that is 29% of the target sample was interviewed, and while this was the best outcome that could have been achieved by the researchers, the results could not be readily generalised to the whole population of young re-offenders originally defined, as according to the authors, it was those children who could not be traced that led the most chaotic and disturbed lives and possibly experiencing more, and to a greater degree, adversities, thus it is possible to assume that the results overall might underestimate the presence of risk factors in the population of young re-offenders as a whole.
Hagell and Newburn (1996) further argued that although the base sample consisted of youngsters arrested three or more times in a year and covered a wide range of geographical locations, the reliance of the selection of the sample on official records does not permit any generalisations to youngsters who were offending yet, were not caught by the police, and that the base sample may represent those youngsters who are processed by the police, although not only because of their frequent offending but also because they were better known to the police and subjected to increased surveillance.

Hagell and Newburn (1996) compared the final interviewed sample (N=74) with the base sample (N=531) and the sample selected for interviews (N=251). They noted that the interviewed sample did not differ from the base sample in terms of sex ratios, age, and number of known and alleged offences, however, “comparisons of the interviewees with those selected for interview suggested that those successfully seen were from the less frequent end of the continuum” (ibid: 9).

Hagell and Newburn (1996) further reported that although the final sample seen consisted of relatively frequent offenders, as the base sample was selected in order to have at least three or more arrests in a year, from anecdotal information from social workers and families, they had the impression that those youngsters, who they could not interview, led the most chaotic lives, so that it was likely that the results derived from those who they managed to interview “to underrepresent the extent of such difficulties in children who offend this frequently” (ibid: 10).

The young re-offenders of the study reported quite satisfactory relationships with both their mothers and fathers, while the extent to which these accounts were affected by presentation bias from the subjects is not known, as Hagell and Newburn (1996) noted “they might be due, in part, to an understandable level of insecurity about “betraying” mothers to strangers” (p.11). In general, 7% had been in foster care, 36% in children’s home, 49% admitted having run away from home at least for a night, and often for longer. In terms of their peer groups, 49% of the young re-offenders in the study said that their peer group was larger in number than most of the people, 49% that it was the same age group as themselves while 45% that their peer group was generally older than themselves, they had frequent contact with them, 72% said that they saw them more often than six times per week, 63% said that their friends did not disapprove
of them, 82% admitted that they were getting into trouble with police with their friends while 40% said that their parents disapproved of their friends.

In terms of their daily activities almost two thirds had left school, with 76% reporting having been temporarily excluded from school and 51% permanently excluded. From those who had left school about a third were unemployed while 16% did not do anything. In addition half of the girls in the study were either parents or were currently pregnant, while three boys were either parents or their partners were expecting a baby, and in terms of rates of conception in girls the results, although clearly indicative, tend to underrepresent the rates as only information for babies was sought and not number of pregnancies.

Although experimentation with alcohol was no higher than in schoolchildren populations, the subjects reported heavier use, and similar results were obtained for drug abuse which was heavier and with more variety in comparison to the general population of similar age, and, in general more than half of the subjects have been referred for counseling and/or psychological help at some point in their lives.

The results of the study were suggestive of the extent and the nature of social disorganisation that young re-offenders had been experiencing in their lives. From comparisons with data of the general population of similar age, it appeared that both the number and the degree of the adversities experienced by the young re-offenders were considerable. In addition it was noted an absence of behavioural norms anticipated by the sample according to their age, especially in terms of daily activities. In addition the results, while based on those re-offenders who were identifiable in the community and are not readily generalised to the base sample initially identified, they are, however, suggestive of the extent of problems young re-offenders face in their lives. The results of the study are also intuitively highlighting the greater extent of them for the rest of the sample that was not identified as it is quite reasonable to assume that those not identified were leading even more chaotic lives. The results although of an exploratory nature, are unique in terms of the population that they could be applied to and are raising important issues that should be further examined, if more light is to be shed on young adolescent reoffenders.

Hagell and Newburn (1994) based on police records of arrests further examined the most persistent juvenile offenders of the selected base sample of all the juvenile
offenders arrested at least three times in one year. The main purpose was to compare and contrast three definitions of persistent offending and examine the degree to which those three definitions actually identify the same group of juvenile offenders. The operational definitions of persistent offending employed in this exercise were the following: the first was "[a]ll those children aged 10-16 who appear in, the top 10% of children arrested most frequently, and the top 10% of children with most 'alleged' offences, and the top 10% of children with most 'known' offences" in the time frame of one year, the second "all those children aged 10-16 who are known or alleged to have committed ten or more offences in a three month period" and the last one was "all children aged 12-14 who commit three or more imprisonable offences, one of which must have been committed whilst to a supervision order, and where the offender under consideration must be serious enough to warrant a secure training order" (ibid: 99).

Within the first definition, where the focus was on frequency of offending, in terms of number of arrests, alleged and known offences, when each one in turn was considered, even though highly related, different young re-offenders were identified, while 30 were labeled as persistent according to this definition. Similar results were obtained within the second definition employed. In any of the four quarters of the year, different individuals were identified as persistent offenders, and these results, according to Hagell and Newburn (1994), suggest that frequent offending is a rather transitory activity. Over the whole year 30 children were found offending at a rate of 10 or more offences in all four three-month periods. It appeared that at any point in time a definition of persistent offending might capture, quite precisely and consistently, the amount of criminal activity attributable to chronic offenders as well as the number of juvenile persistent offenders engaging in frequent criminal activities. Yet it is highly unlikely that the same group of individuals will be identified as persistent offenders within a different frame of time. Further comparison of the individuals identified as persistent offenders according to these first two definitions revealed that, while the number of children identified was essentially the same, only half of them appeared as persistent according to both definitions. This finding is highlighting the fact that different definitions of persistent offending give rather different results in terms of the juveniles identified as such. This pattern of results remained the same when all three definitions were compared, after adjusting for the specific age range employed in the third definition and the area from which the young re-offenders came from, where full
information on supervision orders was available. The degree of overlap was minimal, especially between definition three and definition one and two.

Hagell and Newburn (1994), based on the aforementioned results, noted that as any definition employed was very different, especially in terms of the time frame employed, the groups of individuals who were identified each time as persistent offenders were very different with little degree of overlap, suggesting that any definition of persistence for young offenders would be arbitrary, a finding with clear implication that any policy or action by the juvenile justice system in terms of dealing with persistent juvenile offenders should be considered with caution, before an identification of a coherent group of persistent juvenile offenders in need of special treatment can be reliably identified.

Hagell and Newburn (1994) noted that the groups of persistent offenders, whatever the definition employed, did not differ from the full group of children arrested three times or more in terms of gender, age and types of offences committed as the groups of persistent offenders committed the same types of crimes as the majority of the offenders, with the suggestion that persistence and seriousness of offending do not significantly overlap. Hagell and Newburn (1994) however, suggested that there might be other features in the backgrounds of the persistent offenders that could be different from the rest of the main sample since “the groups of children identified by each of the three definitions all had higher rates of contact with social services than the full sample of reoffenders, and were more likely to have come to the attention of social services via a supervision order or to have been accommodated compulsorily” (ibid: 120).

1.2.7 Factors Differentially Associated with Initiation, Escalation, Persistence and Desistance in Juvenile Offending

Loeber, Stouthamer-Loeber, van Kammen and Farrington (1991) argued that, in contrast to views arguing that there is nothing of significance in the concepts of age of onset and age of desistance, and that there is no reason to assume that the causes of criminal activity are different at different ages and developmental periods, the above assumptions do not account for the fact that most of the juveniles initiate delinquent acts when they are aged around 10 to 11, continue their criminal activities which peak overall at 17 years of age and then the majority stop their delinquent careers while a percentage shows a persistence of criminal activity that continues even around their
early thirties (Rutter et al, 1998; Farrington and West, 1993; Tarling, 1993; Henry, Moffitt, Robbins, Earls and Silva, 1993; Farrington, 1995). Loeber et al (1991) further attempted to examine longitudinally the different correlates of initiation, escalation and desistance of three samples of boys at grades one, four and seven, each sample at each grade consisting of the top 30% (N=250) of the most antisocial boys and an equal number of the remainder of the sample randomly selected.

Loeber et al (1991) noted that many correlates of initiation were the same with those of escalation and desistance and although one could argue that differentiations between the three processes should not be further examined, the authors nevertheless went on to closely examine the issue which was explored in three ways. The identification of variables related to one process but not the others, the examination of the strength of the association of the variables with all the three processes and examination of the way correlates of one process were related to correlates of the other processes.

Initiation of offending was related and predicted by physical aggression, oppositional behaviour, attention deficit/hyperactivity and other covert disruptive behaviours such as manipulation, family variables of coercive interactions between parents and their children and inadequate supervision, as well as internalising behaviours such as shyness and depression, across the three samples. All of them factors that have been found related and predictive of juvenile delinquency, yet, in this study their role in initiating offending behaviour by children and adolescents was highlighted. The results, according to Loeber et al (1991), are of particular importance both for preventive interventions of juvenile delinquency and, especially, for early onset delinquency which has been found related to chronic and serious offending later in life.

Escalation was found to be related with poor school functioning, physical aggression, covert disruption, favorable attitudes towards deviance and family functioning. It has to be noted that most of these variables were overlapping with the variables found associated with initiation and escalation and that the positive associations were most prominent for the middle sample and secondly to the oldest. Yet, they were not replicated for the younger sample, suggesting a lack of knowledge of the factors associated with escalation of offending in younger children.

Desistance from offending was related to low shyness, low disruptive behaviour, favorable attitudes to school and non-offending and strict discipline for more than one
of the samples. In addition, it was observed that several variables were associated with desistance in the different samples, with school adjustment and scholastic performance being related to the younger boys, and family environment and association with non-delinquent peers for the aged ten and older boys. Overall the results suggested, both a shift of the factors associated with desistance from offending in different age groups, as well as, the presence of the same factors related with desistance across different ages.

Further analysis by Loeber et al. (1991) examining whether initiation, escalation and desistance from offending represent different processes, revealed that most of the correlates of initiation were not associated with escalation and some of the correlates of escalation did not apply to initiation while the strength of the correlations were stronger for initiation than escalation of juvenile offending, and the results were interpreted as suggesting different and distinct variables responsible for initiation of offending in comparison to escalation of offending, with the implication that if prevention of juvenile offending is of interest rather different ways should be employed for addressing initial involvement in delinquency and further preventing escalation of juvenile offending. A rather different picture emerged for the correlates of initiation and desistance with a considerable overlap of the variables associated with both processes, thus suggesting that initiation and desistance from juvenile offending “appear to reflect positive and negative aspects of a similar process” (Loeber et al, 1991: 81).

1.3 Studies Assessing Juvenile Offenders’ Cognitive Representations of Delinquent Behaviour

Knight and West (1975) interviewed 83 boys, aged between 18-19, drawn from the Cambridge Study of Delinquent Development, who constituted the most delinquent fifth of the sample, assessed by both self-reported and official delinquency and asked them to explain why they committed their offences, both detected and undetected. Almost half of the reasons provided by the boys were classified as rational motives concerning, mainly, material gain from the offences, almost a third of the responses were because of the excitement of offending and the rest of the reasons provided concerned attribution of blame to external agents, circumstances and peer pressure. It was further found that temporary delinquents said they committed their offences out of excitement and enjoyment of offending significantly more than continuing offenders, a difference that remained significant even after controlling for the seriousness of the offences.
Knight and West (1975) further asked the temporary delinquents, those who did not have any official convictions since turning 17 and did not self-report any offences during the last year prior to interview, the reasons for their desistance from offending. The reasons the boys gave for giving up delinquent involvement were mainly, staying away from their former male friends, custodial sentence and loss of freedom, the disapproval of a girlfriend or a wife, getting a job and having joined the army. It is interesting to note that the boys who desisted from crime said that their custodial sentences, especially their last, one influenced them to stop offending, whereas almost all of the continuing delinquents said that their custodial sentences did not have any effect on their continuation of offending. The continuing delinquents said that it made them even more antisocial and in general they faced their custodial sentences in a relaxed way. It has to be noted that the results of the study are suggestive of potentially useful variables in the way juvenile offenders form their decisions both to engage in crime and to desist from crime, while however they might be influenced by rationalisations of the juveniles as they are retrospective and possibly affected by “halo” effects (Rutter et al, 1998).

Agnew (1990) argued that the examination of the reasons delinquents provide for their offences is important to illuminate the origins of specific delinquent events, as a different yet complementary line of examination of delinquent involvement in general. The study focused on a sample drawn from the general population and was relatively representative of the adolescent population of the United States. The adolescents were asked if they engaged in a number of offences and were then asked to respond to an open-ended question asking “[w]hat led you to do this” for each offence they said they had committed. The analysis of the adolescents’ explanations then focused on the most recent offence and on the first response they provided for each offence.

Agnew (1990) argued that the analysis focused only on the most recent offence as the respondent’s memory would be best for the most recent offence and because the distribution of the most recent offences was almost the same as the distribution of all the offences. The conclusions of the study would remain the same if an additional number of more recent offences was included in the analysis. In addition Agnew (1990) focused only on the first response the adolescents provided for their most recent offence. The vast majority (77%) of the respondents gave a first response and 7.7% a second and
2.8% a third response. Agnew (1990) focused only on the analysis of the first response for ease of presentation as second and third responses were rather idiosyncratic and uncommon and their analysis would be unlikely to alter the conclusions of the study.

For the validity of the responses to be examined the interviewers assessed whether the respondents seemed honest with respect to questions about delinquency. Those who were classified as "often insincere" were excluded for further analysis. In addition the interviewers were asked to assess whether the description of the offences was done in a "as a matter of fact" manner and they perceived 95% of the respondents describing their delinquency in this manner. Finally, many explanations which the adolescents provided were compatible with data derived from other sources, as the general causes of crime, especially in relation to violent offences. In general, as the seriousness of the offences increased attribution of the causes of the offence in external circumstances did not, as might have been expected, which suggested that the participants responded with honesty to the questions asked. Agnew (1990) however, noted that even that data provided only limited confidence on the validity of the adolescents' responses. The types of delinquent acts were factor-analysed with oblique rotation and three categorisations emerged: property, violence and drug offences. Overall it was found that different explanations were provided by the adolescents for involvement in each type of offence. Violent offences were mainly committed for retaliation and out of angry provocation, property offences for utilitarian needs and for pleasure and excitement, while drug offences out of peer pressure and pleasure. It has to be noted that peer pressure was a frequently mentioned explanation for the use of soft drugs but not for hard drugs, while curiosity and excitement was mentioned more frequently for hard drug use. Within the property offences, however, vandalism was committed mainly for retaliation and illegal entry mainly for the thrills of it. The exploration of differences of explanations for the commitment of delinquent acts according to age, sex, socio-economic status and frequency of offending did not reveal a consistent and general pattern of results, and were thus not reported. It has to be noted that the study relied on a general population sample, where adequate numbers of offenders and seriousness of offences are unlikely to be oversampled, which, while making the results of the study more representative, does not, nevertheless, allow for the examination of youngsters involved in serious offences and those who are persistent. In addition the participants of the study were asked to provide retrospective explanations for the offences they had committed, which
is likely to have influenced the reasons the participants provided by rationalisations of their past behaviour (Rutter et al, 1998).

Cimler and Beach (1981), proposed that a potentially fruitful way of examining juvenile delinquency was to view it as a result of a purposeful and rational decision determined by the expected outcomes of delinquency and subjective evaluation of these outcomes. They further argued that this perspective would lead to the identification of the factors involved in the decision to commit an offence and that these factors could then guide any attempts to modify them and the decision of committing the offence. They, however, noted that such a research strategy would be appropriate in identifying the factors involved in the decision to commit an offence, focus on the prediction of the decision, while it would not be appropriate for identifying and describing the cognitive processes involved that lead to the decision.

Cimler and Beach (1981) noted that ethical, practical and procedural problems usually prevent manipulation and observation of delinquent behaviour and a possible adequate criterion variable, measured as a surrogate of actual behaviour, is the respondents' behavioural intentions of committing an offence. They asked 45 male juvenile offenders, aged between 12 and 18 years, in community service, sentenced for relatively non-serious offences, either alone or in groups, to describe 19 possible outcomes of the commitment of an offence as either positive or negative and then to evaluate the magnitude of the perceived utility of each outcome. The juvenile offenders were then randomly allocated to three different groups presented with three different stories of a boy facing decisions about different kinds of theft and were asked to indicate whether the boy would commit the offence or not, and the answer to this question was treated as an index of behavioural intentions. After that, the adolescents were asked how probable it was that certain of the previous outcomes would occur, both, if the boy did commit and did not commit the crime. The results were combined in order to get expected utilities for both version of the story: the boy committed the crime and the boy did not. Overall, the results supported an expected-utility approach in the decision made by juvenile male offenders about behavioural intentions of committing theft related crimes. The higher the perceived value of the outcomes of offences and the more probable they are perceived, the higher the behavioural intention to commit the crime,
and the less valued the outcomes the more probable the occurrence of lowering the intentions to commit a crime.

The results suggest that approaching juvenile delinquency in general, and recidivism in particular, in terms of the more proximal factors related to the juvenile’s decisions to commit a crime by measuring the perceptions and evaluations of their offending behaviour, provides a fruitful and complementary way of studying delinquency in adolescent and young offenders. It has to be noted, however, that the study relied on a rather small sample of males, sentenced to community service for relatively minor offences, meaning that the results are not readily generalised to more serious offenders, and the data collection utilised both individual and group interviews, which might have differentially affected the participants’ responses. In addition, as Cimler and Beach (1981) noted, the outcomes of committing a crime used in the study were predetermined by the researchers and these outcomes might not be the ones most important to the individuals reaching a decision. As Jensen, Erickson and Gibbs (1978) noted, it is the perceived personal evaluations of risks and benefits that are likely to influence individuals’ decisions to commit a criminal act.

Farrington et al (1980) noted that research of cost and benefits perceptions of juvenile delinquents in terms of committing an antisocial act, has mainly focused on verbal statements about hypothetical situations, mainly due to ethical and practical issues arising from manipulating factors assumed to be affecting delinquent behaviour in controlled experimental situations. They also noted that, while such a design is more feasible, the conclusions and interpretations of these results would be of limited value, if verbal statements about committing an offence were not related to actual behaviour and found to be predictive of actual offending in real life situations.

For these reasons they conducted two studies with the main aim to explore the degree of associations between verbal statements of offending and actual offending behaviour. In the first study 25 young people aged between 16 and 18, selected at random in the street, were given the opportunity to steal coins from a bag, and were then asked whether they would have stolen a radio they wanted, if they had been in big department store, and the factors that might influence their decisions. The results of the first study indicated that there was no relationship between the verbal responses the youngsters gave and their actual stealing of coins in the van where they were interviewed, and that
stealing the radio in the hypothetical situation was significantly related with the perception of being caught by the police. The authors argued that the verbal reports of stealing were not related with the actual stealing behaviour in the case of the coins, when the youngsters had the opportunity to do so. They noted, however, that those who had stolen the coins might have responded to the hypothetical stealing situation in such a way in order to minimise the experimenters’ suspicions, those who were interviewed first might have informed the subsequent participants of the content of the interview, so early naive participants might have not stolen, if they, as well, were aware of the interview. Moreover, stealing coins of little value might not be perceived as stealing by some participants and more importantly, the two behaviours involved in the actual stealing situation and the store situation could not be regarded as equivalent. Farrington et al (1980) noted that it is possible that the determinants of stealing coins in a van and a radio from a store might be different and stealing might not be a unidimensional construct. In addition, the role of the perceptions of the seriousness of the offences could be different for the two behaviours and within individuals. Ajzen (1991, 1988) argued that if verbal reports were expected to correspond to and predict actual behaviour, then the measurement of verbal reports should correspond to the measurement of actual behaviour, that is in terms of action, context, target and time, conditions that were not met in the previous study, in order to expect high relations between verbal reports and actual behaviour.

A second study was performed by Farrington et al (1980) in order to resolve some of the problems of the first study. All the participants were unaware of the content and the context of the interview, the same kind of stealing in both behavioural and verbal studies was measured, all the participants were asked, whether they thought the behaviour was stealing and in order to avoid possible confounding effects of previous actual stealing in responses about hypothetical stealing situations, the participants were asked whether they would steal in a hypothetical situation, that was actually employed as a behavioural experiment earlier, with different participants, and how they estimated the costs and benefits involved. Ten participants were interviewed with approximate matching of gender and age as the participants of the behavioural experiments. Overall the participants said that the less the costs perceived the more likely they were to steal. In terms of the relation of behavioural and verbal measures of stealing there was little
association, and the authors suggested that “verbal estimates of likely stealing behaviour are not valid measures of actual behaviour” (Farrington et al., 1980: 46).

Farrington et al. (1980) however noted that the studies were to be considered as exploratory due to the small numbers of participants and to the fact that verbal statements and behavioural responses, from different populations, were actually compared. It is not surprising that no association was found between verbal statements about stealing from a group of people and actual behaviour of another group of people, even if the behaviour in both the hypothetical and real situations were the same. It is quite possible to assume that the lack of association reflected differences between the groups of people and that the group in the actual stealing situation held different beliefs in terms of stealing. It seems that more valid conclusions about the relation of verbal statements and actual offending could be drawn by a longitudinal within subjects design with the aim to predict actual behaviour from verbal statements of the same group of people, while at time 1 previous offending behaviour is measured and statistically controlled.

The relation of perceived risks of offending and delinquency was examined by Jensen, Erickson and Gibbs (1978), in a survey of six high schools, where 1,700 students, males and females, were administered a self-reported questionnaire assessing demographic characteristics, perceived risk of punishment for several offences and self-reported delinquency. Overall it was found that, perceptions of risk from offending, mainly in terms of getting caught and prosecuted, were related with self-reported delinquency, both for general and for 18 different kinds of offending. The higher the perceptions of certainty of sanctions following an offence, the lower the adolescents’ rate of offending. The findings, however, showed that the relation of perceived risks of offending and self-reported offending was not equally strong for all the offences. A dimension that was found to moderate the relation was the seriousness of the offence. More serious offences seemed more deterrent than less serious offences. However the relation between risk of sanctions and offending was holding regardless of the students perceptions of the normative disapproval of the offence, students’ attachment to parents, teachers or delinquent friends, age, gender, race and socio-economic status.

Jensen et al. (1978) noted that the process of the influence of these beliefs on actual offending was not examined and there is always the uncertainty of the temporal stability
of the relation between perceptions of sanctions following an offence and actual offending. Despite these cautious notes, however, they argued that the association was consistently replicated in two different time periods, across different ways of operationalisations of perceptions of risks of punishment, a range of offences and was found uninfluenced by several status and normative characteristics of the sample suggesting that, “it can be concluded with some confidence that there is a stable and persistent relation consistent with the deterrence doctrine” (ibid: 74).

In Scotland the perceptions of young offenders in relation to their offending behaviour has been examined by Loucks, Power, Swanson and Chambers (2000). Loucks, Power et al (2000) argued that social cognition models, such as the Theory of Planned Behaviour, provides a fruitful way of assessing the beliefs of young offenders about their offending behaviour. The study, however, employed direct measures of attitudes, normative influences and perceptions of control and assessed these beliefs with reference to the most common offence of the youngsters. The present study attempts to shift the focus of interest of the previous study and examine these issues in a more detailed manner. Thus the present study will assess attitudes, subjective norms and perceived control of future offending behaviour, will assess the specific beliefs underlying these constructs and operationalise the model by both direct and belief-based measures of the constructs. In addition such an approach will provide an opportunity to examine the extent that the constructs of the model mediate the effects of background variables to the young offenders’ intentions to re-offend in the future, and whether the model can be expanded by the inclusion of variables, e.g. personal norm and affective self-reactions, that have been found predictive of intentions in the literature in behavioural domains representing deviations from “correct”, or “moral” behaviour. At the same time, the salient beliefs of the youngsters about their future offending will be identified, their relation with their intentions to reoffend will be assessed, thus allowing interventions within the correctional settings to be informed about the needs and the criminogenic factors operating in the future, as perceived by the youngsters themselves.

1.3.1 Summary of Research and Purpose of the Study

The examination of chronic, persistent or frequent offending and recidivism in general relied on objective correlates and predictors mainly reflecting background features of participants which are rather static, in the sense that they are not readily
amenable, which are also relatively easily available from several sources of official files (Andrews and Bonta, 1984). A number of studies have been conducted with a main interest in the most potent correlates and predictors of recidivism. Gendreau et al (1996) noted that, mostly because practical reasons have triggered that research, where classification and prediction is of primary concern to the correctional and legal agencies, the main issue was for the people involved in the retainment and rehabilitation of the individual offender to be able to predict, as accurately as possible, who is at risk of subsequent re-offending. If the correctional services could attain that goal, it could have very important implications for their day-to-day practices. Decisions about parole, treatment and early release could be informed in a more precise way. Gendreau et al (1996) argued that, for this reason and because prediction can be achieved by taking into consideration variables both loosely connected and from diverse theoretical propositions, a coherent proposal for the probable antecedents of recidivism has not been explicitly articulated. At best, key variables from sociological propositions about delinquency have been researched and have been treated as predictor variables in the attempt to predict variations in re-offending behaviour. While these factors appear to predict recidivism in a degree, their own nature allows only limited implications for rehabilitation and mainly due to that, the examination of dynamic aspects of the individual has started (Andrews et al, 1990), which are dealt from a social psychological perspective.

Gendreau et al (1996) also argued that, this reliance on predicting recidivism from static features of the subjects was also based on the notion expressed by methodologists, that dynamic risk factors are rather unreliable indicators as they can fluctuate over time and their measurement relies on a degree of subjectivity. Thus psychological factors deemed relevant to recidivism rates have not attracted much attention, and, as a result, no theoretical propositions have been explicitly proposed to account for that phenomenon. What has not received much attention is the offenders’ own perceptions of their future offending behaviour, the reasons which they perceive will make them reoffend in the future, their evaluation of their future offending behaviour, their perceptions of the beliefs significant others hold regarding their future offending, to what extent they feel capable to desist from offending in the future, whether aversive feelings of regret and personal moral standards are related with and predict their intentions to reoffend. This line of research so far reflects the dominance of sociological
criminology in the study of juvenile delinquency, as well as the difficulties of accurate prediction of subsequent recidivism with the reliance on dynamic variables and personal cognitive representations of future offending (Binder, 1988; Genderau et al, 1996). However, the study of the offenders' beliefs about the reasons that could make them reoffend in the future seems worthwhile, as it would identify and make salient those motivational factors that the offenders themselves provide as potentially criminogenic in the future, with clear implications for potential intervention, either at the individual, or the contextual level, to reduce future offending rates. This information could be used as complementary to background features of recidivism and provide a better account of prediction of future re-offending by young offenders (Andrews et al, 1990).

Research addressing issues of juvenile delinquency in general and recidivism and chronic offending in particular has been reluctant to address issues of the reasons and the motives that might be related with juvenile delinquency (Rutter et al, 1997; Lynam, 1996; McCord, 1997). Farrington (1993) provided several reasons for that lack of research in the motivations of juvenile delinquents and noted several difficulties inherent in research of this type. One reason is that the search for internal motives, such as instincts can result in tautological accounts of juvenile delinquency and behaviour in general as any different kind of behaviour can be attributed to an instinct, thus theories relying on internal forces like needs and drives have little explanatory value (McCord, 1997). Farrington (1993) argued that another difficulty in the study of internal motives, threatening the validity of the results, is the reliance on introspection for data collection, with the objection being that people do not have access to complex mental processes and the results are likely to reflect a priori held "theories" rather than a reflection of the "true" mental processes (Nisbett and Wilson, 1977). In addition most of the studies examining the reasons for offending by juvenile offenders relied on retrospective accounts of past behaviour, which are likely to be influenced by, what Rutter et al (1998) called 'halo' effects, that is, a tendency of people to provide accounts of past behaviour that is in line with their present mental state, an effect that confounds any 'true' possible causes in the past with present subjective interpretations of the phenomenon of interest. This effect is most probable when the same agent is the source of information for any phenomenon that has been different in the past and has changed in the present.
However, Farrington (1993) argued that while the risk/protective factors approach in juvenile delinquency and chronic offending has provided us with a number of risk factors related to and predictive of juvenile delinquency, the exact ways that these factors are translated into actual antisocial behaviour is not known. There is a host of identified variables, mostly static factors, that in general account for a moderate degree of variation in the prediction of juvenile delinquency, yet the exact way these factors operate on the person so as their influence is translated into delinquent behaviour is not specified, there are no mechanisms or processes identified as mediating that influence, which means that apart from relative predictive information these mainly static factors could have for the study of juvenile delinquency the specific nature of these relationships has not been described, identified and tested. Similarly, Rutter (1994) argued that the identification of risk indicators in conflict disorder has provided a host of correlates and predictors of the disorder. However, these statistical associations are not informative of the risk mechanisms that underlie these associations. The exact way the effects of the risk indicators are mediated into conduct disorder is not specified, and, as a result, definite and exact conclusions cannot be drawn in terms of practice and policy making and about the processes of psychological development.

It has been proposed (Rutter et al, 1998; 1997; Rutter, 1994; Farrington, 1995, 1993) that the causes of antisocial and offending behaviour are not easily captured under one causing variable, rather many variables are responsible for the offending behaviour to take place in adolescence and young adulthood. A combination of different risk factors with either additive or/and interactional effects has been proposed (Farrington, 1995; Andrews and Bonta, 1984). Similarly, the conceptualisation of different causal chains operating at different points in the process have been proposed in an attempt to integrate empirical findings associated with antisocial behaviour. Rutter et al (1997) proposed a general broad model of motivational influences for antisocial behaviour in general. In articulating the model Rutter et al (1998, 1997), recognised the need for the more immediate antecedents of delinquency to be described, as they can be the outcome of the long-term processes operating in the development of antisocial behaviour. Among the factors specified are the assessment of costs and benefits for any delinquent act being committed. Rutter et al (1997) noted that the importance of the cost-benefit assessment is evident when the subjective evaluation of the individual is assessed and not the actual cost-benefits balance.
The issue of the immediate antecedents of any delinquent act to be committed and especially the assessment of cost and benefits of any delinquent act has not received much attention empirically. The Theory of Planned Behaviour (Ajzen, 1991; 1985) provides a model in which the issue of the most immediate and proximal cognitive antecedents of delinquent behaviour can be studied and organised around a specific framework that has been consistently predictive of a host of different kinds of behaviours and behavioural intentions (Ajzen, 1991). At the same time, it provides an opportunity to study the issue of young offenders’ delinquent behaviour in more depth, as it guides research into the identification of a set of salient beliefs the young offenders themselves identify as salient for the continuation of their offending behaviour. These beliefs are their subjective perceptions of their own offending and that aspect seems to be the crucial element of young offenders’ own evaluation of their delinquent acts, as Rutter et al (1997: 101) noted “that the actual cost-benefits are not what matters; rather, it is the person’s own assessment, however inaccurate and misguided, that will influence action.”

In addition Rutter et al (1997) argued that juvenile delinquency and antisocial behaviour was mainly examined in terms of individual differences between youngsters who have committed an offence and youngsters who did not. The examination of juvenile delinquency could be further examined in terms of individual differences among juvenile delinquents, the youngsters who have committed offences, and the question to be about the frequency of offending behaviour, in a different level of explanation.

The present thesis will focus on a group of incarcerated young offenders, since young offenders in custody, at any given point in time, are highly likely to reoffend (Rutter et al, 1998) and it will aim to examine the factors that will be associated with increased risk of re-offending, as evident from the young offenders’ intentions of re-offending in the future. At the same time it will assess and describe the perceived young offenders’ reasons of their future offending and will explore the relations of these beliefs with certain background characteristics that have been associated with recidivism and chronic offending in the literature. Previous studies that examined the reasons juvenile delinquents perceived as criminogenic, relied on retrospective accounts of the motives for past offending, relied on general population samples likely to under-represent groups
of juveniles engaged in frequent offending and used small samples of individuals not processed by the legal system for crimes. In addition, these issues have not been examined in detail, in the Scottish correctional institutions for young offenders. Finally, the examination of the subjective perceptions held by juveniles in terms of their offending behaviour has not been organised around a theoretical framework specifying the processes by which individual beliefs affect offending behaviour. The present study will partially employ the TPB (Ajzen, 1991, 1988, 1987, 1985) in an attempt to predict the young offenders intentions of re-offending in the future, as a parsimonious model that has been consistently found predictive of behavioural intentions and behaviours in diverse behavioural domains (Ajzen, 1991). The model and its basic assumptions are described in the next section.

1.3.2 The Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) (Ajzen, 1985) is an extension of the Theory of Reasoned Action (TRA) (Fishbein and Ajzen, 1975). The TRA (Fishbein and Ajzen, 1975; Fishbein, 1967) proposed, as a central concept for the prediction of behaviour in any defined social situation, the intention of performing that behaviour.

The original TRA (Ajzen and Fishbein, 1970) postulated that intentions are the most immediate antecedents of any behaviour that is under voluntary control and are assumed to capture the motivational influences on behaviour. Fishbein (1967) provided a new perspective in the conceptualisation and definition of attitude and he reported that the main conclusion for the definition of an attitude is that, an attitude is “a learned predisposition to respond to an object or class of objects in a consistently favourable or unfavourable way” (p. 477). This definition stressed the unidimensionality of the concept and Fishbein (1967) highlighted this unidimensionality as the main problem in the failure of accurate behavioural prediction as an overall attitude towards any object could be the same among individuals, while these individuals may not feel the same degree of favourableness or unfavourableness towards features of the object. Fishbein (1967) further argued that this qualitative differentiation cannot be captured by unidimensional measures of attitudes and this is a reason that attitudes measured in such a way do not predict behaviour. Fishbein (1967) argued that for the prediction of behaviour, it is not sufficient only to know the attitude of a person but his/her behavioural response must be known as well (e.g. intention), which are treated as
different entities, subject, both of them, to the rewards and punishments of the environment which may be differentially reinforced, so that people with the same learned attitude could have different behavioural responses as a result of differential reinforcement of the last. This point was received as stressing the multidimensional composition of the attitude as, if the conative component of attitude is different then the attitude is different as well.

Fishbein (1967) argues for a unidimensional concept of attitude, reflecting the "amount of affect for or against a psychological object" (Thurstone, 1931: 261 cited in Fishbein, 1967: 478) while beliefs and behavioural intentions are viewed as separate concepts related to attitudes as antecedents of attitudes and not as part of them. This distinction is based on the actual measurement of attitudes in the literature, which reflects the measurement of affect, and the inability of a single score to accurately reflect this proposed multidimensionality. In addition, in line with an expectancy-value position, Fishbein (1967) proposed that beliefs about a behaviour in terms of the value of the behaviour and the perceived probability that these outcomes are multiplied and transformed into an evaluative dimension of the behaviour, termed attitude towards the behaviour (Liska, 1984).

Intentions are in turn determined by attitudes towards the behaviour\(^1\), a personal factor, and a social factor, subjective norms, perceived social pressures from significant referents to perform the behaviour and the actors' motivation to comply with the referents\(^2\). Attitudes and subjective norms are in turn determined by the salient beliefs people hold about the behaviour.

Attitudes are formulated by beliefs about the outcomes of performing any behaviour and the perceived importance of that outcome for the actor. So, attitudes towards any behaviour are a function of the strength that a behaviour will result in an outcome and the evaluation of that outcome. In a similar manner, subjective norms depend on views

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\(^1\) Fishbein and Ajzen (1975) argued that the general inconsistency reported in the literature for the low correlations between attitudes as behavioural dispositions and behaviour, was partly due to the fact that several researchers tried to predict behaviours from attitudes towards objects of the behaviour and not towards the behaviour per se. The authors proposed that the measurement of the attitude towards the behaviour will be a better predictor of the behaviour.

\(^2\) Trafimow and Fishbein (1995) challenged the distinction between behavioural and normative beliefs, as both beliefs refer to perceived consequences. This view, however, was not empirically supported.
important others, in people's lives have, and their motivation to comply with them. The TPB (Figure 1) extends the TRA by including a third determinant of intentions and behaviour, perceived behavioural control (PBC), which is assumed to reflect past experience with the performance of the behaviour and anticipated obstacles that could inhibit behaviour. Ajzen (1985) argued that any behaviour is rarely under complete volitional control and identifies, in relation to the individual, many external and internal factors that can potentially inhibit the intended execution of any behaviour. He continued that the predictive role of PBC would depend on the degree to which the behaviour is under volitional control and the potential role of external and internal factors to interfere with the behaviour. The greater the behaviour depends on these factors being enacted the greater the predictive and explanatory role of the PBC. Ajzen (1985) postulated that PBC would determine behaviour both directly and indirectly. Directly through its influence to account for variations in behaviour by taking into account possible obstacles which must be overcome for the successful performance of the behaviour. Indirectly by its influence to intentions, as any person intending to perform a behaviour takes into account the possible obstacles and whether he/she is able to effectively deal with them. Beliefs are supposed to be the single most important structural units of attitudes, norms and PBC. The contribution of each of these factors to the prediction of behavioural intentions is relative and it depends on the behaviour under consideration or/and the person. It is possible that in certain instances either one, or a combination of these determinants will influence intentions. The degree of influence of each one of them in the prediction of intention is provided by empirically obtained standardised regression coefficients (Ajzen and Fishbein, 1973).

The TPB is a dispositional approach to cognitive self-regulation and provides a conceptual and methodological advance in the prediction of behaviour and the attitudes behaviour consistency (Liska, 1984). According to Ajzen (1991, 1988), the TPB, which deals with the information processing of the individual whose behaviour is guided by rational decisions, provides a parsimonious way of predicting intentions, which are regarded as the immediate antecedent of behaviour, by selecting attitudes, subjective norms and, recently, PBC as the mediators between several biological and environmental factors and intentions of executing the behaviour. Any other variable could have an indirect effect on intentions only by influencing attitudes, subjective norms or PBC.

- Educational Attainment
- Employment History
- Family Background
- Delinquent Peers
- Substance Abuse
- Mental Health
- Past Recidivism
- Age of Initiation of Offending

Attitudes towards Offending in Future

Subjective Norms of Offending in the Future

Perceived Control of Desisting from Offending in the Future

Intentions to Re-Offend in the Future
Early conceptualisations and operationalisations of broad behavioural dispositions, such as traits and attitudes, failed to accurately predict behaviour (Fishbein and Ajzen, 1975). In contrast to these early concepts the TRA and the TPB identify salient beliefs that operate as a function for the formation of attitudes, perceived norms and behavioural control. This feature indicates a degree of specificity for the behaviour of interest, with reference to which, the beliefs determining the constructs of the theory are operationalised. Another methodological advance is the specification of the behaviour to be predicted in terms of target, time, context and action and the corresponding operationalisation of the relevant constructs in this fashion, so that a specific and detailed matching is attained. Ajzen and Fishbein (1980) argued that not all behaviours to be predicted from the constructs of the theory should be specifically defined in terms of target, time, context and action, rather, the operationalisation of both the constructs of the theory and the behaviour of interest should correspond, either in specificity or generality. The TPB provides a parsimonious framework for identifying the immediate antecedents of any behaviour with many practical advantages in terms of prediction and potential intervention. In addition, it allows for detailed and in-depth analysis of the specific beliefs that are influencing intentions and behaviour. Given that any of the determinants of intentions are found related with behavioural intentions, the beliefs underlying the related global factors can be analysed for a more detailed analysis of the beliefs underlying them so that a greater insight is gained regarding the possible determinants of behaviour at a more basic level. Any distal factors related to the behaviour of interest are supposed to have an indirect effect on the behaviour by formulating the attitudes, the perceived social norms and the PBC individuals have towards the behaviour or their weights (Ajzen, 1991).

The predictive efficiency of both the TRA and the TPB across numerous behavioural domains is evident from many meta-analytic studies (Godin and Kok, 1996; Randall and Wolff, 1994; Sheppard, Hartwick and Warshaw, 1988). Despite the successful performance of the theory in predicting and explaining behavioural intentions and accounting for a considerable amount of the variance in actual behaviour, there are certain issues of the theory that have been subject to criticism.

Franzoi (2000) and Eagly and Chaiken (1998, 1993) pointed to the fact that the models do not account for actions performed spontaneously and suddenly and they
cannot explain behaviours that are of a habitual nature, that is, mainly daily performed behaviors that used to be under conscious control, but which through repetition have became more "automatic" and are less governed by rational planning (Wegner and Bargh, 1998).

Eagly and Chaiken (1993), argued that the TPB was unlikely to be perceived as a "complete description of the causes of behaviour" (p. 173) as it does not deal with more general characteristics that have been found related with a particular behaviour to which the theory is applied to predict. With regard to any behavioural domain to which the theory is applied, every other variable that has been found associated with the specific behaviour is treated as an external to the model variable. That is, these variables can exert an influence on the behaviour under study, only through their influence on the constructs of the theory or the weights of the constructs in predicting intentions and behaviour. Eagly and Chaiken (1993), noted that the theory does not propose any theoretical specifications of those variables and it does not identify the ways that these variables, that are regarded as external to the model, influence the beliefs underlying the constructs of the theory. It can be argued that the TPB identifies the most proximal cognitive antecedents of behaviour. A similar conclusion was reached by Petraitis, Flay and Miller (1995), who reviewed the literature of the theories of adolescent substance abuse. They argued that the TRA and the TPB, by assessing behaviour specific beliefs, are able to identify very potent predictors of adolescent substance abuse. However, they do not explain the long-term causes of the behaviour, they "focus on the effects of substance-specific cognitions but not on their causes" (ibid: 70). The authors concluded that those two theories have been developed as general models of behaviour that concentrate on the immediate causes of behaviour and while identifying those constructs which proximally influence behaviour, they provide a fruitful way of integrating the more distal variables specifically related to any behavioural domain of interest emphasised by other theories.

Eagly and Chaiken (1993), also questioned the proposition of the theories that people actually engage in such a complex scrutiny and evaluation of their beliefs each time they are about to behave in any way. They however concluded that this could not really be the case; it is plausible to assume that the beliefs people hold determine their attitude, subjective norm and PBC. Once those determinants are formed, when faced with a
behavioural decision, people retrieve only those determinants, either attitude, subjective norm, behavioural control, intention or a combination of them, that will guide their behaviour. However, Eagly and Chaiken (1993) noted that within the theoretical propositions of the theories it is not clear which processes are activated prior to behaviour.

Eagly and Chaiken (1998), further proposed that the TPB does not account for those kinds of behaviours that are not volitional, are influenced by well-learned tendencies to respond in a certain way, that is “the cognitive processing that controls such responding can be termed automatic and thus is quickly and easily performed, often in parallel with other activities” (ibid: 299), behaviours that are habitual, and do not require extensive cognitive effort to be performed. Verplanken, Aarts, van Knippenberg and Moonen (1998), directly tested the idea that habit strength would be an independent predictor of behaviour in addition to the predictors of the TPB, in a field study of travel mode choice, based on the idea that “when behaviour is repeatedly and satisfactorily executed and becomes habitual, however, it may lose its reasoned character” (ibid: 113), an assumption that is central to the TPB, that is, behaviour is guided by rational causes. Habit emerged as the most potent predictor of travel mode choice, in addition to intention and behavioural control. Moreover there was a significant interaction of habit and intention, suggesting that intention predicted behaviour at low levels of habit strength. Aarts, Verplanken and van Knippenberg (1998), argued that repetitive habitual behaviours performed under similar conditions, may set a boundary condition for the application of the TPB, in predicting and explaining them, as they are becoming less and less under the influence of conscious intent, mainly influenced by mental shortcuts requiring limited cognitive effort, although they argued that more research is needed for the identification of the cognitive processes underlying habitual behaviour.

Eagly and Chaiken (1998, 1993), summarised in more detail the role of past behaviour or habit in the prediction of subsequent behaviour. They reviewed studies that tested the influence of habit independently of intentions and the other constructs of the models and they found that the inclusion of such a measure increased the prediction of latter behaviour independently of intentions, and they noted that “The addition of past behaviour to the model is eminently sensible from behaviourist perspectives which postulate that behaviour is influenced by habit, or more generally, by various types of
conditioned releasers or learned predispositions to respond that are not readily encompassed by the concepts of attitude and intention” (ibid: 179).

Ajzen (1991), however questioned the role of past behaviour as an independent predictor of behaviour. First he argued that past behaviour does not have any explanatory value on its own and that the role of habit can not readily be established by operationalisations of past behaviour. Past behaviour is treated by the TPB as a ceiling of its predictive accuracy, reflecting the influence of other variables that may not be included in the model (e.g. personal norm, affective self-reactions) which may be operating at time 1 when past behaviour is measured and at time 2 when latter behaviour is measured.

Ajzen (1991) argued that measures of past and future behaviour are likely to share common error variance that is not shared by the other variables of the model and this is rather likely when past and future behaviour are observed while the other variables are measured by verbal statements in a self-report questionnaire. In addition Ajzen (1991) argued that even when behaviour is elicited by self-report this is done in a format that differs considerably from the rest of the items in a questionnaire. Ajzen (1991) further argued that because of this methodological artifact “[w]e would thus often expect a small, but possibly significant, residual effect of past behaviour even when the theoretical model is in fact sufficient to predict future behavior” (ibid: 202).

However, the inclusion of habit as a determinant of behaviour has been included in Triandis’ (1977) model of attitude-behaviour relationship and has been empirically examined by Bentler and Speckart (1979) where direct influences on later behaviour have been found, a finding further supported by a meta-analytic review of studies assessing such an effect by Quellette and Wood (1998). The findings overall suggest that, while issues of conceptual differentiation of habit from past behaviour and subsequent operationalisation of the construct remain unsettled, it could provide a fruitful way of either testing the sufficiency of the TPB and the need for other variables to be included in the model to enhance its predictive utility or as an alternative explanation of behaviour based on the salience of learned predispositions to behave in a particular way, independently of cognitive representations. However, which role habit will have in the prediction and explanation of behaviour and under which behavioural domains its role might be salient or not remains to be further examined.
Franzoi (2000), argued that a fundamental assumption of the TPB is that individuals' behaviours are guided by rational decisions which, at the most basic level of the determinants of the theory, are captured by their beliefs towards any behaviour (Fishbein and Ajzen, 1975), which are regarded as the single structural units of the theory laying at its foundations. By taking this perspective (Ajzen and Fishbein, 1980; Ajzen and Fishbein, 1977) of the inherent rationality of human behaviour, their models do not account for the possibility that certain behaviours can be influenced by irrational causes, that are not processed by cognitive informational processing. Fazio and Roskos-Ewoldsen (1994) argued that when people are motivated enough and they have the opportunity to engage in extensive cognitive reasoning, the process described by the TPB could be sufficient to account for the antecedents of behaviour. However, when these two requirements are lacking at any given time they proposed that human behaviour would be influenced directly by attitudes towards the object, leading to an evaluative definition of the event as bad or good. Definition of the event depends on the perceptions of the object and the definition of the situation, that is, behaviours that are deemed as appropriate in the particular situation. They further continued that if attitudes towards the objects are to exert any influence on behaviour, the attitude should be readily accessible from memory, and by that mode of operating attitudes towards objects seem to have a clear functional significance for human behaviour by providing people with a simple, efficient, non-time-consuming and energy demanding way to deal effectively with every day life behavioural decisions. It could be argued that no single model can effectively deal with the complexity of human behaviour and juvenile offending in particular, and while the TPB cannot be regarded as dealing with the sum of psychological processes that guide human behaviour, it was thought that it provides a fruitful theoretical framework for organising the study of the young offenders' beliefs and evaluations of their future offending behaviour, and it was, thus, employed as a way to guide the identification, assessment and description of the young offenders' cognitive representations of their future offending behaviour.

Fishbein and Ajzen (1975) and Ajzen and Fishbein (1973) proposed that the relative contribution of attitudes and subjective norms to the prediction of intentions are mainly an empirical issue that needs to be established for any behavioural domain the model is applied as "[t]hese empirical weights are expected to vary with the kind of behaviour that is predicted, with the conditions under which the behaviour is to be performed, and
with the person who is to perform the behaviour” (Ajzen and Fishbein, 1973: 44). This assumption was challenged by Liska (1984) who argued that this assumption is a conceptual problem and not an empirical one, and that if the weights of the model are expected to vary according to the conditions specified above, then the model becomes increasingly idiosyncratic with limited theoretical specification of the models’ variables and constants. This point was also advanced by Bagozzi (1992), who argued that both the TRA and the TPB, do not specify the conditions under which the components of the theories apply or not, as they are thought to function in all contexts. While this seems a justified criticism, it can be argued that for purposes of prediction and practical application, in the sense of informing the content of various intervention programmes for any kind of behaviour, the models, which are parsimonious, can be very useful and informative, especially when the underlying beliefs of the constructs of the theory, which lay at the roots of behaviour, are assessed in detail.

1.3.3 Intentions - Behaviour Relationship

Ajzen (1985) warns that the relationship of intentions and behaviour, with clear implications about the explanatory, predictive and practical utility of the model in several behavioural domains, is subject to boundary conditions. Given that the two constructs are measured in the same degree of specificity in terms of time, target, context and actions, the “measure of intention available to the investigator must reflect respondents’ intentions as they exist just prior to performance of the behaviour; and second the behaviour must be under volitional control” (ibid: 18). The latter boundary condition was dealt with by the inclusion of PBC within the TRA (Fishbein and Ajzen, 1975), by Ajzen (1985; Ajzen and Madden, 1986) with exactly this goal, to expand the model in such a way that with less costs in terms of parsimony to achieve a better fitness of the data to theoretical propositions and the model to be able to account for the whole range of behaviours in terms of control, thus enchanting its range of application.

The first boundary condition refers to the time interval between the measurement of control and actual behaviour, (self-report or observational). Although, as Ajzen (1985) noted, the theoretical implications of the model are not challenged, when intentions at time 1 fail to predict behaviour in time 2, as the current intentions are still predictive of behaviour, this technical issue, potentially resulting in low predictive accuracy, has clear implications for the practical utility and applicability of the model. Ajzen (1985)
identified several factors affecting the stability of intentions over time. At the time of the measurement of the intentions a number of beliefs could be salient for the individual, yet before the performance of the behaviour other beliefs could be salient, thus reversing the proximal to the behaviour intentions. Alternatively, as the time of the execution of the behaviour approaches, habitual behavioural patterns may be more salient in comparison to stated intentions. Moreover, as the time passes from the intentions to behaviour, unanticipated and unforeseeable events may change the intentions. New information could potentially lead someone to change his/her intentions and revise his/her plan based on the new information available. Additionally, the intention behaviour relationship depends on the confidence with which the intention is held, leading to greater commitment in executing the intention. Lastly, Ajzen (1985), identified self-monitoring, as a potentially moderating variable of the intention-behaviour relationship. He proposed that high self-monitoring individuals, more influenced by external factors, would be affected by new information and be prone to change their intentions, in comparison to low self-monitoring individuals who are less sensitive to external cues, being more stable over time, thus expressing stronger intention-behaviour stability.

Ajzen (1985) further argued that the intention-behaviour relationship was subject to many factors, thus, at first glance, potentially undermining the practical utility of the model in many behavioural domains, unless short-term prediction is of interest. Nevertheless, he proposed that the predictive accuracy of the model could be valid for long term prediction as well, provided the prediction is at the aggregate level and not at the individual one, as the aggregate intentions are more likely to be more stable over time than the individual intentions. Ajzen (1985) cited a study on family planning by Bumpass and Westoff (1969). The time interval between the intentions and the behaviour ranged from six to ten years (the end of their reproductive periods). Ajzen (1985), noted that although 41% of the initial sample asked had the number of children they intended in their completed family, on average the intended family size was equal to the actual family size achieved. The study suggested that when prediction at the aggregate level is of interest, intentions could provide a good predictor of actual behaviour, even for a long time interval, between intention and behaviour.
Steel and Ovalle (1984), in a quantitative meta-analytic review of 34 studies, examined the relative stability of intentions and employee turnover. It has to be noted that not all the studies included in the meta-analysis applied the TRA, rather several models, including the TRA, proposing intentions as the immediate antecedent were analysed. This could have an effect on the relationships examined as, Ajzen and Fishbein (1980), clearly specify the methodological operationalisation of the constructs, including the necessity for the measurement of intentions and behaviour at the same level of specificity. The results, however, supported the relationship between intentions and behaviour, as an average correlation of .50 between them was found. This correlation is very much comparable with the one obtained from the meta-analysis of Sheppard, Hartwick and Warshaw (1988) from a meta-analysis of studies applying the TRA in different behavioural domains, thus enhancing the confidence in the predictive utility of intentions for behaviour, and consequently, although indirectly, in the TPB. An interesting finding of the meta-analysis was the moderating influence of time interval between measurement of intentions and behaviour in the strength of their relationship. This finding is in accord with Ajzen (1985) who argued that a decline in the relationship between intention and behaviour could be expected, depending on the time interval between the measurement of the two variables.

Randall and Wolff (1994), explored the matter further. They conducted a meta-analytic review of 98 prospective studies applying the TPB, presenting data for the relationship of intention and behaviour, in order to examine the relationship between time and strength of the intention-behaviour relationship. The average correlation between intention and behaviour was .45, providing support for the Ajzen's (1985) claim, that at the aggregate level intentions can be a reliable predictor of behaviour, and, although smaller, the correlation is comparable with the results of Steel and Ovalle (1984) and Sheppard, Hartwick and Warshaw (1988). The variability, however, of the correlations reported in the studies was rather large, indicating potential moderating effects of other factors. Time, either as a categorical or continuous variable, did not significantly correlate with the strength of the intention-behaviour relationship, a finding that is not in accord with Steel and Ovalle (1984), who argued that, the strength of the relationship between intention and behaviour was a function of the time interval between the measurement of intentions and behaviour. According to the authors, this was not expected and is contrary to the expectations of Ajzen (1985) that a decline of
the relationship between intention and behaviour should be expected. The results suggest that the relationship between intention and behaviour is not a function of the time interval intervening between the measurement of the two variables, thus providing support for the model’s predictive accuracy and utility for long term prediction.

Similarly the operationalisation of intention as behavioural expectation or behavioural intention did not significantly moderate the relationship between time and intention-behaviour.

Marginal significant support was obtained for the role of self-report in comparison to objective measures of behaviour as a moderator of the time and intention - behaviour relationship. It seemed that when self-report measures of intention and behaviour were obtained, the relationship of intention and behaviour was more stable over time, due to “the inclination of individuals to maintain attitudinal and behavioural consistency with earlier verbalisations to which they might feel committed” (Randall and Wolff, 1994: 406). The authors further noted that, as most of the studies included in the meta-analysis relied on self-report measures for the collection of data, this could have resulted in the stability of the intention - behaviour relationship over time, suggesting that the results could have actually been a methodological artifact, further warning that heavy reliance on self-report measures could potentially provide less valid results regarding the stability of the intention - behaviour relationship over time. However, it has to be noted that, the moderating effect of self-report measures on the time and intention - behaviour relationship was only marginally supported and more research is needed for the clarification of the issue.

Finally, type of behaviour emerged as the most important moderator of the time and intention-behaviour relationship. This was evident in alcohol and drug related behaviours, where the strength of the intention-behaviour relationship considerably declined over time, (r=-.67, p<.05). In the other behavioural domains this effect was not observed and the intention-behaviour relationship was stable over time. Although the authors noted that the moderating effects of type of behaviour in the strength of the intention-behaviour relationship can be viewed as tentative, since not enough studies were included in each behavioural category, it seems relevant to quote Semmer’s comment in (cited in Ajzen 1985: 19), trying to explain the intention-behaviour inconsistencies over time that “[t]he conflicting behavioural tendencies produced by a
goal's attractive and repulsive features may be resolved in favour of the more routinized responses. As the time for action approaches, people may fall back on familiar response patterns, that is, the possibility of routine responses may increase, and the probability of novel responses may decline with the passage of time. Changes of this kind could help explain the difficulty of carrying out a decision to refrain from such habitual behaviours as drinking or smoking” suggesting that strongly habitual behaviours may not be adequately dealt with by the TPB, and are not controlled by the theory's postulated antecedents of behaviour.

1.3.4 Perceived Behavioural Control

The TRA (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980) was proposed to predict and explain behaviour under certain conditions. Ajzen (1985) specified these conditions for the successful function of the theory. The measurement of intentions and behaviour should correspond to same level of generality in terms of time, action, target and context. Intentions should remain the same when the actual behaviour is measured and the behaviour under examination should be under volitional control. Ajzen (1985) examined this last boundary condition of the TRA. He suspected that this condition restricts the wider application of the theory and/or restricts its predictive utility in many kinds of behaviour, as the behaviours that are under complete volitional control are very limited and they all fall within a continuum of controllability regarding their successful execution as suggested by Liska (1984).

Liska (1984) questioned the assumption of Fishbein and Ajzen (1975) that most behaviour of interest to social scientists is under volitional control, and the subsequent proposition that the TRA is applicable only to volitional behaviours that require only motivation and not the availability of resources to occur, meaning that different models are needed for the prediction and explanation of voluntary and involuntary behaviours.

Liska (1984) argued that this kind of dichotomy is a false one and human behaviour is best viewed as a continuum in terms of resources and social co-operation needed for their performance, and proposed that intention alone is not a sufficient determinant of most behaviours and that the resources and opportunities available to people should be incorporated within the theory. Based on these notions (Ajzen, 1985, 1987) proposed an expanded form of the TRA, the TPB, which includes a measure of PBC having cumulative and independent contributions in the prediction of intentions above those of
the traditional constructs of attitudes and subjective norms\textsuperscript{3}. The usefulness of PBC in the prediction of intentions is a function of the controllability of the behaviour.

In behaviours totally under volitional control, behavioural control was not expected to improve prediction of intentions whereas in behaviours, the execution of which depended on either internal or external factors, PBC was expected to significantly improve prediction of intentions as Ajzen (1985) argues that intentions are actually potent predictors of a person's attempt to perform the behaviour, not the actual performance of the behaviour.

Ajzen (1985) proposed that PBC would depend on a set of beliefs people hold with regard to the "presence or absence of requisite resources and opportunities...so beliefs about resources and opportunities may be viewed as underlying PBC" (p. 475). He proposed two versions of the TPB. In the first version PBC, in addition to attitudes and subjective norms, has a motivational effect on behavioural intentions which mediate any effects of behavioural control on behaviour.

The second version of the Theory proposes the possibility of a direct effect of PBC on behaviour in addition to the effect of intentions on behaviour. This version is based on the assumption that performance of any behaviour is not solely based on motivation but on actual control over the behaviour. To the extent that PBC reflects actual control, the successful performance of any behaviour is likely to depend on actual control over factors influencing the execution of the behaviour independently of the effects of motivational factors reflected by behavioural intentions.

Ajzen and Madden (1986) tested the TPB in an attempt to predict class attendance. The results were consistent with the theory, PBC significantly enhanced the prediction of intentions over the contributions of attitudes and subjective norms and continued to make a significant contribution to the prediction of intentions after the influence of past behaviour was taken into account, while no interaction effects were observed. At the same time, behavioural control did not have any effect on the prediction of actual behaviour, as attendance of class is thought to be under volitional control and at the same time the second version of the theory, postulating a link of PBC with actual behaviour, was not supported.

\textsuperscript{3} A different view, that perceived behavioural control is a component of attitudes, was proposed by
In addition, no interaction effects of intentions and control were observed. In the same study the authors report results with respect to prediction of intentions and attainment of a grade “A”. The results are consistent with the results obtained for the prediction of class attainment with regard to the contribution of behavioural control in the prediction of intentions, yet attitudes were the only other significant predictor of intentions, subjective norms failed to account for any variance in intentions. An interesting finding was that PBC predicted actual attainment of grade “A” independently of intentions, even after past grade attainment was taken into account. This finding supported the second version of the theory and the Ajzen’s (1985) reasoning that a direct link of PBC and behaviour is expected to the degree that the behaviour is not completely under volitional control and perceived control reflects actual control over the execution of behaviour. Yet, contrary to expectations of an interaction of intentions with PBC on behaviour, and control with attitudes and subjective norms on intentions, no interaction emerged.

Giles and Gaims (1995) in a study of blood donation, applying the TPB, provided further support for the role of PBC in the prediction of intentions of donating blood. The variance of intentions predicted increased (R=.27), from the addition of PBC in the regression equation. Consistent with the results of Ajzen and Madden (1986), no interactions emerged from the data “suggesting that the effect of control adds to the prediction of intentions in a linear additive fashion” (Giles and Garnes, 1995: 179). The results did not reveal any direct effect of control on the prediction of actual blood donation, with the most potent predictor of actual behaviour being intentions to donate blood.

Godin and Kok (1996) reviewed the application of the TPB in health related behaviours in fifty-six studies, in an attempt to evaluate its explanatory and predictive efficiency. They report that on average 40.9% of intentions’ variance was explained by the constructs of the theory, ranging from 32% to 46.8% and 34% of the variance of behaviour was predicted by the combined contribution of intention and perceived behavioural control.

Trafimow and Duran (1998). The proposition was not, however, empirically supported.
PBC made a significant and independent contribution to the proportion of the variance of intentions, at 13.1% on average, supporting the predictive and explanatory function of PBC. Intentions emerged as the most potent predictor of behaviour, while behavioural control made an independent contribution in the prediction of behaviour in approximately half of the behavioural applications studied, on average 11.5% of the behavioural variance explained. This is consistent with the theory as the role of behavioural control in the prediction of behaviour varies according to the actual controllability of the behaviour, evident from the inspection of the addictive behaviours reviewed in the study, where perceived control explained almost 20% of the behavioural variance, carrying more weight in comparison to intentions. Overall, the meta-analytic study supported the theory, indicating the necessity of the inclusion and the measurement of PBC in the prediction of behavioural intentions and actual behaviour, although the relative contribution of each construct needs to be verified empirically for each behavioural domain, which is consistent with the theory, as a considerable variability in the associations between the constructs that emerged from the data was observed.

DeVellis, Blalock and Sandler (1990) in a prospective study of cancer screening found that perceived control increased the amount of variance predicted in intentions to participate in screening for both high and average risk individuals matched on several demographic characteristics. Yet, perceived control had a direct effect on the prediction of actual behaviour but only for the high-risk sample, although the model was more efficient in predicting actual behaviour in the average risk group in comparison to the high-risk group. The authors concluded that PBC exerts its motivational influence through intentions, thus enhancing the predictive and explanatory accuracy of the TRA.

In contrast with the results reported by the previous researchers, Kelly and Breinlinger (1995) found that, in a study predicting women’s participation in collective action, PBC, although significantly, yet weakly, correlated with intentions and behaviour did not change the R values when added in the prediction equations. Consistent with findings from the studies mentioned above no interactions of control with the other constructs were observed in the prediction of either intentions or behaviour. They conclude that the constructs postulated by the TRA were efficient in predicting women’s intentions to participate in collective action and actual participation.
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The results suggest that the behaviour of interest is highly under volitional control, stressing the need to empirically access and determine the relevant constructs for each behaviour. An interesting finding of the study was the moderating effect of self-concept as an activist. It was found that the TRA performed better in those describing themselves as weak identifiers and not at the group of strong activists. They suggest that individual cost and benefit calculations are less important when social identity is salient, further proposing the inclusion of individual characteristics, as important moderators, in the theoretical model.

Beale and Manstead (1991), applied the TPB in an attempt to predict mothers’ intentions to limit the frequency of their infants’ sugar intake. Although the theory’s constructs only moderately predicted intentions, PBC had a significant and independent contribution in the prediction of intentions, yet of a moderate degree. In line with the theoretical propositions of Ajzen (1985), PBC had a significant effect on intentions only for mothers with older children, indicating that personal experience with the behaviour plays a role in the recognition of the control factors involved in the execution of the behaviour, thus making it a significant predictor for behavioural intentions. It is worth noting that for mothers with older children, perceived control carried more weight in the prediction of intentions than attitudes, demonstrating the importance that direct experience with the behaviour can have on the formation of perceived control and subsequently, intentions.

In line with the results of Beale and Manstead (1991), Babro, Black and Tiffany (1990) in a study about intentions to participate in a smoking cessation programme, found that although intentions were a positive function of attitudes, subjective norms and PBC the last determinant contributed less than the other two in the prediction of intentions, although independently and significantly. The results support the addition of perceived control to the traditional constructs of the TRA yet to a moderate degree. East (1993) reported similar results in three studies about investment intentions. Perceived control made a significant and independent contribution to the prediction of intentions beyond and above of attitudes and subjective norms. The results indicate the usefulness of perceived control in the prediction of intentions, however they support the first version of the theory as no direct link was observed between perceived control and actual behaviour. Rather, the effect of control on behaviour, was fully mediated by
intentions, supporting the motivational role of control to behaviour, in the case of investment decisions.

Further support for the predictive efficiency of the TPB over the TRA, for a variability of behavioural applications, comes from Ajzen and Driver (1992a; 1991) in predicting leisure choices, Netemeyer and Burton (1990) in predicting voting behaviour, Kimiecik (1992) in predicting rigorous physical activity, Lynne, Casey, Hodges and Rahmani (1995) in adopting conservation technology, Dennison and Shepherd (1995) in predicting intentions of food choice, Godin et al (1996) in predicting intentions of condom use, Schiffer and Ajzen (1985) in predicting weight loss. Madden, Ellen and Ajzen (1992) reported that the TPB is superior to the TRA in predicting and understanding behaviour after directly testing the two theories in ten different behaviours. They, nevertheless, noted that the effects of PBC were more evident when the behaviours presented some difficulties of implementation due to control.

1.3.5 Factors Moderating the Relationship of Perceived Behavioural Control with Intentions and Behaviour

The aforementioned studies suggest a variability of results regarding the function of PBC within the theoretical model proposed by Ajzen (1985). The results are not inconsistent with the theoretical propositions, apart from the interaction effects between intentions and control to account for variation in actual behaviour which is not supported empirically. Yet, the variability observed in the performance of PBC as a determinant of intentions and action, suggests that certain factors serve as moderators of the relationships postulated by the theory. Although Ajzen (1988) suggests that the search for moderators for any model can actually extend to a limitless list making the effort cumbersome and in the end fail to make much contribution and meaning, certain predictive and practical reasons for some kinds of behaviours apparently make the search for a limited number of potent moderators for any model worth pursuing.

Based on that assumption, Notani (1998) conducted a quantitative meta-analytic review of the studies employing the TPB, with the aim of identifying factors that moderate the relationship of PBC with intentions and behaviour and to assess the efficiency of the theory to account for factors determining and predicting intentions and behaviour. As the robustness of the TRA, which according to Ajzen (1985) can be regarded as a special case of the TPB applicable to behavioural domains under
volitional control, has been assessed in the widely cited review of Sheppard, Hartwick and Warshaw (1988) concluding that the model performed well in the prediction of intentions and behaviour, the author limited the studies to be included in the meta-analysis only to application of the expanded model, that is, the TPB.

Notani (1998) notes that both contextual factors and conceptualisation and operationalisation of PBC varied considerably. He recognises that perceived control provides a useful additional construct in the prediction of intentions and behaviour, yet he notes that its role differs in each case. Perceived control is a motivational factor in the prediction of intentions in addition to attitudes and subjective norms, something established empirically, however, to function as a predictor and determinant of action it needs, to an extent, to reflect real control over the behaviour. When it does not predict behaviour, the author continues, we can not readily conclude that the behaviour is under complete volitional control. An alternative explanation could be that unrealistic perceptions of control have been formulated and the role of control has not been revealed. He attributes the consistency observed in the literature between perceived control and intention and the inconsistency between perceived control and behaviour to that difference, although noticing that overall the link between perceived control and behaviour was supported, yet in a weaker way than the link between perceived control and intention. He continues arguing that under circumstances where the perceptions of control can be more accurate, the link between control and behaviour will be stronger.

Global measures of control were found to predict behaviour in contrast to belief-based measures. This finding was not in accord with the expectation that belief-based measures could be better predictors of behaviour as they provide a more detailed account of the factors involved in the successful execution of the behaviour. Notani (1998) suggests that the more evaluative nature of global measures, as opposed to the more cognitive nature of belief-based measures, could account for that finding as behaviour is often affectively driven. He also notes the possibility that the control beliefs represent a biased sample of beliefs or an incorrect one. He concludes that when prediction of behaviour is the main purpose global measures of control are sufficient, whereas when the determinants of control that structure PBC are sought, a belief based measure of control can be useful, after careful pilot testing and pre-testing.
While PBC predicts intention, when conceptualised and operationalised either as reflecting internal or external factors of control, the link between control and behaviour is better supported when perceived control reflects mainly internal to the individual factors, factors for which the individual can have more accurate perceptions and estimations.

Notani (1998) continues that for student populations perceived control was a significant predictor of intentions but not for behaviour. On the other hand for non-student, adult populations, perceived control was a significant predictor for behaviour but not for intentions. Younger, inexperienced and with less self-knowledge as students can be, their perceptions of control reflect an inaccuracy of estimation for the control factors involved in the attainment of a behaviour. The reverse can be said about an older, experienced, adult population, with better self-knowledge, better able to accurately identify and take into account control factors intervening with the attainment of any behaviour.

In the same line, Notani (1998) argues that an important moderator in the relationship between control and intention and control and behaviour can be the familiarity of the behaviour of interest. It was found that PBC was a significant predictor of behaviour when the behaviour under consideration was a familiar one as “[a] person is likely to have more information on past behaviour, thereby providing a good measure of actual ability and, in turn, serving as a good predictor of the behaviour.” (ibid: 266). The motivational influences of control on intentions were evident for familiar behaviours as well, something that was not observed for unfamiliar behaviours. Unfamiliarity with a behaviour does not guarantee an interest in the behaviour or can produce anxiety, leading to “a stronger motivation to engage in familiar behaviours compared to unfamiliar ones” (ibid: 266).

1.3.6 Perceived Behavioural Control: Variability of Conceptualisation and Operationalisation

Terry and O’Leary (1995) recognised the necessity of the inclusion of PBC in the TRA, which is generally supported in the literature. However, they raised questions about the conceptualisation of the construct and noted that the meaning of the construct had not been clarified. Based on the initial conceptualisation of PBC by Ajzen (1985; Ajzen and Madden, 1986) who claimed that PBC and self-efficacy were similar, they
argued that the two variables were separate and independent, and both the conceptualisation and operationalisation of PBC have been confounded by measuring them interchangeably.

Terry and O'Leary (1995) argued that behavioural control could be distinguished according to an external - internal dimension. Self-efficacy, reflecting internal factors of control, while PBC reflecting external factors. They further explored the compatibility of that distinction with the two versions of the TPB proposed by Ajzen (1985). Perceived control, to the extent that it is an accurate estimation of the factors interfering with the behaviour, can directly influence behaviour, as actual behavioural performance depends on external factors, while exerting a motivational influence on behaviour mediated by intentions, as perceived controllability of a behaviour could strengthen one's motivation. On the other hand, self-efficacy beliefs are supposed to influence behaviour only indirectly, exerting a motivational influence on behaviour through the mediation of intentions. The results of the study supported the distinction of the two variables. A combined measure of self-efficacy and perceived control did not fit adequately to the data, suggesting the independence of the two measures. Yet, at the same time, the two measures correlated significantly, making obvious the need for further research to establish the discriminant validity of measures of self-efficacy and PBC. Perceived control exerted a direct effect on actual behaviour, supporting the theoretical propositions of the TPB, and making obvious the role of control on external factors for successful behavioural attainment.

Terry and O'Leary (1995) further reported that there was a significant interaction effect of perceived control and intentions on behaviour. This finding, although in line with the original propositions of Ajzen (1985) of an interactive effect of motivation and opportunities on behaviour, is not in accord with previous research that has either, revealed no interaction effects of intentions and control on behaviour, or has marginally supported it. Terry and O'Leary (1995) noted that, the failure of previous research to support this proposition might have been due to the confoundment of the operationalisation of perceived control, where self-efficacy and perceived control were measured in an unidimensional way, thus masking the proposed interaction effects of intentions and control on behaviour. On the other hand, perceived control did not influence intentions and its influence on behaviour was fully mediated by intentions.
This finding was neither in line with previous research nor with the propositions of Ajzen (1985). The authors attributed that to the behaviour under study, regular exercise, was a behaviour mainly under control. Moreover, self-efficacy predicted intentions as expected, and the authors suggested that previous influences of perceived control on intentions reported in the literature, might have been due to the fact that the construct of control was measured by items tapping both efficacy expectancies and perceived control over external factors. Overall, the study suggested that a distinction of the notion of control, within the TPB, is a fruitful way to expand the predictive performance of the model, while at the same time clarifying its conceptual basis.

Sparks, Guthrie and Shepherd (1997), recognised the need for the clarification of the issue of control. They agreed that control might not be a unidimensional construct and proposed a distinction in the operationalisation of PBC in terms of difficulty and control. They do not agree with Terry and O’Leary (1995) who equated PBC (referring to external control factors) with outcome expectancies. Sparks et al (1997) argued that outcome expectancies are similar to the behavioural beliefs within the TPB, which determine attitudes, by linking a behaviour to an outcome or an attribute. They, also, raised questions about the argument of Terry and O’Leary (1995) that “there may not be a correspondence between the person’s perception of the extent to which external barriers may impede the performance of the behaviour and his or her judgment that the behaviour will be easy to perform” (Terry and O’Leary, 1995: 202) by stating that there is no reason to reject the incorporation of different factors within the same construct, even if these factors exert a different influence on behaviour, as e.g. some factors facilitating behaviour and others inhibiting it. They, nonetheless, agreed that PBC might be a multidimensional variable, yet they provide a different base for their argument, the “conceptual distinctions between control and difficulty issues that are embodied in PBC” (Sparks et al, 1997: 431). Perceived difficulty emerged as a significant predictor of intentions in their second study, (in the first study perceived difficulty had a marginal effect on intentions), whereas perceived control did not predict intentions in both studies. The results, as the authors noted, are similar to those obtained by Terry and O’Leary (1995), yet the theoretical arguments provided by the researchers differ. Sparks
et al (1997) attributed the similarities of the studies in the same operationalisation of the constructs\(^4\).

Manstead and van Eekelen (1998) noted that the results of the aforementioned studies might not depart conceptually. As the same wording is used for the operationalisation of self-efficacy in the former and perceived difficulty in the second, there is a possibility that perceived difficulty was actually interpreted by the subjects as referring more to internal factors of control rather than external factors. This possibility of the subjects’ interpretation make the findings of the studies quite compatible.

Manstead and van Eekelen (1998), accepting the possible multidimensional structure of the concept of control, further explored this issue in the domain of academic achievement, for the extension of the results in a different domain from those where the issue of control was examined before and because academic achievement is regarded as a behaviour under the influence of both internal and external to the individual factors. A sample of 171 high school students completed a questionnaire assessing the main components of the TRA, past behaviour, as the grades the students had achieved, and six items used in the literature to assess PBC. As a measurement of actual behaviour, the actual grades achieved in the exams for three subjects were considered. The six control items were factor analysed and two factors emerged accounting from 75% to 82% of the variance in each subject. The authors interpreted the first factor (How confident are you?, I am certain that I can, Difficult-easy) as reflecting “confidence in one’s ability to achieve the behavioural outcome” (ibid: 1381) and the second factor (There is a lot that I can do, Completely up to me, How much control do you have?) as appearing “to reflect an assessment of the degree to which one can influence the behavioural outcome.” (ibid: 1381). Self-efficacy was found to be a significant and independent predictor of behavioural intentions in the three subjects while perceived control was not. This finding was, according to the authors, consistent with previous research (e.g. Terry and O’Leary, 1995).

In addition, self-efficacy predicted actual behaviour, yet perceived control failed to do so. This result was not consistent with previous research and the authors recognise

\(^{4}\) Terry and O’Leary (1995) operationalised self-efficacy in terms of ease or difficulty of performing the behaviour, and perceived behavioural control in terms of control. Sparks et al (1997) employed the same dual operationalisation as two dimensions within the perceived behavioural control variable, yet obviously, they did not share the same meaning.
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the variability in the operationalisation of the constructs and the behavioural domains examined across the studies and they attribute to that, the inconsistencies observed, suggesting a “more coordinated approach to future research efforts” (Manstead and van Eekelen 1998: 1389). It is clear from the interpretation given to the second factor, PBC, that emerged from the factor analysis of the study, “a belief that the outcome can be influenced by one’s efforts” (Manstead and van Eekelen 1998: 1387), that the authors relate it very closely to the notion of locus of control proposed by Rotter (1966 cf Bandura, 1997), “behaviour is influenced by generalised expectancies that outcomes are determined either by one’s actions or by external forces beyond one’s control” (Bandura, 1997:19). Yet while the construct of locus of control was conceptualised as “a generalised expectancy that remains stable across situations” (Ajzen, 1991: 183), Manstead and van Eekelen (1998), in line with the fact that “an emphasis on factors that are directly linked to a particular behaviour” (Ajzen, 1991: 183) is characteristic of the operationalisation of the constructs in the TPB, featuring a methodological and theoretical advance in the prediction of behaviour, operationalised the construct of PBC accordingly. That is to reflect the meaning of locus of control as proposed by Rotter (1966 cf Bandura, 1997), yet to assess it for the specific behaviour and not as a generalised expectancy about every kind of behaviour. While this was an attempt to identify specific dimensions in the variable of PBC, it was not consistent with what Ajzen (1991) had defined as PBC. That is “PBC refers to people’s perception of the ease or difficulty of performing the behaviour of interest” (Ajzen, 1991: 183).

It could still be argued that, as the main difference between the two constructs, as identified by Ajzen (1991), is that locus of control is stable and generalised, while PBC varies across situations and actions, and based on the findings in the literature that prediction of behaviour is better when the antecedent variables are operationalised in the same level of specificity in terms of context, time, action and target, the operationalisation of locus of control accordingly could provide a fruitful way in examining the multidimensionality of control. Regarding this issue, Bandura (1997) argued that the two concepts, that is self-efficacy and locus of control, are conceptually different. “Perceived self-efficacy and locus of control are sometimes mistakenly viewed as essentially the same phenomenon measured at different levels of generality. In point
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of fact they represent entirely different phenomena. Beliefs about whether one can produce certain actions (perceived self-efficacy) cannot be considered the same as beliefs about whether actions affect outcomes (locus of control) (Bandura, 1997: 20). Bandura (1997), also argues that the predictive performance of the traditional locus of control concept, has not received much support from the literature, and the same is true when locus of control is operationalised to measure specific behaviours (e.g. health locus of control).

The results of Manstead and van Eekelen (1998), who operationalised PBC very closely to the notion of locus of control, tailored for academic achievement, are consistent with the above statement about the predictive performance of the construct of locus of control. Still, whether locus of control, either generalised or tailored to specific behaviours, can provide a way for further exploring the dimensionality of PBC, has to be empirically established in other behavioural domains.

It seems that the concept of PBC, is not defined in a way that is acceptable by every researcher. There has been a variety of operationalisations among researchers and different labeling of the measures used in the literature. It has been related closely to the notion of self-efficacy (Ajzen, 1991), divided in reflecting internal and external to the individual factors of control (Terry and O'Leary, 1995), perceived difficulty and perceived control (Sparks et al, 1997) and reflecting self-efficacy and locus of control (Manstead and van Eekelen (1998). The diversity of the internal consistency of the measures used in studies further suggests that PBC might be a multidimensional construct (Conner and Armitage, 1998; Manstead and Parker, 1995). Peterson (1990: 243, cited in Sparks et al, 1997: 433) concluded that “I think it is fair to say that the measurement of personal control has lagged behind other aspects of its study, giving us a line of research with poor reliability but spectacular validity”.

Although Ajzen (1991) has noted the similarities of PBC with self-efficacy (Bandura, 1997), the instructions provided by the two scholars for the operationalisation of the constructs differ. Attempts at the refinement of the measurement of the construct, as well as conceptual consensus of its meaning and the factors that might compose it, in addition to “the predictive effects of different PBC measures for different samples and in diverse behavioural domains” (Sparks et al, 1997: 434) provide useful guidelines for the study of PBC.
Apart from the fact that the cognitive representations of young offenders' offending behaviour has not been investigated in detail, their perceptions of the extent to which they think are able to desist from offending in the future has received little attention. For the purpose of the current study, PBC was conceptualised and operationalised as the perceived ability to stop offending in the future and not as the ability to continue offending in the future, as it was obvious that the subjects would certainly be able to continue offending in the future if they wanted to. It seemed to be more useful and informative to ask whether they thought themselves as able to stop offending and able to control those factors that could potentially make them prone to recidivism. In line with Terry and O’Leary (1995), who argued that self-efficacy refers to internal factors and perceived control to external to the individual factors, and Sparks et al (1997) who argued that PBC can be assessed in terms of difficulty and control, factors internal to the individual were phrased and assessed in terms of ability and factors external to the individual in terms of control.

1.3.7 Personal Norm

Many attempts have been made at extending the Theory of Planned Behaviour and at the same time testing the sufficiency of the theory. Ajzen (1991; 1988) argues that any other variable, external to the model, could have an effect on the formulation of intentions and behaviour only indirectly, mediated either by attitudes, subjective norms or PBC. This line of argument also sets the boundaries of testing the sufficiency of the theory. Having the relevant constructs measured accurately, the components of the theory should predict intentions and, subsequently, behaviour to the limit of error variance and no other significant contribution should be made to the amount of variance predicted by external to the model variables (Ajzen, 1991). Many studies have challenged this assertion, especially for behaviours where personal norms and affective self-reactions seem to be relevant.

Ajzen (1991) suggests that the TPB is open to include any variable shown to significantly add to the predictive accuracy of the model and in examining behaviour in some contexts a measure of personal norm as opposed to social pressures could add to explanatory efficiency of the model. Beck and Ajzen (1991) in a study among students examining the predictors of cheating on a test, shoplifting and lying, conclude that a measure of personal norm reflecting beliefs of rightness or wrongness of performing the
behaviour, significantly and independently contributed to the prediction of the variance of actual behaviour between 3% and 6%.

Fishbein (1967) in the original formulation and proposition of the TRA, arguing about the second component of the theory, the normative beliefs, initially distinguished between two types of normative beliefs: a) a personal belief, reflecting internalised rules or standards of behaviour, about what one ought to do, and b) a belief reflecting what the individual perceives society, his groups of reference and significant others say he should do. This initial distinction was based on the fact that although these two different kinds of beliefs are often the same, they might as well be diverse and competing, stressing the necessity of obtaining them both for the prediction of a behavioural intention.

In a later testing of the TRA, Ajzen and Fishbein (1970) concluded, that a measure of personal normative beliefs about what an individual should do, correlated highly with the behavioural intentions of the subjects. Based on that finding Ajzen and Fishbein (1970) consequently concluded that personal norm have been found to be redundant and they excluded such a construct from the theory, as it provided an alternative way to measure intention. Gorsuch and Ortberg (1983) pointed out that, the way this construct was actually operationalised and whether it tapped moral values and standards guiding behavioural intentions was not clear.

In addition, the context of the Prisoner's Dilemma game, the experimental task employed by Ajzen and Fishbein (1970) to test the predictive utility of personal norm, does not provide a suitable opportunity for testing the inclusion of such a variable reflecting moral standards of behaviour. Fishbein (1967) and Ajzen (1988) have argued that the relevant predictive importance of the several components of the TRA or the expanded form, TPB, depends on the behavioural intentions under consideration. In the same line of argument, the conclusion that personal norms reflecting moral standards do not contribute to the prediction of behavioural intentions seems premature especially when based on morally neutral behaviours and the operationalisation of personal norm is in probabilistic terms rather than moral (Schwartz and Tessler, 1972). Schwartz and Tessler's (1972) study of transplant donation revealed a different pattern of results postulated by the TRA and the role of personal beliefs in the prediction of variance in behavioural intentions. It was shown that personal beliefs emerged as the most
important predictor of behavioural intentions and subsequent behaviour above the
contribution of attitudes and subjective norms. In the case of actual behaviour personal
norm was as good a predictor as the behavioural intentions showing a direct effect on
behaviour unmediated of intentions. The results indicated that, at least for certain
behaviours, the disqualification of personal norm, as a predictor of intentions and actual
behaviour, might have been premature.

In contrast, Jaccard and Davidson (1975), in a study of family planning intentions
report that the role of personal normative beliefs, even when the operationalisation is in
terms of moral obligations of performing the behaviour, evident from low correlation's
with behavioural intentions, is, although significant and above the contribution of
attitudes and subjective norms, marginal in the prediction of behavioural intentions.
They conclude that personal norm may be a potential third component of the TRA, yet
this has to be determined by future research.

Gorsuch and Ortberg (1983), argued for the necessity of including a component
measuring moral obligation in the case of predicting behaviour in moral situations. They
developed four situations, two with a distinct moral aspect and two morally irrelevant.
The results clearly showed that the inclusion of a measure of moral obligation in
morally relevant situations contributed to an increase in the amount of variance
explained with regard to behavioural intentions while in morally neutral situations this
effect was not observed. The results are in accord with the conclusion of Ajzen and
Fishbein (1970) who argued that perceived moral values was just an alternative way of
measuring behavioural intentions, however, they admitted that this issue has not been
resolved yet. Gorsuch and Ortberg (1983), in a methodological and conceptual critique,
questioned the "ethical sensitivity" of the Ajzen and Fishbein (1970) measures of
personal norm in that they did not adequately distinguished moral obligation and
personal preference, and they continue that when that distinction is applied, perceived
moral obligation emerges as a potent, useful construct in predicting behavioural
intentions in morally coloured behaviour.

Parker, Manstead and Stradling (1995), in an attempt to extend the TPB, tested the
idea that personal norm could have an additive and independent role in the prediction of
intentions and in particular intentions of performing driving violations. The authors
make reference to the original conceptualisation of the TRA by Fishbein (1967) where
personal and social normative beliefs were treated as different entities and, in addition, they state that the current TPB does not include this construct while trying to provide a definition of the nature of the two constructs as “Personal norm reflects an individual’s internalised moral rules, while social norm reflects the individual’s perceptions about what others would want him/her to do.” (p. 129). In order to test this idea they employed a quota sample of 600 drivers, structured by age and sex, from four English towns of comparable size and the data collection was based on structured interviews.

The results revealed that PBC increased the explained variance on intentions, from 3 to 8 percent, and the same predictive contribution was made by the new construct of personal norm where the proportion of explained variance increased by 10.6, 10 and 15.3 per cent respectively, for cutting in, reckless waving and overtaking on the inside. These results demonstrate that the TPB is superior to the TRA in predicting behaviour, at least, in the cases where the behaviour is not entirely under volitional control. More importantly the inclusion of a new construct of personal norm contributed even more substantially to the prediction of intentions of driving violation, a finding which is not surprising if we consider that this kind of behaviour is related to the moral standards one holds. The addition of this kind of variable, at least in attempts to predict behaviours with a clear moral dimension, may enhance the predictive accuracy of the TPB and open new ways for preventing different forms of detrimental behaviour as is evident from this study, at least, for driving behaviour.

Pomazal and Jaccard (1976) tested the idea of including a measure of personal norm reflecting moral obligations to perform blood donation. The measure of personal norm predicted intentions to donate blood by 6.6%, independently of the attitudes and subjective norms towards the behaviour.

Kurland (1996), in an attempt to predict agents’ intentions towards clients, operationalised the constructs of the TPB and a measure of moral obligation towards disclosing information to clients. The results support the idea of the inclusion of a measure of moral standards in the prediction of intentions, while, at the same time, made the measure of subjective norm redundant in the prediction, suggesting that for certain behaviours personal norm might be a more potent predictor of intentions than subjective norms. Although these results are in accord with previous studies stressing the utility of including a measure of personal norm in the prediction of intentions, they
have to be treated with caution, especially in the case of making subjective norms unnecessary predictors, mainly due to the multicollinearity of the predictor variables in the study, highlighting considerable correlations between the predictor variables.

Godin et al (1996) examined the role personal norm might have in the prediction of intentions to use condoms in three different ethnic groups. The predictive utility of the addition of personal norm was supported across the different cultural groups demonstrating a major and independent influence on the formulation of intentions. The authors suggested that future research should include this variable in the standard TPB, especially for behaviours where personal norm seems relevant.

Similar results were obtained when Lane, Mathews and Prestholdt (1988) attempted to identify the determinants of nurses’ intentions to leave their profession. Personal norm significantly and independently increased the prediction of intentions, above and beyond the influence of attitudes and subjective norms.

Partial support for the predictive utility of personal norm comes from the research of Raats, Shepherd and Sparks (1995, 1993) about different behavioural outcomes concerning food consumption. Personal norm made a contribution to the prediction of intentions for some behaviours but not for others. The same pattern of results emerged from the study of Sparks, Shepherd and Frewer (1995), in a study of the use of modern technology in food production in a survey of the UK population. The increase of the variance explained by perceived ethical obligation was marginal. It has to be noted that the criterion variable in this study was behavioural expectations and not intentions. The two constructs, although related, represent differences in the confidence with which each one is held (Ajzen, 1985). Intention to perform a behaviour and expectation of the behaviour being performed successfully represent different constructs.

Inconsistencies in the role of personal norm as an additional construct in the TBP comes from the study of Lane, Mathews and Prestholdt (1990). In an attempt to predict nurses’ turnover intentions, the authors applied the TPB and the additional construct of moral obligation. They report that moral obligation made a significant contribution to the prediction of intentions only for sub-groups of the sample, suggesting that the additional role of moral obligation in the prediction of behavioural intentions is valid when certain moderating variables are examined. Significant, yet marginal effects of a measure of moral obligation to predict behavioural intentions and hypothetical
behaviour comes from the study of Randall and Gibson (1991) who were investigating ethical decision making in the medical profession. Moreover, East (1993) in an attempt to predict investment decisions, reported a study measuring moral obligation in addition to the traditional constructs of the TRA and perceived control. The results revealed that moral obligation did not make any independent contribution to the prediction of intentions, as “the effect of personal norm was fully covered by other variables, particularly attitude towards the behaviour with which it was strongly correlated. Thus, personal norm was not a reason for unexplained variance in this case” (East, 1993: 359).

On the other hand, Ajzen and Driver (1992b), in a study of 150 students tried to predict willingness to pay for goods that are not usually priced in the area of leisure activities such as lying on a beach and climbing mountains and deciding the amount to be paid. The multiple regression revealed that not only did moral obligation and affect towards the activity increase significantly the proportion of the variance explained in intentions to pay, but when they were entered in the regression equation, the classical components of the TPB, attitudes towards the behaviour, subjective norms and PBC no longer made any significant contribution to the prediction of intentions. When the variable to be predicted was deciding the amount of money to be paid, perceived moral obligation continued to significantly improve the proportion of variance explained, above that explained by subjective norms and behavioural control. In the latter case, neither affect towards the activity nor attitudes were included in the prediction equation. Although these results challenge the universal application of the constructs postulated by the TPB, they are in accord with the theoretical propositions, that for certain behaviours, not all the components of the theory are important determinants of either intentions or behaviour, something that has to be established empirically.

Conner and Armitage (1998), in a review of the TBP, considered ways in which the theory could be expanded. They argued that the inclusion of moral norms or personal norms is a possible way of doing so. They proposed the idea that personal norm is a construct distinguishable from the other constructs of the theory. They noticed, however, that the role of personal norms within the theory is not yet clear as several studies suggest it as an antecedent of the traditional constructs of the theory. Another way of viewing the role of personal norm is as complimentary to subjective norms, which are perceived beliefs of what one thinks others would like him to do. In this way, the
authors suggested the role of subjective norms, as the weakest predictor of the theory in general, may be compensated for. Based on the results so far, it can be concluded that the role of a construct of personal norm within the TPB seems to be variable, and very much dependent on the specific behaviour of interest. While the parsimony of any model concerned with prediction and explanation of behaviour requires strong and consistent evidence for the inclusion of additional variables, which is not yet evident beyond any doubt about the potential role of personal norms, it seems that at least for certain behaviours where a moral dimension is of relevance (Conner and Armitage, 1998; Ajzen, 1991), personal norms or feelings of moral obligation provide a fruitful way of improving the predictive accuracy of the TPB. The present study addressed issues of juvenile offending and according to this line of argument, the present study proposes to address that the inclusion of a measure of personal norm reflecting moral considerations of engaging in the offending behaviour could be an important contribution to the variation in the subjects intentions to re-offend. This issue has received little attention in research of juvenile delinquency to date.

1.3.8 Affective Self-Reactions

Attempts at extending the TPB have concentrated on another construct, namely, anticipated affective reactions resulting from the performance of the behaviour. Ajzen (1991) states that the TPB deals with “cognitive self-regulation in the context of a dispositional approach to the prediction of behaviour” (ibid: 180) and that individuals make decisions rationally, according to the information available to them. The model derives from the expectancy-value perspective and a calculation of the costs and benefits of any behaviour are supposed to be taken into account in the planning of the final performance of it. Richard, van der Pligh and de Vries (1995) argued that the rational decision making, postulated by the model, may not be sufficient in the prediction of behaviours heavily influenced by emotions, as these emotions might have an effect on the process of decision making. They argued that anticipated affective reactions might have a motivational influence, by means of a deterrent effect, on the execution of sexual behaviours that could lead to AIDS prevention.

In a study of a representative sample of 822 adolescents, aged from 15 to 19 years of age, Richard et al (1995) tested the enhancement of prediction of behavioural expectations in three sexual situations, by the addition of anticipated affective reactions.
They concluded that the prediction of behavioural expectations in the sexual domain, could be increased by the incorporation of affective reactions to the TPB. The independent increase in the multiple correlation of behavioural expectations was significant and consistent for both behavioural expectations examined: namely refraining from sexual intercourse and using a condom. They further argued that the results of their study replicated previous findings, supporting the idea of including a measure of anticipated affective reactions in the TPB in predicting behavioural expectations, at least, in sexual behaviours. It has to be noted, however, that, although the motivational influences of anticipated affective reactions were supported in this study, whether these effects on behaviour are totally mediated by intentions, or exert a direct effect on behaviour, has not been examined.

Parker, Manstead and Stradling (1995), report similar results. Anticipated regret substantially improved the prediction of intentions to commit driving violations. It has to be noted, however, that Parker et al (1995) conceptualised anticipated regret and moral norm as different aspects of an individual’s personal norm and report the combined effects of these two variables on the prediction of intentions. Conner and Armitage (1998) reviewed studies that examined the role of anticipated regret in the performance of the behaviour within the TPB. They noted that a role of anticipated affect across behaviours is generally supported, while they report that interventions, aimed at increasing the salience of anticipated affect, were more successful than interventions targeting change in the other components of the TPB. They also noted a variability of the operationalisation of the construct across studies, similar to the direct measurement of attitudes or as behavioural beliefs. The authors suggested that the later way is preferable as it does not confuse the assessment of anticipated affective reactions with attitudes and provides a way to examine the dimensionality of attitudes, “as the extent to which affective beliefs underlie affective attitudes and instrumental beliefs underlie instrumental attitudes” (Conner and Armitage, 1998: 1448), employing more specific affective reactions than general positive or negative reactions.

Affective self-reactions as a possible way to improve prediction of behavioural intentions, seems promising in behavioural domains that the commitment of the behaviour is likely to induce feelings of guilt and shame, as is evident from studies about commitment of driving violations (e.g. Parker et al, 1995). However, its predictive
utility in accounting for variance in behavioural intentions of more serious law violations by adolescent males has not been investigated, and the current study attempted to examine this issue in a sample of incarcerated young offenders, whose offences were serious enough to justify sentence to custody.

1.4 Summary of Research and Purpose of the Study

Research that examined the perceptions of offending and the reasons the offenders themselves provide as incentives for their offending has been mainly atheoretical and did not relate these beliefs to any kind of behavioural index. The present study attempts to relate the reasons the young offenders provide for continuation of offending in the future and to relate them to their intentions to engage in such a behaviour in the future.

While it could be argued that antisocial behaviour and juvenile delinquency are influenced by irrational factors reflecting high levels of impulsivity and unplanned decision making, it is probable that delinquent behaviour is similar to other behaviours and, thus, proximally influenced by the subjective evaluation of the costs and benefits that derive from any delinquent act (Rutter et al, 1997) although these decisions are derived by cognitive processes without a proper appraisal of the actual cost-benefits of the behaviour and are probably subjected to a “spur of the moment” decision making style.

The argument is similar to the proposition of Franzoi (2000), that a fundamental assumption of the TPB is that individuals' behaviours are guided by rational decisions, which, at the most basic level of the determinants of the theory, are captured by their beliefs towards any behaviour (Fishbein and Ajzen, 1975). Beliefs are regarded as the single structural units of the theory laying at its foundations. By taking this perspective (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980) of the inherent rationality of human behaviour, their models do not account for the possibility that certain behaviours can be influenced by irrational causes that are not processed by cognitive informational processing. Fazio and Roskos-Ewoldsen (1994) argued that when people are motivated enough and they have the opportunity to engage in extensive cognitive reasoning the process described by the TPB could be sufficient to account for the antecedents of behaviour.
Moreover Eagly and Chaiken (1993), also questioned the proposition of the theories that people actually engage in such a complex scrutiny and evaluation of their beliefs each time they are about to behave in any way. They, however, concluded that this cannot really be the case as it is plausible to assume that the beliefs people hold determine their attitude, subjective norm and PBC, and once those determinants are formed, when faced with a behavioural decision, people retrieve only those determinants, either attitude, subjective norm, behavioural control, intention or a combination of them, that will guide their behaviour. However, they noted that within the theoretical propositions of the theories it is not clear which processes are activated prior to behaviour.

It could be argued that no single model can effectively deal with the complexity of human behaviour and juvenile offending in particular. While the TPB cannot be regarded as dealing with the sum of psychological processes that guide human behaviour, it was thought that it provides a fruitful theoretical framework for organising the study of the young offenders' beliefs and evaluations of their future offending behaviour.

The model was, thus, employed as a way to guide the identification, assessment and description of the young offenders' cognitive representations of their future offending behaviour, based on the proposition that continuation of re-offending will partially rely on the perceived rewards of offending and the subjective evaluation of these rewards, even though these subjective evaluations are erroneous and are influenced by a decision-making style that does not involve extensive planning and focuses on the immediate act rather than on long terms consequences.

From this perspective, this study will focus on young offenders' intentions of future offending as a proximal antecedent of their future offending behaviour (Cimler and Beach, 1981), as it has been shown in the literature in general and in certain meta-analytic studies, that intention is a rather potent predictor of actual behaviour (Ajzen, 1991).

The study will partially apply the TPB to further examine the postulated antecedents of the young offenders intentions of re-offending. It will focus on their attitudes towards offending in the future, their subjective norms of offending in the future and their beliefs in their ability and the extent to which they think themselves capable of desisting from
offending in the future, thus concentrating on the proximal cognitive representations serving as motivations for their future offending behaviour.

At the same time the present thesis will examine the necessity of the inclusion of the components of the model, that is attitudes, subjective norms and PBC of future offending, in predicting intentions of re-offending. It will also assess the relative contribution that each of them makes by determining empirically based weights of the constructs according to the TPB (Ajzen, 1987; Ajzen and Fishbein, 1980). This examination will provide, in addition, evidence for the relative predictive accuracy of the TRA and the TPB.

In addition, the thesis will test the sufficiency of the TPB (Ajzen, 1991, 1988) with regard to several other predictors of recidivism that have been identified through the literature and are mainly dealt with from a sociological perspective. According to Ajzen (1991), the model, which deals with the information processing of the individual whose behaviour is guided by rational decisions, provides a parsimonious way of predicting intentions, which are regarded as the immediate antecedent of behaviour, attitudes, subjective norms and PBC, as the mediators between several biological and environmental factors and intentions of executing the behaviour. Any other variable could have an indirect effect on intentions only by influencing attitudes, subjective norms or PBC.

This line of argument also sets the boundaries of testing the sufficiency of the theory. Having the relevant constructs measured accurately, the components of the theory should predict intentions and subsequently behaviour to the limit of error variance and no other significant contribution should be made to the amount of variance predicted by external to the model variables (Ajzen, 1991). The present study provides an opportunity for testing that assertion as the behaviour under study has been associated with many correlates and predictors, which are regarded as external to the model.

In relation to the aforementioned objective, it will be examined whether the model could be further expanded to incorporate two personal factors, personal norms and affective self-reactions. That is, whether the two constructs predict a substantial amount of the variance of behavioural intentions of re-offending and whether this is done by holding attitudes, subjective norms and perceptions of behavioural control constant.
Such an approach is recommended by Ajzen (1991), who argued that the TPB is open to include additional predictors, contributing to the variation of behavioural intentions and behaviour. Similar studies of behavioural domains that could be characterised according to a moral dimension have shown a significant, yet of variable magnitude contribution, depending on the behaviour under investigation (Conner and Armitage, 1998; Manstead and Parker, 1995; Parker, Manstead and Stradling, 1995; Beck and Ajzen, 1991; Gorsuch and Ortberg, 1983; Pomazal and Jaccard, 1976; Schwartz and Tessler, 1972) suggesting that more research is needed before either personal norm and/or affective self-reactions could be included in the model without losses in the parsimony of the model.

Finally, the model will be measured and operationalised both directly and by belief-based measures of the constructs. Focusing on both ways of operationalisation of the model it will be examined which way is more efficient in predicting behavioural intentions and to what extent belief-based measures correspond to direct measures of the variables of the model. Such an examination is an important one as the results obtained thus far have provided support for such a relation although inconsistently and of a moderate degree (Ajzen 1988; Eagly and Chaiken, 1993; Manstead and Parker, 1995).

Such an approach was preferred as, according to Manstead and Parker (1995), focusing solely on the direct measures of the constructs does not provide any guidance for modification of the variables. Knowing the beliefs and the variables on which these constructs are based, can provide guidance in terms of interventions of challenging and changing these constructs.

In addition, belief-based operationalisation in addition to direct measurement of the constructs, was chosen as the proposition of beliefs as the single causal structural units of the formation of attitudes, subjective norms and PBC is a fundamental assumption of the TPB, calling for more research for an attempt at the clarification of the issue that they are usually moderately related.

Moreover, as the thesis will examine the extent that the model is sufficient in predicting behavioural intentions, by testing whether external to the model variables account for variation of intentions, both types of measurement of the constructs will be employed, as, according to Manstead and Parker (1995), such an operationalisation is to be preferred as belief-based and direct measures are not equally, strongly associated
with intentions and behaviour, to examine whether any contribution of external to the model variable is consistently replicated across different operationalisations of the constructs.
CHAPTER 2:

CHILD-REARING PRACTICES AND DELINQUENCY IN CHILDREN AND ADOLESCENTS
CHILD-REARING PRACTICES AND DELINQUENCY IN CHILDREN AND ADOLESCENTS

2.1 Longitudinal Studies Predicting Juvenile Delinquency from Child-Rearing Practices

McCord (1979), reviewed files of 201 boys, participating in a treatment program of delinquency prevention between 1939 and 1945, who were reared by their natural mothers. The files contained information about their home environment and compared them with court reports thirty years later to obtain an index of offending. This methodological procedure had the advantage that “measures of home atmosphere were uncontaminated by retrospective biases and measures of subsequent behavior were uncontaminated by knowledge of home background” (ibid: 1484), as the two sources of data were independent, not coded by the same individuals and they were oblivious of the other source of data. Results from the study indicated that more than a third of the variance in both number of convictions for property offenses and offenses against persons could be predicted from six variables reflecting the child’s home environment.

In addition, the most potent predictors were related to child-rearing namely supervision, maternal affect and parental conflict. Furthermore, 75% of the sample could be classified as ever criminal or non-criminal, as youngsters, while a higher 80% could be classified as criminal or non-criminal as adults, that is, after the age of 18, better than chance. Although the results are limited to the population from which the sample was selected, they provide support for the possible detrimental effects of poor parenting on the development of juvenile and adult delinquency, and clearly identify home environment, and more specifically, parental child-rearing practices, as potent predictors of juvenile and adult criminality.

Farrington (1995), identified poor parental child-rearing behavior as among the most important independent predictors of juvenile delinquency, based on the results from the Cambridge Study In Delinquent Development, “...a prospective longitudinal survey of the development of delinquency and antisocial behavior in 411 South London boys” with a main focus on “continuity or discontinuity in behavioral development, on the effects of life events on development, and on predicting future behavior” (ibid: 930). He noted that strict, controlling discipline, lack of supervision, intermarital conflict and separation from parents constituted the basic elements featuring family functioning that had the most detrimental effects on juvenile male development and the development of
delinquent behavior. Farrington (1995), further argued that juvenile delinquents differed significantly from unconvicted juveniles (the measurement of delinquency based either on official convictions or self-reported delinquency, both of which provided similar results), at age 8-10, before anyone in the sample was convicted, on several aspects of their familiar environment, "[t]hey tended to be receiving poor parental child-rearing behavior, characterised by harsh or erratic parental discipline, cruel, passive, or neglecting parental attitude, and parental conflict. The parents tended to supervise them poorly, being lax in enforcing rules or under-vigilant" (p. 939). Furthermore, potential juvenile delinquents were more likely to have experienced separation from their parents and their parents tended to have authoritarian child-rearing attitudes.

Moreover, at age 14, those boys who later became delinquents, showed the same pattern of characteristics with regard to their family environment as at age 8 to 10, suggesting a continuity of those family characteristics that are related to delinquent behavior over time, and their pervasive influence on child and adolescent psychosocial development. Although the predictive efficiency of poor parenting behaviour, independently of other predictors, was established, it was not possible, as Farrington (1995) argued, to distinguish the possible influence that genetic factors might have played in accounting for both poor parenting practices and juvenile delinquent behaviour, as the study did not include a behaviour genetic design, examining twin brothers and/or adopted children where the possibility to partial out the influence of biological factors on the one hand and the environment on the other hand on behavior is possible.

Henry, Moffitt, Robbins, Earls and Silva (1993), in a prospective longitudinal study, with family data drawn from the Dunedin Multidisciplinary Health and Development Study, attempted to examine the predictive utility of family related variables with children and adolescent antisocial behavior, as measured from different sources of information, self-reported, official and parents’, teachers’ and peer ratings. Certain aspects of family functioning were related to general psychosocial child and adolescent functioning, being associated with both externalizing (delinquent behavior) and internalizing (anxiety/ depression/ withdrawal symptoms), supporting the suggestion that dimensions of the relationship between parents and children could be regarded as general nonspecific risk factors for the psychosocial development of children and
adolescents. The study also compared adolescents who showed delinquent behavior and those with other disorders, mainly internalizing symptoms, in an attempt to identify those familial variables that are exclusively related and predictive of different and distinct psychosocial problems in adolescence, with the aim to identify factors possibly uniquely and causally related to delinquency as opposed and compared to internalized psychosocial problems. The results revealed that the two most important predictors of antisocial behavior at age 11, measured by times of police contact, was parental disagreement on discipline when the child was five years old and the number of parent changes experienced in childhood. Cumulative summation of the number of parent changes to age 13, was the most important predictor of the number of police contacts by that age, suggesting a possible causal role of family stability in early adolescent delinquent behavior. Although the percentage of variance explained was quite modest, it provided evidence for unique predictors of antisocial behavior in late childhood and early adolescence.

As Henry et al (1993) noted, several other characteristics could also have been measured, for example, paternal characteristics and family criminality, which could account for higher percentage of variance in delinquent behavior, and in addition delinquent behavior could have been operationalised as a continuous variable, resulting in a higher proportion of the variance being accounted for by the predictor variables. Yet the approach of group membership provided more confidence in identifying unique correlates and predictors of delinquent behavior, especially stable and pervasive antisocial behavior. It is worth noting that the socio-economic status of the family was controlled, in order to assess the relative contribution of other aspects of the family life in the prediction of adolescent delinquency, as well as pre-school behavior problems, which were also controlled to, statistically, partial out the possibility that early temperamentally difficult children could tax the skills and patience of parents and influence the stability and the quality of the parent-child relationship. The two aforementioned variables were identified as possible confounding variables of other correlates of adolescent delinquency. The procedure followed permitted, statistically and to a certain degree, to estimate the relative contribution of variables of a more dynamic psychological nature, as opposed to static social class and biological determinants.
Kolvin, Miller, Fleeting and Kolvin (1988), report similar results from the analysis of the data of the Newcastle Thousand Family Study. The study was not originally designed to assess family features and adolescent delinquency, but to investigate the relative contribution of several indices of deprivation in the prediction of delinquency, in a birth cohort longitudinal study of 1,142 infants, boys and girls, and the possible transmission of deprivation and delinquency across generations. However, among the indices reflecting social deprivation, were included ratings, from doctors and health visitors to the family, about marital instability, poor physical care of the children and poor mothering ability, as well as, ratings about the characteristics of the parents in relation to their care of the children and the family. Among the criteria of deprivation operationalised in the study, it was found that poor physical care of the child and the home by the mother emerged as the most significant factor associated both with general delinquent behavior and consistently with different types of delinquent behavior such as violent offenses, theft, fraud, criminal damage, drinking and motor offenses. Additionally, male offenders tended to have parents who were rated as ineffective in their parental role and more aggressive fathers. They concluded that although the operative mechanisms linking deprivation to delinquency are not clear, "taken together, the findings again emphasize the importance of poor supervision, direction, and guidance of children in the genesis of delinquency" (p. 89).

Additional support for the role of poor child-rearing practices in the prediction of juvenile delinquency comes from a review of the most potent predictors of male delinquency, by Loeber and Dishion (1983). According to the evaluation of several studies measuring parental skills and child-rearing practices to predict future delinquent behavior, parental family management techniques emerged among the most potent ones in predicting male adolescence delinquent behavior. The authors stressed the importance of family related variables both for prediction purposes and preventive actions against the development of delinquency, as family dysfunction can be measured early in the life of children and proper intervention applied. Furthermore, it was shown that children and adolescents from families employing poor family management techniques accounted for approximately half of the offences committed, although they represented a small proportion of the children (approximately 11% to 16%). This finding revealed that offending was gathered within families, and the authors suggested that some families were more at risk of delinquency than others, and child-rearing practices could be
responsible for that discrimination. A similar pattern emerged from the Cambridge Study In Delinquent Development, where it was found that “5% of the families accounted for half of all the convictions of all family members” (Farrington, 1995: 939), providing extra support for the assertion that environmental factors, expressed by family environment, might be encouraging juvenile delinquency.

In terms of prediction and according to many longitudinal studies (Farrington, 1995; Henry et al, 1993; McCord, 1979), child-rearing practices, operationalised in different ways, consistently predict antisocial behavior and contacts with the law during adolescence. Given that the measurement of child-rearing practices was made at a time when the children were at a young age and prior to any manifestation of antisocial behavior by the children it seems likely that parental management is a probable antecedent of juvenile delinquency and antisocial behaviour.

2.2 Intervention Studies Suggesting a Causal Role of Child-rearing Practices in Antisocial Behaviour

Larzelere and Patterson (1990) and Patterson (1986) reported that interventions, aimed at parental education and training to deal with delinquent and antisocial behavioral manifestations in children and adolescents, resulted in reductions in the antisocial conduct of the adolescents. Patterson and Reid (1973), replicating an earlier study of parental education on monitoring and effective use of behavioral principles for reducing antisocial behavioral manifestation of their children, reported that nine out of eleven families showed “reductions of greater than 30 per cent (targeted deviant behaviour) from baseline” (ibid: 390). Although the results of the study aimed at changing different kinds of antisocial behavior in general and aggression in particular, they, however, provide support for the proposition that parental management is determining, to a high degree, the antisocial and aggressive behavior of children. Additional indirect evidence of the causal status of parenting in the development and maintenance of antisocial behavior across the life span, comes from early intervention programs targeting those risk factors that have been consistently associated and predictive of antisocial conduct.

Yoshikawa (1994) reviewed the programs that had been designed to provide early family support and education to children and their families who were under the influence of risk criminogenic factors. The interventions were intensive during the
children's first five years and were designed with a clear research orientation and assessment of progress in view. They included control groups and random assignment to intervention with extensive follow-ups that enabled the researchers to assess possible "sleeper" effects and stability of gains over time. The studies actually postulated two pathways in the development of resiliency against delinquency, one through the effects of cognitive development and school achievement and the other through the enhancement of parenting for buffering socio-emotional dysfunction. The interventions were designed to facilitate the general development of children and functioning of the families.

Yoshikawa (1994), concluded that had been noticed sustained improvements in the socio-emotional functioning of the children, which included school attainment, reduction in delinquency and antisocial behavior and less chronic delinquency rates in comparison to the controls. Although these results are helpful in estimating the efficiency of early intervention programs, the evidence for the effects of parenting in the general socio-emotional functioning in children, including delinquency, over time can only be inferred indirectly, as the components of the programs targeted many risk factors. However, mainly family support and children education, with those targeting both achieving better results than those that targeted either of them, may be mainly due to their cumulative or interaction effects. Despite the difficulty inherent in the studies, to assess the relative contribution of improved parenting on the delinquent behavior of the children, it seems that effective parenting is a necessary, while not sufficient, factor for the normal development of children and the inhibition of antisocial behavior and delinquency in childhood and adolescence.

2.3 Reciprocal Parent-Child Effects in the Development of Antisocial Behaviour

Although the association between parental rejection and persistent juvenile offending seems supported, it is not evident that parental rejection causes delinquency and persistent offending. It is equally plausible to assume that delinquency induces parental rejection or there is a bi-directional relationship (Borduin and Schaeffer, 1998). Liska and Reed (1985) examined the reciprocal effects of ties to conventional institutions and juvenile delinquency, and the results from family studies, measuring parental attachment, supported the idea that low attachment precedes delinquency. They noted that parental attachment is implied by many theories of juvenile delinquency as a causal
antecedent of delinquency, although they may disagree on the underlying processes that account for the association. By examining two main institutions that have been consistently associated with juvenile delinquency, family and school, they hypothesized that the effects might be reciprocal. Lower family and school attachment to influence juvenile delinquency and delinquent behavior to have an effect on family and school ties by inducing reprimanding and rejecting behavioral responses by parents, teachers and classmates. They reanalyzed the data from the Youth in Transition study (Bachman, 1975 cited in Liska and Reed, 1985) a four-wave, multistage, national probability sample of 1,886 boys to test their hypotheses.

Liska and Reed (1985) concluded that “most of the observed negative relationship between parental attachment and delinquency comes about because of the effect of parental attachment on delinquency” (p. 557). The absence of any delinquent behavior effects on parental attachment is attributed to the stronger ties of parental attachment not contingent upon the adolescent behavior and to the fact that, in many cases, parents could be oblivious to the delinquent act of their offspring. In general it was supported that parental rejection has a direct effect on adolescent delinquent behavior and that the relationship between the two was not bi-directional, although a variability of intervening processes for that relationship has been proposed.

Similar results are reported by Simons, Robertson and Downs (1989). In a two wave panel data of adolescents aged between 13 and 17 years it was found that the path coefficient for the effect of parental rejection on delinquency was significant, whereas the reciprocal path, that is, from delinquent behavior to parental rejection, was not. The results suggest that parental rejection has a possible causal effect on adolescent delinquency and that reciprocal effects are not probable, noting the importance of the quality of the parent-child relationship in the development of antisocial behavior in the adolescent. Evidence, however, for reciprocal, transactional effects between children and parents, for the development and expression of conduct disorder in children and adolescents, has been reviewed by Lytton (1990). Despite the evidence reviewed, it was recognized that family factors, and especially maternal affection, could act as a buffering factor for the expression of conduct disorder.

Rutter et al (1998), in evaluating research about parents-children effects in the relation of coercion and hostility with antisocial behavior, reported that, although
Chapter 2

Children effects on the behavior of their parents exist and the relationship seems to be bi-directional, this cannot be the principal explanation as parents effects are also real and because family circumstances have been shown to be predictive of adolescent criminality even from the preschool years. The authors concluded that a reciprocal dynamic process can be suggested which is more evident in younger children than adolescents and that the relative strength of each part of the bi-directional relationship remains to be established.

2.3.1 Patterson's Coercion Model of Reciprocal Parent-Child Effects in the Development of Antisocial Behaviour

The recognition of reciprocal parent-child effects in the development of antisocial behavior in children and adolescents has been incorporated in performance models advanced by Patterson (1986; Patterson, Dishion and Bank, 1984) for antisocial boys. The first of the models deals with the learning of antisocial behavior in the home, within a social-interactional perspective. "The assumption central to the general model is failure by parents to effectively punish garden variety, coercive behaviors sets into motion interaction sequences that are the basis for training in aggression. The process set into motion involves family members in patterned exchanges of aversive behaviors; the exchanges are such that both members train each other to become increasingly aversive. This process is labeled coercion." (Patterson, 1986: 436). The central and important parental determinant of aggressive patterns in the boys is suggested as being ineffective discipline by parents. Analyses of interaction sequences at the microsocial level within the family of antisocial children, revealed that parents respond to disciplinary confrontations with verbal aggressive responses, such as threats, nagging and lecturing, while they fail to follow their verbal warnings with concrete punishment, in terms of withdrawal of privileges, time out, etc. In contrary, infrequent, sudden explosions from parents with physical punishment were often observed.

In general, Patterson (1986; Patterson, Dishion and Bank, 1984) suggested that a vicious cycle of coercive exchanges within the family provide a training of coercive patterns to both children and parents which can potentially escalate to aggressive behavior and generalize to other settings, apart from home, where children function, such as, school and peer groups, where rejection by peers, low academic attainment and low self-esteem follow as a consequence from the coercive behavioral pattern of the
children, substituting for social skills in every day social exchanges. Furthermore, Patterson (1986) suggested that this process would be more detrimental for children when a combination of poor parental skills and difficult temperament of the child is evident. The presence of other stressors and substance abuse by parents is expected to exert a negative influence on parenting, thus initiating, maintaining and escalating the coercive exchanges of parents and children within the family. Within the coercion theory the reciprocal effects of parent-child bi-directional relationship have been most accurately described and incorporated into a model of development of antisocial behavior in children and adolescents.

In line with the theoretical model proposed by Patterson (1986), Stice and Barrera (1995), examined the reciprocal relations between parenting and adolescent substance abuse and externalizing behavior. Utilizing data from a two-wave study with an one year interval, and employing structural equation modeling techniques, the authors reported that “full prospective reciprocal relations were found between perceived parenting and adolescent substance use, such that deficits in both parental support and control prospectively predicted adolescent substance use, and adolescent substance use was prospectively related to lower levels of parental support and control” and that “regarding externalizing symptoms, the prospective effects of adolescent externalizing behavior on parenting practices are consistent only with that aspect of the reciprocal effects model that allows for child influences on parenting practices” (ibid: 330).

While the results by Stice and Barrera (1995) suggest a two-way transactional relationship between parent and adolescent behavior, externalizing symptoms are usually manifest earlier in childhood and, by adolescence, they may have been stabilized and the influence of parenting on adolescents’ behaviour may not be observable, while adolescents’ behavior effect on parental support and control would be easier to trace. Consistent with the view that the association between parenting and antisocial behavior may change over time, adolescence, as a distinct developmental period, might not be very informative for the study of parental effects in the initiation of externalizing symptoms, as they are more likely to exert an influence earlier in the child’s life.

Moreover, it is equally plausible to assume that, while parental influence in the initial learning of externalizing and antisocial behaviors which are prominent in childhood, during life span development, other factors and agents, such as deviant peers and school
failure, become more prominent in the maintenance, further development, escalation and generalisability of those behavioral patterns, thus making the study of the parental influences on the manifestation of externalizing symptoms difficult to reveal in adolescence.

### 2.4 Genetic Mediation of Child-Rearing Effects on Juvenile Delinquency

The recognition of reciprocal parent-child effects in the expression of antisocial and delinquent effects evident mainly in childhood, with the parallel recognition of the probable primary effects of parents on children and adolescents in the expression of antisocial and delinquent behaviour, based on interventions aiming at changing child-rearing practices with subsequent reductions in children's antisocial behavior and from the predictive efficiency of parental child-rearing practices to account for both self-reported and official reported delinquency, does not mean that these could be the main sources of delinquent adolescent behavior. It is equally plausible to assume that both, harsh, rejecting and coercive parenting, and, delinquent behavior of children, in addition to the fact that many young offenders have parents that show antisocial behavior themselves, including convictions (Farrington, 1995) are both manifestations of the same tendency for antisocial and delinquent behavior that is genetically transmitted from parents to their offsprings, thus accounting for the relationship of poor parenting and adolescent delinquent behavior (Rutter et al, 1998).

Rutter et al (1998), in reviewing studies, mainly adoptee and twin studies, dealing with the genetic influences in the development of antisocial and delinquent behavior, concluded that there is a rather strong genetic influence in the case of hyperactivity and that liability “overlaps greatly with that of antisocial behavior when the two are associated” (ibid: 1998), while there is a stronger environmental influence in the case of self-reported antisocial behavior which is not associated with hyperactivity and peer relationships problems, while for delinquency per se the genetic influence is much weaker, in contrast to aggressive or general antisocial behavior. In addition the genetic influence appears to be influential in the case of early onset and persistence into adulthood than in adolescent limited delinquency. Rutter et al (1990a) argue that different genetic research designs have different methodological limitations and multiple methodology should be employed so that the strengths of one method cancel out the disadvantages of the other, and, despite any methodological deficiencies in either
adoption and twin studies, and their variants, when results tend to be replicated with different methods and are consistent with different methodological designs and operationalisations, the results should be viewed with greater confidence.

Rutter et al (1990a) argued that twin designs are assuming that the family environments for monozygotic and dizygotic twins are comparable, although monozygotic twins are more likely to be treated in the same way in comparison to dizygotic twins, being a member of an identical twin pair may influence development in a unique way, and, that having an unusually close relationship with an identical twin sibling, are likely to be factors that make monozygotic twins show more behavioural similarities in comparison to dizygotic twins. Rutter et al (1990a) argued that these environmental factors, not captured in the twin designs, are likely to overestimate the genetic influence on behavioural manifestations of monozygotic twins in comparison to dizygotic twins. Rutter et al (1990a) further argued that the disentaglement of genetic and environmental forces in shaping behaviour is better achieved by adoption studies where the behaviour under investigation is examined in the biological parents and the adopted-away children, although adoption studies are often characterised by a lack of data on the biological father, they cannot easily estimate gene-environment interactions and biases may arise from the difficulties of being an adopted child. Rutter et al (1990a) noted that while the rate for psychiatric disorders in adoptees is higher than the general population norms, rates of criminality are not and this finding is suggesting that the rate of psychiatric disorders in adoptees is likely to, at least partially, derive from the stresses associated with being an adopted child.

However, regarding the genetic influences in antisocial behaviour that have been argued by adoption studies Stoolmiller (1999) suggested that they should be interpreted with caution. The author suggested that the relatively less influence of family environment found in adoptee studies could be attributed to the restricted range of family environments sampled in such studies, since the families finally participating in the studies are subject to several selection processes such as the criteria of adoption agencies for placing children, self-selection by future adoptive parents and volunteering in a study. Stoolmiller (1999), argued that those selection processes are likely to provide an adoption study with a sample characterised by a restricted range of family environment as all the selection processes are highly likely to result in families with
good family environment and child-rearing practices, with limited within group variability, thus almost rendering child-rearing practices into a constant. The same degree of restriction in the values of other family characteristics like socio-economic status or intelligence is not likely to occur to the same degree and only to the extent that they are correlated with the criteria of the selection processes, meaning that while studies including adoption families appear, at the first glance, to be representative of a general population, and in fact to be on many socio-demographic characteristics, they can still be restricted to those family characteristics that are more important and more proximally related with children’s behavioral outcomes.

Stoolmiller (1999) further continued by arguing that the same range restriction of family environment could account for the high correlations of twins who have been adopted by different families and while range restriction of family environment was not regarded as an inherent problem in twin designs, this assumption may be premature as the restriction of family environment in the sample of those studies could still be operative through volunteer bias. That is families providing a generally supportive environment for their children to participate in the studies.

Stoolmiller (1999) concluded that, while possible genetic influences in the development of antisocial and delinquent behavior are likely to operate, the application of mainly adoption design and subsequently twin design in examining those issues, is likely to be limited by a restricted range of variability in child-rearing practices used by the families, thus making any associations of child-rearing practices with children’s behavioral manifestations difficult to reveal.

2.5 Child-rearing Practices as Mediators of the Relationship between Social Disadvantage and Family Structural Variables and Juvenile Delinquency

Wilson (1980), reported that child-rearing practices and, especially parental supervision, in deprived inner city areas, exerted a buffering influence on juvenile delinquency by imposing strict rules limiting children’s mobility, and examined the possible effects of parental supervision in variable settings representing different levels of social handicap. Overall she reports that juvenile delinquency was significantly higher in families employing less supervision practices and that, in areas with high delinquency rates, the effects of parental supervision were more important than the effects of social handicap. She further argues that the effects of strict parenting in
socially handicapped areas restrict children's involvement with delinquent peers, as their parents have expressed their disapproval towards offending behavior and those peers who express the behaviour. Those messages are internalized and turned into self-control, therefore inhibiting mixing with antisocial peers. It is evident that the author implied a process linking parental supervision with juvenile delinquent behaviour, where involvement with antisocial peers is a key mediating variable. However the explanation process remains at a narrative level and is not directly empirically tested.

The role of parental factors as correlates and predictors of delinquency in young people and adulthood were examined by Glueck and Glueck (1950 cited in Laub and Sampson, 1988) in Unraveling Juvenile Delinquency. Laub and Sampson (1988), provided an assessment of the longitudinal study and commented that the data base collected by Glueck and Glueck (1950 cited in Laub and Sampson, 1988) provided a unique source of information that could be very informative about potential correlates and predictors of delinquency. They noted that their work has been criticized on methodological, statistical and ideological grounds. They recognized that their ideological perspective of biological influences in delinquent behavior and their finding that mesomorphy was a predictor of delinquency resulted in their work being severely criticized, mainly from scholars working within the social criminological perspective, and while their statistical analysis was not optimal, they suggested that criticisms about their methodological design were overstated. In fact, Laub and Sampson (1988), believed that the methodological design of the Glueck and Glueck (1950) study, was very strong and they report that it involved the comparison of 500 delinquent males and 500 non - delinquents matched, case by case, on age, race/ethnicity, general intelligence and low-income residence “all criminological variables thought to influence both delinquency and official reaction” (p. 356). In addition, the samples were followed up on two occasions, when the participants were aged approximately 25 and 31 years old and they concluded that “[u]sing multiple sources of information, the Gluecks collected data on a variety of interesting and important indicators relevant to understanding the causes of serious, persistent delinquency. Indeed, the Gluecks’ data, in all likelihood, are superior to many of the current longitudinal data sets in criminology” (p. 376).

Recognizing the possibility that re-analysis of the data set could be informative of the possible correlates of delinquency and the identification of intervening family variables
between structural factors and delinquent behavior, the authors re-examined the data of the study with the aim to examine closely, and with the use of multivariate data analysis techniques, the potential predictive role of family functioning on delinquent behavior. Erratic discipline by mother and father, poor maternal supervision, parental rejection of the boy and parental attachment were found to be significantly related to delinquency. Background factors such as paternal and maternal criminality, parental alcohol abuse, home overcrowding, economic dependence of the family on social welfare and absence of parents during childhood were related both to family functioning and delinquency. More interestingly, the effects of those background structural factors on delinquency were almost totally mediated by family functioning variables, and their effects on delinquency behavior were minimized when family functioning variables were taken into consideration. The only variable that continued to exert a direct effect, although considerably minimized, on delinquency was the number of family relocations. The results are even more supportive of the proposed mediating family processes, since the samples were matched on age, race/ethnicity, general intelligence and low-income residence. The role of family supervision and attachment as potent predictors of delinquency, and, the hypothesis of the authors that the effects of social structure on delinquency, in a considerable way are, mediated by parental rejection and harsh discipline and poor supervision, are therefore, further supported, a finding that is suggested by the data, even when other, generally static correlates of delinquency are held constant. The authors concluded, “we believe this model has considerable significance for future research in that it explains how key background factors influence delinquency. A concern with only direct effects conceals such relationships and leads to erroneous conclusions” (p. 375).

Larzelere and Patterson (1990), who hypothesized that the effects of socio-economic status on delinquency are mediated by parental management, have reported similar results. They noted that socio-economic status was a central construct of most sociological theories of crime, although the theories differed in the way they conceptualized the impact of social class on delinquency. They reported that while Merton’s (1957 cf Larzelere and Patterson, 1990) anomie-strain theory proposed that greater frustration of lower social class juveniles led them to crime, Sutherland’s differential association theory (1947 cited in Larzelere and Patterson, 1990), suggested that lower social class youths would probably be exposed to and influenced by criminal
elements of society. Hirschi's social control theory (1969 cited in Larzelere and Patterson, 1990) held that lower social class youths were not sharing and were not committed to the same familial, vocational and scholastic values common to middle class youths, thus making them more prone to delinquent behavior. The common element in all these theories, Larzelere and Patterson (1990) noted, was the direct effects of socio-economic status on delinquency, while these effects seemed to be rather weak and inconsistent, especially when the individual was the unit of analysis.

The authors further hypothesized that any effects of socio-economic class on delinquent behavior would be mediated by parental management, as child-rearing practices have been associated with juvenile delinquency and have actually been potent predictors of delinquency. The hypothesis is derived from the coercion theory (Patterson, 1982). "The coercion model emphasizes the central role of the family and peer group in providing the positive and negative contingencies that maintain the performance of both prosocial and deviant child behaviors" (Larzelere and Patterson, 1990: 305). The study measured parental discipline and monitoring, with different methods, resulting into multiple indicators, in order to minimize any bias resulting from one measuring method, and actually concentrated on these two aspects of parental management as mediators of the effects of socio-economic disadvantage on delinquency,

in the longitudinal Oregon Youth Study of 206 boys coming from schools within an area with the highest police arrest rate per capita. The boys in the study were followed up from the 4th to the 7th grade at school. The authors reported that parental management, a combination of measures of parental discipline and monitoring, fully accounted for the relation between socio-economic status at 4th grade and self-reported delinquency at 7th grade, supporting the hypothesis of a mediational role of family child-rearing practices between the link of socio-economic disadvantage and delinquent behavior. The results, however, are informative of the possible role of parental management in early adolescent delinquency behavior, while socio-economic disadvantage could exert an independent influence on later adolescent delinquent behavior, as the authors noted.

The results of the study are in accord with McLoyd (1998), who stated that "the link between socio-economic disadvantage and children's socio-emotional functioning appears to be mediated partly by harsh, inconsistent parenting and elevated exposure to
acute and chronic stressors” (p. 185). Reviewing the literature on the effects of socio-economic disadvantage on the general socio-emotional functioning of children, McLoyd (1998) reported that there was enough evidence to support that prolonged economic stress combined with subsequent negative life events and chronic adversities, results in parental dysphoria, in the form of anger, irritability and/or depression, which in turn increases the parents’ tendency to use harsh, punitive, arbitrary and inconsistent ways of discipline for their children and ignore their dependency needs by withdrawal from their children. The author continues that such a pattern results in a range of, both externalizing and internalizing, socio-emotional problems of the children, including anxiety, depression, temper tantrums, irritability, negativism and delinquency.

McLoyd (1998) provides complementary evidence of the role of parenting in the psychosocial development of children that comes from studies actually in search of protective factors that buffer possible effects of deprivation, disadvantage and chronic stressors on children’s development and which instill in to them a sense of resilience. The author reviewed studies of children exposed to a high number of chronic adversities and negative events and tried to distinguish stress resilient children from those affected by stress. The factors that generally characterised resilient children were “no separation of child and primary caregiver during infancy; positive parent-child relations during the preschool years; a strong sense of parenting efficacy by the primary caregivers; and parental use of reasoned, age-appropriate, consistent disciplinary practices” (p. 197). The author stated that effective parenting or the existence of non-parental adults in the children’s environment, providing positive role models or having the role of a “mentor” for the child, seemed to be factors that could buffer any negative, effects which adversities and hardships, could have on the psychosocial development of children faced with them.

Similar conclusions were reached by Yoshikawa (1994), by reviewing effects of family support on chronic delinquency. From several studies reviewed, he argued that there is evidence for a mediational role of family variables such as parental discipline and maternal affection between juvenile delinquency and socio-economic disadvantage.

In any case he warned that the link between socio-economic disadvantage and delinquency is more evident when the former is measured as a community-wide
characteristic, thus the link at the individual level of analysis appears to be prone to the ecological fallacy and any inferences for the individual should be made with extreme caution and only after the link is replicated with the two levels of analysis.
Chapter 3

MORAL DEVELOPMENT AND JUVENILE DELINQUENCY

3.1 Definition of Morality

Rest (1983) noted the diversity and the difficulty in establishing a widely accepted definition of morality. He noted that morality has been conceptualised as “1) behaviour that helps another human being, 2) behaviour in conformity with societal norms, 3) the internalisation of social norms, 4) the arousal of empathy or guilt or both, 5) reasoning about justice, and 6) putting another’s interests ahead of one’s own” (p. 556). Rest (1983) argued that while each of these definitions is tapping an aspect of morality, none is without problems. Regarding behavior that results in helping another human being, while it is an important element of morality, not each and every behavior that results in positive consequences for the welfare of another person can be subsumed under this label since many behaviours that result in helping other people, accidentally or as a consequence of the arrangements of the physical environment, could be regarded as moral, despite any evidence that they are governed by internal processes and that they are intentional.

Rest (1983) argued that conformity to social norms is important as it permits and guarantees the functioning of organised societies, yet non-conformity, can actually be expressed as opposition to those social arrangements which permit the exploitation of certain segments of a society, a behaviour that cannot be considered immoral. Lickona (1976) also noted that equating morality with conformity would mean that those who conformed to the prevalent Nazi ideology would be moral, pointing to the inadequacy of the definition to capture the essence of morality.

Rest (1983) continued, arguing that the notion of moral behaviour being governed by internalised standards presents some limitations as well, mainly, the neglect of the social side of morality, “the balancing of one’s own interests and the coordination of long-term plans and goals with other persons in unified schemes of cooperation” (p. 557) although it focuses on the internal processes that govern moral behaviour in the absence of external reinforcement, which make moral decisions voluntary and purposive.

Empathy and guilt are certainly important motivations for moral behaviour according to Rest (1983), yet the author argued that neither of them is without problems, as empathic considerations in medicine do not always result in the best outcome for a patient, or, high levels of neurotic guilt could not be regarded as the moral ideal. Moral
reasoning, as well, cannot be regarded as the only and basic dimension of morality as reasoning about moral issues at higher levels does not guarantee good acts and because every type of reasoning, both at lower and higher levels, can justify any course of action either moral or immoral. Finally, Rest (1983) argued that putting another’s interests ahead of one’s own, a behaviour mainly labeled procosial, while provides evidence for unselfish motivation, does not capture the cooperative aspects of morality where a balancing of one’s own and others’ interests are promoted without losses in the personal interest. He finally argued that cooperation with the promotion of every individual’s interests does not mean that one has to suffer personal losses, as each individual’s interests are as important as everyone else’s in the cooperation scheme.

Rest (1983) in evaluating the definitions of morality in the literature, concluded that while each definition captures an essential aspect of morality, every one of them has limitations in leaving some behaviours, that have a moral colour, out of the definition or includes behaviours that can not really be regarded as moral themselves or deals with a specific aspect of morality and neglects some other. The author argued that these definitions have served as operational definitions in empirical examinations of morality and while none of them can be regarded as all-encompassing the essential aspects of morality, they have all pointed to the need to view morality as a multifaceted phenomenon, involving many psychological processes.

3.2 The Cognitive Developmental Perspective of Moral Development

Jennings et al (1983) described the major assumptions of the cognitive developmental perspective of moral development, mainly advanced by Piaget and Kohlberg. The main focus is on the qualitative aspect of moral reasoning and the developmental changes in the reasoning. Moral reasoning is conceived in terms of structural characteristics that develop according to stages, based on the age of the children and their cognitive capabilities. The content of the moral reasoning or the reasons provided by children in order to justify an action as morally right or wrong, are not analysed, as the focus is on the form of this reasoning, that can be extracted by the children’s responses in several hypothetical situations including a moral dilemma and can be classified according to the general rules employed, regardless of the specific content of the responses. That is, it is not the actual responses or the kind of behaviour that is chosen by the children, but the rational or the principles they provide for that,
either at the concrete individual perspective, or member of society perspective, or prior to society perspective (Kohlberg, 1976). The development of the stages is sequential, and it is assumed that development occurs when the child can integrate the previous stage of reasoning to the higher one through qualitative transformations of the logical understanding prevalent in the previous stage.

Lawrence Kohlberg (1976) investigated the development of the moral reasoning of individuals mainly concentrating on the form of reasoning about moral dilemmas and the qualitative differences noticed during different developmental stages.

Kohlberg (1976: 34-35) categorises moral reasoning in three levels each incorporating two stages:

**Level 1: Preconventional.**
- Stage 1: Heteronomous Morality (e.g. avoidance of punishment).
- Stage 2: Individualism, Instrumental Purpose, Exchange (e.g. serve one's own interest, recognise that other people have their interests).

**Level 2: Conventional.**
- Stage 3: Mutual Interpersonal Expectations, Relationships, and Interpersonal Conformity (e.g. "good boy", "good girl" orientation, caring for others, maintain rules)
- Stage 4: Social System and Conscience (e.g. keep society going by conforming to rules).

**Level 3: Post Conventional or Principled.**
- Stage 5: Social Contract or Utility and Individual Rights (e.g. freely entered commitment to law, family, friendship, trust and work obligations; "the greatest good for the greatest number").
- Stage 6: Universal Ethical Principles (e.g. belief in universal moral principles and a sense of personal commitment to them).

Jurkovic (1980) noted that most of the studies examining the link of moral development and immoral behaviour of children and adolescents, relied on the content of the youngsters moral orientation, as reflected by their knowledge of and attitudes towards conventional norms, without providing an explanation of the morality of these norms. The structural developmental perspective, on the other hand, focused on the
structure of moral development and any qualitative differences between the stages of moral reasoning, that can be applied and can organise any content of moral valuing and any reasons taken as standards for moral action. Morality is not viewed as a trait or a simple result of social context, but rather as a process progressing from lower to higher modes of moral reasoning. Jurkovic (1980) argued that this approach provides a more objective way of examining moral development as a universal phenomenon, regardless of the sociocultural environment that is acknowledged to affect the content of moral values orientation, the rate of development and the higher stage developed (Kohlberg, 1976).

Jurkovic (1980) further noted that, the cognitive developmental perspective emphasises the way children and adolescents evaluate moral issues and how they actively develop their moral reasoning, rather than internalising the moral values and judgments of the external environment and their significant others', through either imitation, conditioning or identification. In contrast, psychoanalytic theories focus mainly on the affective component of moral development, whereas learning and social learning theories examine the behavioural manifestations of morality, while both orientations assume that moral development is a process of internalisation of values and norms of the general environment, defined as the family and other groups such as peers, society and culture, external to the individual.

3.2.1 Stage Unity Assumption

The stage unity assumption proposes that every individual should apply the same rules of reasoning about moral issues for different dilemmas, that is for different content areas, as assessed by the Moral Judgment Instrument (Colby et al, 1983). The assumption that “the logic of each stage forms a “structured whole” (Colby et al, 1983) could be tested empirically by presenting several moral dilemmas to the same individual and observing whether the individual is reasoning about the different content presented in the same mode of moral reasoning, whether he/she is using the same stage in trying to negotiate and resolve the conflicts arising from the stories, which intend to assess moral reasoning stage. Colby et al (1983), based on the results from the 20 years longitudinal study of moral reasoning, argued that, the logical coherence of the stage concept was supported by the distributions of the proportions of moral reasoning scores at any level for each participant. These distributions ranged between 68% and 72% for any single stage across three different forms of the interview, with each dilemma scored blindly to
responses to the other dilemmas, so as to reduce scorer bias. It was further reported that between 97% and 99% of the subjects reasoned at two adjacent stages, a finding that does not challenge the assumption of the stage unity, rather it is evidence that the participants were moving from a lower to higher stage of moral reasoning as the two stages of moral reasoning were always found to be adjacent.

Siegal (1982), however, challenged the assumption of the generality of stage responses. In a review of studies examining whether subjects applied the same rules of moral reasoning in different tasks or content areas, operationalised either according to Piaget’s clinical interview or Kolhberg’s moral judgment interview, which both share the assumption that development involves qualitative progressions in the mode of thinking or the logical cohesion of the rules applied, evident in different stages that are hierarchically more advanced as each stage reorganises and presupposes the logical coherence of the previous ones. Siegal (1982) concluded that the correlations between different tasks or moral issues were rather modest and they do not provide support for the dominance of one stage of cognitive development or moral reasoning across different content areas, a finding that challenges the assumption of the stage concept in cognitive and social development.

Rest (1983) similarly challenged the assumption of the stage unity inherent in Kolhberg’s description of moral development according to “hard” stages. Rest (1983) proposed that the results of stage consistency found in the moral reasoning of the participants reported by Colby et al (1983) 20 years longitudinal study cannot be regarded as evidence for actual stage consistence in an individual’s moral reasoning. Rest (1983) noted that, the scoring rules employed by Colby et al (1983), in categorising a person’s responses according to a stage of moral thinking, were subjected to extensive revisions so as to rule out stage mixture. Rest (1983) further argued that this procedure, while attempting to differentiate structure from content of moral reasoning and establish more rigorous scoring guidelines which makes the scoring of the moral judgment interview less esoteric, that is, more easily applied by any independent researcher, has resulted in bias toward research findings of stage consistency in the moral reasoning of participants. Rest (1983) noted that, while a person can be actually arguing about a moral dilemma according to the criteria of many stages or at least more than one, the actual score of any person’s arguments would depend on reasoning according to the
higher stage present in the interview data, and any instances of lower stage arguments would be discarded, thus resulting in scores of less stage mixture than actually present in a person's moral reasoning, based on the rationale that lower stage arguments are included and can be logically subsumed under a higher stage reasoning, which make any lower stage ideas redundant. Rest (1983) however argued that, the empirical justification of the assumption of stage unity in moral reasoning can not be tested by the moral judgment interview and its scoring rules as “[s]uch scoring rules give the Kohlberg measure good internal reliability and make sense as methods for inducing good interrater reliability. Nevertheless, this procedure does not allow disconfirmation of the hard-stage model” (p. 583).

3.2.2 Stage Sequence Invariance

Colby et al (1983) examined the hypothesis of the invariant stage sequence development of moral reasoning in a longitudinal study of 84 boys, followed-up every 3-4 years for a period of 20 years. They hypothesised that support for their hypothesis could be derived from the absence of any downward stage movement longitudinally in the moral reasoning of their subjects. They, however, argued that, as the interview employed for data collection was not an error-free instrument, a more fair and logical expectation would be to compare the frequency of sequence intervals present in their longitudinal data with the amount of error present in the data, as is evident from the test-retest reliability of the instrument. If sequence reversals were less than the amount of error, evident from test-retest reliability of the interview, then the hypothesis of invariant stage sequence would be supported. The results of the 20 years longitudinal study were supportive of the hypothesis, as the reversals observed in the data were much lower than the error attributable to test-retest reliability of the interview.

Walker (1989) examined the assumption of invariant progression of moral reasoning in a 2-year longitudinal study of 233 participants of both sexes with an age range of 5 to 63 years. The results of the study supported the idea of invariant development of moral reasoning, as all age groups progressed significantly, and the regressions observed in the data could be attributed to measurement error. In addition, there was no stage skipping in the reasoning of the participants, an expected finding due to the short period of two years of re-examining the subjects' moral reasoning. While the period of the longitudinal study was quite short to provide a firm conclusion of the assumption of the
cognitive developmental perspective of moral development in an invariant irreversible fashion, the results are similar to those reported by Colby et al (1983) from an extensive 20-year longitudinal study. In addition, as Walker (1989) noted, the study provided further evidence for the sequence of moral reasoning in females, which was not found different to that of males and it was based on a much larger sample size than many other studies examining the same issues.

Colby et al (1983) further argued that to support the sequence of the moral reasoning stage development, no stage skipping should be observed in the longitudinal data, and that every individual should proceed to his/her stage development going through each stage since, "each stage is a prerequisite for those that follow" (p: 35). This proposition was supported by the longitudinal data for every individual participant who proceeded to reach a particular stage, after he had gone through each one of the previous stages. Similar results have been reported by Walker (1989), from a 2-year longitudinal study.

Snarey (1985) reviewed 45 cross-sectional and longitudinal studies, of variable time intervals, examining the assumption of invariant sequence development of moral reasoning in diverse cultural settings. The results from both types of studies were supportive of the proposition that development of moral reasoning proceeds in an invariant fashion with no skipping of stages and no regressions, longitudinally to previous stages. Snarey (1985) reported that some regressions were observed in the longitudinal studies, but they could be attributed to measurement error of the interview. He also noted that the regressions observed were at most, half a stage and skipping a full stage was not observed and that these results support the view of step-by-step invariant development of moral reasoning development, which are further strengthened by the fact that these studies were conducted in diverse cultural settings, that is, in diverse developmental contexts, which adds support for the universality of sequential moral reasoning development.

Siegal (1982) argued that, an invariant irreversible sequence in the development of the stages of moral reasoning is not supported by the literature mainly due to regressions that have been observed and to the fact that the higher stages of post conventional moral reasoning is not always found, and, it is mainly inferred by scoring of responses of western samples. It can be proposed that the earlier studies testing the proposition of invariant sequence of moral development relied on less refined interview schedules.
assessing moral development, and which were less error-free than the latest more refined schedule, and as Jennings et al (1983) noted, these anomalies in the data could be due to the validity of the measure. In relation to this point, Snarey (1985) argued that “regressions could be accounted for by measurement error if the frequency of regression is less than measurement error” (p. 204), a point that was empirically established by the review of 45 studies. In relation to the second point about the existence of the full range of stages for the invariant sequence to be supported, Snarey (1985) argued that, this is not a prerequisite, as the rate of development and the presence of postconventional moral reasoning could be subject to cultural and general environmental factors, and it is recognised that different individuals can attain different terminal points of development and these results are not to be regarded as evidence against the stage sequence of moral reasoning development, as stage sequence implies that each individual has to go through the same process of development without skipping any stage, and not that each individual has to reach the upper limits of reasoning about moral issues.

Snarey (1985) reviewed 45 studies undertaken in different cultural and diverse socio-economic settings in order to examine the evidence for the assumption that moral reasoning develops through the same sequence for each individual, without skipping any stage and without regressions to previous ones, regardless of cultural influences. Evidence towards that direction would be within the basic assumptions of the cognitive-developmental paradigm that the structure of the development of cognition is genetically predetermined and irrespective of cultural variation, that is broadly defined environmental influences.

The review was based on both published and unpublished studies employing Kohlberg’s interview ranging from the initial scoring method to the standardised scoring manual which introduced a variability into the scoring of the subjects’ responses in the studies. Snarey (1985) recognised that and classified each study according to the scoring system employed. Another issue that made the comparability of the studies difficult was the progressively different ways of reporting the presence of a stage in the subjects’ reasoning. As later studies reported moral reasoning at a particular stage only when it was present in at least 25% of the subject’s reasoning, the results of previous studies reporting a stage even when present for 5% of a subject’s reasoning, were subjected to re-analysis according to the first rule. Finally the stage scales reporting findings ranged
considerably in the studies from 5-point scales to 13-point ones. Based on raw data the author recalculated the scales to 9-points ones. These steps were followed for a standardization of the results of the various studies employing a different methodology, so that a level of comparability could be achieved.

The vast majority of the studies interviewed the subjects in their native language and made culturally relevant adjustments to the content of the dilemmas. The creation of completely new dilemmas salient for a culture did not yield significantly different results from the adapted standardised dilemmas, although choices of a certain course of action depended on the dominant cultural environment. On the other hand, this does not affect the reasons provided by the subjects being classified as reflecting different moral stages, as it is the structure of the reasoning that is important and not the reasons provided by subjects for a classification to be made. Snarey (1985) commented on the possible cultural bias in the selection of the issues presented, yet the interview can be "culturally fair" when translated and adapted to the culture under study as variations in content can still allow for the same structures to be detected. These requirements allow for comparisons between the studies while at the same time make the interview an acceptable tool for cross-cultural research.

Regarding the issue of invariant sequence in stage development, Snarey (1985) argued that, both cross-sectional and longitudinal studies support that claim since any regressions reported could be attributed to measurement error. The regressions were at the range of half-stage to one third of a stage and they were evident among adults, among whom slowness of development and accumulation of terminal points is expected leading to greater variation in that group.

Moreover, Snarey (1985) argued that this evidence of invariant sequence in such diverse cultural settings can not be attributed to socialization practices which are different in each culture. Yet, he proposed that, rate of development and style of moral reasoning may be partially influenced by cultural variations. This claim, Snarey (1985) argued, is consistent with the theoretical propositions of Kohlberg, who acknowledged the role of social experiences and cognitive development to moral development.

Another aspect addressed in the review, was the presence of the full range of the stages in all cultures and different social groups within a culture. While the presence is confirmed, the rate of development seems to differ with samples from urban cultures.
and upper middle and middle classes showing a faster rate of development. A related issue is the absence of the highest level of moral reasoning, stage 5\(^1\), in certain cultures and groups within cultures. Whether this reflects an actual fact or is due to scoring bias is unresolved, Snarey (1985).

### 3.3 Moral Reasoning Assessment

Jurkovic (1980) noted that Kohlberg’s measure, in contrast to Piaget’s moral judgment items, relies on a rather subjective interpretation of the participants’ responses, while it is acknowledged that the measure has been subjected to progressive refinement resulting in more objective scoring guidelines.

The issues related to assessment of moral reasoning development were examined by Kurtines and Greif (1974), based on a review of the studies attempting to demonstrate the validity of the cognitive-developmental perspective of morality, focusing on some limitations of the paradigm. They started with the examination of the Moral Judgment Scale, the structured projective test presenting nine moral dilemmas to the subjects and asking them to justify their answers. This test is the main instrument used in the cognitive-developmental research tradition, for assessing the development of moral thought, categorising it in stages according to the logic underlying each stage and providing a hierarchical score of cognitive moral maturity.

The authors noticed that not all of the dilemmas of the scale are actually used in research, as administration and scoring of the subjects' responses are time consuming, leading to a lack of generalizability and comparison between studies, something that becomes even more difficult when considering the fact that the subsequent probing interview questions really depend on the initial responses of the subjects, meaning that the administration of the test is not reliable as different questions are asked to all the subjects. This may not be such a serious limitation though, as the aim of the test is to categorise each subject according to his reasoning which is evident from the initial responses of the subjects.

The authors continue by arguing that the scoring of the instrument seems to be complex and variable, which leads to a possible scorer’s bias, and also experimenter

\(^1\) Stage 6 was incorporated in stage 5 for scoring purposes in the standardised scoring manual. Kohlberg (1976) argued that stage 6 was not present in the moral reasoning of individuals.
bias, problems with interpretation of results in published studies, and discouragement of independent research. This limitation of esoteric scoring seems to have been restored though by Colby et al (1983) who published a detailed and objective description of scoring guidelines. It should be noticed, however, that, although the methodology employed by Kohlberg is complex and time-consuming, it is an attempt to face and to try to master, rather than avoid altogether, the complexity that characterises human behaviours or verbalisations of behaviour in real life. Therefore, despite the many problems a researcher who is willing to employ that methodology may face, the interview itself is a step forward towards our understanding of human complexity, a task that is both complex and time-consuming (Durkin, 1995).

Yet, certain other features of the scale add to its problematic employment in research. The main characters of the dilemmas presented are males, which may affect the judgments made by the subjects. Potential verbalisations of reasoning may be inhibited by the fact that many dilemmas are not independent of context, rather in some cases the plot of a story continues to provide a new dilemma, while being a projective test, the results are not unconfounded by the subjects’ IQ, socio-economic status and verbal ability (Kurtines and Greif, 1974).

Kurtines and Greif (1974) also comment on the lack of any evidence of temporal stability and internal consistency of the scale. Any lack of those psychometric features of the test maybe due to the fact that, from the theoretical rationale of the cognitive developmental perspective, stages are subject to change themselves; any subject reasoning at a given stage, at a given point in time, may be reasoning at a higher stage at another point in time. In this sense, test-retest reliability is not actually expected, although coefficients could be computed for a relatively short period of time within the age limits that the theory postulates a stage being dominant. Rubin and Trotter (1977) attempted to provide some evidence for these issues, and they report 3 weeks test-retest reliability coefficients for the global moral levels of r(19)=. 44, p.05, and point to the fact that, although statistically significant, the result is rather modest, given the small sample size and the very short time interval between the two administrations of the interview. At the same time they report satisfactory internal reliability coefficients for the three dilemmas employed in the study, yet based on small number of items.
Kurtines and Greif (1974), however, noted that the test is actually a semi-structured interview and although it provides scores of overall moral maturity, it is within the frame of qualitative research methods that it should be evaluated. To subject qualitative data and data gathering techniques to an evaluation that is mainly appropriate for quantitative data and tests employed to gather them, is not an appropriate solution. What really matters about this instrument, mainly eliciting qualitative data with the aim to categorise them and ascribe a subject to a given stage according to the principles of his reasoning about moral dilemmas, is the degree to which one researcher would provide the same categorisation for the same group of people at any point in time as with another one. That is, the degree of inter-rater reliability coefficients. Higher reliability coefficients in that domain would provide greater confidence about the scoring of the dilemmas, as that scoring would not depend on the individual's subjective interpretation of the responses elicited during the interview, but rather on the objective guidelines provided for identifying the principles underlying the moral thought and score them appropriately and consistently. For this type of reliability, Kurtines and Greif (1974) report satisfactory evidence from the literature.

### 3.4 Moral Reasoning Development and Juvenile Delinquency

Blasi (1980) reviewed a number of studies examining the relation of moral development and delinquency. He noted that, the main definition of delinquency was institutionalisation in a correctional setting or trial and conviction and that this definition of delinquency might have concealed variations of types of offending and that could be a source of variation in the delinquents moral reasoning. Most of the studies of the review included control groups and appropriate matching on age, race, social class, intelligence and often community type, factors that could be related to moral reasoning. The results of the studies although employing different methods of measuring moral development suggested that delinquents relied significantly more on the preconventional stages for their moral reasoning in comparison to matched non-delinquents. In ten out of fifteen studies these differences were observed. It has to be noted that, it was mainly Kohlberg's interview that discriminated most of the samples in comparison to other measures of moral reasoning. Despite those differences, however, it was noted that delinquents did not only use the preconventional stages of moral reasoning, but the conventional and even the postconventional or they were in a transition to that.
Furthermore, while the matching procedures, usually employed, could eliminate possible confounding variables related to moral reasoning, they do not account for the possibility that institutionalisation itself could have a potential repressing influence on the accounts given by the delinquent participants.

Blasi (1980) concluded that, while it seems that delinquents operate at lower levels of moral reasoning in comparison to non-delinquents, the whole range of moral reasoning can be present among them, a finding that does not constitute the preconventional stage of reasoning being exclusively related to delinquents. In addition to the fact that the stage of the reasoning of offenders could be due to institutionalisation, Blasi (1980) concludes that moral reasoning appears to be an important element of delinquency, yet it is not a sufficient factor, a conclusion consistent with Binder (1988) who argued that the literature on the link between moral development, as viewed from a cognitive developmental perspective, and juvenile delinquency while it has received support from some studies, this support has not been consistent.

Blasi (1980) proposed that “delinquency offers a natural ground for testing the relations between moral reasoning and moral behavior” (p. 11), yet he noted that, there are certain problems in relation to the definition of delinquency. Most of the studies define delinquency as the institutionalisation in a correctional setting or any contact with the legal system and there is a considerable heterogeneity of the offences committed by the participants, masking the relation between moral maturity and different kinds of delinquency. The same issues were raised by Jennings et al (1983), who further argued that, in the case of juvenile delinquency, some studies could have relied on subjects punished for status offences, or behaviours that have been punished because they were performed below a certain age, which masks the relation of moral development and more serious offences. Jennings et al (1983) also noted that, the legal definition of delinquency, especially juvenile delinquency, might vary in different countries and cultures making the studies that relied on institutionalised adolescents from different countries hard to compare and subsequently generalise the results. The fact that such a divergence of the definition of juvenile delinquency across countries has been shown and documented by Rutter et al (1998), provides further evidence for the difficulty of the operationalisation of juvenile delinquency in legal terms, for the comparability and generalisation of the factors related to delinquency in diverse cultures and to the extent
that different behaviours related to juvenile delinquency are regarded "normal" or "deviant" according to cultural variations.

Jurkovic (1980) reviewed a number of comparative studies that examined the level of moral reasoning of offenders and non offenders, matched on a number of variables such as socio-economic status, age, sex, ethnicity and IQ. The author noted that, the conclusions that can be drawn from these studies cannot be definite about the hypothesised moral immaturity of delinquent adolescents, as delinquency has been, in general, operationalised as detention or institutionalisation in correctional settings, a variable that could potentially be confounded with moral reasoning. Another problem with these studies, as Jurkovic (1980) noted, is the fact that with an institutionalised population of offenders the results may not be applicable to delinquent behaviour in general, as they do not represent those individuals who offend without being noticed by the juvenile justice system. Both of these facts could result in an artificial relationship between juvenile delinquency and moral reasoning maturity. Jurkovic (1980) based on these studies comparing delinquents with non-delinquents concluded that the results are mixed. While the delinquent groups appeared to be reasoning at less mature levels, overall, at the preconventional level, in comparison to the non-delinquent groups whose moral maturity was at the conventional level, there were some delinquents with a moral reasoning level at the conventional or even the post-conventional level. Jurkovic (1980) argued that, these results could be attributed either to measuring issues of the instrument employed to measure moral maturity, or lack of control of potentially confounding factors related to moral maturity. Yet, he assumed that it is not likely that all of the variability is due to methodological reasons, but rather that, part of the differences of the level of moral reasoning between delinquents and non-delinquents should be real, although the results overall support a trend toward less mature reasoning on the part of juvenile delinquents yet not in the form of definite support.

Based on the assumption of the heterogeneity of offenders and on the fact that not all of the delinquents showed the same level of moral reasoning, that is the preconventional level, Jurkovic (1980) went on to examine the moral reasoning of subgroups of juvenile delinquents and their moral reasoning level. From the review of the studies examining moral maturity within the delinquent population, the author concluded that it was mainly offenders convicted for drug related offences who reasoned at the more
advanced levels of moral maturity, thus implying that drug related offenders are motivated by different stressors to commit an offence. In addition most of the offenders that could be classified as psychopaths were reasoning at the preconventional level, whereas the levels of reasoning of the rest of the offenders were evenly distributed. Jurkovic (1980) concluded that, the variability of moral reasoning scores of delinquents, observed in the studies comparing delinquent and non-delinquent populations, could be due to different behavioural and psychological characteristics of the juvenile delinquents. While these results are shedding light on the variability of moral reasoning within the delinquent samples examined and point to the problems of the definition of delinquency in legal terms, which masks a considerable heterogeneity of several characteristics of the juvenile offenders, they still do not provide evidence for moral immaturity, as defined in the cognitive developmental terms, as a sufficient factor for delinquency, rather moral immaturity could be viewed as a covariate of a "more general sociogenic personality disturbance" (p. 716).

Jennings et al (1983) reviewed a number of studies examining the relation between moral reasoning and juvenile delinquency. The studies reviewed measured moral reasoning either by Kohlberg's Moral Judgement Instrument (MJI), Rest's Defining Issues Test (DIT) (1979, cited in Jennings et al, 1983) or Gibb's Sociomoral Reflection Measure (SRM) (1981, cited in Jennings et al, 1983), as their aim was to examine the relation of juvenile delinquency with moral development as conceptualised by the cognitive developmental perspective. It has to be noted, however, that apart from the different measures employed in each study under review, the Kohlberg's Moral Judgment Instrument has been subjected to several revisions that, although resulting in greater objectivity and scoring reliability, each study used different versions of the instrument, thus resulting in variation between the studies, making the comparability of the results more difficult (Snarey, 1985).

Most of the studies used incarcerated and non-incarcerated participants, matched on a number of variables that could be related to moral maturity level, such as sex, age, race, IQ and socio-economic level. Jennings et al (1983) reported that most of the delinquent participants scored lower than their matched control on level of moral maturity, yet there was a proportion of delinquents scoring at the conventional level 3 and even level 4, and it should be further examined in what ways those delinquent participants were different.
from the delinquent groups. While the presence of conventional reasoning among delinquents could be attributed to measuring issues related to different scoring criteria used for the classification of the participants’ responses according to the version of the Kohlberg’s Moral Judgment Instrument (MJI) used or/and the use of different measures of moral maturity, the results of the review seem to be suggesting, according to Jennings et al (1983), that moral maturity could be a factor related to delinquency, yet not a sufficient one. Furthermore, most of the studies reviewed relied on a correlational level of analysis, thus preventing any definite conclusions about the causal influence of moral reasoning level on delinquent behaviour, whatever the degree of covariation.

In addition, according to Durkin (1995), while most of the studies examining the relation of moral maturity and juvenile delinquency matched the two groups on several background variables in order to control for background and/or psychological variables related with both delinquency and level of moral reasoning, it could still be possible that the incarcerated groups scored lower on moral maturity because of the effects of institutionalisation on their criteria for judgment in moral issues.

It could be concluded, with respect to juvenile delinquency, that moral maturity seems to be a moderately related factor (Jennings et al, 1983), yet it is not clear whether moral maturity is an antecedent factor to delinquency, that is, what is the degree of the covariation between moral reasoning and juvenile delinquency, and if moral judgment is related to the effects of incarceration in correctional settings and the adjustment of the individual’s moral reasoning according to the prevalent environment of the correctional settings, where authority assertion and coercion are, more often than not, prevalent.

In addition to narrative reviews of the hypothesised link between moral immaturity and juvenile delinquency (e.g. Blasi, 1980), Nelson et al (1990) addressed the same issue by a quantitative meta-analytic study of research examining the moral development of juvenile delinquents. Besides, Nelson et al (1990) tried to investigate any possible effects of the different methodologies employed in the literature and any effects these different methods could have on the hypothesised relation of moral reasoning development and juvenile delinquency. Studies that did not use a control group were not included in the meta-analysis, as well as, studies examining moral reasoning development in relation to different groups of juvenile delinquents such as drug users, psychopaths, those with withdrawal symptoms and those with learning
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disabilities. The meta-analysis relied on 15 studies examining the differences in moral reasoning scores between incarcerated juvenile delinquents and matched control groups on several variables such as age, race, intelligence, socio-economic level and geographical area in the majority of the studies while some included further matching on parental education and length of institutionalisation.

Nelson et al (1990) reported that the total number of the subjects was 673, with a mean number per study of 48 subjects. Their mean age was 15.34 (1.56) and with a mean IQ score of 90.27 (4.82) and that in the majority of the studies (13 out of 15) Kohlberg’s interview schedule was employed as the main data gathering instrument for assessing moral development, while nine studies scored moral reasoning blindly to the status of each subject. Because of the heterogeneity of certain features of the studies that prevented their direct comparability, Nelson et al (1990) examined whether these differences actually affected the overall effect size of the hypothesised moral immaturity of the juvenile delinquents and reported that none of the correlations between effect size and study characteristics was found significant, while overall, the resulting mean of the juvenile delinquents was found to be significantly lower than the mean moral reasoning score of matched non-delinquents, thus providing evidence according to Nelson et al (1990) for the assumption of the moral immaturity of juvenile delinquents. Nelson et al (1990) noted a substantial delay of moral development in juvenile delinquents, and these results can be viewed with greater confidence since no significant associations were found between study characteristics (reflecting different methodological procedures in the studies reviewed) and the overall effect size of significantly lower scores of moral maturity of juvenile delinquents in comparison to non-delinquents. They further argued that the conclusion of Blasi (1980) and Jurkovic (1980) should be re-examined when it stated that, while juvenile delinquents seemed to be reasoning about moral issues at less advanced levels of moral development in comparison to non-incarcerated matched samples, yet this difference should be interpreted with caution as certain common methodological caveats in the designs of the studies prevented any definite conclusions.

It could be argued, however, that Nelson et al (1990), while quantifying the characteristics of the studies, did not take into account the development of Kohlberg’s interview schedule that has been subjected to substantial revisions, thus each time representing an improved more error-free instrument, relying more on the form of moral
reasoning and not on the content of it. This variability of the main assessment instrument employed for the scoring of moral judgment could have resulted in variability of the overall effect size not captured by the meta-analysis.

In addition, it could be noted that all of the studies relied on samples of incarcerated juvenile delinquents and matched “equivalent” samples of non-delinquent youths, and it has been demonstrated that incarcerated juvenile delinquents reason about moral dilemmas at a less advanced level in comparison to their control groups of non incarcerated juveniles, and while this could be true, it is still possible, as Blasi (1980) and Jurkovic (1980) noted, that this observed difference is due to incarceration and the prison environment which actually encourage conformity to authority and rely on externally imposed rewards and punishments, for the management of inmates, characteristics of the preconventional level of moral reasoning.

Furthermore, Petronio (1980) found that repeater juvenile delinquents scored higher in moral maturity than non-repeater offenders, and moral maturity was found positively related with delinquency, a finding contrary to most of the studies that hypothesised a negative relationship between moral reasoning development and juvenile offending. It could be concluded that definite conclusions about the hypothesised moral immaturity of juvenile delinquents cannot be drawn until certain methodological issues of the design of the studies are resolved.

**3.5 Moral Reasoning Development and Moral Behaviour**

Blasi (1980) reviewed a number of studies relating moral reasoning and moral behaviour. The studies reviewed conceptualised and, accordingly, operationalised moral behaviour as either delinquency, honesty, altruism or resistance to conformity, reflecting the heterogeneity of the definition of moral behaviour in the literature. Blasi (1980) noted that statistical significant relations were observed between moral judgment and moral behaviour, although this relationship was stronger for some behavioural indices than others, and it was generally concluded that moral reasoning appeared to be related to diverse operationalisations of moral behaviour, thus enhancing the predictive power of moral reasoning in accounting for part of the variation of moral behaviour.

However, Blasi (1980) mentioned that, this conclusion is based on the studies of the review which are not free from certain methodological caveats which could endanger
the conclusion of the postulated positive relationship between moral reasoning and moral behaviour. Blasi (1980) noted that, positive relationships were observed between moral reasoning and behaviours that could not be regarded as particularly moral, e.g. conformity to authority, resistance to temptation, and that these findings are rather puzzling to interpret, unless one resorts to non moral variables such as age, IQ and cognitive development, which are related to moral judgment maturity. The observed relationships could be an artifact of these other variables operating, which were not controlled in the design of the studies or taken into account statistically, so that moral maturity scores are un-confounded and examined in relation to moral behaviour.

It is possible that a custodial environment does not allow much independent behaviour of the adolescents and their behaviour to be influenced by the authority figures in custody and their adaptation in an environment where avoidance of punishment and seeking of rewards, characteristics of the preconventional mode of moral reasoning, is of primary concern to the inmates, if they want to cope with the prison environment and have a “successful” adaptation in it.

Coyle (1994) argued that, especially in the past, prisons allowed very limited independent behaviour on the behalf of the inmates and, even today, one of the main objectives of prisons is to provide secure custody to people who have broken the law and to restrict their activities. In any case, according to Coyle (1994), prisons are places where a group of people is locking up another group of people and inmates are entering a cell where there is no inside handle on the door and activities are often regulated according to a preset timetable and have to be followed by prisoners at specific times each day.

Furthermore, the initial forms of moral reasoning assessment are of unclear reliability and validity of measurement, as well as, diverse scoring criteria (Kurtines and Greif, 1974) and therefore any overreliance on these results, which could be mixed to examine the relationship of moral judgment and moral behaviour, could be misleading.

Apart from the methodological issues inherent in the studies reviewed and made explicit by Blasi (1980), the author argued that, even if moral judgment development and moral behaviour appear to be statistically related, this association can only be informative about the relative predictive power of moral judgment in partially accounting for moral behaviour. Blasi (1980) further argued that, an explicit articulation
of the nature of the relationship between general moral rules and specific actions has not been provided and accordingly empirically tested. "[W]hat was not learned in reviewing these studies, the successful as well as the unsuccessful ones, is the psychological meaning of significant statistical correlations between moral reasoning and action" (Blasi, 1980: 40). Blasi (1980), continued by arguing that this meaning would not be revealed, even after certain methodological problems in the examination of moral reasoning development and moral behaviour are resolved and thus permit a better and more accurate degree of predictive accuracy of moral reasoning to moral behaviour. He further proposed that, the application of general moral rules to diverse situations of varying content could rely on morally neutral psychological variables that intervene in the relationship of moral judgment and moral behaviour, such as attention and IQ, which could be regarded as ego strength factors, and moderate the relationship of moral judgment to moral behaviour, a similar approach taken by Kohlberg and Candee (1984) in further examining the issue of moral maturity and moral action. It has to be noted that this approach, apart from illuminating the processes of moral judgment and moral action, takes into account and integrates the role of other variables, such as IQ and cognitive development which appear to be related both with moral maturity and diverse expressions of moral development.

Siegal (1982) reported that, the most controversial issue of Kohlberg's theory of moral reasoning development was the prediction of actual behaviour, and from a review of a number of studies relating moral reasoning to different forms of overt behaviour that could be regarded as moral, the author concluded that the associations reported between stages of moral reasoning and moral behaviour was at best modest, while stronger relations had been reported for helping and fair behaviour. Siegal (1982) argued that these relations could be attributed to intelligence, which has been found to be related with helping and fair behaviour. In addition, Siegal (1982) argued that type of employment and educational level were found to be equally good predictors, as is moral development, of moral behaviour defined as, keeping a contract of returning filled in questionnaires to a confederate experimenter who said to the subjects that, unless they returned the questionnaires on time he could fail in the exams, a study designed by Krebs and Rosenwald (1977 cited in Siegal, 1982). Siegal (1982) argued that the relationship of moral development and keeping of the contract could be due to the level of education of the subjects, where the better educated subjects could better understand
the problems that the experimenter would have faced if they did not return the questionnaires on time.

Siegal (1982) further applied a similar interpretation to a study by McNamee (1978 cited in Siegal 1982) where helping behaviour was measured as help offered to a drug user by the participants of an experiment where the experimenter refused to help, because she claimed she was a researcher and not a therapist. Siegal (1982) argued that an alternative, equally plausible, interpretation could be that those who refused to help did not know how to help and what exactly to do, while those who actually helped were aware of what kind of help to offer. Siegal (1982) relies on the same line of reasoning as Blasi (1980) in interpreting the positive although moderate relations of moral reasoning development and diverse forms of moral behaviour, that the role of other variables such as general knowledge, intelligence, educational and occupational level could account for these relations since these variables are related to moral reasoning, stressing the need for further research in the relation of moral development and moral behaviour, while the role of these possibly confounding variables has been taken into account.

Kupfersmid and Wonderly (1980) reviewed a number of studies relating moral maturity to several behavioural domains, that is resistance to temptation, resistance to authority, student activism, prosocial behaviour and antisocial behaviour. From the review of the studies they noted that the general hypothesis of a link between moral maturity and behaviour in general has not been supported, and although this failure of statistical associations between moral maturity scores and several behavioural indices of moral and immoral behaviours could be attributed to the limited use of principled individuals participating in the studies reviewed, thus making the range of moral maturity scores rather restricted for a statistical association to be found, the results, however, did not provide any convincing evidence for a link between moral maturity and different kinds of behaviour.

Straughan (1985) argued that the evidence in support of moral reasoning development and moral action has generally been based on experimental studies where moral behaviour was operationalised as not cheating in an experimental task. Although finding a positive relationship of a moderate degree between higher stages of moral development and moral non-cheating behaviour, the experimental situation cannot be assumed to adequately represent real life situations which require a moral decision in a
situation of moral conflict, as it is possible that the subjects are aware of the experimental situation and do not invest it with much moral importance, thus committing the ecological fallacy of generalising experimental results in real life situations. Similarly, Straughan (1985) argued that, subjects with higher IQ levels were aware of the experimental conditions and may have realised or at least suspected that although left unsupervised, they could be watched and thus avoided cheating. Less cognitively advanced subjects failed to do so and as a result they succumbed to the temptation. As it has been argued by other researchers (e.g. Blasi, 1980; Siegal, 1982). IQ and general cognitive development could have accounted for these results in both experimental and naturalistic studies.

Locke (1979) argued that, the relation of moral maturity and moral behaviour is the most interesting and the most difficult one to resolve within the cognitive developmental perspective of moral development and identified two main difficulties. First that, as there are six moral stages and in simplified form only two behavioural alternatives each time, either to behave morally or not, it is obvious that the same kind of behaviour could result from different developmental stages, so there could not really be any direct link between the stages of moral reasoning and behaviour. Second, the stages of moral reasoning are identified, described and conceptualised as different forms of moral reasoning in contrast to the content of moral thinking, thus allowing different and contrasting kinds of content of moral reasoning, different reasons for behaviour, either in favour or against the specific behaviour, to be organised around the same form of reasoning. Thus, one would expect moral behaviour to be mainly unrelated with stages of moral reasoning.

Locke (1979) emphasised the role of the content of reasoning as determining the morality of an action and not the form of it, and further argues that, as the form of moral reasoning does not influence the content of moral thinking, or it has not been shown to do so, it cannot be expected that form of moral reasoning will determine moral action. Based on this line of argument Locke (1979) argued that a way to examine the relation of moral reasons and moral action would be to "...identify the stages of moral reasoning by content as well as by form, or to allow that the form of reasoning can, in part, determine its content" (ibid: 179) and the examination of such an interaction might provide a link of moral reasoning with moral behaviour.
PART II

EMPIRICAL STUDIES
CHAPTER 4:

PREDICTION AND EXPLANATION OF YOUNG OFFENDERS’ INTENTIONS TO RE-OFFEND
Chapter 4

PREDICTION AND EXPLANATION OF YOUNG OFFENDERS’ INTENTIONS TO RE-OFFEND

4.1 Introduction

It has been proposed that a degree of delinquent behaviour is quite normal for adolescents, especially males, accompanying this developmental stage, where issues of autonomy from parental supervision and subsequent acts of rebelliousness are common. At the same time peers’ opinions and peer culture are becoming main social influences for the adolescent (Bee, 1994).

While this may be the case for most of the adolescents engaging in minor and not serious delinquent acts, there is a proportion of youngsters who seem to persist in their offending behaviour. As a result, a number of studies have been conducted in an attempt to specify certain correlates of continuous re-offenders mainly due to the fact that a large percentage of criminal activity among young offenders is attributable to a small number of individuals who continue their crimes (Wolfgang, Thornberry and Figlio, 1987; Tarling, 1993).

Certain studies have been conducted to identify possible correlates of persistent offenders that are not dissimilar from the main correlates of delinquency. Dysfunctional family characteristics (Loeber and Stouthamer-Loeber; 1998; Masten and Coatsworth, 1998; Loeber and Dishion, 1983; Ganzer and Saranson, 1973), social instability (McLoyd, 1998), poor educational and employment attainment (Farrington and West, 1993; Myner et al, 1998), substance abuse (Myner et al, 1998) are among the most important.

The main feature of the literature about recidivism is that the theoretical framework mainly employed is that of social criminology. The main correlates searched and actually identified are mainly social factors (Binder, 1988) which are regarded as criminogenic and reflect the trend for issues of delinquency being examined through the sociological perspective and with the subsequent suggestion that, unless crucial changes are put forward by society for a change in societal structures, the problem of delinquency will always be there as a side effect of modern, institutionalised, political-economic societal functions.

Similar statements, whether subject to debate or not, may be useful to governments and policy makers who are responsible for finding ways and initiating policies for
reduction, prevention and rehabilitation of social instability which appears to be criminogenic. They are of limited help to those institutions and the staff employed there, such as prison services, who have to deal with the individual offender and his rehabilitation. In addition, little research has examined these issues in young offenders' correctional institutions despite the fact that their population, at any given point in time, is highly likely to recidivate (Rutter et al, 1997) and they represent a high risk population that significantly contributes to the level and the extent of overall criminal activity upon release from the correctional settings. Similarly, Rutter, Giller and Hagell (1998) argued that targeting high risks groups, highly likely to commit delinquent acts, with the aim of preventing further criminal involvement has been proposed as a cost effective approach.

The individual is target of challenge by the prison's staff, and how and what he perceives, interprets, thinks, feels, expects and plans. Knowing what and how a juvenile offender thinks will enable the parties involved in his rehabilitation to have a better idea of his cognitive representations of his own offending and deal with that appropriately (Dodge, 1993).

Coyle (1994) argued that the main objective of prisons were to deprive individuals of their liberty as a punishment for their breaking the law and deemed by courts as responsible for their actions and that prison sentence should be used only as a last resort for those individuals for whom an alternative is not appropriate. Coyle (1994) also argued that, according to a Framework Document published by the prison service in England and Wales in 1993, the goals of prison service are “to keep prisoners in custody, to maintain order, control, discipline and a safe environment, to provide decent conditions for prisoners and meet their needs, including health care, to provide positive regimes which help prisoners address their offending behaviour and allow them as full and responsible a life as possible, to help prisoners prepare for their return to the community, to deliver prison services using the resources provided by Parliament with maximum efficiency” (ibid:198-199).

Coyle (1994) argued that the primary objective of prisons is to deprive individuals of their liberty and earlier statements about reformation of prisoners were both inconsistent in suggesting that prison could have more than one primary aim and could lead to a
coercive environment where a group of people is trying to reform another group of people.

Coyle (1994) further argued that such a conception of prisons was further reinforced by the wish of the staff involved in the welfare of the prisoners to present a more positive side of their daily routine which in this way could be linked to worthy purposes and validate their work to themselves and others in a more respectable way. It could also be argued that such claims could be further supported by the wish of certain professionals to gain a more expert outlook as “experts” in changing or reforming people and be related with power struggles within the prison services.

Although prison’s primary aim is to deprive individuals of their liberty Coyle (1994) also argued that it should provide positive environments where the prisoners could address their offending behaviour, although the exact ways that this might happen are not specified. From the point of view of Coyle (1994) the two propositions do not seem incompatible. While the primary aim of the prison service is to provide secure custody and deprivation of liberty, the possibilities of providing them with opportunities to challenge their offending behaviour as well as educational and vocational assistance in combination with practical assistance upon release in the community, should not be overlooked.

Focusing solely on social factors that facilitate offending, to the exclusion of individual characteristics, provides only a partial view of the puzzle of offending (Short and Meier, 1981) who argued that delinquency in general can be conceptualised and examined at different levels of explanation and they identify the individual level, where the focus is on the individual characteristics, the macrosociological level, focusing on the role of social systems and cultural variation in explaining delinquency and the microsociological level, which focuses on situational determinants of delinquency in terms of role and reference groups and the processes of ongoing interaction. Short and Meier (1981) argued that further understanding of delinquency should consider interdisciplinary research at every level of analysis with the aim to “recognise different levels of explanation and to seek conceptual bridges between them” (ibid: 468). Possible interactions of the individual’s way of thinking and the social environment he belongs to, may be fruitfully identified and the picture become more complete, thereby providing a clearer idea of the possible causes of offending.
Although there appears to be a host of correlates of recidivism in juvenile delinquents, reflecting mainly sociological propositions of delinquency, the psychological correlates at the individual level have not been extensively researched (Binder, 1988). In addition, little research has concentrated on the motivational factors of juvenile delinquency and persistent offending (Farrington, 1993).

A reason for that reluctance is, as Nisbett and Wilson (1977) argued, that introspective data is not very useful since people are not able to accurately report inner cognitive events and mental processes, and generally, people account for a phenomenon in terms of previously held theories, and that the reasons juvenile delinquents provide for their offences might be incorrect as they are unaware of the 'true' causes of their delinquency e.g., biological or social factors (Agnew, 1990). When and under which conditions introspective data can be regarded as valid, has been examined (Erickson and Simon, 1980; Smith and Miller, 1978; Lieberman, 1979) and the matter seems unresolved, Baumeister (1998) argued that people might not be able to accurately report on their mental processes, especially on well learned tasks that have become relatively automatic, yet verbal reports of the content of their thinking seem desirable. "Introspection may be quite valid and accurate when people are asked to report what they are thinking and feeling. It may, however, be quite inaccurate when people seek to analyse how they arrived at these thoughts and feelings" (ibid: 693).

Similarly, Lieberman (1979) argued that verbal reports are useful data to the extent that they predict and can control actual behaviour, which represent features of the model employed in the present thesis that have received support (Ajzen, 1991; 1987; Sheppard, Hartwick and Warsaw, 1988; Fishbein and Ajzen, 1975). Rutter et al (1997) argued that the examination of juvenile delinquency could be pursued on many levels. Similarly, Agnew (1990) and Farrington (1993), noted that verbal reports such as attitudes and beliefs regarding offending behaviour might not be adequate techniques when the focus of research is the differences between individuals, that is, those who engage in crime and those who do not. When the focus of a study is delinquent events, an approach of examining the reasons the individuals themselves provide for committing a crime is a fruitful way of examining the most immediate and situational factors that lead to commitment of any delinquent event.
Moreover, Rutter et al (1997) argued that it is unlikely that juvenile delinquency could be explained in terms of a single variable. For any case of delinquent act to be examined it has to take into account the subjective evaluations of the costs and benefits of the delinquent act, and, from this perspective, it is the subjective perceptions that matter, no matter how inaccurate and misleading.

The application of social cognition models to recidivism may be useful in identifying the proximal cognitive antecedents of the offending behaviour and provide an opportunity to explore their relations to background factors that have been consistently related with chronic offending and recidivism. The aim of this study is to provide some evidence for the determinants of intentions. While efforts to account for variations in actual behaviour and predicting it may be more informative, this is suggested as a step for further research. Procedural problems do not permit the current study to incorporate a long-term follow-up component. Furthermore, it was thought to be more appropriate in the first place to establish possible determinants for intentions before a longitudinal, predictive study took place, since intentions are regarded as the most proximal antecedent of behaviour (Ajzen, 1991; 1987).

If these cognitive constructs, postulated by the Theory of Planned Behaviour (TPB), are empirically established as determinants of intentions and behaviour, that is, to predict a considerable amount of the variance in these two variables, the underlying beliefs of attitudes, norms and behavioural control can be targets of change. As these beliefs reflect the main motivational reasons for young offenders, at the aggregate level, to enact delinquent behaviour, they can be challenged. Besides, the resultant disadvantages may be stressed as deterrents for future antisocial behaviour.

At the same time, several issues that have been raised, and addressed in detail in the literature review of Chapter 1, in terms of the relations of the constructs of the TPB, their necessity and sufficiency, in comparison to external to the model variables, to predict behavioural intentions, the relations of belief-based and direct measures of the constructs of the model and the empirical establishment of the most potent predictors of intentions of future re-offending, will be examined.

In addition, research in Scottish Young Offenders' Institutions examined issues of the extent and the nature of bullying (Power, Dyson and Wozniak, 1997; Biggam and Power, 1999a) psychological well-being and suicidal propensity of young offenders in
custody (Biggam and Power, 1999b; Power and Spencer, 1987), and characteristics and perceptions of Scottish Young Offenders (Loucks, Power, Swanson and Chambers, 2000). However, relatively little is known about the specific reasons young offenders in Scotland perceive as criminogenic in the future, what could be any perceived normative influences on future offending, what are the problems they have to overcome in order to desist from offending, whether they are deterred by custodial sentences from future offending, how their beliefs are related with their background characteristics, what is a parsimonious way of predicting their intentions of re-offending, what needs of the youngsters must to be accounted for, and in what ways the content of interventions delivered within the correctional settings of Young Offenders Institutions could be informed so as to prevent offending future offending. The present study attempts to examine these issues.

4.2 Objectives of the Study

1) To describe background characteristics of a sample of young offenders, drawn from the largest young offenders' institution in Scotland.

2) To identify and describe young offenders' beliefs about their future offending.

3) To explore the differences of young offenders' beliefs about future offending according to their background characteristics.

4) To contrast and compare the predictive efficiency of the Theory of Reasoned Action (TRA) and the Theory of Planned Behaviour (TPB), in predicting young offenders' intentions to re-offend.

5) To test the necessity of the constructs of the Theory of Planned Behaviour (TPB) to predict young offenders' intentions to re-offend.

6) To test the sufficiency of the TPB and examine whether personal norm and affective self-reactions account for variation of young offenders' intentions to re-offend.

7) To obtain and describe the beliefs underlying young offenders attitudes, subjective norms and perceived behavioural control (PBC) towards future re-offending, so as to get a detailed description of the reasons at the roots of offending behaviour from the young offenders' perspective.
8) To assess the relationship of global and belief-based measures of attitudes, subjective norms and PBC.

9) To examine the relationships of young offenders’ behavioural, normative and control beliefs with their intentions of future re-offending.

4.3 Methodology

4.3.1 Procedure

A combination of designs was employed in the study, with the dominant methodology being quantitative and the qualitative analysis of the initial interviews to inform the preparation of the interview schedule and the questionnaire used in the main study. The survey method was employed as a way of describing certain features of the young offenders. The main interest was to “discover the relative incidence, distribution and interrelations” (Kerlinger, 1973: 377) of certain variables of interest in a sample of the largest Scottish Young Offenders’ Institution. Background characteristics were recorded regarding education, employment, previous offences, drug and alcohol abuse, family features as well as their beliefs and attitudes towards their offending behaviour. The first aim was to describe those issues and then to assess their relationships. While certain background factors have been repeatedly associated with juvenile delinquency, the perceptions that this group develops with regard to their own offending behaviour has not been given enough attention, neither has the influence of these background factors on the development of these cognitions. The identification of these cognitions and the assessment of their relative contribution to the offenders’ intentions of re-offending and their actual offending may be of interest to the staff of the prison service responsible for the rehabilitation of the individual offender. The survey approach provides a relatively economical way of gathering a considerable amount of data, in respect to time, effort and resources, and given that representative sampling was employed, the results may be generalised to the population of interest with a fairly high degree of confidence (Alreck and Settle, 1995).

At the time the study was carried out, the total population of young offenders held in Scotland was about 750 inmates of which 451 were kept in Polmont. Polmont is the largest institution in Scotland, in numerical terms, since young people, aged from sixteen to twenty one years old, serving a range of sentences, are kept there. Although
the largest institution in Scotland, Polmont is not representative of the young offenders' population in Scotland, in terms of profiles of offenders and types of offences committed. Young offenders serving long sentences for homicides and other serious offences and young people on remand are not represented in the sample so any inferences would not apply to them. Yet, the Polmont sample consists of young offenders having committed various offences, mainly those offences that create the most serious problems in terms of recidivism rates, property offences, violent offences, drug related offences and, more often than not, a combination of all of them.

From the largest institution in Scotland, approximately 33% of the young offenders from each hall, was selected and interviewed. This simple stratification was employed since offenders with different features are kept in each hall. The interviewees were selected from every Hall in Polmont so that the final sample could be spread over and be representative of Polmont Institution.

The actual number of the interviewees from each Hall was selected in order to reflect the size of the young offenders population in each Hall, and the number of young offenders interviewed in each Hall are: Spey=32, Argyle=31, Lomond=27, Nevis=26, Cramond=18, Rannoch=12, Beechwood=4 and Dunedin=2.

The young offenders were placed in each hall according to the following criteria: in Rannoch, if low risk offenders serving long sentences, in Cramond, if at risk of being bullied or likely to harm themselves in any way, in Dunedin, if they were bullies or exhibiting violent behaviour, in Beechwood, if well adjusted and transferred to the low security hall at the end of their sentence, in Nevis, if serving long-term sentences, in Lomond, if under 18 years old, and Spey and Argyle halls, hosting the majority of the offenders, usually sentenced for a relatively short period.

The total number of inmates in the institution was 451 and the sample size 152, so, approximately one-third of the inmates were interviewed. Every third inmate in each hall was interviewed starting from the second cell each time. While this sampling technique is more systematic than pure random, it is legitimate (Alreck and Settle, 1995).
Schofield (1996: 31) argues that this way of sampling, in contrast to the simple random selection, has the advantage of ensuring that “the sample is more evenly spread across a population” and he continues that “systematic sampling will be adequate as a form of random sampling, but only to the extent to which there is no ‘pattern’ in the sampling frame and the placing of any item in it really is independent of the placing of other items” (ibid: 31). Each of these prerequisites was true for the population of interest. In addition to the homogeneity of the population, the sampling interval was small, permitting one-third of the Institution’s population to be interviewed while the second rather than the first cell in each hall was selected as the starting point of sampling, since the first “item” in any sampling frame is more likely to be selected in general. All these cautionary steps made the likelihood of the introduction of any systematic bias in the sample selection quite minimal. In addition, the selection of any method of sampling, especially, in applied research, would be the outcome of balancing accuracy against feasibility. The role of the gatekeepers (Barrett, 1995) is an important one in determining the feasibility of any research, and when there are many, the co-operation of each one of them has to be ensured. Bearing in mind that the research took place in an institution where staff have their own routine, it seemed appropriate, for the feasibility of this study and for future research to be welcomed in the institution, to impose less demanding requests on them. Having a predetermined list of completely randomly selected inmates and asking staff to “chase” those particular ones, seemed less appealing than the sampling method employed. Apart from satisfying the prerequisites for a random sample, the selection procedure used in the present study was more flexible and ensured the best co-operation with rotating, shift-changing staff while, at the same time, making the data collection phase a less distracting task, from the staff point of view.

Despite the above selection procedure, any generalisation to the whole population of young offenders held in Scottish Institutions must be made with caution, although the Institution, where the research took place, is the largest one in Scotland. Any generalisations do not apply to female young offenders and to male young offenders convicted and sentenced for homicide and those on remand. Two inmates refused to take part in the interview and three did not complete the interview because it was felt that they did not approach it honestly. Any information they had given was not included in the analysis. The final sample consisted of 152 offenders. The size of the sample was
determined in order to achieve a 95 percent probability of a range of error around thirteen percent of the sample mean for the variables of the study (Alreck and Settle, 1995).

The research design of the thesis was cross-sectional introducing a correlational level of analysis and not a causal one (Crano and Brewer, 1973). Yet, property-dispositions relationships between variables can be studied, as well as the free variation of variables as they occur in their natural environment. While this feature adds to the ecological validity of the results it does not permit causal conclusions. In a natural environment the variables of interest are confounded by the presence of other factors as well. Certain ethical, practical issues as well as the nature of the research problem do not permit either manipulation of the independent variables or control of other variables by randomisation to treatments. In these instances the correlational approach may be the only way of gaining an insight into the research problem. In addition, certain research questions or hypotheses are of a mainly exploratory type or they aim to discover a degree of relationship between variables first, before any attempts of establishing causality can be undertaken. Furthermore, a cross-sectional design permits a considerable amount of data to be collected in a relatively short period of time and a number of intercorrelations to be examined. Obviously, the internal validity of this approach does not approximate the one established by the experimental method, while at the same time, given that appropriate sampling is employed, as naturally occurring relationships are studied, generalisations to real life situations can be applied, thereby enhancing the external and ecological validity of the results. Ethical permission for this research has been given by the University of Stirling and the Central Research Unit of Scottish Prison Service.

4.3.2 Data Gathering Instrument

Structured interviews were employed as the main data gathering technique, in spite of the high cost associated with this method in terms of time, effort and resources. Since some of the questions asked to the subjects were about secretive or illegal, and definitely sensitive issues, the interview provides a good means of getting such information, given that a degree of rapport is established between the interviewer and the respondent (Crano and Brewer, 1973). The face-to-face interview can, more efficiently, motivate and encourage the respondents to seriously consider the questions asked and clarify any misunderstandings that the subjects may have, which for the sample of the study was
quite possible due to their restricted educational attainment (Bradburn, 1983). The same effectiveness is doubtful if it was accomplished by self-report questionnaires, a most economical way of gathering information, due to the impersonal nature of the technique. Besides, response rates are usually higher in interviews than in self-report questionnaires, thus permitting greater confidence in the generalisability of the results, ensuring that the major source of error in survey designs (Schofield, 1996) can be minimised, especially in populations with literacy problems as the young offenders in this research. At the same time, the researcher, who is present in the interview, can evaluate, to a considerable degree, whether the subjects approach the interview, in a serious manner and are willing to provide information, which improves the quality of the data (Robson, 1993). In that way, problems associated with response bias in self-completed questionnaires can more effectively be dealt with by an interview.

While it could be argued that a self-completed questionnaire can make the subjects feel safer about the confidentiality of their responses, the fact that the responses were completely confidential and that the data analysis would be done anonymously were stressed early in the interview thereby encouraging subjects to honest responses. In addition to informing the subjects about the aims of the research they were told that they had been selected completely randomly, that there was no other particular reason for their selection, this interview was not part of any prison assessment procedure or any other official legal, social, correctional or governmental agency. They were told that the interviews were part of a research project based at Stirling University and that the prison service would not have access to the individual information confided by the subjects. In this phase of the research the main interest was the relationships between variables and whether certain hypotheses were true or false. The interview was a structured-scheduled one employing closed ended questions, according to the classification of Crano and Brewer (1973) who argued that this type of interview is the best approach in hypotheses testing, in comparison with less structured interviews, mainly because of the comparability of responses it can provide, especially when it can be assured that the responses available to the subjects cover every possible reaction. In addition, a high degree of standardisation in the administration of the interview can be attained, thus achieving greater uniformity of stimuli and enhancing reliability since slight alterations of the wording of items have large effects on the responses given (Sheatsley, 1983).
Chapter 4

While a pre-structured data-gathering technique can be regarded as not permitting unanticipated discoveries and restricts people in providing predetermined information without giving them the opportunity to express other information they consider relevant and important, the heavy reliance on the construction of a part of the questionnaire on the responses provided by a sample of the population resolves that limitation (Bradburn, 1983). In addition, the factual and behavioural information asked from the subjects was based on an extensive review of the literature, in an attempt to identify for key correlates. Although standardised questionnaires or interview schedules are subject to criticisms as "people understand the questions differently, respondents are forced into what seems to them an unnatural reply, they have no opportunity to quality their answers or to explain their opinions more precisely" (Sheatsley, 1983: 197). The only way to avoid these, is a precise standardisation of the questions, their sequence and wording in order to control possible response effects.

The instructions to the respondents were predetermined as well as the sequence of the questions, in an attempt to minimise the effects of the variations that the delivery of the interview could have on the variations between the subjects’ responses, thus, enhancing reliability.

The interviews were conducted by the same researcher, which controlled, to a certain degree, possible interviewer effects, as the stimuli provided by the interviewer were the same for all the respondents.

Alreck and Settle (1995) argued that the most important component of any survey research is the questions asked to the respondents, determining, in a high degree, the reliability and the validity of the results, more than any other aspect of the research design. They categorised sources of bias in instrumentation and respondent bias. Further, Bradburn (1983) concluded, from an extensive review of the literature, that the most important effects of response bias are attributed to the wording of the questionnaire in comparison to the response effects of interviewer and respondent. As the sample consisted of young offenders, a population that presents some limitations, in their level of literacy, because of their often restricted education attainment, and a rather limited attention span, extra care was taken for the wording of the questions so that they appear as simple, straightforward and unambiguous as possible. Care was taken to ensure that jargon and complex words were avoided, as well as double-barrelled, loaded
and leading questions. All the items were written in a way that asked the respondent to specify his answers in personal reference and relevance.

The construction of the final interview schedule relied on several phases of pilot testing. At the beginning, 5 inmates read the Moral Disengagement scale to identify any ambiguities in the wording of the items (see Chapter 6, Pilot Study). In the next phase 36 randomly selected inmates were given the slightly modified Moral Disengagement Scale and participated in a scheduled interview with open-ended questions aiming at identifying their salient behavioural beliefs, significant referents and control beliefs in terms of their offending behaviour according to Ajzen and Fisbein (1980), (see Chapter 4, Pilot Study). After a ten-week period the Moral Disengagement Scale was again administered to the same group of youngsters who had initially completed the scale. However, only 33 of them could be traced within the institution, in order to assess the scale's psychometric, mainly test-retest reliability and concurrent validity, properties in a group of young offenders in custody (see Chapter 7, Pilot Study). After these initial steps, the final interview schedule was pre-tested on ten subjects to ensure that the questions were comprehensible by the respondents, that any ambiguities were identified and clarified and whether the sequence of the questions was the one that optimally permitted honest responses and the establishment of rapport during the main phase of the research. Although the sequence was predetermined to begin with "easy" questions and then to proceed to the more difficult ones and finally to present some "easy" questions again, based on the feedback from the respondents in the pilot study, the sensitive questions, especially those regarding information about the families of the respondents, were asked almost at the end of the interview, starting with the least sensitive to the more sensitive. This was done because it has been observed, during the pilot testing, that the presentation of sensitive questions prematurely, that is, before a certain degree of rapport is established between the researcher and the subjects, could either put the respondents in a defensive position or make them suspicious and ask for more information about the purpose of the research. The interview lasted from approximately forty to seventy minutes and asked several personal and familial sociodemographic, legal, institutional, educational, vocational, mental health characteristics as well as issues of drugs and alcohol abuse. For the assessment of the above issues a modified version of the interview schedule employed by Loucks, Power
et al (2000) was used. This was made available to the researcher by the Anxiety and Stress Research Centre at the University of Stirling.

4.3.3 Questionnaire Format

Budd and Spencer (1986) warned that, the correlations of the constructs of the TRA, could be influenced by a response bias, resulting from the lay-person's intuitive psychology of intention, "which motivates people to create consistency between the components of the TRA when completing questionnaires which measure the model's construct" (p. 109). They, therefore, argued that, the predictive efficacy of the model and the relationships postulated by the theory between the constructs, which have been generally supported in the literature and especially by certain meta-analytic studies, actually reflected an artefact of the possibility of "people's concerns about being labelled as dishonest, or irrational, [which] may motivate them to strive to create consistency between the components of the TRA" and continue that "completing a questionnaire which measures the components of Ajzen and Fisbein's (1980) model is a social act which is likely to be affected by self-presentation demands" (p. 116). They tested the above hypothesis by providing subjects with questionnaires, which presented a differing degree of consistency between the constructs of the theory, and asked them to rate each questionnaire as whether the responses were honest or dishonest. They reported that, the degree of consistency between attitudes, subjective norm and intentions, affected, significantly, the perceived credibility of the questionnaires. Moreover, they content analysed reasons, the subject provided, for dishonesty in the completion of the questionnaires and report that, most people are aware of the rules used for attributing dishonesty to the questionnaires and most of them believed that failure to be consistent with propositions of the TRA, was evidence for dishonest responses. The authors further argued that, when presentation of items in a questionnaire format is in a way that permits the salience of the logical relationships between variables to be obvious, the correlations of the constructs would be higher, although this would be a methodological artefact of questionnaire structure based on exaggerating the effects of self-presentation concerns.

Armitage and Conner (1999), in a study applying the TPB in food consumption, tried to investigate any influences of questionnaire format, structured vs. random presentation of items, and social desirability on the strength of the relationships between the
constructs of the theory. The implications of the results were deemed crucial, as the expression of internal states such as attitudes or social cognitions, in general, should not be influenced by questionnaire format. If that was the case, as has been suggested (Budd and Spencer, 1987; 1986), the reliability and validity of the TPB, and, similarly, of other social cognition models, could be at stake. Budd and Spencer (1987) found that structured questionnaires resulted in higher correlations between the constructs of the TRA, in comparison to questionnaires presenting the items in a random way.

However, Armitage and Conner (1999), suggested that these differences could be equally accounted for by different internal reliabilities of the constructs, the number of behaviours that have been assessed and the fact that analysis was based on correlation coefficients only, while disattenuated correlation coefficients, controlling the effects of questionnaire format and social desirability could have been used, alternatives that have not been addressed in the previous study. Armitage and Conner (1999) further reported that, when responses of structured and randomly presented items were compared, no significant differences emerged, and the same results were obtained when responses were compared according to high and low social desirability. Interestingly higher internal reliabilities were obtained in the randomly presented format of the questionnaire. In addition possible moderating effects of questionnaire format and social desirability were performed, and it was found that none of the relationships between the constructs postulated by the TPB, differed significantly, as a function of either questionnaire format or social desirability. Although in the random presentation of items condition only attitudes and self-identity predicted intention, whereas in the condition of structured presentation of items, subjective norm predicted intention as well. The authors concluded that, social desirability did not have an effect on the relationships between the constructs of the theory, while questionnaire format could possibly have an effect on patterns of prediction, although not significant. They concluded that "[the] questionnaire cannot be regarded as a wholly neutral medium for collecting data, although the present study suggests that the problem may not be as serious as previously suggested" (p. 270).

Despite the fact that influences of questionnaire format on the reliability and validity of the propositions postulated by the TPB, can be regarded tentative, some evidence proposes that they can be minimal, non-pervasive and non-threatening to the predictive
validity of the model, it was decided, for the present study, to present the multiple items assessing a construct, in a random way, so that the logical consistency between the items and the constructs were less salient, in an attempt to minimise any possible source of response bias in the subjects responses.

4.3.4 Questionnaire

Direct Attitudes: Direct attitude measures were obtained by asking the subjects to evaluate, with reference to them, their offending behaviour in the future on a set of 8 seven-point semantic differential items according to Osgood, Suci and Tannenbaum (1957). In half of the items the positive pole was presented first and in the other half the negative pole, so as to control response bias (e.g. rewarding-punishing, boring-interesting, safe-unsafe). The average over all 8 scales served as a general measure of direct attitude towards offending. Valois and Godin (1991), postulated that the selection of adjectives for the measurement of attitudes by the semantic deferential method, could influence the internal reliability of the attitude measure and thus, in turn, influence the attitude-behaviour relationship. Different item pairs might not be appropriate for evaluating every behavioural domain, as the respondents can misinterpret them.

Valois and Godin (1991) employed four adjective pairs, unpleasant-pleasant, unhealthy-healthy, bad-good and useless-useful, and asked 217 undergraduate female students to evaluate different behaviours, namely: smoking cigarettes, use of oral contraceptives and breast self-examination. They reported variable internal reliabilities of the four measures of attitudes, ranging from .49 to .83. and variable attitude-behaviour correlation coefficients, ranging from .12 to .64. The results suggested that the selection of the adjective pairs aiming at assessing attitude by the semantic differential method could be influencing the internal consistency of the scale and therefore the attitude-behaviour relationship since, if they were not appropriate for the evaluation of the behaviour of interest, they could create ambiguity of their meaning to respondents. They concluded that, more care should be taken in the selection of appropriate bipolar adjectives, for these problems to be taken care of, and the internal reliability of the constructs of the TPB to be enhanced, as satisfactory internal reliability is essential when relationships between constructs is the focus of research. They suggested that researchers employing the semantic differential method for assessing attitudes should choose the adjective pairs according to the criteria of relevance to the
behaviour and their semantic stability, which have been proposed by Osgood et al (1957) for the construction of semantic differential scales measuring attitude. Different adjective pairs could be more appropriate for evaluating different behaviours, as they could differ on many dimensions. In addition, especially quite general adjectives, could be interpreted differently by the respondents and be either ambiguous or be perceived from a different point of view from the respondents. Based on the results of Valois and Godin (1991), the operationalisation of the direct measure of attitudes followed their warnings and extra care was taken to ensure that the adjective pairs were both relevant and stable semantically for future offending behaviour.

**Direct Subjective Norm:** Three seven-point rating scales were used to assess direct perceived subjective norms towards offending behaviour as has been operationalised in the literature (Ajzen and Driver, 1992a, 1991; Armitage and Conner, 1999; Parker et al, 1995). (1) Most people who are important to me think I should stop offending in the future (Unlikely-Likely), (2) Most people who are important to me approve of my offending in the future (Disapprove-Approve), (3) Most people I know would like me to stop offending in the future (Unlikely-Likely). Summating responses to the three scales gave a direct measure of subjective norms.

**Direct Perceived Behavioural Control:** Three seven-point rating scales were used to obtain a direct measure of PBC according to operationalisations in the literature (Terry and O’Leary, 1995; Sparks et al, 1997; Raats et al, 1995; Armitage and Conner, 1999). (1) How much control do you have whether you stop offending in the future? (Very little control - Complete control). (2) For me to stop offending in the future is (Easy-Difficult). (3) If I wanted to, I could easily stop offending in the future (Extremely unlikely- Extremely likely). Average responses to the three scales provided a direct measure of PBC to stop offending in the future.

**Intentions:** Two 7-point semantic-differential items elicited intentions to offend in the future. The items were formulated for offending behaviour in the future without precise specification of target and context. (1) I intend to offend in the future (Extremely likely-Extremely unlikely). (2) Will you offend in the future (Definitely plan not to- Definitely plan to). This approach is recommended by Ajzen and Fishbein (1980), who argue that if specific actions at specific time, context and target is of interest to be predicted, then the wording of the constructs of the theory should correspond to all these
features of the behaviour attaining a degree of specificity. The theory can be applied equally well to prediction of behaviour in more general terms, yet the wording of the constructs of the theory should then be consistent with the general definition of the behaviour of interest.

Belief-based attitude: The belief-based attitude measure was developed according to the eleven salient beliefs elicited by thirty-six randomly selected subjects in the pilot study (See Section 4.4). These salient beliefs reflected the subjects' perceptions of the advantages and disadvantages that result from the engagement in delinquent acts in general. The strength of these beliefs was assessed by means of seven point scales e.g. My offending will result in my going to jail in the future (unlikely-likely), My offending will be an exciting experience in the future (unlikely-likely) and the subjective evaluations of these outcomes by seven-point scales as well e.g. Staying out of jail in the future is (completely unimportant to me-very important to me), Having excitement in my life in the future is (completely unimportant to me-very important to me). Each scale was scored from 1 (unlikely, completely unimportant to me) to 7 (likely, very important to me). The indications of the belief strength and the subjective evaluation for each outcome were multiplied and then summated to provide an overall score of the belief-based attitude for each subject.

Belief-based subjective norms: The belief-based measures of subjective norms involved the five salient referents elicited in the pilot study with respect to the offending behaviour (mother, father, partner/girlfriend, friends who offend and friends who do not offend). With respect to each referent, the respondents indicated the strength of their normative beliefs on the following seven-point scale (How much do the following people (mother, father, girlfriend, close friends who offend, close friends who do not offend) agree with your offending in the future? (Strongly disagree-Strongly agree). Motivation to comply with each referent was measured by a seven-point scale to the following questions. How important to you generally are the views of the following people (mother, father, girlfriend, close friends who offend, close friends who do not offend)? (Very unimportant - very important). According to Ajzen and Fishbein (1980), the normative beliefs scales were scored in a bipolar fashion, from -3 (Strongly disagree) to 3 (Strongly agree). Subjects' responses to motivation to comply with each referent were scored in a unipolar fashion, from 1 (Very unimportant) to 7 (Very
important). Each normative belief score was multiplied by each motivation to comply score, and the resulting products were summed across the five normative referents to give a total score of the belief based measure of the subjective norms of the sample.

**Belief-based control**: Based on the factors, from the pilot study, believed to facilitate re-offending the subjects were asked whether they could attain the following: e.g. Getting a job in the future is (out of my control-under my control) Keeping calm when I am provoked in the future is (difficult-easy). Because the beliefs identified from the pilot study reflected both external and internal factors that could make the subjects re-offend, the scales for the external factors had poles in terms of control (out of my control-under my control) whereas the scales for the internal factors had poles in terms of difficulty (difficult-easy) according to Sparks, Guthrie and Shepherd (1997) and Terry and O’Leary (1995). Subsequently they were asked about their perceived effect that this factor could have in their stopping offending e.g. Getting a job will help me to stop offending in the future (false-true), Keeping calm when I am provoked will help me to stop offending in the future (false-true). All the scales were scored from 1 to 7 and the scores to the perceived effect of each factor were multiplied with the perceived ease of accomplishment and the sum of these products resulted in a belief based measure of behavioural control.

**Personal norm**: A measure of personal norm was obtained by means of seven-point rating scales for four items (1) I feel it is wrong for me to continue offending in the future (Strongly disagree-Strongly agree), (2) Offending in the future goes against my values (Strongly disagree-Strongly agree), (3) It would be morally wrong for me to continue offending in the future (Strongly disagree-Strongly agree) and (4) There is nothing bad with offending in the future (Strongly disagree-Strongly agree). An overall score for personal norm was calculated by averaging the scores of the four scales.

**Affective self-reactions**: Three seven-point rating scales supplied a measure of affective self-reactions. (1) After committing an offence I usually feel sorry for doing it (Extremely unlikely-Extremely likely), (2) After committing an offence I feel guilty most of the times (Extremely unlikely-Extremely likely) and (3) I sometimes feel ashamed after committing an offence (True-False). An overall score for affective self-reactions was calculated by averaging the scores of the three scales.
4.4 Pilot Study

The pilot study was conducted in Polmont Institution for young offenders in Scotland where young people aged from 16 to 21 are held for various offences they have committed. It is an institution mainly aimed at holding in custody intermediate offenders of various crimes apart from serious homicides. The inmates interviewed were selected to reflect Polmont's population and the appropriate percentage from each wing was randomly selected. From the potential interviewees approached, one refused to take part in the interview and finally 36 inmates were interviewed.

The pilot consisted of structured scheduled interviews employing six open-ended questions. What are the advantages of your offending? What are the disadvantages of your offending? Who approves of you continuing offending? Who disapproves of you continuing offending? What will stop you from offending in the future? What will make you offend in the future?

This approach was chosen both because it is suggested by Ajzen and Fisbein (1980) and because of its appropriateness at this phase of the research. The nature of the information sought from the subjects was theoretically predetermined and restricted which means that what the researcher was looking for was fairly well guided by a considerable amount of information pre-existing in the literature, so neither exploratory nor structured non-scheduled interviewing was necessary. Rather it was a way to allow the subjects, freely and exhaustively, to respond to pre-determined questions of theoretical relevance so that the structured-closed scheduled interview could be better prepared. The subjects identified crucial factors regarding their offending behaviour, in the form of modal beliefs, with the advantage of eliciting the subjects' own personal beliefs. The main advantage of this approach being the lack of response restriction, and at the same time, the exhaustiveness in the responses the subjects provide in order to ensure that a main disadvantage of the structured-closed schedule interview, a potential incompleteness in the range of responses available to respondents, could be overcome. The salience of the responses which the subjects provided was also of interest, a prerequisite that open-ended questions can well satisfy (Bradburn, 1983).

While it could be argued that these responses could be context specific, in custody, and could serve as justificatory discourses as a response to the interview process, as the focus of the study is on young offenders held in custody and the findings are not meant
to generalise to young adolescents who offend in general, they are still informative and a valuable source of the subjective accounts of the young offenders regarding their future offending behaviour. It has to be noted, however, that while the reference point of their opinions was their future behaviour, the information they provided is likely to be subjected to “halo” effects (Rutter et al, 1998), that is, to be distorted by the participants own set of mind, and their overall perceptions of offending, yet this is the kind of information that was sought by the subjects at that stage of the research, that is, to extract the factors that they themselves perceived as relevant for their future offending behaviour.

This procedure was employed at that early stage of the research so that a set of categories could be produced for the construction of closed questions in the main study, resulting from a content analysis based on the frequency each belief was mentioned by the subjects and the meaning they conveyed. The procedure followed was that proposed by Ajzen and Fisbein (1980) and it was ensured that at least 75% of the responses were categorised. As Robson (1993) warns, in this way an amount of information is lost. Only idiosyncratic responses were left out and this does not create a problem if the focus of the procedure is to have information for the population as a whole. The results from the initial interviews were content analysed, in order to get the most salient factors of the sample at the aggregate level. It was ensured that the categories which emerged covered at least 75 percent of the total responses given by the young offenders, leaving out idiosyncratic responses. The content analysis resulted in the following categories with the most salient, the most frequently mentioned themes, presented first. The wording of these beliefs selected was according to the less sophisticated responses provided by the subjects to ensure that they would be comprehensible by all the subjects in the main study.
### Table 1: Young Offenders' Perceived Advantages of Offending Behaviour

<table>
<thead>
<tr>
<th>Advantages of offending.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My offending provides me with money to buy drugs.</td>
</tr>
<tr>
<td>2. My offending provides me with money for the lifestyle I want.</td>
</tr>
<tr>
<td>3. My offending provides me with money for drinking.</td>
</tr>
<tr>
<td>4. My offending is an exciting experience.</td>
</tr>
<tr>
<td>5. My offending enables me to cope with life.</td>
</tr>
</tbody>
</table>

### Table 2: Young Offenders' Perceived Disadvantages of Offending Behaviour

<table>
<thead>
<tr>
<th>Disadvantages of offending.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My offending results in my going to jail.</td>
</tr>
<tr>
<td>2. My offending results in losing my freedom.</td>
</tr>
<tr>
<td>3. My offending results in my losing contact with my family.</td>
</tr>
<tr>
<td>4. My offending results in my losing contact with my friends.</td>
</tr>
<tr>
<td>5. My offending results in difficulties to find a job.</td>
</tr>
<tr>
<td>6. My offending results in my family being embarrassed.</td>
</tr>
</tbody>
</table>
Table 3: Young Offenders' Identification of their Significant Others.

People the young offenders think will agree with their offending in the future.

1. Friends
2. Partner/Girlfriend
3. Father
4. Mother

People the young offenders think will disagree with their offending in the future.

1. Mother
2. Partner/Girlfriend
3. Friends
4. Father

When the subjects were asked about the factors that they thought could prevent them from offending in the future and about the factors that would make them re-offend in the future there was a considerable overlap in the meaning of the factors mentioned in the two categories. The general pattern, which emerged, was of the following type: “Stopping drinking” was mentioned as an inhibitor of future behaviour and “Continuing drinking” as facilitator of future offending. It was decided that the total number of factors mentioned in both kinds of responses would be summated and collapsed in one total set of responses and this set would be further content analysed. The categories that emerged from this analysis are reported next.
Table 4: Young Offenders' Beliefs about the Factors that Can Exert an Influence in the Continuation of their Offending in the Future.

Factors that could potentially stop offending behaviour in the future.

1. Getting a job.
2. Being away from the same old delinquent friends.
3. Being off drugs.
4. Getting support from my family.
5. My stopping drinking.
6. Having money.
7. Having my own family.
8. Keeping calm when I am provoked.
9. Having a house.
10. Moving away and making a new start.

4.4.1 Discussion

The reasons that the young offenders thought would make them re-offend in the future are mainly materialistic benefits and feelings of excitement, a pattern of results that has been consistently found in similar studies assessing the reasons that juvenile delinquents provide for their offending behaviour (Farrington, 1993). It has to be noted, however, that a notable difference with the previous studies, is the issue of drug misuse, which was the most often cited reason for the present study. The importance of drug misuse as a reason for offending is recognised by the young offenders as a factor that they have to control in the future, in order to stop offending. The fact that previous studies did not report drug misuse as a main reason for offending might reflect that the needs and the factors predisposing adolescents today in crime, may be partly different from the needs and factors of the past. This is likely, as most of the studies assessing the subjective accounts of young offenders are rather old and their results may not be
applicable to current generations of adolescents. The results also point to the fact that research focusing on the subjective evaluations of offending behaviour from the offenders’ perspective, could be better informed if the specific factors that are thought to predispose to crime are of personal relevance to the participants of the study and not imposed by researchers. In addition the results are suggesting that any interventions by the correctional settings to reduce overall levels of recidivism could focus on the specific needs of the offenders rather than targeting general risk factors (Andrews and Bonta, 1984).

Regarding drug using behaviour among 234 adult male prisoners in Scotland, Shewan, Gemmell and Davies (1994) noted that prison can act as a modifier of drug using behaviour since most of the drug injectors stopped injecting drugs during their current sentence, although they used non-injecting drugs rather than giving up drug use. In addition only two men started injecting drugs in prison suggesting that prison does not introduce people to drug abuse, although Shewan et al (1994) noted that some prisoners may smoke cannabis regularly after being in prison and people who are already drug users may start trying different drugs while in prison for the first time.

Shewan et al (1994) further argued that, as being prescribed methadone in the community and having the prescription discontinued on entry to prison, were among the predictors of sharing injecting equipment within prison "a detoxification programme with reduction based oral prescribing should be routinely offered, and administered on a contractual basis, to all prisoners on admission who present with a drug problem"(ibid: 214), arguing for the need of drug rehabilitation opportunities in prison, which although not the primary objective of prisons, it is compatible with alternatives of constructive changes in prison and the need for provision of health-related services available in the community.

Shewan, Hammersley, Oliver and Macpherson (2000) examined the rate of deaths due to drug overdose after liberation from prison among 690 women ex-prisoners between October 1993 and September 1995 in order to examine whether reduced tolerance to opiates, due to reduced drug use in prison, resulted in increased deaths in drug users after liberation from prison. The results suggested that the risk of death was significantly higher among drug users in comparison to non-drug users, however, not all
the deaths were occurring shortly after liberation. Deaths were occurring within 38 days of release from prison and after a longer period between 147 and 347 days.

Shewan et al (2000) interpreted these findings as, that different processes might be involved in drug related deaths after liberation and that relapse to drug injection after release from prison might be the factor in fatal overdose rather than liberation from prison. However Shewan et al (2000) argued that it is quite plausible to assume that liberation from prison is likely to increase the risk of overdose, an explanation that needs further investigation, and that provision of drug related relapse prevention advice and services should be available to released prisoners with drug problems.

Shewan, Macpherson, Reid and Davies (1996) evaluated a drug reduction programme in adult prisoners, the Edinburgh Prison Drug Reduction Programme, consisting of substitute prescribing of drugs and educational and practical advice on drug-free lifestyles, and found that clients who completed the programme were more likely to use a lesser number of drugs, less often, of lower amounts and that these patterns remained stable over time for a period of two-weeks in comparison to the clients who did not complete the programme. The two groups each consisted of 30 participants. In the intervention group, prisoners who have either completed the programme or completed at least 21 days participated and the control group consisted of 30 prisoners who represented "the different extent to which non-clients will have been in contact with the DRP" (ibid:85). The initial interviews were carried out approximately one-month after completion of the programme, for the intervention group, or one month after admission to prison, for the control group. The two groups did not differ in the number of days they had spent in prison when the first interview was conducted, although the intervention group was more likely to be older, to have ever injected, to have injected heroin and have used methadone prior to custody while there were no significant differences between the two groups in terms of past drug using behaviour in prison.

A follow-up assessment was conducted within the prison setting and involved 21 participants from the intervention group and 15 from the control group within two weeks of their release. Shewan et al (1996) noted that although the study did not assign randomly the participants in the two groups, which were self-selected, and that could mean that people participating in the intervention group were more motivated to change
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their drug-using behaviour in comparison to the control group, the pre-treatment differences, especially in terms of injecting, were higher for the intervention group, suggesting that the participants of the intervention group were more likely to experience more serious problems in terms of drug using behaviour and, thus, having more difficulties in modifying their behaviour.

Despite that, completing the Drug Reduction Programme was an independent predictor of using fewer number and lower amounts of drugs at the initial interviews and prior to release. Overall, Shewan et al (1996) argued that the programme had a positive impact on drug using behaviour in prisoners in custody and provided a model for implementation in other prison settings.

4.5 Main Study

4.5.1 Statistical Analysis

Before the main statistical analyses, the data were inspected and several variables were excluded from further analysis. The data were first screened through frequencies for adequate variability and the categorical variables with a 90/10 distribution were excluded from further analyses, as they represented constants with little chance of discovering any meaningful relations. The variables excluded at this stage were: ever taken drugs, first drug taken, any friends involved in criminal activities, ever been suspended from school, truancy at school. Dichotomous variables were further screened with a correlation matrix to examine to what extent there was any overlap between them. Those variables with a phi coefficient greater than .70 were examined and in any instance of significant overlap the variable that was deemed to represent less explanatory power was dropped. So, ever been in residential care was preferred to ever been in special school, having a stable employment before custody was preferred to ever been employed, being employed at the time of offence and ever been dismissed from a job. Finally, presence of psychological problems in the family was preferred to any suicidal attempts in the family.

In addition, the data were examined through frequency distributions to examine continuous variables for normality, skewness and kurtosis, as a considerable amount of variability needs to be present in each variable if the relationships between variables are to be examined and the relationship captured by the correlation coefficients and to
examine whether outliers are present in continuous variables. In addition the variables were plotted to examine whether the relationships between them were linear and, in all cases, linear relationships were found.

The amount of missing values in the data was very small as the data collection relied on a structured interview delivered by the researcher who was present during the completion of the self-report questionnaires. Any missing values reflected mainly those cases to which the variable(s) of interest did not apply, e.g. the completion of the Parental Bonding Instrument, when no mother or mother figure was available as a point of reference, or drug and alcohol abuse when the subjects did not engage in these behaviours. Based on this pattern it was decided that any missing values be replaced by the overall mean, so that the cases could be included in the statistical analyses. This alternative is recommended by Tabachnick and Fidell (1996) as a relatively conservative procedure since the distribution of the values of any variable does not change and it is an informed solution, as it does not require the researcher to guess a value to be inserted.

Affective self-reactions were found to be highly correlated with attitudes, suggesting a significant overlap between the two variables, meaning that affective self-reactions would not add to the prediction of intentions and that, if included in the regression, collinearity would emerge. It was decided that attitudes towards future offending should be included as a predictor as it is theoretically specified by the TRB.

Multivariate outliers were identified by Cook's distance. The results of the regression analysis both including and excluding the, outliers did not change significantly and it was, therefore, decided to retain all the cases (Tabachnic and Fidell, 1996).

4.5.2 Results

Legal, Institutional and Socio-Demographic Background Characteristics of the Young Offenders (N=152)

The age of the sample ranged from 16 to 21, m=18.9, (s.d.=1.3) and 29% were in custody mainly for property offences, 53% for violent offences, 9% for drug dealing and 9% for other offences. The length of their sentences ranged from 2 to 96 months (m=26.4, s.d. = 20.3). They had been in custody m=2.5, (s.d.=2.2) and had been remanded m=4.8, (s.d.=5.4) times. They had 11.1, (s.d. = 13.8) previous sentences and stayed in custody for an average of 6.9 months, (s.d.=7.1) at the time of the interview.
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The total time they had spent in custody was 19.6 months, (s.d.=16.4). The self reported age of their first offence was 12.3 years, (s.d.=2.6), first arrest 14 years, (s.d.=2.4) and first time in custody 16.8 years, (s.d.=1.5). They had tried alcohol at 12.7, (s.d=1.9) and drugs at 12.8, (s.d=1.7).

Forty six percent had been in residential care, and (50. %) had attended a special school. Seventy six percent reported poor school behaviour and 91% had played truant in the past. Ninety percent had been suspended from school and 21.7% reported poor peer relations at school. Eighty one percent had been employed in the past, 43.8% had been dismissed from a job and 52% were not employed when they had committed the offence, while 59.9% did not have a stable employment. A third of their families had the support of a social worker and nearly two-thirds (67.8%) of their families relied on state benefits.

Seventy three percent reported being in touch with their families while in custody. Ninety-four (61.8%) had someone, usually father or brother, in their immediate family having served a custodial sentence. Fifty five (36.2%) came from a family experiencing drug misuse and 71 (46.7%) alcohol abuse, while 40 (26.3%) reported that someone in their immediate family had received psychiatric or psychological treatment. The vast majority 147 (96.7%) had a close friend involved in criminal activity.

The term drug in the current thesis is used to describe any illicit, non-prescribed compound used as a way of altering the mood of the user, that is, likely to cause harm to the individual, and, it violates social standards (Cox, Jacobs, Leblanc and Marshman, 1987; Royal College of Psychiatrists, 1987; Institute for the Study of Drug Dependence, 1999).

"Drug misuse is any taking of a drug which harms, or threatens to harm, the physical or mental health or social well-being of an individual, of other individuals, or of society at large, or which is illegal" (Royal College of Psychiatrists, 1987: 30). The above definition of drug misuse was proposed as a working definition by the Royal College of Psychiatrists in Drug Scenes, a report about Drugs and Drug Dependence (1987) and was employed for the current thesis.

Ninety three percent had taken drugs and 80.9% started with "soft" drugs such as cannabis. Overall the Young Offenders reported using the following drugs in the past:
heroin=45, cannabis=61, methadone=2, tamazepam=8, speed=16, acid=4, crack=3, cocaine=16, ecstasy=21, valium=11, diazepam=2, jellies=5, LSD=1, glue=1, amphetamines=2 and 23 young offenders reported that they did not use any kind of drugs in the past.

The drug use patterns of the young offenders were categorised as "no drug use", use of "soft drugs" and use of "hard drugs". The Drug Abuse Briefing by the Institute of the Study for Drug Dependence (1999) noted that "[o]bviously there is an element of truth in the distinction, ... [although] the terms ‘hard’ and ‘soft’ when applied to drugs have no legal or pharmacological validity"(p: 3). For ease of analysing drug misuse patterns with the rest of the variables, drugs such as cannabis, glue, jellies, valium, tamazepam and diazepam, were categorised as ‘soft’, while drugs such as heroin, cocaine, methadone, crack, LSD, acid, speed, ecstasy and amphetamines, were categorised as ‘hard’.

From the drug users one third (36.8%) admitted that drug taking was a problem for them and 66.4% admitted that they had committed a crime to get drugs while an equal percentage (65.8%) reported that they had committed a crime under the influence of drugs. Most of the drug users (52%) believed that they would continue taking drugs after custody and another 29.6% were uncertain. Eighty eight percent had tried alcohol and from them 28.3% believed that alcohol use was a problem for them while 45.4% admitted that drinking contributed to their current offence and 75% reported that they had ever committed a crime because they had been drunk.

In general 44.1% said that they had been under psychiatric or psychological treatment in the community, while a lower 20.4% had seen a psychologist or psychiatrist while in custody. Finally 14.5% (22 young offenders) admitted to have attempted committing suicide. From the 22 young offenders who have attempted suicide 11 attempted suicide in the community, 9 in custody and 2 attempted suicide both in custody and the community.

An almost equal percentage (13.8%) reported that someone in their families had attempted suicide or self-injury.

Overall, 47 (30.9%) expected that their living situation would be unstable after custody.
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Table 5 illustrates the participants’ perceived likelihood about their offending behaviour consequences. Most of the young offenders recognised that future offending is likely to result in custodial sentence, loss of freedom and it will make their families feel embarrassed. Two thirds recognised that future offending is likely to create problems for them in terms of employment and almost half of them accepted that future offending is likely to provide financial means for getting drugs. About a third recognised that future offending is likely to support their lifestyle, it is likely to be exciting and it will result in losing contact with their families.

The young offenders’ evaluations of the perceived consequences of offending behaviour are presented in table 6. The vast majority of the young offenders agreed that staying out of jail, having their freedom, being able to find a job, having contact with their families, being able to cope with life and trying not to embarrass their families were very important for them in the future. At the same time two-thirds agreed that it was also very important to have excitement in their lives and have money for the lifestyle they wanted. Twenty-two percent accepted that it was also very important to have money to buy drugs in the future.

The young offenders’ perceptions of important others’ agreement with their offending behaviour and their motivation to comply with these referents are presented in tables 7 and 8 respectively. In table 7 it could be seen that the majority of the young offenders perceived their mothers as disagreeing with their future offending, as well as their girlfriends and their fathers. It has to be noted that the percentage of the young offenders perceiving their fathers as disagreeing with their future offending although high was lower in comparison to their mothers. Friends were mostly perceived as neither agreeing not disagreeing. In table 8 it can be seen that the majority of the young offenders found their mothers and girlfriends views very important while less than half found their fathers’ views as important. Friends’ views were for most of the young offenders, rather neutral.

Table 9 illustrates the young offenders’ perceptions of control over certain factors that could inhibit future offending and table 10 illustrates their perceptions that these factors can potentially help them to stop offending in the future. About two-thirds of the young offenders perceived themselves as able to find a job in the future and getting support from their families. About half of them were able or thought it easy to have
money, moving away and making a new start, being away from their peer group, keep calm when provoked and stop taking drugs. Around a third found it easy to stop drinking in the future while a comparable percentage found it difficult.

About two-thirds of the young offenders believed that having support from their families, stopping drinking and having a house and money will stop them from offending in the future. Overall most of the factors that have being identified by the original interviews with open-ended questions were perceived by the majority of the young offenders as helpful in desisting from offending in the future. A third believed that stopping taking drugs would help them stop offending in the future, a third believed it would not and an equal percentage was not sure. About the influence of the their peer group most of the young offenders were not sure whether being away from them would help or not.
Table 5: Young Offenders Agreement with Perceived Consequences of Future Offending (N=152).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Likely</th>
<th>Neither likely nor unlikely</th>
<th>Unlikely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Score 1,2)</td>
<td>(Score 3,4,5)</td>
<td>(Score 6,7)</td>
</tr>
<tr>
<td>My offending in the future will result in my going to jail</td>
<td>128 (84.2)</td>
<td>21 (13.9)</td>
<td>3 (2)</td>
</tr>
<tr>
<td>My offending in the future will result in losing my freedom</td>
<td>136 (89.5)</td>
<td>13 (8.5)</td>
<td>3 (2)</td>
</tr>
<tr>
<td>My offending in the future will result in losing contact with my family</td>
<td>55 (36.2)</td>
<td>40 (26.4)</td>
<td>57 (37.5)</td>
</tr>
<tr>
<td>My offending in the future will result in losing contact with my friends who do not offend</td>
<td>62 (42.2)</td>
<td>58 (38.1)</td>
<td>27 (17.7)</td>
</tr>
<tr>
<td>My offending in the future will result in difficulties to find a job</td>
<td>94 (61.8)</td>
<td>41 (27)</td>
<td>17 (11.2)</td>
</tr>
<tr>
<td>My offending in the future will result in my family being embarrassed</td>
<td>119 (78.3)</td>
<td>26 (17.1)</td>
<td>7 (4.6)</td>
</tr>
<tr>
<td>My offending in the future will result in losing contact with my friends who offend</td>
<td>26 (17.1)</td>
<td>47 (30.9)</td>
<td>79 (51.9)</td>
</tr>
<tr>
<td>My offending in the future will be an exciting experience</td>
<td>46 (30.3)</td>
<td>71 (46.7)</td>
<td>35 (23)</td>
</tr>
<tr>
<td>My offending in the future will enable me to cope with life</td>
<td>30 (19.8)</td>
<td>57 (37.5)</td>
<td>65 (42.8)</td>
</tr>
<tr>
<td>My offending in the future will provide me with money for drinking</td>
<td>37 (24.4)</td>
<td>44 (28.9)</td>
<td>71 (46.7)</td>
</tr>
<tr>
<td>My offending in the future will provide me with money for the lifestyle I want</td>
<td>56 (36.9)</td>
<td>50 (32.8)</td>
<td>46 (30.3)</td>
</tr>
<tr>
<td>My offending in the future will provide me with money to buy drugs</td>
<td>73 (48)</td>
<td>33 (21.8)</td>
<td>44 (29.3)</td>
</tr>
<tr>
<td>Event</td>
<td>Completely Unimportant for me (Score 1,2)</td>
<td>Neither Important nor Unimportant for me (Score 3,4,5)</td>
<td>Very Important for me (Score 6,7)</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------</td>
<td>-------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Having money to buy drugs in the future is</td>
<td>65 (43.3)</td>
<td>51 (33.5)</td>
<td>34 (22.3)</td>
</tr>
<tr>
<td>Having money for the lifestyle I want in the future is</td>
<td>6 (7.2)</td>
<td>46 (30.3)</td>
<td>100 (65.8)</td>
</tr>
<tr>
<td>Having money for drinking in the future is</td>
<td>85 (55.9)</td>
<td>46 (30.3)</td>
<td>21 (13.8)</td>
</tr>
<tr>
<td>Having excitement in my life in the future is</td>
<td>7 (4.6)</td>
<td>50 (33)</td>
<td>95 (62.5)</td>
</tr>
<tr>
<td>Staying out of jail in the future is</td>
<td>4 (2.6)</td>
<td>12 (7.9)</td>
<td>136 (89.5)</td>
</tr>
<tr>
<td>Having my freedom in the future is</td>
<td>4 (2.7)</td>
<td>9 (5.9)</td>
<td>139 (91.5)</td>
</tr>
<tr>
<td>Being able to find a job in the future is</td>
<td>7 (4.6)</td>
<td>34 (22.4)</td>
<td>111 (86.8)</td>
</tr>
<tr>
<td>Having contact with my family in the future is</td>
<td>6 (4)</td>
<td>13 (8.6)</td>
<td>133 (87.5)</td>
</tr>
<tr>
<td>Being able to cope with life in the future is</td>
<td>1 (.7)</td>
<td>35 (23)</td>
<td>116 (76.3)</td>
</tr>
<tr>
<td>Trying not to embarrass my family in the future is</td>
<td>7 (4.6)</td>
<td>28 (18.4)</td>
<td>117 (77)</td>
</tr>
<tr>
<td>Having contact with my friends who offend in the future is</td>
<td>54 (35.5)</td>
<td>76 (50.1)</td>
<td>22 (14.4)</td>
</tr>
<tr>
<td>Having contact with my friends who do not offend in the future is</td>
<td>10 (6.5)</td>
<td>50 (32.9)</td>
<td>87 (57.2)</td>
</tr>
</tbody>
</table>
### Table 7: Young Offenders' Perceptions of Important Referents' Agreement with their Future Offending.

<table>
<thead>
<tr>
<th>Referent</th>
<th>Strongly disagree (Score 1,2)</th>
<th>Neither agree nor disagree (Score 3,4,5)</th>
<th>Strongly agree (Score 6,7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother agrees with offending</td>
<td>121 (82.3)</td>
<td>25 (16.5)</td>
<td>1 (0.7)</td>
</tr>
<tr>
<td>Father agrees with offending</td>
<td>96 (69.1)</td>
<td>41 (27)</td>
<td>2 (1.3)</td>
</tr>
<tr>
<td>Girlfriend agrees with offending</td>
<td>98 (71.5)</td>
<td>35 (23)</td>
<td>4 (2.6)</td>
</tr>
<tr>
<td>Friends who offend agree with offending</td>
<td>3 (2)</td>
<td>88 (57.8)</td>
<td>61 (40.2)</td>
</tr>
<tr>
<td>Friends who do not offend agree with offending</td>
<td>58 (40)</td>
<td>80 (52.6)</td>
<td>7 (4.6)</td>
</tr>
</tbody>
</table>

### Table 8: Young Offenders' Motivation to Comply with Important Referents' Views.

<table>
<thead>
<tr>
<th>Referent</th>
<th>Very Unimportant (Score 1,2)</th>
<th>Neither Important nor Unimportant (Score 3,4,5)</th>
<th>Very Important (Score 6,7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother's view important.</td>
<td>9 (5.9)</td>
<td>32 (21.1)</td>
<td>106 (69.8)</td>
</tr>
<tr>
<td>Father's view important.</td>
<td>24 (15.8)</td>
<td>50 (32.9)</td>
<td>65 (42.7)</td>
</tr>
<tr>
<td>Girlfriend's view important.</td>
<td>3 (2)</td>
<td>40 (26.3)</td>
<td>94 (61.8)</td>
</tr>
<tr>
<td>Friends' who offend view important.</td>
<td>35 (23)</td>
<td>107 (70.4)</td>
<td>10 (6.6)</td>
</tr>
<tr>
<td>Friends' who do not offend view important.</td>
<td>6 (4)</td>
<td>103 (67.8)</td>
<td>36 (23.7)</td>
</tr>
</tbody>
</table>
## Table 9: Young Offenders’ Perceived Control over Certain Factors that Inhibit Future Offending (N=152).

<table>
<thead>
<tr>
<th>Factor</th>
<th>Out of my Control (Score 1,2)</th>
<th>Neither Out nor Under my Control (Score 3,4,5)</th>
<th>Under my Control (Score 6,7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting a job in the future is</td>
<td>16 (10.5)</td>
<td>34 (22.3)</td>
<td>102 (67.1)</td>
</tr>
<tr>
<td>Having support from my family in the future is</td>
<td>20 (13.2)</td>
<td>37 (24.3)</td>
<td>95 (62.5)</td>
</tr>
<tr>
<td>Having a house in the future is</td>
<td>39 (25.7)</td>
<td>51 (33.5)</td>
<td>62 (40.8)</td>
</tr>
<tr>
<td>Having money in the future is</td>
<td>28 (18.4)</td>
<td>40 (26.3)</td>
<td>84 (55.2)</td>
</tr>
<tr>
<td>Moving away and making a new start in the future is</td>
<td>31 (20.4)</td>
<td>41 (26.9)</td>
<td>80 (52.6)</td>
</tr>
<tr>
<td>Being away from the same old delinquent friends in the future is</td>
<td>24 (15.8)</td>
<td>52 (34.2)</td>
<td>76 (50)</td>
</tr>
<tr>
<td>Keeping calm when I am provoked in the future is</td>
<td>13 (8.6)</td>
<td>64 (42.1)</td>
<td>75 (49.4)</td>
</tr>
<tr>
<td>Stopping drinking in the future is</td>
<td>45 (30)</td>
<td>49 (32.3)</td>
<td>56 (36.8)</td>
</tr>
<tr>
<td>Being off drugs in the future is</td>
<td>34 (24.1)</td>
<td>33 (21.7)</td>
<td>74 (48.7)</td>
</tr>
</tbody>
</table>
Table 10: Young Offenders' Perceptions that Certain Factors will Inhibit Future Offending (N=152).

<table>
<thead>
<tr>
<th>Factor</th>
<th>False (Score 1,2)</th>
<th>Neither False nor True (Score 3,4,5)</th>
<th>True (Score 6,7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting a job will help me to stop offending in the future</td>
<td>12 (7.9)</td>
<td>55 (36.2)</td>
<td>85 (55.9)</td>
</tr>
<tr>
<td>Having a house will help me to stop offending in the future</td>
<td>5 (3.3)</td>
<td>52 (34.1)</td>
<td>95 (62.5)</td>
</tr>
<tr>
<td>My stopping drinking will help me to stop offending in the future</td>
<td>20 (13.3)</td>
<td>34 (22.3)</td>
<td>96 (63.2)</td>
</tr>
<tr>
<td>Keeping calm when I am provoked will help me to stop offending in the future</td>
<td>46 (30.3)</td>
<td>74 (48.7)</td>
<td>32 (21)</td>
</tr>
<tr>
<td>Having money will help me to stop offending in the future</td>
<td>5 (3.3)</td>
<td>55 (36.2)</td>
<td>92 (60.6)</td>
</tr>
<tr>
<td>Moving away and making a new start will help me to stop offending in the future</td>
<td>5 (3.3)</td>
<td>57 (37.5)</td>
<td>90 (59.2)</td>
</tr>
<tr>
<td>Being away from the same old delinquent friends will help me to stop offending in the future</td>
<td>30 (19.7)</td>
<td>77 (50.6)</td>
<td>45 (29.6)</td>
</tr>
<tr>
<td>Having support from my family will help me to stop offending in the future</td>
<td>10 (6.6)</td>
<td>39 (25.6)</td>
<td>103 (67.8)</td>
</tr>
<tr>
<td>Being off drugs will help me to stop offending in the future</td>
<td>45 (31.9)</td>
<td>48 (31.6)</td>
<td>48 (31.6)</td>
</tr>
</tbody>
</table>
Chapter 4

Legal, Institutional and Socio-Demographic Characteristics of Young Offenders and their Cognitive Representations of Offending Behaviour in the Future.

A further objective of the study was to explore any differences in the way young offenders cognitively represent their future offending according to several features that have been associated with juvenile delinquency in general and chronic offending in particular. This aim was mainly approached in an exploratory way since no theoretical propositions have been advanced about the particular social factors influencing perceptions of offending, nor which factors could be solely associated with perceived evaluations or beliefs of self-efficacy to stop offending in the future. In relation to the TPB, the proposition is that several demographic or external to the model variables would exert any influence on intentions through the postulated antecedents of intentions that is, attitudes, subjective norms and PBC, while the specific relations are not theoretically specified (Eagly and Chaiken, 1993) and have to be empirically established.

This procedure led to a large number of comparisons with the accompanying risk of Type I errors, reporting statistical significant differences when in fact they are not. However, the demographic characteristics that were selected were found related to juvenile delinquency and chronic offending in the literature, both empirically and theoretically, and it was expected that high risk factors would be associated with favourable representations towards future offending. Yet, as there is not really anything in the literature to guide the identification of the factors that would facilitate favourable thinking of future offending and the possible differential relations of some factors with either attitudes, perceived control or subjective norms, these issues were explored in the present study.

A number of t-tests were performed to test any differences between those young offenders who have been sentenced to custody for property offences and those who have been sentenced for violent offences. Violent offenders had a more prolonged incarceration in custody for their present offence, \( t(123) = 3.7, p < .001 \), while property offenders had a higher rate of past recidivism, defined as the sum of the number of their past incarcerations, past arrests and past, non-custodial sentences, divided by their age to obtain an index of the offenders past recidivism rate, \( t(69.01) = 2.7, p = .007 \). It has to be noted that the operationalisation of recidivism in the present study led to a slight caveat.
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of double counting e.g. a past arrest could lead to imprisonment or non-custodial sentence or even neither of the two. However, the operationalisation of recidivism, in this way, allowed for more spread of offending to be measured and as Thorton (1985) has argued (see 1.1.2 literature review) no one measure of recidivism is likely to tap all the dimensions of the construct and for this reason multiple indices of frequency of offending were used and combined.

Property offenders had a more favourable attitude towards their offending ($t(109.7)=3.2, p=.002$) and perceived themselves as less able to control their offending in the future ($t(98.3)=4.3, p<.001$) than violent offenders. The same pattern of differences between property and violent offenders was found for the indirect, belief based measure of attitude, with property offenders expressing a more positive evaluation of their offending, ($t(99.9)=3.7, p<.001$), while the difference between property and violent offenders in their ability to control their offending in the future did not reach significance for the indirect measure of behavioural control.

Those young offenders who have been in residential care have spent more time in total in young offenders' institutions, ($t(150)=3.5, p<.001$), and started earlier their criminal career as is evident from differences in the age at which they started showing antisocial behaviour in comparison to those who have not been in residential care; those in residential care committed their first offence at an earlier age ($t(150)=3.6, p<.001$), were arrested earlier ($t(150)=4.2, p<.001$) and were in a young offenders’ institution at an earlier age than those that have not been in residential care, ($t(150)=4.7, p<.001$). In addition, the young offenders who had an experience of residential care were more likely to have started taking drugs ($t(139)=2.6, p<.01$) and drinking alcohol at an earlier age ($t(134)=2.3, p<.02$) in comparison to those who did not. They were also less likely to perceive themselves as able to stop their offending in the future, a result that was evident for both the direct ($t(150)=3.1, p=.002$) and the indirect ($t(136)=2.1, p<.05$) measures of behavioural control and they were more likely to hold a positive attitude towards their offending, as is evident from differences in the scores in the indirect measure of attitude ($t(144)=3.3, p<.001$), and report less feelings of guilt and shame after committing an offence ($t(150)=2.2, p<.05$) in comparison to those who had not been in residential care.
Regarding peer relationships at school, those young offenders who had overall good relationships with their classmates at school were sentenced to custody ($t(150)=2.5$, $p=.013$) and had started taking drugs ($t(139)=2.2$, $p<.05$) at an older age, had a less favourable attitude to their offending, as is evident from the indirect measure of attitude towards offending ($t(144)=3.1$, $p<.01$) and perceived significant others as more supportive of their offending, as is evident from the indirect subjective norm of offending ($t(117)=1.9$, $p<.05$), in comparison to those who did not report satisfactory peer relationships at school. Finally, the young offenders who reported to have been behaving badly at school committed their first offence ($t(150)=2.3$, $p=.018$) and were arrested for the first time ($t(150)=2.4$, $p=.014$) at an earlier age and they perceived themselves as less able to stop their offending in the future, as is evident from the direct measure of behavioural control of stopping future offending ($t(150)=2.2$, $p<.05$), in comparison to those young offenders who reported good behaviour at school.

The young offenders with stable employment have spent less time, in total, in young offenders' institutions ($t(99.63)=2.1$, $p<.05$) than those with a more unstable employment history, committed their first offence at an older age ($t(126)=2.1$, $p<.05$), started taking drugs at an older age ($t(115)=2.3$, $p<.05$) and reported less intention to reoffend in the future ($t(126)=22.2$, $p<.05$). In addition, they perceived themselves as more able to stop their offending in the future, evident from differences in both direct ($t(126)=2.8$, $p<.01$) and indirect ($t(114)=2.1$, $p<.05$) measures of PBC. Finally those with an unstable employment history reported more favourable attitude toward their offending, as measured by the belief based attitude, ($t(121)=2.1$, $p<.05$) and less feelings of guilt and shame after an offence ($t(126)=2.7$, $p<.01$).

Regarding certain family characteristics of the young offenders, those whose families relied on the support of a social worker had a more positive evaluation of their offending, as measured by, either, a direct ($t(149)=2.7$, $p<.01$) or an indirect ($t(143)=3.6$, $p.001$) measure of attitude, were more likely to feel free from feelings of guilt and shame after an offence ($t(149)=2.6$, $p<.01$) and more likely to intend to reoffend in the future ($t(149)=1.9$, $p=.052$) although not statistically significant, in comparison to those young offenders whose families did not have support from a social worker, while those young offenders whose families relied on the financial support of the State, received social benefits, started drug misuse at an earlier age ($t(138)=2.3$, 150
p<.05) in comparison to those young offenders whose families of origin did not receive social benefits. Those young offenders who came from a family of which someone had served a custodial sentence, mainly the father or an older brother, started taking drugs (t (138)=2.7, p<.01), committed their first offence (t (149)=4.1, p<.001), were arrested for the first time (t (149)=3.9, p<.001) and served a custodial sentence (t (149)=3.7, p<.001) at an earlier age than those whose family members did not serve a custodial sentence. Age of starting drug misuse was significantly earlier for those young offenders who came from a family who used drugs (t (138)=3.1, p<.01) and they perceived themselves as less able to stop future re-offending (t (149)=2.1, p<.05) in comparison to those participants who did not report drug misuse in their families. The same pattern was also observed for the incidence of alcohol abuse in the family. They felt less able to stop their future offending behaviour (t (149)=2.4, p<.05) and were more likely to have started taking drugs at an earlier age (t (138)=3.1, p<.01) in comparison to those youngsters whose families did not experience alcohol use problems. In addition, those young offenders that came from an alcohol using family were more likely to evaluate their offending in a positive way (t (143)=2.3, p<.05) in comparison to those who did not report alcohol use in the family.

Certain features of the young offenders were examined, which are of relevance to their post incarceration way of living. Their living situation, after custody, appears to be of high salience as those who expect to experience an unstable living situation after custody report higher intention to reoffend in the future (t (149)=2.9, p<.01), perceive their offending as resulting in positive consequences, consistently evident from higher, direct (t (149)=2.3, p<.05) and indirect (t (143)=3.1, p<.01) measures of attitude and they perceive themselves as less able to stop offending in the future, also consistently evident from both direct (t (149)=4.1, p<.001) and indirect (t (135)=3.3, p<.001) behavioural control in comparison to those who expected a stable living situation after their custodial sentence. Finally, they perceived that significant others were more likely to support their offending (t (149)=2.1, p<.05). For the young offenders who have been using drugs, those who have being using ‘hard’ drugs were more likely to intend to re-offend in the future (t (125)=2.1, p<.05) and were less able to stop offending in the future (t (125)=2.1, p<.05) than those who have being using ‘soft’ drugs. Those who responded that their drug misuse was a problem for them have spent more time in young offenders’ institutions (t (139)=2.3, p<.05), had committed their first offence (t
(139)\(=2.5, p<.05\) and started taking drugs (t (139)=3.2, p<.3.2) at an earlier age, in comparison to those who did not think that their drug misuse was a problem for them. They also hold a more positive attitude towards their offending, ( t(139)=2.1, p<.05), as evident from both the direct measure of attitude and (t (136)=3.2, p<.001) the indirect measure of attitude. In addition those who thought their drug usage was not a problem for them were more able to stop their future re-offending as evident from differences in the scores of the two measures of direct (t (139)=4.1, p<.001) and indirect (t (132.6)=2.1, p<.05) behavioural control of future offending, in comparison to those who believed it was not. Finally the young offenders who perceived their drug usage to be a problem for them were more likely to perceive their offending as morally justified as is evident from differences in the scores of personal norm (t (139)=2.1, p<.05) and to feel less guilt and shame after an offence (t (139)=2.1, p<.05) than those who believed it was not.

Those who had committed a crime to get drugs had spent more time in young offenders’ institutions (t (139)=3.1, p<.01), committed their first offence (t (139)=2.4, p<.05) and used drugs (t (139)=4.8, p<.001) at an earlier age, viewed their offending more positively, as is evident from both direct (t (139)=2.9, p<.01) and indirect measures of attitude (t (136)=4.4, p<.001), were likely to feel less guilt and shame after an offence (t (139)=3.4, p<.001), thought they were less able to discontinue their offending in the future, as is evident from the direct measure of behaviour control of stopping future offending(t (139)=2.6, p<.01) and were more likely to admit that they will intend to continue re-offending in the future (t (139)=2.5, p=.012) in comparison to those young offenders that had not committed a crime to get drugs. A quite similar pattern of responses emerged for commitment of offending under the influence of drugs. Those young offenders who admitted having committed a crime under the influence of drugs had spent more time in young offenders’ institutions (t (139)=2.7, p<.01), they committed their first offence (t (139)=3.1, p<.01), were arrested (t (139)=2.4, p=.015) and started taking drugs (t (139)=2.9, p<.01) at an earlier age in comparison to those young offenders who had never committed a crime under the influence of drugs. In addition they held more positive attitude towards their offending as is evident from differences in the scores of direct (t (139)=2.6, p<.01) and indirect (t (136)=3.3, p<.001) measures of attitude and felt less able to stop their offending in the future, as is evident for differences in the scores of direct behavioural control of future discontinuation of
offending ($t(1139)=2.8, p<.01$) in comparison to those who did not commit a crime under the influence of drugs.

The young offenders who admitted that they would continue taking drugs after custody, intended to continue their offending behaviour in the future ($t(122)=3.8, p<.001$), felt their offending in general was morally correct ($t(122)=3.7, p<.001$), felt less guilty and shameful after the commitment of an offence ($t(122)=3.2, p<.001$), evaluated their offending in a more positive way, evident from differences in the scores of the direct ($t(122)=2.4, p=.015$) and indirect ($t(120)=2.5, p=.012$) measures of attitude and were less able to stop offending in the future, as measured by direct behavioural control ($t(122)=3.2, p<.01$) and indirect behavioural control ($t(116)=4.2, p<.001$), in comparison to those young offenders who reported that they would discontinue their drug usage in the future.

Regarding the young offenders' patterns of alcohol use, the young offenders who admitted that their alcohol use was a problem for them, reported higher intention to continue their offending behaviour in the future ($t(134)=2.1, p<.05$) and perceived significant others as more supportive of their offending behaviour, as is evident from differences in the scores of the indirect measure of subjective norm towards their offending, ($t(108)=2.5, p=.013$) in comparison to those who said that their alcohol usage was not problematic for them. Those who have committed a crime because they have been drunk, committed their first offence ($t(134)=3.4, p<.001$), they were arrested for the first time ($t(9134)=2.4, p=.014$), and started drinking alcohol ($t(134)=3.4, p<.001$) at an earlier age than those young offenders who have never committed a crime due to drinking alcohol.

Regarding indices of the young offenders' mental health, those who had been seen by either a psychiatrist or a psychologist in the community perceived themselves as less able to stop their offending behaviour in the future, evident from differences in the scores of both the direct ($t(150)=2.1, p<.05$) and the indirect ($t(136)=2.5, p<.01$) measures of behavioural control of discontinuation of future re-offending. In addition they perceived significant others to be more supportive of their offending behaviour, as evident from direct subjective norm towards offending ($t(150)=2.1, p<.05$) in comparison to those who did not see either a psychiatrist or a psychologist in the community. Those young offenders who saw a psychiatrist or a psychologist in custody
had spent more time in young offenders’ institutions \((t (150)=2.8, p<0.01)\), had been in a young offenders’ institution at an earlier age \((t (150)=3.1, p<0.01)\), had a more positive attitude towards offending, as is evident from indirect measure of attitude towards offending \((t (144)=2.2, p<0.05)\) and perceived significant others as less supportive of their offending behaviour, as is evident from indirect measure of subjective norm towards offending \((t (117)=2.1, p<0.05)\) in comparison to those who did not see either a psychologist or psychiatrist in custody. Finally those young offenders who had attempted to commit suicide or to injure themselves perceived significant others to be less supportive of their offending behaviour, as is evident from indirect subjective norm towards offending \((t (117)=2.4, p=0.016)\) in comparison to those young offenders who did not attempt suicide.

Regarding the young offenders’ rate of past re-offending, defined as the sum of the number of times they had been held in custody, number of times they had been arrested and number of non-custodial sentences they had received in the past divided by their age, it was higher in the those young offenders who had been, at the time of the data collection, sentenced to custody for property offences \((t (69.1)=2.7, p<0.01)\) in comparison to those who had been sentenced for violent offences, those who have been in residential care \((t (125.8)=3.1, p=0.01)\) in comparison to those who had not, those who had bad relations with their peers at school \((t (150)=2.1, p<0.05)\) in comparison to those who reported satisfactory peer relationships at school, those who came from a family with alcohol abuse problems \((t (125.5)=2.5, p=0.012)\) in comparison to those whose families did not have such a problem, those who admitted to have committed a crime in order to get drugs \((t (139)=2.5, p=0.011)\) in comparison to those who did not commit a crime to get drugs, and those who have committed a crime because they were under the influence of drugs \((t (139)=2.3, p=0.02)\) in comparison to those who have not.

**Young offenders’ perceptions of offending in the future.**

The correlations between direct and indirect measures of attitude, subjective norm and PBC, although significant, were of moderate degree. There was a correlation of .56, \(p<0.01\) between direct and indirect measure of attitude, of .52, \(p<0.01\) between direct and indirect measure of PBC, while there was no correlation between direct and indirect measure of subjective norm, thereby, indicating that the direct and belief-based ways of
the operationalisation of attitude and PBC, although significantly related, seem to tap different aspects of the constructs.

An inspection of table 11 reveals that almost all of the direct measures of the components of the TPB and, in addition, direct measures of personal norms and affective self-reactions, show acceptable to very satisfying internal consistencies. These results provide further confidence that the questions were relatively well understood by the population of young offenders and kept ambiguity of meaning across subjects to a minimum. However, the direct measure of subjective norm is an exception, with an alpha reliability coefficient of .46. It has to be noted that even this level of internal consistency was achieved after eliminating one of the three items, which aimed to measure subjective norms directly. The item excluded from the composite measure of direct subjective norm was "Most people who are important to me, approve of my offending in the future". "Most people who are important to me, think I should stop offending in the future" and "Most people who are important to me, would like me to stop offending in the future" were the two items, which formed the direct measure of subjective norm. Separate regression analyses of intentions on the antecedents as postulated by the TPB, were performed and each of the two beliefs as well as the combination of them was included. The results were consistent across the separate analyses, subjective norm did not contribute to the prediction of intentions, so it was decided that the direct measure of subjective norm consisting of the two items should be retained.

The indirect measures of attitude, subjective norm and PBC show acceptable internal consistencies. These indices of the constructs do not need to have high alpha reliability, "as individuals may well hold some salient beliefs that are not consistent with the overall direction of their attitudes" (Ajzen and Driver, 1991: 193).

Table 12 reports the specific behavioural beliefs about offending in the future and the correlations with intentions of re-offending. As can be seen, all the sum products of the behavioural beliefs correlated significantly with intentions of re-offending, apart from family being embarrassed. Inspection of table 12 provides detailed information about the specific reasons the young offenders themselves provide for continuing offending in the future. Intentions of re-offending are significantly correlated with beliefs that offending is exciting, that it provides money for the lifestyle they want, for drugs and
drinking and that it is a way of coping with life, while at the same time the negative consequences of offending were not perceived, as such, by those young offenders who intended to continue offending in the future. Intentions of future offending were significantly related with beliefs that, it does not result in going to jail, losing freedom, losing contact with friends and family, it does not result in difficulties of employment settlement. Finally, those who intend to re-offend in the future tend to believe that they will be able to keep in contact with their delinquent friends.

The results are informative of the reasons that motivate young offenders to continue their offending behaviour as well as their perception that the immediate and long-term consequences probably will not affect them. It is interesting to note that even incarceration, with a role of an immediate deterrent effect, it is not perceived as such by those young offenders who intended to continue their offending pattern in the future. The issue of drug misuse emerges as a significant predictor of intentions. The need to support the habit financially makes many of them to intend re-offending in the future.

Table 13 presents the referents elicited in the pilot study as well as the correlations of intentions to re-offend with the perceived approval of them and the motivations to comply with the referents' opinions. From the sum products it can be seen that the offenders' intentions to re-offend are mainly influenced by their girlfriend's opinions, and then by their friends who are uninvolved in any criminal activity. It can be noticed that intentions correlated with almost all the normative beliefs, whereas motivation to comply with the referents was, most of the time, unrelated to intention, apart from mother and friends who do not offend. Interestingly, intentions to re-offend in the future were negatively correlated with motivation to comply with mother and friends. It appears that motivation to comply actually suppressed the correlations of intentions with the perceived social pressures. The results are similar to Ajzen and Driver's (1991) findings in leisure participation. Motivation to comply was mainly found to be unrelated to behavioural involvement. The authors suggested that motivation to comply is not expected to exert an influence on behaviour, rather, it depends on the perceived normative expectations; when subjects believe that the referents approve of the behaviour, motivation to comply would be positively correlated with behaviour, when they think the referents disapprove of the behaviour, motivation to comply is expected to be negatively related to behaviour.
### Table 11: Internal Consistency of the Direct and the Indirect Measures of Attitude, Subjective Norm, Perceived Behavioural Control and Personal Norm, Affective Self-Reactions and Intention.

<table>
<thead>
<tr>
<th></th>
<th>Cronbach's alpha reliability coefficients for the direct measures of:</th>
<th>Cronbach's alpha reliability coefficients for the indirect measures of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>.75</td>
<td>.59</td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>.46</td>
<td>.54</td>
</tr>
<tr>
<td>Perceived Behavioural Control</td>
<td>.82</td>
<td>.77</td>
</tr>
<tr>
<td>Personal Norm</td>
<td>.73</td>
<td></td>
</tr>
<tr>
<td>Affective Self-Reaction</td>
<td>.93</td>
<td></td>
</tr>
<tr>
<td>Intention</td>
<td>.79</td>
<td></td>
</tr>
</tbody>
</table>

### Table 12: Correlations of Intentions with Belief Strength, Outcome Evaluations and the sum products

<table>
<thead>
<tr>
<th>Behavioural Beliefs</th>
<th>biel&lt;sup&gt;1&lt;/sup&gt;</th>
<th>belief strength</th>
<th>outcome evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides me with money to buy drugs</td>
<td>.36**</td>
<td>.35**</td>
<td>.36**</td>
</tr>
<tr>
<td>Provides me with money for the lifestyle I want</td>
<td>.41**</td>
<td>.37**</td>
<td>.20**</td>
</tr>
<tr>
<td>Provides me with money for drinking</td>
<td>.20*</td>
<td>.18*</td>
<td>.05</td>
</tr>
<tr>
<td>Is an exciting experience</td>
<td>.44**</td>
<td>.45**</td>
<td>.16*</td>
</tr>
<tr>
<td>Enables me to cope with life</td>
<td>.18*</td>
<td>.27*</td>
<td>-.24**</td>
</tr>
<tr>
<td>Does not result in my going to jail</td>
<td>.37**</td>
<td>.22**</td>
<td>.45**</td>
</tr>
<tr>
<td>Does not result in losing my freedom</td>
<td>.26**</td>
<td>.20*</td>
<td>.25*</td>
</tr>
<tr>
<td>Does not result in losing contact with my family</td>
<td>.25**</td>
<td>.08</td>
<td>.18*</td>
</tr>
<tr>
<td>Does not result in losing contact with my friends</td>
<td>.27**</td>
<td>.17*</td>
<td>.25**</td>
</tr>
<tr>
<td>Does not result in difficulties to find a job</td>
<td>.22**</td>
<td>-.11</td>
<td>.39**</td>
</tr>
<tr>
<td>Does not result in my family being embarrassed</td>
<td>.14</td>
<td>.09</td>
<td>.24**</td>
</tr>
<tr>
<td>Does not result in losing contact with my friends who offend</td>
<td>-.31**</td>
<td>.04</td>
<td>-.31**</td>
</tr>
</tbody>
</table>

* p<.05
**p<.01

<sup>1</sup> Multiplicative Product of Belief Strength and Outcome Evaluation.
### Table 13: Correlations of Intentions with Strength of Perceived Subjective Norms, Motivation to Comply and the sum products.

<table>
<thead>
<tr>
<th>Referents</th>
<th>nimi²</th>
<th>belief strength</th>
<th>motivation to comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.06</td>
<td>.18*</td>
<td>-.26**</td>
</tr>
<tr>
<td>Father</td>
<td>.04</td>
<td>.23**</td>
<td>-.29**</td>
</tr>
<tr>
<td>Girlfriend</td>
<td>.26**</td>
<td>.29**</td>
<td>-.13</td>
</tr>
<tr>
<td>Friends who offend</td>
<td>.15</td>
<td>.06</td>
<td>.10</td>
</tr>
<tr>
<td>Friends who do not offend</td>
<td>.18*</td>
<td>.27**</td>
<td>-.19*</td>
</tr>
</tbody>
</table>

* p<.05  
** p<.01

Table 14 presents the control beliefs and the correlations with intentions to re-offend. It can be noted that all of the control beliefs correlated significantly with intentions to re-offend. Most of these correlations were rather higher than the behavioural beliefs underlying attitudes. More interestingly they reflect the factors that the offenders themselves believe would inhibit their offending behaviour in the future. Many of these factors reflect internal factors that the adolescents need to control in order to avoid offending, whereas others would require the co-operation of other people and their presence would inhibit future offending. While it would be ideal for them to rely on a supportive family, this in most of the cases is beyond the abilities of many professionals involved in young offenders’ rehabilitation. Proper employment appears to provide solutions to other problems as well, such as stable living situations and the obvious requirement of being able to support themselves financially. Drug taking and drinking appear to be issues of high priority as their effects on offending can be brought about by either inhibition of self-control and/or need for money to support the habit. Change in the environment and the peer pressure to continue offending seems appropriate as well. It is obvious that, as far as the factors inhibiting re-offending are concerned, attempts for changing future offending should be made at many levels. The individual offender, the family and the immediate environment he belongs to.

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² Multiplicative Product of Belief Strength and Motivation to Comply.
Table 14: Correlations of Intentions with Perceived Likelihood of Factors' Presence in the Future and Power of Control Factors to Inhibit Future Offending Behaviour (N=152).

<table>
<thead>
<tr>
<th></th>
<th>Control beliefs</th>
<th>Getting a job</th>
<th>Being away from the same old delinquent friends</th>
<th>Being off drugs</th>
<th>Getting support from my family</th>
<th>Stopping drinking</th>
<th>Having money</th>
<th>Keeping calm when I am provoked</th>
<th>Having a house</th>
<th>Moving away and making a new start</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>cipl(^3)</td>
<td>belief strength</td>
<td>Power of control factor</td>
<td>r</td>
<td>r</td>
<td>R</td>
<td>r</td>
<td>r</td>
<td>R</td>
<td>r</td>
</tr>
<tr>
<td>Control beliefs</td>
<td></td>
<td></td>
<td></td>
<td>-.45**</td>
<td>-.51**</td>
<td>-.18*</td>
<td>-.56**</td>
<td>-.50**</td>
<td>-.35**</td>
<td>-.39**</td>
</tr>
<tr>
<td>Getting a job</td>
<td></td>
<td></td>
<td></td>
<td>-.45**</td>
<td>-.51**</td>
<td>-.18*</td>
<td>-.56**</td>
<td>-.50**</td>
<td>-.35**</td>
<td>-.39**</td>
</tr>
<tr>
<td>Being away from the same old delinquent friends</td>
<td></td>
<td></td>
<td></td>
<td>-.35**</td>
<td>-.26**</td>
<td>-.26**</td>
<td>-.35**</td>
<td>-.35**</td>
<td>-.35**</td>
<td>-.35**</td>
</tr>
<tr>
<td>Being off drugs</td>
<td></td>
<td></td>
<td></td>
<td>-.46**</td>
<td>-.28**</td>
<td>-.35**</td>
<td>-.46**</td>
<td>-.46**</td>
<td>-.46**</td>
<td>-.46**</td>
</tr>
<tr>
<td>Getting support from my family</td>
<td></td>
<td></td>
<td></td>
<td>-.56**</td>
<td>-.50**</td>
<td>-.35**</td>
<td>-.56**</td>
<td>-.50**</td>
<td>-.35**</td>
<td>-.56**</td>
</tr>
<tr>
<td>Stopping drinking</td>
<td></td>
<td></td>
<td></td>
<td>-.39**</td>
<td>-.33**</td>
<td>-.13</td>
<td>-.39**</td>
<td>-.33**</td>
<td>-.13</td>
<td>-.39**</td>
</tr>
<tr>
<td>Having money</td>
<td></td>
<td></td>
<td></td>
<td>-.31**</td>
<td>-.32**</td>
<td>-.07</td>
<td>-.31**</td>
<td>-.32**</td>
<td>-.07</td>
<td>-.31**</td>
</tr>
<tr>
<td>Keeping calm when I am provoked</td>
<td></td>
<td></td>
<td></td>
<td>-.39**</td>
<td>-.30**</td>
<td>-.28**</td>
<td>-.39**</td>
<td>-.30**</td>
<td>-.28**</td>
<td>-.39**</td>
</tr>
<tr>
<td>Having a house</td>
<td></td>
<td></td>
<td></td>
<td>-.46**</td>
<td>-.49**</td>
<td>-.11</td>
<td>-.46**</td>
<td>-.49**</td>
<td>-.11</td>
<td>-.46**</td>
</tr>
<tr>
<td>Moving away and making a new start</td>
<td></td>
<td></td>
<td></td>
<td>-.30**</td>
<td>-.24**</td>
<td>-.24**</td>
<td>-.30**</td>
<td>-.24**</td>
<td>-.24**</td>
<td>-.30**</td>
</tr>
</tbody>
</table>

Note
* p<.05
**p<.01

Pearson's correlations between the measured variables of the TPB are displayed in table 15. From the correlation matrix it can be observed that, apart from the belief based subjective norm, all the other variables were significantly correlated with behavioural intentions of future offending. Attitude and PBC, both belief-based and direct, were significantly and substantially related to behavioural intentions. Almost all the interrelationships between the variables were significant and many of them substantial. It is interesting to note that direct subjective norm correlated substantially with personal norm while affective self-reactions correlated substantially with both direct and belief-based measures of attitude. The fact that the relationships between the variables are significant and substantial supported the need for performing a regression analysis of intentions on the several predictors so that the unique contribution of each predictor to account for a percentage of the variance of behavioural intentions to offending in the future can be assessed. The fact that the relations of affective self-reactions with both the direct and indirect measures of attitudes towards future offending were large, made affective self-reactions a redundant variable, as it is sharing much common variance with attitude of future offending. This fact was further evident from multicollinearity.

\(^3\)Multiplicative Product of Belief Strength and Power of Control Factor.
statistics, where affective self-reactions showed low tolerance in relation to the other variables, suggesting a rather weak independent effect in the prediction of intentions of future offending. For statistical reasons then, to avoid multicollinearity, affective self-reactions were not included in the regression equation.

A different procedure could have been applied to examine the predictors of intentions of future re-offending and the validity of results of the regression analyses. The proposed model could have been constructed on half of the sample and then tested on the other half in order to cross-validate the regression equation and enhance confidence in the validity of the results (Howell, 1992). Such an approach was, however, deemed as less satisfactory in the study. The number of the participants was not large enough to allow for such an approach as it would lead to reduced power of the analyses and the proposed model has been extensively tested in the literature and across diverse behavioural domains and was found to perform empirically as suggested by the theoretical assumptions linking the components of the model. In addition, and in relation to the last consideration, cross-validation of the regression equation in another sample is mainly required when prediction is established solely on empirical grounds without any theoretical framework relating the variables of interest, and it could be argued, that in that case the stability of the regression equation has to be tested and cross-validated on a separate sample.

Table 16 shows the results of the hierarchical regression of intentions on attitude, subjective norm, behavioural control and personal norm. The results overall support the TPB and the prediction of intentions. It can be seen that attitudes, behavioural control and personal norm made significant and independent contributions to the prediction of the young offenders' intentions to re-offend.

Behavioural control emerged as the most important determinant of intentions as is evident by the values of $b$ in table 16. This finding provides extra support for the relative predictive efficiency of intentions of the TPB in comparison to the TRA. The important role of PBC in determining intentions of future re-offending suggests that offending behaviour is not totally under volitional control. There appear to be many obstacles which the young offenders need to overcome and several resources they need to acquire, in order to change or discontinue their offending pattern in the future, as can be seen from the detailed account of the control factors they reported, in table 14. The
fact that behavioural control emerged as the most important predictor of intentions, makes these factors especially relevant and informative for the agents involved in the successful rehabilitation of young offenders. While parole decisions could potentially rely on the extent young offenders believe they are in control of their offending behaviour, the factors that could potentially prevent or lead to offending are informative for prevention policies as well.

Table 15: Correlations of Intention, Affective Self-Reaction, Personal Norm and Direct and Indirect Measures of Attitude, Subjective Norm, and Perceived Behavioural Control (N=152).

<table>
<thead>
<tr>
<th></th>
<th>Intention</th>
<th>Att</th>
<th>SN</th>
<th>PBC</th>
<th>PN</th>
<th>AFSR</th>
<th>InAtt</th>
<th>InSN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Att</td>
<td>.43**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SN</td>
<td>.28**</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBC</td>
<td>-.48**</td>
<td>-.36**</td>
<td>-.18*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PN</td>
<td>-.37**</td>
<td>-.29**</td>
<td>-.32**</td>
<td>.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFSR</td>
<td>-.44**</td>
<td>-.47**</td>
<td>-.20**</td>
<td>.29**</td>
<td>.44**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In Att</td>
<td>.56**</td>
<td>.56**</td>
<td>.14</td>
<td>-.49**</td>
<td>-.31**</td>
<td>-.44**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>InSN</td>
<td>.16</td>
<td>.18</td>
<td>.10</td>
<td>-.15</td>
<td>-.15</td>
<td>.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>InPBC</td>
<td>-.48**</td>
<td>-.35**</td>
<td>-.24**</td>
<td>.52**</td>
<td>.36**</td>
<td>.39**</td>
<td>-.37**</td>
<td>-.10</td>
</tr>
</tbody>
</table>

Note: Att=Attitude, SN=Subjective Norm, PBC=Perceived Behavioural Control, PN=Personal Norm, AFSR=Affective Self-Reactions, InAtt=Indirect Attitude, InSN=Indirect Subjective Norm, InPBC=Indirect Behavioural Control.

**p<.01
*p<.05

Table 16: Hierarchical Regression of Intention to Reoffend in the Future on Direct Measures of Attitudes, Subjective Norm, Perceived Behavioural Control, Personal Norm (N=152).

<table>
<thead>
<tr>
<th>Predictors</th>
<th>R</th>
<th>Adjusted R²</th>
<th>Increment to R²</th>
<th>F</th>
<th>Final b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>.427</td>
<td>.177</td>
<td>.177</td>
<td>33.43**</td>
<td>.218*</td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>.480</td>
<td>.221</td>
<td>.044</td>
<td>9.41*</td>
<td>.110</td>
</tr>
<tr>
<td>Perceived Behavioural Control</td>
<td>.579</td>
<td>.322</td>
<td>.101</td>
<td>23.18**</td>
<td>-.353**</td>
</tr>
<tr>
<td>Personal Norm</td>
<td>.616</td>
<td>.362</td>
<td>.040</td>
<td>10.43*</td>
<td>-.230*</td>
</tr>
</tbody>
</table>

Note:
* p<.01
**p<.001
Interestingly enough the second most important predictor of intentions was personal norm, an internalised belief that performing the behaviour in question is right or wrong. Those young offenders who intend to re-offend in the future tend to perceive their offending behaviour as right or correct and do not perceive it as morally bad.

Subjective norm, however, failed to remain in the regression equation after personal norm was entered in the regression. The relatively less important role subjective norm might have in the prediction of intention, has received support from previous studies (Godin and Kok, 1996). This result could be attributed to the moderate internal reliability of this variable, yet when intention to re-offend in the future was regressed to the indirect measures of the constructs of the TPB, subjective norm did not enter into the regression equation. This consistency of results cannot readily be attributed to statistical reasons, rather, it reflects that young offenders' intentions of re-offending are not influenced by external social norms. This is more evident from the fact that subjective norm was forced out of the regression equation when personal norm was entered into the regression.

Attitudes emerged as the third most important predictor of intentions to re-offend. This is in line with previous research and theoretical propositions of the predictive role of attitudes to intentions (Ajzen 1991, 1985). Those who acknowledge that they can attain positive and valued consequences from their offending tend to intend to re-offend in the future. The deterrent role of incarceration and provision of custody does not seem to be perceived as probable and/or punishment for those who intend to re-offend in the future, neither are other long-term negative consequences of offending. With the predictive efficiency of attitude, a variable reflecting a personal factor, the role of personal factors emerges again in shaping intentions of re-offending, proportional to the similar role of personal norm and not subjective norm in the prediction of intentions. In addition, it seems that those who intend to re-offend either believe, and probably have experienced, that offending does not always result in immediate punishment by society, in terms of incarceration, and/or even when punishment occurs it does not outweigh the beneficial and valued consequences of offending. This point was mentioned repeatedly by many young offenders during the interviews at the data collection phase. It has been suggested that sometimes the material benefits of offending, especially drug dealing, can
be so satisfying that a period of incarceration seems a relatively acceptable risk to take. The implications from such accounts are several and important.

Table 17: Hierarchical Regression of Intention to Reoffend in the Future on Indirect Measures of Attitudes, Subjective Norm, Perceived Behavioural Control, Personal Norm (N=152).

<table>
<thead>
<tr>
<th>Predictors</th>
<th>R</th>
<th>Adjusted R²</th>
<th>Increment R²</th>
<th>F</th>
<th>Final b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>.548</td>
<td>.295</td>
<td>.295</td>
<td>64.31*</td>
<td>.357*</td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>.559</td>
<td>.304</td>
<td>.009</td>
<td>2.79</td>
<td>.081</td>
</tr>
<tr>
<td>Perceived Behavioural Control</td>
<td>.730</td>
<td>.524</td>
<td>.220</td>
<td>69.97*</td>
<td>-.471*</td>
</tr>
<tr>
<td>Personal Norm</td>
<td>.736</td>
<td>.530</td>
<td>.006</td>
<td>2.70</td>
<td>-.100</td>
</tr>
</tbody>
</table>

Note:
*p<.001

When intentions to re-offend in the future were regressed on the indirect measures of the constructs of the TPB and personal norm, a similar pattern of results emerged (Table 17). Subjective norms, similarly, failed to enter the regression equation, a consistent finding with the two regression analyses, suggesting that young offenders do not rely on perceived social consequences when they formulate a decision to re-offend in the future.

Perceived ability to control several factors that could lead to future offending emerged in the second regression as the most potent predictor of intentions of future offending. It is, thus, consistently evident that perceived self-efficacy in dealing with a host of problems, obstacles and triggering factors of offending exerts a pervasive influence in the decisions formulated by the young offenders regarding their future offending behaviour.

Attitudes again emerged as significantly predictive of intentions of future offending, suggesting an independent role, expected rewards, mainly in terms of material gains, have in future behavioural decisions. Those young offenders who perceived offending as a way to gain several material gains that were highly valued as well, were more prone to formulate positive intentions of re-offending in the future.

Personal norm however, a variable reflecting whether offending overall is perceived as acceptable or unacceptable, failed to make an independent prediction of intentions of future re-offending in the second regression where the predictors were belief-based.
measures of the constructs of the TPB. Given that, overall, the belief-based predictors accounted for more variance of intentions in comparison to direct measures of attitudes, norms and behavioural control and that personal norm was significantly related with the indirect measure of behavioural control but not with direct measure of behavioural control, the independent contribution of personal norm in accounting for part of the variance of intentions in the case of the direct operationalisations of the constructs, might have been accounted for by the indirect measure of behavioural control in the second equation, which was found significantly related with personal norm. However, whether the inclusion of a measure of personal norm provides a way for further extending the TPB in general, and achieving a better prediction of intentions of future offending for young offenders in particular, needs further research.

Keeping with the proposition of the TPB that, when applied in any behavioural domain, the influence of any external to the model factors on intentions and behaviour would be mediated by attitudes, subjective norms and PBC, this proposition was further explored empirically by means of statistical tests. From the host of background features of the young offenders, those that were significantly related with intentions of future offending and one or more of the predictor variables specified by the model were selected (Baron and Kenny, 1986).

These variables included, total time spent in custody, if alcohol use is a problem, stable living situation after release from custody, age of alcohol use and a composite measure of age of onset of delinquent behaviour combined by age of first offence, arrest and custodial sentence. When intentions of re-offending in the future were regressed on these background features, they all significantly and independently accounted for a considerable proportion of the variance of intentions. When these background variables were, however, kept constant and the sociocognitive determinants of the theory were entered into the regression, almost all of the background variables, apart from age of alcohol use, failed to predict any of the variance of intentions.

The same pattern of results was obtained, both with the direct measures and belief-based measures of attitudes, subjective norms and PBC. The results are supportive of the proposition of the TPB (Ajzen, 1991), that the effect of any other variable on behavioural intentions would be mediated by the social cognitive determinants of the
theory and empirically supports the sufficiency of the model to predict intentions of re-offending of the young offenders of the study.

4.5.3 Discussion

Correlations of Belief-Based and Direct Measures of the Constructs of the Model.

The direct and belief-based measures of the constructs of the TPB were, significantly, yet moderately, related. This is in line with previous research, where it has been reported that direct and indirect measures are positively correlated, yet to a moderate degree. Ajzen (1991) noted that for acceptable correlations between belief-based and global measures of the constructs of the TPB to be obtained, the beliefs formulating the belief-based measures should be salient. This proposition relates to the methodological requirement that the salient beliefs should be elicited in a pilot study, from a representative sample of the population of interest. The correlations between direct and belief-based measures were of moderate degree, although the above recommended procedure was followed in this study. Ajzen (1991) further warned that this pattern of results might still hold even when the belief-based measures are formulated by salient beliefs, and suggested that optimal scaling of the belief-based measures could improve their correlations with the global measures. He concluded, however, after a detailed analysis and description of the procedure of optimal re-scaling, that even after the measures are optimally re-scored, the correlations between the direct and indirect measures of the constructs, are far from perfect or near perfect, and usually fall in the range of moderate association. As, according to Ajzen (1991), the gains from the optimal re-scaling of the multiplicative terms are generally quite low and in any case “there is nothing in the theory, however, to inform us whether responses to these scales should be scored in a unipolar fashion (...) or in a bipolar fashion” (ibid: 192). It was decided in the present study that all the scales would be scored in a unipolar way and no transformation to apply to them.

It has to be noted that the belief-based measures of the model were more strongly associated with behavioural intentions in comparison to the direct measures, despite the higher internal reliabilities of the direct measures. The results are not in line with the conclusion of Manstead and Parker (1995) that belief-based measures of the constructs of the model are less strongly associated with behavioural intentions in comparison to
Chapter 4

direct measures. It has to be noted that the previous study measured the belief-based constructs of the model based on predetermined beliefs and not beliefs derived from the population of interest of the study. Such an approach is not likely to include all the beliefs that underlie the constructs of the model, and thus result in weaker associations with behavioural intentions. The results of the present study suggest that when the measurement of the variables of the TPB rely on beliefs derived from the population of interest, belief-based measures will be more strongly related with behavioural intentions, in addition to the fact that these beliefs identify possible targets of interventions.

In addition, Conner and Armitage (1998), in their review of ways to improve the correlations between belief-based and direct measures of attitudes, reported that, in addition to presenting modal salient beliefs to respondents, they could be further asked to rank the importance of each belief for them personally. This approach could provide a personally selected set of beliefs determining each individual’s attitude. This approach was followed by Budd and Spencer (1986) and Elliot, Jobber and Sharp (1995 cited in Conner and Armitage, 1998) according to the review, and the correlations between the most salient beliefs rated by the respondents were significantly more correlated with direct attitudes, than the summation of the total set of the modal salient beliefs. Conner and Armitage (1998) stressed the additional advantage of identifying the most salient beliefs for subpopulations of interest and designing interventions targeting directly these limited and most important beliefs that determine attitudes. Although this approach seems to improve the correlations between global and direct measures of attitudes and provide gains in terms of parsimony of description and explanation of certain behaviours and subpopulations, it makes comparison of subsamples to the same responses impossible. The fact that respondents who differ in any characteristic might endorse different beliefs, could potentially be helpful for targets of interventions, yet it is not informative enough about the different degree of agreement different groups of people might have to the same set of responses. From that perspective the procedure originally suggested by Ajzen and Fishbein (1980), that a qualitative analysis of the originally obtained responses of a representative sample of the population of interest, with the subsequent selection of the most salient of them, those that cover no less that the 75% of the total responses given, seems to provide an adequate way of dealing with the selection and the number of the salient beliefs presented to the subjects, as it
“filters” the most important beliefs to be included in a questionnaire with relatively little loss in descriptive validity of the questions and provides the advantage of comparing individual or subpopulations responses to the same questions, without losing any informative implications for designing intervention programmes targeting the population of interest as a whole or particular stratas of it.

Ajzen (1991) provided another possible explanation for the consistent findings of moderate correlations between direct and indirect measures of the constructs. He proposed that as responses to global measures might require less deliberations, the responses to them might be rather automatic while the responses to the belief and evaluative measures might be more reasoned, being elicited by the information-processing capabilities of the respondents. He further argued that the fact of the generally moderate correlations of global and belief based measures of the constructs of the TPB, do not challenge the notion of the causal influence of beliefs on the formulation of attitudes, which is supported by experimental evidence in the area of persuasive communication, rather it sets the boundaries for the expectancy-value conceptualisation to account adequately for the “process whereby individual beliefs combine to produce the global response” (ibid: 198), and suggests that other models need to be formulated to describe the relationship between beliefs and the global constructs.

It can be observed that belief-based subjective norm, although showing higher internal consistency than the direct measure, may be due to the fact that more items were used in its measurement than the items used for the direct measure of subjective norm, which enhances internal reliability, it showed lower internal reliability in relation to indirect measures of attitude and PBC. These results indicate that probably the operationalisation of direct and indirect subjective norm employed in the study, although in line with the operationalisation suggested in the literature, did not prove very satisfactory for the particular sample of young offenders, who seemed not to perceive the meaning that the researcher was trying to convey to them in a very consistent way. This seems to be the case mainly for the direct measures of subjective norms, while the operationalisation of subjective norm indirectly proved more satisfactory.
Attitude, Perceived Behavioural Control and Intention

Attitudes and perceptions of ability to control future offending were found significantly related and potent predictors of the young offenders’ intentions to reoffend in the future. Perceived control was found to be the most important predictor of intentions which is in line with many studies which report similar findings and which generally support the important motivational influence of perceived control and attitudes in the prediction of intentions in diverse behavioural domains (Ajzen and Driver, 1991, 1992a; Netemeyer and Burton, 1990; Kimiecik 1992; Lynne et al, 1995; Dennison and Shepherd, 1995; Godin et al, 1996; Schifter and Ajzen, 1985; Madden, Ellen and Ajzen, 1992). PBC was the most potent predictor of intentions followed by attitudes towards future offending, and this pattern was consistently stable across both direct and belief-based measures of the constructs, suggesting that young offenders’ decisions of continuation of offending are primarily influenced by their perception of their efficacy in controlling possible criminogenic factors in the future. Since the beliefs of the young offenders consisting behavioural control of future offending were measured, they can be guidelines for attempts at intervention with the aim of reducing future offending rates of the young offenders.

The results overall partly support the TPB and make evident the independent role of perceived control in intentions to reoffend in the future for the sample of young offenders. The additive and independent effect of behavioural control in accounting for more variance in intentions adds to the superiority of the TPB over the TRA. The negative signs of the beta weight of behavioural control in table 17 indicate that those who intend to offend in the future perceive themselves as less able to control their offending behaviour and/or the factors that they perceive will lead them to offend.

Subjective Norm and Intention

The weak role of subjective norms in the prediction of intentions has received empirical support in the literature. Godin and Kok (1996), in a meta-analytic study of the applications of the TPB to health-related behaviours report that subjective norm contributed less than attitude and PBC in the amount of explained variance in intention. Moreover, they report that subjective norm made an independent and significant contribution to the amount of intention variance explained in 47.4% of the applications included in the meta-analysis, whereas attitude and behavioural control were found
significant in 81.6% and 85.5% of the applications respectively. They further noted that even when subjective norm was found to account significantly for the prediction of intention variance, its weight was lower than the other two antecedents of intentions. Miniard and Cohen (1981), argued that the operationalisation of subjective norm in the TRA does not separate personal and normative influences on the formulation of intentions and behaviour, although they noted that the inclusion of motivation to comply in the measure of subjective norm increased the prediction of intention. They alternatively suggested that a measure of subjective norm reflecting "beliefs about the responses of important referents and the value associated with such responses" (ibid: 332) would provide an improved way to tap the normative component of the theory in a way that it would not be confounded with attitudinal component.

In a similar line of argument Grube, Morgan and McGree (1986) proposed that the standard operationalisation of subjective norm is not inclusive of the normative influences on intention and behaviour. They noted that behavioural norms or the perceived behaviour of significant others might be a potentially useful construct incorporated in the TRA. They reported that behavioural norms were found to be distinct from subjective norm and contributed significantly and, in addition to, subjective norm to the prediction of intention and behaviour, although they did not lead to a substantial degree of the variance explained in intentions and behaviour. The authors further argued that the relatively weak contribution of normative influences on intention and behaviour reported in the literature might have been due to the operationalisation of subjective norm, whereas the inclusion of behavioural norms could provide a way for tapping these normative influences and enhancing their contribution to the prediction of intention and behaviour.

It has to be noted however, that the fact that subjective norm did not contribute to the prediction of intention, is consistent with Ajzen (1998; 1991) who argued that some of the predictors postulated by the TPB might be important for different behaviours and the weight they carry might be variable as well, according to the behaviour under study. The identification of the important variables to predict intention and behaviour and their relative contribution to do so have to be empirically established. It could be argued that normative influences are not of primary concern, as factors influencing decisions of re-offending, for the young offenders who mainly rely on personal factors, reflecting a
rather egoistic perspective in general, it is not definite whether a different operationalisation of normative influences can improve prediction of intention of re-offending or, in fact, which of the determinants of intention, postulated by the TPB, are significant for different behavioural domains and the weight they are carrying to the prediction of intentions has to be empirically established, are questions open to further research.

**Personal Norm and Intention**

Ajzen (1991), recognised that a possible way of expanding the TPB is the inclusion of a measure of personal norm, for which there is evidence which has been presented earlier in the study, that can make an independent and significant contribution to the prediction of intention and behaviour. The results are in line with several other studies examining the role of personal norm in the prediction of intention (Kurland, 1996; Parker, Manstead and Stradling, 1995; Beck and Ajzen, 1991; Gorsuch and Ortberg, 1983; Jaccard and Davidson, 1975). The role of personal normative beliefs appears relevant in the study of behavioural domains with a moral dimension or moral connotations. As expected, personal norm exerted an influence on the young offenders' intentions of re-offending in the future, and provides further evidence that personal normative beliefs are a variable that provides a way of extending the theory of planned behaviour, at least in behavioural domains that can be evaluated on a moral dimension.

Personal norm entered the regression equation and made subjective norm redundant. This finding suggests that young offenders formulate their intentions to re-offend regardless of the opinions of their social environment, rather it is their individual norm that plays a significant and independent role in the formulation of their intentions to continue offending or not. Juvenile delinquency has been associated with a disengagement from the prevalent social norms (Patterson, 1986; Liska and Reed, 1985) and the present findings are in accord with that association. However, the influence of their delinquent friends, through subjective norms, accounting for the participants' intentions to re-offend in the future was not found, contrary to previous research and what might have been expected. It is equally plausible to assume that, under the influence of their unique developmental stage of adolescence, they are unwilling to accept that they can be influenced by external interference to direct their lives. It has to
be noted, however, that this result is likely to be due to, either, the lower reliability of subjective norms and/or the lack of much variability in the scores of subjective norms.

However, the contribution of personal norm to the prediction of intentions of re-offending in the future was not replicated when intentions were regressed to the belief-based variables of the model and personal norm. Thus, the inclusion of personal norm as a variable predicting intentions of re-offending over and above attitudes and subjective norm and PBC was not consistently supported. These results could be attributed to the fact that direct measures of the constructs of the model allowed more scope for the influence of personal norm to be observed and further point to the need for both types of operationalisations of the constructs to be employed for testing the sufficiency of the model (Manstead and Parker, 1995).

**Affective Self-Reactions and Intentions**

Affective self-reactions did not contribute to the prediction of intentions. It has been suggested that for morally relevant behaviours affective self-reactions could potentially predict intentions and behaviour. Although there has been support for such a proposition (Richard, van der Plight and de Vries, 1995; Parker, Manstead and Stradling, 1995), this was not replicated in this study. The failure of affective self-reactions to enter the regression equation for the prediction of intention was due to the fact that affective self-reactions correlated significantly and strongly with attitude. It could be argued that feelings of guilt, regret and shame after an offence might have been interpreted, by the sample of young offenders in the study, as personal evaluations of the results of their offending behaviour similar to the direct and belief-based operationalisations of attitude. The significant correlations of the two measures make such a suggestion possible. However, it raises the issue of whether affective self-reactions is a distinct construct or it can be subsumed under the affective dimension of attitude as a class of affective consequences of the performance of the behaviour (Conner and Armitage, 1998; Manstead and Parker, 1995; Ajzen, 1991).

**Mediating Role of Attitudes and Behavioural Control of the Effects of External to the Model Variables on Behavioural Intentions**

The proposition of the TPB that attitudes towards the behaviour, subjective norms and perceived behaviour control are both sufficient and necessary factors for the
prediction of behavioural intentions and behaviour was partially tested in the study. While it was not possible, due to several procedural problems, to test this proposition for actual behaviour, the implications were examined for behavioural intentions. The background characteristics of the young offenders who were measured in the study have been consistently related with juvenile delinquency in general and chronic offending in particular and according to the theory it was expected that any influence they might have on intentions of re-offending in the future would be mediated by the postulated sociocognitive determinants of the theory suggesting a fully mediating role of these constructs between background, static and relatively distal factors of juvenile delinquency and intentions of re-offending in the future. That is, any effects of these background factors would be brought about by the proposed cognitive representations of future offending. In the present study the factors related to intentions were identified and those that were also related to either attitude or behavioural control were finally selected (Baron and Kenny, 1986). A regression analysis suggested that most of the effects of these background variables on behavioural intentions were no longer significant once attitudes and behavioural control were entered into the regression, suggesting a clear mediation of attitudes and behavioural control of the effects of several background characteristics on behavioural intentions.

The approach followed was clearly an exploratory one, yet Ajzen (1991) proposed that the extent to which the constructs of the TPB mediate the effects of other external to the model variables on intentions and behaviour has to be empirically assessed, while no theoretical propositions of the specific relations of these background factors and the determinants of intentions and behaviour have been articulated (Eagly and Chaiken, 1993; Liska, 1984).

It has to be noted that among the factors identified as related to intentions of future offending and found to be mediated fully by attitudes and behavioural control, was age of initiation of criminal activities, a variable that is predictive of chronic and persistent offending (Loeber and Farrington, 1998; Rutter et al, 1998) and recidivism (Niarchos and Routh, 1992; Myner et al, 1998). Age of onset, while one of the stronger predictors of chronic offending, does not have, however, on its own, any explanatory value and the results of the present study are suggestive that much of its predictive power could be attributed to the cognitive representations young offenders, who have started offending
Early, hold about future offending. While this assertion seems to be supported for the case of the young offenders' behavioural intentions of offending in the future, based on the results of the study, it cannot be readily applied to actual behaviour.

However, the results of the present cross-sectional study are promising that such a link with actual behaviour exist, a link that is theoretically proposed (Ajzen, 1991) and this could be further pursued and empirically verified by a longitudinal study, something that is proposed as a step for future research. The implications of the mediating role the social cognitive constructs of the TPB could have on recidivism and chronic offending, does not mean that other variables which have been identified as related with persistent offending are of little value (Eagly and Chaiken, 1993). Rather, the implications are that, the model can account for the proximal factors related with continuation of offending, mediate the effects of distal factors on future offending, provide a parsimonious way of predicting young offenders' intentions and possibly future offending behaviour, and identifies the personal factors of the young offenders that might exert an influence on future offending, which the correctional institutions could target, as possible interventions taking place within the juvenile correctional institutions are likely to target the individual adolescent offender since they have limited capacity to deal with the broader environmental conditions he belongs to. However whether the findings of the present study could provide a useful guide for informing the content of any intervention programmes within the young offenders' institutions that could be successful in reducing the rates of recidivism, has to be established through longitudinal follow-up studies and controlled randomised experimental trials.

The results are potentially informative for interventions initiated by correctional services and other agencies involved with the rehabilitation of the young offenders, in the sense of reducing recidivism. The study identified several beliefs elicited from the young offenders themselves. Correctional services are mainly involved with the individual offender and usually aim at challenging his/her beliefs and attitudes to offending behaviour (Vennard, Sugg and Hedderman, 1997). Stressing the negative consequences resulting from juvenile delinquency and providing alternative ways of satisfying the adolescents' needs of excitement and enjoyment may provide useful directions of the content of any intervention. Similarly enhancing the youngsters' perceptions of their abilities to control offending behaviour and actually help them with
those factors that can act as facilitators of offending, can be a fruitful way of reducing recidivism. Help could be directed towards reducing unemployment, and providing accommodation after custody so that financial stresses are not encountered and are dealt with smoothly after incarceration. Drug and alcohol misuse were, according to the young offenders of the study, factors that they could operate towards offending through the generation of financial needs for support of the habits.

The study was conducted in the largest young offenders’ institution in Scotland. Although inferences could be made from the study, these have to be made with caution. Serious offenders committing homicides are not represented and those who were remanded are also underrepresented. The sample mainly reflects the intermediate young offenders in Scotland, in terms of seriousness. The results do not apply to female offenders.

The study deals mainly with behavioural intentions. The results are meaningful on their own, reporting the immediate cognitive antecedents of the young offenders intentions to re-offend in the future and fill a gap in the relevant literature of recidivism, which has mainly concentrated on static predictors of recidivism which, in addition, are not readily amenable to change. This study, employing the TPB, attempts to relate these distal factors with the young offenders intentions of re-offending. These external to the model variables may influence shaping of intentions indirectly by influencing the formulation of attitude, personal norm and PBC over the offending behaviour. This was evident as, after many background characteristics of the offenders were entered into the regression, they failed to account for a substantial and significant proportion of the variance in intention. This finding is related directly to the correctional service responsible for the custody of young offenders. Target of change by the agents operating within the setting is mainly the individual offender and the way he conceptualises his offending behaviour. What he thinks, feels and believes is capable of are related to what he plans and are all potentially amenable to change after informed intervention.

It is noted, however, that this study did not address the possible relation of intention and PBC to actual behaviour. A longitudinal study, following up those young offenders could provide evidence for the predictive efficiency of the model in accounting for actual recidivism rates. As it was a first requirement that the performance of the model was evaluated with respect to its ability to predict intentions of re-offending, a follow up
of the sample of the offenders is recommended for future research. The intention-behaviour correlation was found to be .53, in a meta-analytic study of Sheppard, Hartwic and Warshaw (1988), studying the application of the TRA in 87 studies dealing with diverse behavioural domains, .58 in a meta-analytic study of health related behaviours applying the TPB (Godin and Kok, 1996) and Ajzen (1991) reports a number of studies predicting behaviour from the intentions and behavioural control, with multiple correlations of .21 to .78 with a mean of .51. Sutton (1998) and Conner and Armitage (1998) noted that the average explained variance of actual behaviour from intentions and behavioural control was in the range of 34% to 38%. Sutton (1998) further evaluated these results as large. Although the prediction of behaviour from the TPB is far from perfect, it is substantial and consistent across studies. However, the relative predictive efficiency of the TPB to account for variations of actual future re-offending rates of young offenders after release remains to be empirically tested.

The study was of a correlational nature and the causal structure or causal order of the models, the TRA and TPB, was not directly tested, although the causal relations between the constructs have received support from experimental evidence (Ajzen and Fishbein, 1980; Ajzen, 1985; 1987; 1991). Similarly, the role that offending behaviour might have in the formation of the young offenders' beliefs was not directly tested, and while the identification of the young offenders' beliefs about offending with reference to the future were attained and organised around a clear and parsimonious theoretical framework, it is not possible to suggest that those cognitions are causally related to their subsequent behaviour. It is equally plausible to assume that their cognitive representations are the product of their offending behaviour. All these issues are open for further study where a longitudinal research design would be a more fruitful way to provide answers to them.
CHAPTER 5:

PERCEIVED PARENTAL CARE AND SUPERVISION: RELATIONS WITH LEGAL, INSTITUTIONAL, AND SOCIO-DEMOGRAPHIC FEATURES AND COGNITIVE REPRESENTATIONS OF FUTURE OFFENDING IN A SAMPLE OF YOUNG OFFENDERS
Chapter 5

PERCEIVED PARENTAL CARE AND SUPERVISION: RELATIONS WITH LEGAL, INSTITUTIONAL, AND SOCIO-DEMOGRAPHIC FEATURES AND COGNITIVE REPRESENTATIONS OF FUTURE OFFENDING IN A SAMPLE OF YOUNG OFFENDERS

5.1 Introduction

Child-rearing practices have been associated with socio-emotional functioning of children and adolescents. Delinquent behaviour, as part of the socioemotional problems of childhood and adolescence, has long been investigated in relation to family structural (McLoyd, 1998; Larzelere and Patterson, 1990; Laub and Sampson, 1988; Wilson, 1980) and content features (Stice and Barrera, 1995; Patterson, 1986, 1982; Liska and Reed, 1985) and has been found predictive of juvenile delinquency (Farrington, 1995; Henry et al, 1993; Kolvin et al, 1988, Loeber and Dishion, 1983; McCord, 1979). Similarly, child-rearing practices have been examined in terms of chronic offending and recidivism.

5.1.1 Child-rearing Practices Differentiating Persistent and Non-Persistent Juvenile Offenders

Seydlitz and Jenkins (1998), based on a number of studies examining the relationship of parental variables with delinquency, reached the conclusion that the most powerful, among family related variables, predictor of delinquency, was parental rejection, which held discriminatory power not only between delinquents and normal adolescents but between persistent and serious offenders and non-persistent offenders. Patterson and Stouthamer-Loeber (1984), examined the relationships of four family management variables, monitoring, discipline, problem solving and reinforcement, and delinquency measured by self-reported questionnaire and police contacts for seventh and tenth grade boys from a community sample. While discipline was moderately, negatively and significantly related with self-reported delinquency, monitoring emerged as the most important substantial correlate of both official data and self-reported delinquency, showing the same consistent pattern of relations for both criterion variables. The other family management variables were not correlated with either measures of delinquency, supporting monitoring as the most important dimension of parental skills associated with delinquent behaviour of children and preadolescents. The emergence of the same general pattern of results for both criterion variables is in accord with notions that self-reported and official delinquency do not represent distinctly different phenomena (ibid:...
1304; Tarling, 1993). In addition monitoring was the only variable able to differentiate chronic offenders, defined as those subjects with three or more police contacts, moderate offenders, those with one or two police contacts and non-offenders. The same differentiating ability of monitoring was supported with self-reported data as well and the authors commented that "(monitoring) ... may even serve a dual function. Initially it may determine which youths become engaged in the delinquency process. Secondly, it may determine which youths become recidivists" (ibid: 1305).

Laub and Sampson (1988), also reported that family hostility, rejection and low attachment were strongly related with serious and persistent offending in adolescence and early adulthood and Hanson et al (1984), found that family variables such as conflict, dominance, affect and supportiveness, significantly and independently predicted frequency of arrests in adolescence. Simons, Robertson and Downs (1989) found that the relationship of parental rejection to delinquent behaviour was holding even after controlling for other family variables, number of parents present in the family, maternal employment, family conflict, parental control, family organisation and family religious commitment. It was shown that the association of parental rejection and adolescent delinquent behaviour was not spurious and not dependent on those family variables, and although the search for third variables, possibly responsible for an observed association, can be limitless, the findings, however, provide support for the importance of parental rejection as a factor for the development and/or maintenance of juvenile delinquency. Hagell and Newburn (1996) however found that their adolescent re-offenders reported good relationships with their mothers. Their findings were based on the narrative reports of the re-offenders and there was no comparison with a group of less frequent offenders. Moreover, the final sample consisted of those young re-offenders who were identifiable in the community. It is possible that those who are more difficult to trace differ from those who are available.

5.1.2 Community Studies of the Relationship of Parental Care and Overprotection with Juvenile Delinquency

Mak (1994) examined parental neglect and overprotection as correlates of self-reported delinquency. They administered the PBI and a self-report scale of delinquency to 405 male and 387 female adolescents in Australia. They reported a significant relationship of self-reported delinquency with care and protection from both parents.
Both maternal and paternal care correlated negatively with delinquency while maternal and paternal protection correlated positively with delinquency. The combinations of the subscales of the PBI yield four distinct types of parenting style for each parent. It has been proposed that a combination of high care and low protection describes an optimal bonding, high care and high protection describe affectionate constraint, low care and low protection weak bonding, whereas low care and high protection are suggestive of affectionless control, which is regarded as the most detrimental of parenting styles.

Mak (1994) reported that, in line with her expectation, the affectionless control group was more delinquent than the group of optimal parenting style. Those having experienced a weak parenting style differed significantly from the optimal parenting group in terms of delinquent behaviour, yet in a different way for each of the sexes. Males differed on maternal styles while females on paternal styles. When delinquent behaviour was regressed to several demographic variables and the parental care and protection variables, maternal neglect emerged as the most important contributor of the variation in delinquent behaviour, followed by being male, coming from a broken home, low paternal care, father's education and an interaction effect of sex, paternal care and paternal protection. Although the combined predictors accounted for 12.48% of the variation of delinquent behaviour in the adolescent sample, the role of neglect, as perceived by the adolescents, mainly for mothers and secondarily for fathers, emerged as a significant potential determinant of juvenile delinquency. The findings are suggestive for intervention preventative action in child-rearing practices in those families in need of it. It is not only the fact that maternal care, followed by paternal care seem to be potent predictors of juvenile delinquency, it is the possible amenability of these factors, in relation to the other predictors of the study, that make the results potentially attractive to the agents involved with the prevention of socio-emotional dysfunction in children and adolescents.

Pedersen (1994), employing a shortened 20-item form of the Parental Bonding Instrument (Parker et al, 1979), in a community sample of 573 Norwegian adolescents aged 15-19, investigated any relationships of parental care and protection with several indices of adolescent psychosocial functioning. He reported that self-reported delinquency could be predicted significantly by low maternal care as a main predictor, followed by paternal care. Overprotection was not found to be significantly associated
Chapter 5

with delinquency problems or anxiety and depression in the sample. From the results of the study, it can be noted that care emerged as the most important dimension of the child-parent relationship associated with psychosocial functioning in adolescent males and females, while overprotection or control was not related to either internalising or externalising problems in the sample. The role of mothers and fathers might be different in influencing the adolescent psychosocial development, as perceptions of low paternal care were associated with anxiety and depression, while perceptions of low maternal care were associated with self-reported delinquent behaviour, and as both classes of psychosocial functioning were found related to low perceptions of care, this could be suggestive of the role of parental care, at least, to be a non-specific risk factor in the development of dysfunctional behavioural patterns of adolescents.

It is evident from the literature that parental variables and delinquent behaviour in childhood, and mainly, adolescence have attracted the attention of researchers, either in attempts to account for the developmental pathways of delinquency, either as mediators of the effects of structural variables on delinquent behaviour or as among those risk factors which additively and/or interactively are responsible for the expression of delinquency in childhood and adolescence. Although the possible causal and predictive role of parenting in juvenile delinquency seems well supported, it is also evident that the conceptualisation and operationalisation of child-rearing practices is not consistent across the literature. Both structural aspects of the family and quality of parenting have been examined with the progressive acknowledgement that it is mainly the quality of parenting that children are subject to that matters for their psychosocial development and the expression of delinquency behaviour in adolescence (Simons, Robertson and Downs, 1989). Parker (1989) identified two main dimensions of parenting: care and protection. One issue is, whether protection is actually interpreted as not permitting psychological independence or monitoring of activities. If protection conveys the meaning and taps monitoring on the behalf of the parents of the child’s activities, this could be expected to have a positive effect on the child’s behaviour, as parents would actually identify and restrict potential opportunities of antisocial behaviour, and/or the association of the child with antisocial peers which could have a negative influence on the child’s behaviour, by imposing clear rules and limits on the juvenile’s behaviour, making obvious the kind of behaviour that is going to be accepted. In that case parental
protection would be expected to have a negative association with juvenile delinquent behaviour.

On the other hand, protection could convey the meaning and tap a different aspect of parental interference, as overprotection, in the sense that parental involvement with the adolescents' behaviour does not result in their psychological independence. In that case the adolescent is more prone to rebellious acts, in an attempt to gain his independence from parents, which could involve delinquent behaviour.

It is even possible to speculate that parental protection could have positive effects in the child’s development when it is performed by his parents at younger ages, where children need to be monitored and it is critical for their subsequent development. In that case, protection could be expected to correlate with care, since leaving the children without supervision and monitoring of their activities at an age when they have not acquired or developed the relevant skills and resources to deal effectively with environmental challenges, could easily be equated with parental indifference (McLoyd, 1998).

In a similar line, the same degree of protection of the child by his parents in adolescence could be as detrimental as no protection at all in earlier years. Simply because adolescence is the period when potential adults need to learn different roles, face challenges and grow up emotionally, overprotection could inhibit those processes and not allow the adolescent to further develop.

It could be hypothesised that parental protection could have two aspects, one reflecting monitoring and supervision of the behaviour and the other reflecting inhibition of psychological independence, each one contributing in different ways in the children’s and adolescents’ psychosocial behaviour at different ages. Higher monitoring and higher protection may be positive factors in the development of children at younger ages, as McLoyd (1998) noted that ignorance of children’s dependency needs is detrimental to their development, while progressive shifts towards less monitoring and more psychological independence during adolescence provide positive factors for the psychosocial development of children.
5.1.3 Research of Perceptions of Parental Care and Protection in Scottish Young Offenders' Institutions

The PBI as a measure of two aspects of parenting, care and protection, has been employed in Scottish young offenders' institutions for the exploration of relationships of perceived parenting received by incarcerated inmates and measures of psychological distress experienced in custody by young inmates (Biggarn and Power, 1998) and the consideration of the interaction of parental styles in the experience of psychological distress as well as other characteristics of young offenders that have been found related and predictive of juvenile delinquency (Chambers, Power et al, 2000). The results of the two aforementioned studies were not consistent in mean scores obtained for the paternal and maternal protection measures, a finding that could be attributed either to the different sampling procedures employed by the two studies, or to the employment of different types of the same measure. The Chambers, Power et al (2000) study relied on a random sample from the largest institution in Scotland, while Biggarn and Power (1998) performed the analyses on a combination of subsamples selected from the same institution and Chambers, Power et al (2000) used the shortened form of the PBI. The present study attempted to replicate the aims of the previous studies and compare the mean scores on the PBI subscales of care and protection with normative data available in an attempt to clarify the issue, that is, the extent to which differences in parenting perceptions exist between incarcerated young offenders and samples drawn from the general male adolescent population, and the extent of these differences.

In addition, the two previously mentioned Scottish studies did not examine the relations of perceived parenting with the inmates' cognitive representations of their offending behaviour. Parenting has been consistently related and found independently predictive of juvenile delinquency, and has been proposed as a general risk factor for juvenile delinquency and general socio-emotional functioning (Loeber and Farrington, 1998; Pedersen, 1994). The consistent association of parenting with juvenile delinquency and the fact that child-rearing practices are potent and independent predictors of juvenile delinquency has led to a consensus in the recognition that family functioning is involved in offending behaviour by adolescents. However, several explanations have been proposed with regard to the way that those family influences are brought about and have an effect in the antisocial behaviour displayed by adolescents.
Liska and Reed (1985) summarised the underlying causal processes suggested by many theories linking family child-rearing practices with juvenile delinquency. They reported that Differential Association Theory (Sutherland and Cressey, 1970 cited in Liska and Reed, 1985), suggested that strong attachment between parents and children acts as a protective factor in the involvement of the child and the adolescent with delinquent peers, and the effect of parental attachment in this regard would be obvious in circumstances under which such an availability exists, such as neighbourhoods with high crime rates. In addition, a suggestion found in Social Control Theory as well, (Hirschi, 1969 cited in Liska and Reed, 1985), and Social Learning Theory (Akers, 1979 cited in Liska and Reed, 1985), is that children with a strong attachment to their parents are more likely to be sensitive to parental sanctions for detrimental behaviour and more motivated to prescribe to their disciplinary guidelines, in addition to the fact that they are more likely to internalise the moral definitions and values of their parents, which act as safeguards to the expression of antisocial behaviour by children and adolescents. Simons, Robertson and Downs (1989), in a similar way, proposed two main pathways in which inadequate parenting and weak bonding can exert an influence in juvenile delinquency. They argued that socialisation in a family characterised by little concern and warmth by the family members, leads to a callous interpersonal style to the children of these families, likely to be generalised in other interpersonal relationships as well, assuming a pervasive role that internal working models can exert on later development as Bowlby (1977), has argued.

During early experiences in childhood, children develop mental representations of their early relationships, internal working models of the self and the main caregiver, which according to Bowlby (1977) tend to remain relatively stable over the life span development and “influence feelings, thought and behaviour unconsciously and automatically” (Belsky and Cassidy, 1994: 379). Evidence for continuation of the attachment organisation of internal working models during development, at least in childhood, comes from Main, Kaplan and Cassidy (1985) who identified continuity in attachment organisation from 12 months to 6 years which was specified as coherence among rules that guide behaviour, attention and memory. Such coherence was seen in children who have been classified as avoidant at 12 months had a tendency, when they were 6 years old, during reunion with a parent to attend to toys, and responded with difficulty in discussing feelings or coping strategies when pictured separations were
presented to them. In general, several processes have been proposed that mediate the effects of ineffective and rejecting parenting to the development of antisocial behaviour and delinquency in adolescence.

5.2 Purpose of the Study

It has been proposed that the causes of antisocial and offending behaviour are not easily captured under one causal variable, rather many variables are responsible for the offending behaviour taking place in adolescence and a combination of different risk factors with either additive or/and interactional effects has been proposed (Lober and Farrington, 1998; Farrington, 1995). Quite similarly, the conceptualisation of different causal chains operating at different points in the process has been proposed (Rutter, Giller and Hagell, 1998) in an attempt to integrate empirical findings of antisocial behaviour.

The issue of the immediate precursors of any delinquent act being committed, and especially the assessment of cost and benefits of any delinquent act has not received much attention empirically. The Theory of Planned Behaviour provides a model with which the issue of the most immediate and proximal antecedents of delinquent behaviour can be studied organised around a specific theoretical framework that has been consistently predictive of a host of different kinds of behaviours and behavioural intentions. At the same time, it provides an opportunity for the issue of young offenders' delinquent behaviour to be studied in more depth as it provides us with a set of salient beliefs the young offenders themselves identify as salient for the continuation of their offending behaviour. These beliefs are their subjective perceptions of their own offending and that aspect seems to be the crucial element of young offenders' own evaluation of their delinquent acts, as Rutter et al (1998: 101) noted "that the actual cost-benefits are not what matters; rather, it is the person's own assessment, however inaccurate and misguided, that will influence action."

The present study attempted an examination of the relations of perceived parenting and how young offenders in custody perceive their offending behaviour, with specific reference to future offending. It was thought that perceived parenting styles might influence the perceived evaluations of offending, the inmates' subjective norms regarding future offending behaviour, as family is a major social group of reference, and their perceived ability to stop offending in the future. In addition, it was hypothesised
that any possible effects on the inmates' intention to re-offend in the future would be mediated by their attitudes, subjective norms and perceived behavioural control to stop offending in the future. In short, it was a partial test of the Theory of Planned Behaviour examining the role of perceived parenting as an external to the model variable exerting its influence on young offenders' intentions to re-offend, by influencing the constructs hypothesised by the model as determinants of intentions, that is, attitudes towards offending in the future, subjective norms of future offending and perceived behavioural control to stop future offending behaviour.

In general it was expected that the variables postulated between the two models - as frameworks postulating different causal constructs operating at different points in the chain of antisocial behaviour, child-rearing practices representing more distant factors than the beliefs of the young offenders which represent more proximal antecedents, would be related in an expected direction. That is, young offenders' perceptions of their offending behaviour and especially their intentions to continue offending in the future, are expected to be negatively related to perceived care and positively related to perceived parental protection, as low care and high overprotection have been found associated with juvenile delinquency.

The mallability of the main variables employed and examined made the purpose of the study informative for potential interventions targeting either more distal factors of juvenile delinquency as parenting styles and/or individual perceptions and evaluations of offending behaviour by the young offenders.

5.3 Methodology

5.3.1 Procedure

One hundred and fifty-two young offenders from the largest institution in Scotland were randomly selected to take part in an interview. The interview asked information about certain background features of the subjects such as their age, current offence, offending history, educational attainment, employment history, family issues and drug and alcohol misuse (See Chapter 4, Methodology). In addition the subjects completed a shortened form of the Parental Bonding Instrument.
5.3.2 The Parental Bonding Instrument

A shortened form of the Parental Bonding Instrument (Pedersen, 1994) was used in the study, derived from the Parental Bonding Instrument, a factor analytic instrument developed by Parker, Tupling and Brown (1979). The shortened form of the PBI consists of 10 attitudinal and behavioural items, each scored in a Likert-type scale ranging from 0 to 3, five measuring perceived parental care e.g. "She/He appeared to understand my problems and worries" and five protection e.g. "She/He let me decide things for myself", for both mother and father. Pedersen (1994), reported satisfactory internal reliability coefficients for care and protection, a factor analysis resulting in two factors solution, similar to Parker et al (1979) and the ability to discriminate groups in a meaningful way, providing support for the instrument's validity. In addition, Parker (1989) reported that the PBI is characterised by high internal reliability for each factor, is quite uninfluenced by mood states and the two dimensions have generally been supported. Care appears to be a homogeneous factor, while protection seems to be more heterogeneous as Cubis et al (1989), report "Protection in Social Domain" and Protection in Personal Domain as sub-factors of the Protection factor in the PBI. Generally the PBI shows good construct and predictive validity, while it has been found to measure actual parenting, rather than perceived parenting, yet it seems to be culturally sensitive (Parker, 1990, 1989; Parker et al, 1979). Reliability and validity for the care factor have been very satisfactory, while overprotection usually achieves reliability and validity lower than care, which could be the result of some difficulty in the definition of overprotection (Lopez and Gover, 1993).

5.4 Results

From the 152 young offenders who participated in the interview, five were unable to fill in the PBI in relation to their mothers or a mother figure and thirteen for their fathers or a father figure. All the participants, however, were retained in subsequent analysis. Alpha reliability coefficients for the subscales of the PBI were, maternal care .82, paternal care .89, maternal protection .63 and paternal protection .63. The results are suggestive of the relative homogeneity of parental care while parental protection for both parents seems not to achieve the same degree of homogeneity for the sample of young offenders. Care and protection were unrelated for both parents, suggesting the independence of the two factors. There was a positive and significant correlation of .38,
p<.01, between mother care and father care, while mother protection and father protection did not correlate.

Correlations of perceived parental care and protection with certain characteristics of the young offenders are presented in table 1. It is interesting to note that protection by both parents was mainly unrelated to most of the background characteristics of the young offenders.

Table 1: Correlations of Maternal Care and Protection and Paternal Care and Protection with Offenders’ Background Characteristics.

<table>
<thead>
<tr>
<th></th>
<th>Mother Care</th>
<th>Father Care</th>
<th>Mother Protection</th>
<th>Father Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of current sentence</td>
<td>.05</td>
<td>.21*</td>
<td>-.02</td>
<td>-.01</td>
</tr>
<tr>
<td>History of past offending</td>
<td>-.25**</td>
<td>-.28**</td>
<td>-.15</td>
<td>.05</td>
</tr>
<tr>
<td>Age at first offence</td>
<td>.12</td>
<td>.18*</td>
<td>.09</td>
<td>-.09</td>
</tr>
<tr>
<td>Age at first arrest</td>
<td>.11</td>
<td>.14</td>
<td>-.12</td>
<td>.17*</td>
</tr>
<tr>
<td>Age at first time in prison</td>
<td>.04</td>
<td>.04</td>
<td>-.18*</td>
<td>.05</td>
</tr>
<tr>
<td>Being in residential care</td>
<td>-.35**</td>
<td>-.22**</td>
<td>.07</td>
<td>.05</td>
</tr>
<tr>
<td>Contact with family while in custody</td>
<td>.24**</td>
<td>.15</td>
<td>.08</td>
<td>-.05</td>
</tr>
<tr>
<td>Alcohol abuse in family</td>
<td>-.23**</td>
<td>-.12</td>
<td>.11</td>
<td>-.01</td>
</tr>
<tr>
<td>Age at first time taken drugs</td>
<td>.26**</td>
<td>.16</td>
<td>-.11</td>
<td>.14</td>
</tr>
<tr>
<td>Age at first time drinking alcohol</td>
<td>.19*</td>
<td>.24**</td>
<td>-.03</td>
<td>.02</td>
</tr>
<tr>
<td>Seen a psychologist in community</td>
<td>-.24**</td>
<td>.04</td>
<td>.07</td>
<td>-.03</td>
</tr>
<tr>
<td>Attempted suicide</td>
<td>-.24**</td>
<td>-.21*</td>
<td>.05</td>
<td>.03</td>
</tr>
</tbody>
</table>

Note: * = Pearson’s correlation, the rest Point-Biserial correlations.

History of past offending was based on a composite measure of the sum of the numbers of previous custodial sentences, previous arrests and non-custodial sentences of the sample of the young offenders divided by their age to obtain a recidivism rate measure.

* p<.05
** p<.01

The parenting styles reported by the young offenders are reported in table 2. The assignment of each offender to one of the four possible quadrants was based on normative mean scores of the male adolescents that participated in Pedersen’s (1994) study. While Parker et al (1979), in the development of the PBI report normative values, Pedersen (1994), used the shortened form of the PBI, the version of the measure that was employed in the current study, so it was thought that the results would be more readily comparable as they are based on the same measure, while differences arising from the fact that the normative values are derived from a culturally different sample.
has to be noted. The results suggest that there were small proportions of the young offenders assigned either to optimal parenting or neglectful parenting. Rather, as the sample overall scored rather high in protection, most of the offenders could be classified as experiencing an affectionate constraint parenting style. A smaller percentage experienced parenting characterised by affectionless control.

**Table 2: Perceived Parental Styles reported by the Young Offenders for Mothers and Fathers, (Based on Pedersen, 1994 normative sample's means).**

<table>
<thead>
<tr>
<th>Optimal Parenting, High Care and Low Protection from</th>
<th>Affectionate Constraint, High Care and High Protection from</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers 3 (4.41%)</td>
<td>Mothers 120 (81.63%)</td>
</tr>
<tr>
<td>Fathers 5 (3.59%)</td>
<td>Fathers 89 (64.02%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Neglectful Parenting, Low Care and Low Protection from</th>
<th>Affectionless Control, Low Care and High Protection from</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers 3 (4.41%)</td>
<td>Mothers 21 (14.28%)</td>
</tr>
<tr>
<td>Fathers 7 (5.03%)</td>
<td>Fathers 38 (27.33%)</td>
</tr>
</tbody>
</table>

As the studies reported in table 3, employed either the original version of the PBI (Parker et al, 1979) or the shortened form (Pedersen, 1994), the procedure suggested by Chambers, Power et al (2000) was followed, that is, the scores of the studies employing the original version of the PBI were scaled down so that the results were comparable across the studies. From a number of t-tests, the results of which are reported in table 4, and the inspection of the mean scores for the samples of the studies, it can be seen that the young offenders in the present study scored significantly higher in comparison to both the normative samples and the samples of young offenders, in terms of both paternal and maternal care and protection. The differences are particularly obvious in the case of perceived paternal protection and maternal protection and subsequently for perceived paternal care and maternal care.
Table 3: Means and Standard Deviations of Maternal Care, Maternal Protection, Paternal Care and Paternal Protection for the Current Study’s Young Offenders and means of other studies’ Young Offenders Populations and Normative Values.

<table>
<thead>
<tr>
<th></th>
<th>YOs in the present study</th>
<th>Chambers, Power et al YOs</th>
<th>Biggam and Power Yos (scaled)</th>
<th>Pedersen study Normative</th>
<th>Cubis et al Normative (scaled)</th>
<th>Murphy et al Normative (scaled)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=152</td>
<td>n=101</td>
<td>n=114</td>
<td>n=267</td>
<td>n=1068</td>
<td>n=97</td>
</tr>
<tr>
<td></td>
<td>m (s.d.)</td>
<td>m (s.d.)</td>
<td>m (s.d.)</td>
<td>m (s.d.)</td>
<td>m (s.d.)</td>
<td>m (s.d.)</td>
</tr>
<tr>
<td>Maternal Care</td>
<td>15.01 (3.5)</td>
<td>10.62 (3.3)</td>
<td>10.52</td>
<td>11.4 (2.6)</td>
<td>9.88</td>
<td>11.48</td>
</tr>
<tr>
<td>Maternal Protection</td>
<td>10.97 (2.5)</td>
<td>6.92 (2.5)</td>
<td>3.84</td>
<td>5.6 (3.0)</td>
<td>5.76</td>
<td>5.14</td>
</tr>
<tr>
<td>Paternal Care</td>
<td>12.12 (4.19)</td>
<td>7.96 (3.6)</td>
<td>7.47</td>
<td>10.1 (3.1)</td>
<td>9.25</td>
<td>10.18</td>
</tr>
<tr>
<td>Paternal Protection</td>
<td>9.91 (2.7)</td>
<td>6.18 (2.4)</td>
<td>2.84</td>
<td>4.8 (2.9)</td>
<td>5.12</td>
<td>3.83</td>
</tr>
</tbody>
</table>

Table 4: T-tests of scores of the PBI Subscales of the Young Offenders of the study with scores of samples of other Young Offenders and Normative Data.

<table>
<thead>
<tr>
<th></th>
<th>YOs of this study vs. YOs Chambers, Power et al.</th>
<th>YOs of this study vs. YOs Biggam and Power.</th>
<th>YOs of this study vs. Pedersen.</th>
<th>YOs of this study vs. Cubis et al.</th>
<th>YOs of this study vs. Murphy et al.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t(146)=15.18*</td>
<td>t(146)=15.52*</td>
<td>t(146)=12.48*</td>
<td>t(146)=17.73*</td>
<td>t(146)=12.20*</td>
</tr>
<tr>
<td>Maternal Care</td>
<td>t(146)=19.10*</td>
<td>t(146)=33.62*</td>
<td>t(146)=25.32*</td>
<td>t(146)=24.57*</td>
<td>t(146)=27.49*</td>
</tr>
<tr>
<td>Maternal Protection</td>
<td>t(138)=11.70*</td>
<td>t(138)=13.08*</td>
<td>t(138)=5.68*</td>
<td>t(138)=8.07*</td>
<td>t(138)=5.46*</td>
</tr>
<tr>
<td>Paternal Care</td>
<td>t(138)=16.16*</td>
<td>t(138)=30.63*</td>
<td>t(138)=22.14*</td>
<td>t(138)=20.75*</td>
<td>t(138)=26.34*</td>
</tr>
<tr>
<td>Paternal Protection</td>
<td>t(138)=30.63*</td>
<td>t(138)=30.63*</td>
<td>t(138)=22.14*</td>
<td>t(138)=20.75*</td>
<td>t(138)=26.34*</td>
</tr>
</tbody>
</table>

Note: *p<.001

The correlations of perceived paternal and maternal care and protection are reported with the young offenders’ direct and belief-based attitude towards future offending, their subjective norm and their perceived behavioural control to stop future offending behaviour are reported in tables 5 and 6. Paternal protection was found unrelated to the young offenders’ perceptions of their future offending and almost the same pattern was true for paternal care, apart from a significant relationship with the samples’ belief-based attitude towards their offending. Maternal care was found consistently related to perceptions of control and ability to stop offending in the future, evident from significant relationships with direct and belief-based measures of behavioural control of future offending behaviour. Those offenders who perceived their mothers as more
caring were more likely to assert that they perceive themselves as more able to discontinue offending in the future. Maternal care was also found related to the indirect measure of attitude towards offending. The higher the perception of maternal care, the less rewarding offending was rated by the young offenders. In addition, the differential relations of maternal protection to the young offenders' attitude was evident. The higher the maternal protection perceived by the offenders, the higher their evaluation of offending, evident from positive associations with both the direct and indirect measures of attitude. Finally, maternal overprotection was positively related to the young offenders' intentions to re-offend in the future.

Table 5: Correlations of Maternal Care, Paternal Care, Maternal Overprotection and Paternal Overprotection with Intention, Indirect Attitude, Indirect Subjective Norm and Indirect Behavioural Control of Incarcerated Young Offenders (N=152).

<table>
<thead>
<tr>
<th></th>
<th>Maternal Care</th>
<th>Paternal Care</th>
<th>Maternal Overprotection</th>
<th>Paternal Overprotection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>-.10</td>
<td>-.11</td>
<td>.25**</td>
<td>-.05</td>
</tr>
<tr>
<td>Ind. Attitude</td>
<td>-.26**</td>
<td>-.24**</td>
<td>.31**</td>
<td>-.06</td>
</tr>
<tr>
<td>Ind. Subjective Norm</td>
<td>-.04</td>
<td>.13</td>
<td>.04</td>
<td>.02</td>
</tr>
<tr>
<td>Ind. Behavioural Control</td>
<td>.23**</td>
<td>.13</td>
<td>-.08</td>
<td>-.04</td>
</tr>
</tbody>
</table>

Note: **p<.01

Table 6: Correlations of Maternal Care, Paternal Care, Maternal Overprotection and Paternal Overprotection with Intention, Attitude, Subjective Norm and Behavioral Control of Incarcerated Young Offenders (N=152).

<table>
<thead>
<tr>
<th></th>
<th>Maternal Care</th>
<th>Paternal Care</th>
<th>Maternal Overprotection</th>
<th>Paternal Overprotection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>-.10</td>
<td>-.11</td>
<td>.25**</td>
<td>-.05</td>
</tr>
<tr>
<td>Attitude</td>
<td>-.04</td>
<td>-.01</td>
<td>.22**</td>
<td>.02</td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>-.15</td>
<td>-.04</td>
<td>.01</td>
<td>.10</td>
</tr>
<tr>
<td>Behavioural Control</td>
<td>.26**</td>
<td>.35</td>
<td>-.04</td>
<td>-.08</td>
</tr>
</tbody>
</table>

Note: **p<.01

For a more detailed examination of the relationships between parenting and the young offenders' representations of their future offending behaviour, associations between paternal and maternal care and control with the beliefs underlying the constructs of the Theory of Planned behaviour were further explored.

Table 7, presents the relationships of the care and protection for both parents with the products of outcome expectancy beliefs and their evaluations by the young offenders. It
can be seen that perceptions of both paternal care and protection were mainly unrelated to the young offenders’ beliefs. Maternal care however, was negatively related to the adverse consequences of incarceration of embarrassing the family and losing contact with family. Those offenders who perceived their mothers as more caring seemed to be more concerned with these possible negative outcomes of offending that can result mainly from a custodial sentence, while an actual concern about incarceration was not observed in relation to maternal care. In a different direction those young offenders who perceived their mothers as more protective were more likely to believe that offending is likely to help them cope with their lives, that offending provides them with money for the lifestyle they wanted, that they were unlikely to lose contact with their friends as a consequence of offending, and that offending provided them with money for drinking.

Table 7: Correlations of Maternal Care, Paternal Care, Maternal Protection and Paternal Protection with Young Offenders’ Beliefs about the Consequences of their Offending Behaviour (N=152).

<table>
<thead>
<tr>
<th></th>
<th>Maternal care</th>
<th>Paternal care</th>
<th>Maternal Protection</th>
<th>Paternal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money to buy drugs</td>
<td>-.10</td>
<td>-.19</td>
<td>.13</td>
<td>.06</td>
</tr>
<tr>
<td>Money for the lifestyle I want</td>
<td>-.14</td>
<td>-.12</td>
<td>.20*</td>
<td>-.09</td>
</tr>
<tr>
<td>Money for drinking</td>
<td>-.11</td>
<td>-.16</td>
<td>.18*</td>
<td>-.03</td>
</tr>
<tr>
<td>It is an exciting experience</td>
<td>-.09</td>
<td>-.09</td>
<td>.13</td>
<td>-.07</td>
</tr>
<tr>
<td>To cope with life</td>
<td>-.14</td>
<td>-.11</td>
<td>.29**</td>
<td>.07</td>
</tr>
<tr>
<td>Unlikely to go to jail</td>
<td>-.07</td>
<td>-.02</td>
<td>.10</td>
<td>.09</td>
</tr>
<tr>
<td>Unlikely to lose my freedom</td>
<td>-.09</td>
<td>-.03</td>
<td>.01</td>
<td>.11</td>
</tr>
<tr>
<td>Unlikely to lose contact with my family</td>
<td>-.25**</td>
<td>-.08</td>
<td>.07</td>
<td>.08</td>
</tr>
<tr>
<td>Unlikely to lose contact with my friends</td>
<td>.08</td>
<td>.09</td>
<td>.21**</td>
<td>-.08</td>
</tr>
<tr>
<td>Unlikely to have difficulty to find a job</td>
<td>-.07</td>
<td>.09</td>
<td>.07</td>
<td>.02</td>
</tr>
<tr>
<td>Unlikely to embarrass my family</td>
<td>-.40**</td>
<td>-.18*</td>
<td>-.12</td>
<td>-.01</td>
</tr>
<tr>
<td>Unlikely to lose contact with my friends who offend</td>
<td>-.07</td>
<td>-.11</td>
<td>.06</td>
<td>-.14</td>
</tr>
</tbody>
</table>

Note: **p<.01  
* p<.05

Table 8, presents the correlations of the young offenders’ perceptions of parenting with their beliefs about the factors that could inhibit their offending behaviour in the future. Both maternal and paternal protection was unrelated to the offenders’ behavioural beliefs. Those that perceived their mothers and fathers as more caring were more likely to believe that they were more able to have support from their family, to
find a job, to stop drinking and to stay calm when provoked in the future. The relations of those beliefs to maternal care were somewhat stronger with perceptions of maternal care in comparison to paternal care.

Regarding beliefs about perceived norms, the only significant relation illustrated in table 9, was between paternal protection and perceived agreement of father with future offending. Apart from that, perceived parenting was found unrelated to normative beliefs about offending behaviour.

Maternal protection was found significantly related to the young offenders' intentions to re-offend in the future, as was expected. However, significant relations were found between perceptions of parenting and most of the predictors of intentions as postulated by the Theory of Planned Behaviour, apart from subjective norms, operationalised either as direct or belief based, which leads to a direct test of the assumption of the model, that any external to the model variable would exert any influence on intentions and behaviour that is mediated, brought about, by influencing some or all of the determinants of intentions. It has to be noted that such a procedure, while theoretically postulated by Ajzen (1991, 1985, 1987, 1988), it does not specify either which determinants of the model will be affected by which external to the model factors or the ways that, external to the model variables, in the present case perceptions of child-rearing practises, will be related to the constructs of the model. That is the mediating role of the constructs of the model is assumed for the prediction of intentions and behaviour, yet, the specific relations of external to the model variables and the constructs of the model have to be empirically established, leading to a largely exploratory procedure for the pattern of relationships to be revealed.

To examine whether the constructs postulated by the TPB as determinants of intentions mediate the relations of perceptions of maternal protection with intentions to re-offend in the future, two hierarchical regression analyses were performed with intentions to re-offend in the future as the criterion variable.

The predictors were included in two steps, maternal perceptions of protection were included as the first step, in order to assess the amount of variance of intentions of future re-offending by the young offenders was accounted for by this variable and secondly the postulated constructs of the TPB were entered to assess whether the amount of variance of intentions predicted by the Parental Bonding Instrument's factors
remained the same, was lowered or was fully accounted for by attitudes, behavioural control and personal norm. Baron and Kenny (1986) suggested this procedure as a way to assess the role of mediating variables. Baron and Kenny (1986) suggested that for mediation to be examined, the mediator has to be related to both the predictor and the criterion variables. Subjective norms, contrary to expectations, were found unrelated to the dimensions of parenting measured by the PBI, operationalised either directly or based on the subjects' beliefs. Additionally, as was shown in chapter 1, subjective norms failed to predict variability in intentions over and above attitudes and behavioural control and it was made redundant when personal norm was entered in the regression equation. For all these reasons, a modified model was proposed that excluded subjective norms as a predictor of intentions and this model was the focus of the present analysis. Furthermore, while maternal and paternal care were found to be related to attitudes and behavioural control, they did not relate directly to intentions and while paternal protection was found mainly unrelated to the model's constructs, the testing for mediation focused on maternal protection, attitudes and intentions (Baron and Kenny, 1986).

Three hierarchical regression analyses (Tables 10, 11) were performed in order to examine the mediating role of attitudes across the different operationalisations of attitudes, measured directly or based on the participants' beliefs and to examine their potentially different mediating efficiency. It could be seen from the results in tables 10 and 11 that maternal protection did not account for any variance of the young offenders' behavioural intentions to re-offend in the future over and above the belief based attitudes and perceived behavioural control to desist from offending in the future. However, maternal protection made an independent and significant prediction of behavioural intentions over and above the directly measured variables of the TPB, although this contribution was lowered. The results indicate that any effects of maternal protection on intentions of future re-offending are mediated by attitudes and perceived control of future offending, although such an effect is more evident when the constructs of the TPB are operationalised according to an expectancy value way.
Table 8: Correlations of Maternal Care, Paternal Care, Maternal Protection and Paternal Protection with young offenders' beliefs about their ability to control factors that they identified as facilitating their offending behaviour (N=152).

<table>
<thead>
<tr>
<th></th>
<th>Maternal Care</th>
<th>Paternal Care</th>
<th>Maternal Protection</th>
<th>Paternal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Able to find a job</td>
<td>.29**</td>
<td>.19*</td>
<td>-.15</td>
<td>-.06</td>
</tr>
<tr>
<td>Able to move away</td>
<td>.10</td>
<td>-.01</td>
<td>-.02</td>
<td>-.07</td>
</tr>
<tr>
<td>Able to stop drugs</td>
<td>.03</td>
<td>.11</td>
<td>-.14</td>
<td>.02</td>
</tr>
<tr>
<td>Able to have support from my family</td>
<td>.33**</td>
<td>.22**</td>
<td>-.02</td>
<td>-.05</td>
</tr>
<tr>
<td>Able to stop drinking</td>
<td>.25**</td>
<td>.19*</td>
<td>-.04</td>
<td>.08</td>
</tr>
<tr>
<td>Able to have money</td>
<td>.03</td>
<td>.10</td>
<td>-.07</td>
<td>-.16</td>
</tr>
<tr>
<td>Able to stay calm when I am provoked</td>
<td>.22**</td>
<td>.18*</td>
<td>-.06</td>
<td>-.07</td>
</tr>
<tr>
<td>Able to have a house</td>
<td>.10</td>
<td>.12</td>
<td>-.07</td>
<td>-.08</td>
</tr>
<tr>
<td>Able to stay away from my delinquent friends</td>
<td>.03</td>
<td>.01</td>
<td>-.04</td>
<td>-.08</td>
</tr>
</tbody>
</table>

Note: **p<.01  *p<.05

Table 9: Correlations of Maternal Care, Paternal Care, Maternal Protection and Paternal Protection with Young Offenders' perceived likelihood that significant others agree with their offending behaviour (N=152).

<table>
<thead>
<tr>
<th></th>
<th>Maternal Care</th>
<th>Paternal Care</th>
<th>Maternal Protection</th>
<th>Paternal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>.01</td>
<td>.07</td>
<td>.07</td>
<td>.14</td>
</tr>
<tr>
<td>Father</td>
<td>-.01</td>
<td>.16</td>
<td>-.03</td>
<td>.21*</td>
</tr>
<tr>
<td>Girlfriend</td>
<td>-.08</td>
<td>.05</td>
<td>.14</td>
<td>.11</td>
</tr>
<tr>
<td>Friends who offend</td>
<td>-.05</td>
<td>-.01</td>
<td>.14</td>
<td>-.15</td>
</tr>
<tr>
<td>Friends who do not offend</td>
<td>-.03</td>
<td>.01</td>
<td>.08</td>
<td>.07</td>
</tr>
</tbody>
</table>

Note: *p<.05
Chapter 5

Table 10: Hierarchical Regressions Examining the Mediation of belief based Attitudes of the relation of Maternal Protection with Intentions of Re-offending (N=152).

<table>
<thead>
<tr>
<th>Predictor</th>
<th>R</th>
<th>Adjusted R²</th>
<th>Increment to R²</th>
<th>F</th>
<th>b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Protection</td>
<td>.24</td>
<td>.05</td>
<td>.05**</td>
<td>9.18*</td>
<td>.24*</td>
</tr>
<tr>
<td>(Criterion Variable=Intention)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Predictor</th>
<th>R</th>
<th>Adjusted R²</th>
<th>Increment to R²</th>
<th>F</th>
<th>b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Protection</td>
<td>.30</td>
<td>.09</td>
<td>.09**</td>
<td>14.83*</td>
<td>.30*</td>
</tr>
<tr>
<td>(Criterion Variable=Ind. Attitude)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Predictors</th>
<th>R</th>
<th>Adjusted R²</th>
<th>Increment to R²</th>
<th>F</th>
<th>b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Protection</td>
<td>.24</td>
<td>.05</td>
<td>.05</td>
<td>9.18*</td>
<td>.24***</td>
</tr>
<tr>
<td>Ind. Attitude</td>
<td>.55</td>
<td>.29</td>
<td>.29</td>
<td>32.91</td>
<td>.52*</td>
</tr>
<tr>
<td>(Criterion Variable=Intention)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:
*P<.05
** P<.01

Table 11: Hierarchical Regressions Examining the Mediation of direct Attitudes of the relation of Maternal Protection with Intentions of Re-offending (N=152).

<table>
<thead>
<tr>
<th>Predictors</th>
<th>R</th>
<th>Adjusted R²</th>
<th>Increment to R²</th>
<th>F</th>
<th>b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Protection</td>
<td>.24</td>
<td>.05</td>
<td>.05</td>
<td>9.18*</td>
<td>.24***</td>
</tr>
<tr>
<td>(Criterion Variable=Intention)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Predictor</th>
<th>R</th>
<th>Adjusted R²</th>
<th>Increment to R²</th>
<th>F</th>
<th>b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Protection</td>
<td>.22</td>
<td>.04</td>
<td>.04</td>
<td>7.79*</td>
<td>.22*</td>
</tr>
<tr>
<td>(Criterion Variable=Attitude)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Predictors</th>
<th>R</th>
<th>Adjusted R²</th>
<th>Increment to R²</th>
<th>F</th>
<th>b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Protection</td>
<td>.45</td>
<td>.19</td>
<td>.19</td>
<td>19.14</td>
<td>.39*</td>
</tr>
<tr>
<td>(Criterion Variable=Intention)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:
* p<.05
** P<.01
*** p<.001
5.5 Discussion

Relationships between PBI factors for Mothers and Fathers

The relatively moderate internal consistency of the protection factor for both mother and father, suggests that protection, operationalised by the PBI, might not be a homogeneous factor and, potentially, be defined according to certain dimensions that could be interrelated. Cubis et al (1989) actually identified two subfactors of the protection scale, protection in the social domain and protection in the personal domain. In addition, the mixed results of the studies, which operationalised parental protection in terms of monitoring, discipline and overprotection and inhibition of personal development with delinquent behaviour in children and adolescents, suggest that more research is needed for the conceptual clarification of parental protection, its possible dimensions, its operationalisation accordingly, so that its relationship with delinquent behaviour can be established.

Care and protection were unrelated for both parents, suggesting the independence of the two factors. There was a positive and significant correlation of .38, p<.01, between mother care and father care, while mother protection and father protection did not correlate. These results are not in line with Chambers, Power et al (2000) who found no relationship of mother care and father care. They also report a positive correlation of mother care and protection and a negative correlation of father care and protection, which were not found in this study. Additionally, Mak (1994) reported moderate correlations between care and protection for both mothers and fathers. Care and protection for both mothers and fathers were negatively associated, while maternal and paternal care, as well as, maternal and paternal protection were positively associated. Parker, Tupling and Brown (1979), in the development of the PBI, noted the possibility of different associations of the subscales of the instrument for different populations and suggested different ways of handling the data for different purposes. The results of the aforementioned studies, however, suggest that the independence of the two factors, care and protection, has not been well established, although in the present study of young offender population, the two factors did not correlate. The present results suggest that there is some consistency in the care received from both parents, as perceived by the young offenders, suggesting an overall family pattern, at least, in terms of affection expression. While the independence of the two main factors of care and protection, as
measured by the PBI is supported, an overall family function of care and warmth emerged, suggesting that those young offenders who perceived their mothers as caring tended to perceive their fathers as caring as well.

**PBI and Indices of Mental Health Problems**

It is interesting to note that maternal care was negatively correlated with contact with a psychologist in the community and both maternal and paternal care were negatively associated with suicidal attempts. Although the degree of association between parental care and those indices of psychological dysfunction and distress, was at best moderate, it was significant and consistent with both psychological treatment and suicidal attempts. The role of parental styles, as correlates of psychological distress among Scottish young offenders held in custody, has been examined in more detail by Biggam and Power (1998). Their study examined the relationship of parental care and protection with depression, anxiety and hopelessness. It was found that mainly maternal overprotection and subsequently paternal overprotection was significantly related to the three psychological distress indices, namely depression, anxiety and hopelessness. For hopelessness, though, paternal overprotection emerged as the most significant predictor followed by maternal overprotection. The results are suggestive of the role perceptions of parental overprotection might have in the process of adjustment and the experience of psychological dysfunction in a custodial environment for young offenders.

However, a similar study of incarcerated young offenders in Scotland by Chambers, Power et al, (2000) examined the role of parental styles experienced by young offenders and their relationships with anxiety, depression, hopelessness and self-esteem. In contrast to the previous study, it was found that parental care was significantly associated with psychological distress in custody, while parental protection was unrelated to the psychological distress experienced by the young offenders in custody. In addition, it was found that those young offenders perceiving an optimal parenting style from both parents were functioning psychologically better than those who experienced the other combinations of parenting styles from both parents, that is, having one or both parents practising negative parenting styles. Those perceiving both parents as optimal ones were exhibiting less depression, less pessimism and higher self-esteem, although there were no differences in the levels of anxiety. While Chambers, Power et al (2000) attribute the discrepancy of the results from the earlier study of Biggam and Power
(1998), to the higher levels of protection reported in the latter study so that protection lost its discriminatory power in differentiating distressed and non-distressed individuals, the differential emergence of parental care in both studies was not adequately explained. Although the different correlations between the two factors in the two studies could account for these differences, it seems that the role of perceptions of care and protection of young offenders and their relations to psychological distress needs to be further examined.

In addition, the two aforementioned studies did not examine the possibility that, either the perceptions of parenting reported and/or the experience of psychological distress by the young offenders, could be due to their incarceration. The present study tried to overcome this and examined whether perceived parenting was related to the time the young offenders have been in custody for their present offence, as, if any effects of incarceration on the offenders’ views of their child-rearing practices exist they should be evident by a co-variation of the time of incarceration with their views of the parenting dimensions their parents exercised. Duration of current stay in custody was found unrelated to the young offenders’ perceptions of both care and protection from both their parents. The same examination could not be applied for the indices of psychological distress since no measure of psychological experience of distress was used in the study. However, the lack of any systematic association of the PBI subscales of care and protection from both parents with duration of stay in custody, suggests that the measure is quite unaffected by any possible effects of incarceration on the responses of the young offenders on the PBI.

Although the present study did not aim to examine parental styles in relation to psychological distress of incarcerated, Scottish, young offenders, it can be seen from the results of table 1 that maternal care was negatively and significantly associated with contact with mental health professionals out of custody and both maternal and paternal care showed negative and significant correlations with suicidality in young offenders in general. These results are similar to Chambers, Power et al, (2000), where parental care was associated with psychological distress in a similar sample of young offenders. Moreover care and protection were not associated, in the present study, making the relative contribution of care and protection, as distinct factors of parenting, in the experience of psychological distress, easier to examine. Despite the emergence of care,
mainly maternal care, as a significant parental correlate of psychological distress among incarcerated young offenders, it has to be noted that psychological distress can only be inferred by an indirect retrospective operationalisation of contact with mental health professionals in the community and self-reported attempts to suicide. The results overall are suggestive that further research is needed for the clarification of the association between parenting styles and psychological distress in incarcerated young offenders.

**PBI and Family Alcohol Abuse**

Inspection of the results of table 1 reveals that maternal care was negatively and significantly associated with alcohol abuse in the family. Parental alcohol abuse in the family is expected to be related to less care of the children. Similar results were obtained by Rutherford, Cacciola, Alterman, McKay and Cook (1997), that alcoholic fathers were rated by their sons as less caring than fathers with no alcohol problems. In a similar way sons of alcoholic fathers and sons of non-alcoholic fathers, in the present study, did not report any significant differences regarding their perceptions of overprotection, suggesting that alcohol abuse is not related to perceptions of overprotection. However, low perceptions of protection were related with sons’ alcohol consumption. The lower the protection perceived, the heavier the drinking among the young men, and the association was evident in those with family alcohol abuse problems and those without such problems. It seems unsurprising that parental alcohol abuse in the family is associated with less care and indifference for the children and parents’ ability to exercise effective parenting is decreased thus making children prone to socio-emotional dysfunction including delinquent behaviour.

Whipple, Fitzgerald and Zucker (1995) compared parent-child interactions in 17 alcoholic and 23 non-alcoholic families and their biological sons. The two groups did not differ on mean parent and son age nor on socio-economic status. However non-alcoholic families had significantly more years of education, were married longer and had higher incomes than the alcoholic families. Although the results of the study should be approached with caution due to the small sample sizes in each group and significant differences for several demographic indices, the parent-child interaction in each group, as measured by the Dyadic Parent-Child Interaction System, presented some different patterns. During the parent-directed task and clean-up sessions, alcoholic parents did not effectively engage their children and did not have dyadic synchrony. Non-alcoholic
parent-child dyads “appeared better connected and better able to read and respond to each other’s cues... (and) control was more effectively used by these parents and more readily accepted by their children” (ibid: 157-158). In general the interactions of alcoholic parents with their children were characterised by a lack of parental warmth, their children displayed more negative affect and a parental demand for more independent behaviour during child-directed play was observed, suggesting that those children were expected to display independent behaviour quite early.

**PBI and Drug and Alcohol Misuse**

There was a significant relationship between maternal care and the age at which the young offenders tried drugs and between paternal care and maternal care and the age at which the young offenders reported drinking. The higher the perceived parental care, the later the age these behaviours were initiated by the subjects. Parental protection was not associated with the age at which the subjects started drinking or taking drugs. This finding is not in line with Rutherford, Cacciola, Alterman, McKay and Cook (1997), who found a significant relationship of parental overprotection with alcohol consumption in a community sample of young men.

So far, the pattern of alcohol and drug misuse has not been investigated in incarcerated samples of young offenders in relation to the child-rearing practices they have experienced. From the findings reported in the present study it seems that parental overprotection is not related to early initiation of either of these behaviours, while a moderate and significant relationship exists between care and substance abuse.

Dobkin, Tremblay and Sacchitelle (1997) examined maternal parenting as a correlate of substance abuse in a sample of thirteen years old boys. They identified that maternal nurturing behaviour was predictive of early onset substance abuse, in addition to disruptive behaviour of the boys. Maternal parenting behaviour promoting autonomy was unrelated to the adolescents’ substance abuse. The findings of the present study are in accord with findings reported by the aforementioned study. Maternal care was found consistently related to early onset of both alcohol and drug misuse, whereas overprotection was, both maternal and paternal, found unrelated to early substance abuse reported by the young offenders.
Leukefeld et al (1998), from a review of a number of studies examining the relation of family variables with adolescent drug misuse, reported that family drug misuse patterns in terms of parental and sibling drug misuse were significantly related to adolescent substance abuse as well as parental positive attitudes towards substance use, availability and drug misuse modelling significantly contributed to drug misuse by adolescents. In addition they noted that broadly defined family interaction has been found to be related to adolescent substance abuse. Characteristics that defined family interaction patterns have been operationalised in terms of family communication, involvement with family and discipline. Adolescent drug misusers have described their families as "hostile, lacking understanding, lacking in love, lacking cohesiveness, lacking co-operation, and as a situation high in alienation" (pp. 102-103). The results of the present study are in accord with the picture evolving of the familial environment of adolescent drug misusers by Leukefeld et al (1998) from community studies with non-incarcerated adolescents and young adults, and it seems that the same relations are generally supported in a young offenders population, at least, about perceived care from the mother and drug misuse initiation for male young offenders. In addition, the present study operationalised child-rearing according to two factors that seem to characterise parent and adolescence relations, which could be regarded as broader and higher order factors of those features constituting effective parenting and give a more precise picture of the variables related to the quality of parenting that could actually be associated with early onset of misuse of drugs in incarcerated young men.

**Relationship of PBI with Offending History**

Both maternal and paternal care correlated significantly with a composite index of offending history reflecting frequency of past incarcerations, remands and previous sentences. Overall, the results suggest that the less the care, from both the father and mother, the subjects perceived, the more frequent their offending behaviour. The results are in line with a great number of studies, which identified a consistent relationship of parental rejection and hostility with juvenile delinquency and persistent offending in adolescence. The present study focused on an incarcerated sample of young offenders and thus concentrated on the more extreme proportion of the population of young people in whom persistent offending was more likely to be evident. Concentration on the more extreme part of the population, in terms of offending and persistent
delinquency runs the risk of a restricted range of variability in the values of offending history since, assuming delinquent behaviour as a normally distributed variable in the population, the sampling is restricted to the top of the distribution. The significant correlations, however, of parental care and offending history of the incarcerated young offenders, which could be attenuated due to lack of variability in the offending history variables, further support the well established association between parental child-rearing practices and persistent juvenile delinquency.

The results of any research taking place in an institutional environment are subject to being confounded by the effects of institutionalisation on the subjects. While this is a methodological shortcoming of the present research, the duration of time the inmates had been incarcerated in the institution for their current sentences was measured. Hirschi and Selvin (1967) and Laub and Sampson (1988), argued that if incarceration per se has any effect on the variables of interest in a study of institutionalised offenders, this effect could at least be evident from covariation between duration of institutionalisation and the variables of interest. Duration of incarceration for the present sentence of the offenders was not related with either their perceptions of parental care and overprotection or with indices of their offending history. While this was a statistical post hoc testing of any effects of incarceration on the variables of interest, rather than actual control of this probably confounding variable in the research design, duration of current incarceration was unrelated to the variables of interest, thus making the assumption of any effects on either perception of parenting or offending history indices rather remote to consider, at least for the present sample of young offenders.

**Young Offenders’ Scores on The PBI in Comparison to Other Studies of Incarcerated Juvenile Delinquents and Normative Data**

The differences in the scores of the young offenders in the PBI factors of parental care and protection were significantly higher than the mean scores of males adolescents of the general population and from the mean scores of the young offenders in the two previous studies employing the measure in a similar population. The differences in the overprotection scores between the sample of the study and the normative samples is in the expected direction, as higher perceptions of overprotective parenting have been associated with juvenile delinquency (Mak 1994; Pedersen, 1994). The higher scores of parental care, however, perceived by the sample, are not compatible with the proposition
of an association of lower care and juvenile delinquency, an association that has been supported by findings by both Biggam and Power (1998) and Chambers, Power et al, (2000) in Scottish Young Offenders’ samples, although the care scores were higher than Cubis et al (1989) study. The higher perceptions of parental care reported by the sample of the present study are not easily interpretable. A possible speculation might be due to the higher percentage of violent offenders in the present study (53% were convicted for violent offences and 23% for property offences) that led to increased reports of higher perceived parental care.

The issue was examined further by comparing the mean scores of violent, non-sexual and property offenders. While no differences were observed in terms of perceived maternal protection \( t (118)=.29 \), n.s. and paternal protection \( t (112)=.32 \), n.s. between the two groups, property offenders reported significantly lower perceived care by their mothers \( t (118)=3.78 \), \( p<.001 \) and their fathers \( t (112)=2.64 \), \( p<.01 \). The high percentage of violent offenders in the present sample, in comparison to the fact that they scored higher on the PBI’s parental factors, may account for both the significant differences between both the normative and the young offenders’ data of the previous studies. However, it is not clear why these differences between the two groups, property offenders vs. violent offenders, emerged. A possible explanation might be that violent offenders reported significantly lower alcohol abuse in their families in comparison to property offenders \( t(122)=2.11 \), \( p<.04 \). It could be argued that further research is needed for the clarification of the relationship of the quality of parenting and different classes of offenders and offending behaviour as the high risk factors and predisposing conditions for different groups of offenders might differ and perceived parenting might have a differential effect for violent and property offending or be mostly related with one class of offending. The implications of the results overall indicate that overprotection is generally related with delinquency in adolescence, consistent with findings of normative samples (Pedersen, 1994) and comparisons between youngsters held in custody with normative data (Chambers, Power et al, 2000) a finding that was supported in the present study. The role of care, however, emerged as more puzzling and inconsistent with previous findings suggesting a relation of low care with delinquency. It has to be noted that the studies attempting to explore such a relationship (e.g Mak, 1994) employed measures of delinquency that measured mainly trivial offences where the commitment of more serious violent offences was not represented in the sample. It
could be speculated that the role of perceived parental care with juvenile delinquency is further complicated when this is examined in samples of juvenile offenders (samples drawn from populations in custody) as they could represent a restricted range of perceived parenting and from possible differences in the direction and strength of the relationship for different sub-samples of incarcerated young offenders, which, overall, suggest that further research is needed before any definite conclusions can be provided for the link between perceived parenting and serious and violent juvenile delinquency.

**PBI and Young Offenders' Cognitive Representations of Future Offending**

Maternal protection was found positively and significantly related to the young offenders' intention to re-offend in the future and the young offenders' perceptions of maternal overprotection were found related to positive evaluation of their offending behaviour in the future, consistently with direct and belief-based operationalisations of attitudes towards offending. An inspection of the correlations of the beliefs underlying their attitude with maternal protection, reveals the particular advantages of future offending as perceived by the inmates. They are more likely to believe that offending helps them to cope with life, it is not likely to make them lose contact with their friends, provides them with money for the lifestyle they want and for drinking. The results, while exploratory and based on a cross sectional design, are however suggestive of the way parental and, especially, maternal overprotection may be detrimental to adolescent development. It seems that overprotection does not lead young people to cope with the general requirements of their developmental stage in a constructive way. In addition, they are more likely to assume that offending is an alternative way to deal with the fulfilment of their needs and wishes. In that respect, it might seem unsurprising that they are more likely to say that they intend to continue their criminal career in the future.

The protective role of parental care in the development of juvenile delinquency that has been found in the literature (Yosikawa, 1998; Patterson, 1982) is evident from the negative relations of perceived parental care with evaluations of offending. Those that perceived their mothers and fathers as more caring, tended to evaluate their offending behaviour in a more negative way, while this pattern of relations was evident for the belief-based measure of attitude. The way that this effect might be brought about could be further explored by the relations of perceived care to the beliefs underlying attitudes. Higher perceptions of care, especially maternal care, were related with more recognition
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of the fact that offending is likely to embarrass the family and more likely to result in reduced contact with the family, both outcomes rated as aversive by the young offenders. The results seem compatible with the propositions of Social Control Theory (Hirshi, 1969 cf Liska and Reed, 1985), and Social Learning Theory (Akers, 1979 cf Liska and Reed, 1985), that children with a strong attachment to their parents are more likely to be sensitive to parental sanctions for detrimental behaviour and more motivated to prescribe to their disciplinary guidelines, in addition to the fact that they are more likely to internalise the moral definitions and values of their parents, which act as safeguards to the expression of antisocial behaviour by children and adolescents. Simons, Robertson and Downs (1989) proposed that socialisation in a family characterised by little concern and warmth by the family members leads to a callous interpersonal style to the children of these families. The suggestion of the present findings is that perceptions of caring relationships within the family by the adolescents, are likely to be accompanied by concern about the negative consequences of offending on other family members and that the disruption per se of the family relationships, due to incarceration, is perceived as aversive.

The protective role of parenting is further supported by the correlations of maternal care with both direct and belief-based measures of perceived behavioural control to stop offending in the future. Perceptions of higher care by both mother and father were related with the young offenders’ beliefs that they will be able to have support from their family, to find a job, to stop drinking and stay calm when provoked in the future together with their beliefs that these factors will help them to stop offending in the future. The role of a supportive family environment could be suggested as a protective factor for juvenile delinquency. Bowlby (1977) argued that a secure attachment of the children to their primary caregiver results in children that are more able to explore and in that respect refine and employ their skills and talents in a constructive way. Belsky and Cassidy (1994), argued that the concept of attachment has been employed as a domain specific model as well as a broad general model that “depicts attachment security as foundational to a variety of features of development. Thus, sensitivity to attachment signals promotes attachment security, which fosters development in a wide variety of domains” (ibid: 382-383). From this general perspective the results of the study seem not surprising. The young offenders who intend to re-offend in the future tended to perceive themselves as less able to stop offending in the future which means
they were less likely to exert control over factors that contributed to their offending in the past, thus not being able to function adaptively in the future and to regulate their lives in constructive ways, both for them and society. Perceptions of parental care were related with the offenders' beliefs that they were able to stop offending in the future, which in turn could be further examined in relation to the specific factors that they could exert control over in the future in order to stop offending. Availability of family support and ability to enter employment were the more salient, as well as their ability to self-regulate by stopping drinking and control negative emotional states. While it is not possible to establish a causal link between parenting and the beliefs and evaluations the young offenders reported due to the cross-sectional nature of the study, and despite the proposition of Belsky and Cassidy (1994: 383), that “the notion of internal working models as the causal process explaining the associations between attachment security and developmentnal sequelae remains a useful interpretative heuristic in need of empirical evaluation” the results are consistent with the assumption of internal working models children develop as a result of their attachment history, that is, beliefs about oneself and others and how the interpersonal world functions (Bowlby, 1977; Ainsworth, 1989).

Finally, the hypothesis that any effect of perceived parenting on intentions to re-offend in the future would be mediated by its influence on the predictors postulated by the TPB, as a model focusing on the more proximal antecedents of intentions and behaviour relating them to more distal factors (Petraitis, Flay and Miller, 1995) was supported. It was found that the perceived parenting relation to intentions was mediated mainly by the expectancies of the consequences of future offending and their subjective values of these consequences, while subjective norms were found almost totally unrelated to both perceived parenting and intentions of re-offending in the future. This pattern of relationships was mainly evident for the belief based measures of attitudes which fully mediated the relation of perceived parenting and intentions, while the direct measure of the construct did not fully capture the amount of variance in intentions attributable to parenting, a result that, if taken together with the relative larger amount of variance of intentions predicted by the belief based measures in comparison to the direct measures, suggests that, in terms of both predictive accuracy of intentions and accounting for the relations of external to the model variables with intentions, the belief-
based, more personally relevant measures of attitudes are to be preferred to the direct operationalisations of the construct.

While the cross-sectional nature of the study does not permit any causal inferences and the results cannot be readily generalised beyond incarcerated male young offenders, however, the results can be informative for the prediction of young offenders' intentions who are held in custody and share similar characteristics with the current sample, who it could be argued, represent the majority of incarcerated male young people in Scotland. For the prediction of their intentions, the results suggest that perceived parenting is redundant since its relation to intentions is mediated by their attitudes about offending in the future. In addition, and while the juvenile correctional institutions have limited ability to intervene in several aspects of the young offenders' lives, as implementing parenting training programmes for their families, and the focus of potential intervention can be the individual young offender, the potential possibility of concentrating on the young offenders' attitudes and beliefs and challenging them could appear as a promising alternative for altering their intentions of future re-offending. Based on the results of many meta-analytic studies, which found intentions as a potent predictor of behaviour, to change future rates of recidivism, although the actual value of such an approach would require experimental evidence of randomised intervention trials with an extensive longitudinal follow-up of the participants to establish both causal relationships and the practical value of such an intervention approach.

Finally, in the current study the relation of poor parenting with frequency of offending was replicated and poor parenting was associated with favourable attitudes towards offending and lower perceived capability to desist from offending in the future. It seems reasonable to propose that educational programmes on the role of parenting in the socio-emotional functioning of children could be initiated within the correctional institutions, especially for young offenders, as they are likely to have their own families. Such an approach could be promising in preventing the transmission of poor child-rearing practices across generations and reduce its effects in the general socio-emotional functioning of children.
CHAPTER 6:

EXPLORING THE RELATIONS OF MORAL DISSOCIATION AND COGNITIVE REPRESENTATIONS OF FUTURE OFFENDING IN A SAMPLE OF YOUNG OFFENDERS
EXPLORING THE RELATIONS OF MORAL DISENGAGEMENT AND COGNITIVE REPRESENTATIONS OF FUTURE OFFENDING IN A SAMPLE OF YOUNG OFFENDERS

6.1 Introduction

6.1.1 Moral Development and Juvenile Delinquency

In relation to the hypothesised link between immature moral development and juvenile delinquency, it was mainly proposed that juvenile delinquents do not reason about moral issues at the same level of moral reasoning as adolescents who are not involved in crime (Jennings et al., 1983). Several studies compared the level of moral reasoning in juvenile delinquents and non-delinquents, but the results were inconsistent and a strong relation between the stage of moral reasoning and juvenile delinquency was not found (Blasi, 1980; Jennings et al., 1983; Jurkovic, 1980). The reports of inconsistent findings regarding the level of moral immaturity in juvenile delinquents have also been criticised on theoretical and methodological grounds.

Blasi (1980) noted that positive relationships were observed between moral reasoning and behaviours that could not be regarded as particularly moral and that these findings are rather puzzling to interpret, unless one resorts to non-moral variables such as age, IQ and cognitive development and that the observed relationships could be an artefact of these other variables operating, not being controlled in the design of the studies.

Even when these other aforementioned variables were adequately controlled, as was the case with most of the studies examining the relation of moral judgement and juvenile delinquency, these attempts relied on the examination of incarcerated and matched non-incarcerated populations, where there is still the possibility that any observed differences between offenders and non-offenders may be attributed to the fact of incarceration itself. It is possible that a custodial environment does not allow much independent thinking and both the thinking and behaviour of the adolescents may be influenced by the authority figures in custody and the prisoners adaptation to an environment where avoidance of punishment and seeking of rewards, characteristics of the preconventional mode of moral reasoning, is of primary concern to the inmates (Jurkovic, 1980; Blasi, 1980).
Furthermore, the initial forms of moral reasoning assessment are of unclear reliability and validity of measurement as well as diverse scoring criteria (Kurtines and Greif, 1974) and therefore any overreliance on these results, to examine the relationship of moral judgement and moral behaviour, could be misleading.

Another problem in these studies as (Jurkovic 1980) noted is the fact that, with an institutionalised population of offenders, the results cannot be applicable to delinquent behaviour in general, since they do not represent those individuals who offend without having been noticed by the juvenile justice system. Both of these facts could result in an artifactual relationship between juvenile delinquency and moral reasoning maturity.

Straughan (1985) argued that the evidence in support of moral reasoning development and moral action based on experimental studies, where moral behaviour was operationalised as not cheating in an experimental task, although based on a positive relationship of moderate degree between higher stages of moral development and moral, non-cheating behaviour, the experimental situation cannot be assumed to adequately represent real life situations that require a moral decision in a situation of moral conflict as it is possible that the subjects are aware of the experimental situation and do not invest it with much moral importance, thus committing the ecological fallacy of generalising experimental results in real life situations. Similarly it could be argued that subjects with higher IQ levels were aware of the experimental conditions and had realised or, at least, suspected that although left unsupervised they could be watched and thus avoided cheating, while less cognitively advanced subjects failed to do so and as a result they succumbed to the temptation. As it has been argued by other researchers (e.g. Blasi, 1980; Siegal, 1982) IQ and general cognitive development could have accounted for these results in both experimental and naturalistic studies.

The hypothesised link between moral maturity and juvenile delinquency, has been criticised, apart from methodological reasons, on theoretical grounds as well (Siegal, 1982; Locke, 1979; Kupersmith and Wonderly, 1980; Mischel and Mischel, 1976. Blasi (1980) argued that even if moral judgement behaviour and juvenile delinquency appear to be related, this association could only be informative of the relative predictive power of moral reasoning to account partially for moral behaviour. Blasi (1980: 40) noted that "[w]hat was not learned ...is the psychological meaning of significant statistical correlations between moral reasoning and action", and continued arguing that this
meaning will not be revealed, even after better assessment of moral maturity and moral action is achieved.

Moral reasoning development has also been examined by the social learning tradition focusing mainly on moral behaviour and the factors influencing performance of moral behaviour. Moral behaviour is perceived as no different to other behaviours, and the focus is on “how the particular situation, the child’s previous history of observational learning, and the particular content area determine the child’s moral judgements” (Miller, 1993: 212). Moral behaviour is initially regulated by rewards and punishments from the child’s environment and it is assumed to generalise to similar situations were the child has previously been punished, even in the absence of an external agent in the situations, mainly due to conditioned anxiety (Birch, 1997). Apart from direct experience, the observation of the behaviour of significant models in similar situations is proposed to guide a child’s moral behaviour (Birch, 1997). Bukatko and Daehler (1995) argued that early social learning viewed children as rather passive recipients of the actual and vicarious rewards and punishments of their environment. However, the active role of the child in performing moral behaviour has been proposed and the personal standards of the child have been examined although, these standards are internalised by the standards of behaviour being observed and reinforced. Miller (1993) argued that rules and expectations of one’s behaviour are acquired by observing a model criticising his/her own behaviour and/or reinforcement of statements of self-criticism and are assumed to apply to several situations with no external monitoring. Miller (1993), however, noted that moral development according to social learning theory does not rule out the possibility that children naturally acquire rules for behaviour by cognitively transformed moral stages, as it could be argued that vicarious learning of moral rules is only one way of acquiring standards of behaviour. In addition, Birch (1997) argued that support for the social learning view of moral development has focused on experimental situations involving an adult-child interaction usually measuring cheating behaviour, and that situation could be quite artificial as it does not represent real life situations and does not take into account possible peer influences in behaving morally or not.
6.2 Self-regulation of moral behaviour

Mischel and Mischel (1976) similarly challenged Kohlberg’s assumption of a strong link between moral reasoning and moral action, and argued for a different theoretical perspective of the relation of moral thinking and moral action. While they recognised that moral reasoning was related to moral action, they argued that the magnitude of this relationship was rather modest and within the limits of the average personality coefficient following the trait approach, that is around .30. Mischel and Mischel (1976), thus, pointed out that knowledge of a person’s moral reasoning development could account for 10 percent of the variation of actual behaviour which they found rather unimpressive for the assumption of a strong link between moral reasoning and moral behaviour. They, similarly to Blasi (1980) and Siegal (1982), noted that the magnitude of this relationship can be reduced when other variables such as IQ, socio-economic level and age are taken into account and warned that the relationship between moral reasoning and trait ratings are generally higher than real behaviour, as trait ratings might actually reflect biases due to the very same factors, such as intelligence, social class and age, which were found to be related to both moral reasoning development and ratings of morality. Mischel and Mischel (1976), however, concluded that while it appeared that moral reasoning development is not a uniquely related factor of moral behaviour and the magnitude of this relation seemed moderate, the study of moral reasoning in different developmental periods could provide more insight into the role of moral competence in the prediction of moral behaviour.

Yet, at the same time Mischel and Mischel (1976) proposed that, as moral reasoning did not seem to be a sufficient factor of predicting moral behaviour, the study of other possible determinants of moral behaviour seemed worthwhile for further illumination of the relation of moral cognition to moral action. They also proposed that “[i]n the psychological analysis of morality it is also necessary to distinguish two components: the individual’s competence (capacity) to generate prosocial behaviours, and the motivational (incentive) variables for their performance in particular situations” (p. 85). They argued that the basic distinction between acquisition and performance in social learning theorising could be informative for the study of morality, and they summarised that what people have acquired during their socialisation constituted their competencies, what they can do, that is what they know, in terms of skills, rules and cognitive
capacities that have been acquired and potentially enable them to generate overt behaviours.

Mischel and Mischel (1976) further contrasted capability and performance and proposed that actual performance of any behaviour, and subsequently moral behaviour, is rather subject to motivational variables and incentives that exert their influence on any overt behaviour to be observed, and in that sense they argued that the study of those motivational variables could shed more light on the prediction and explanation of moral behaviour, which is conceived as a process approach and distinguished from an all-encompassing approach to moral reasoning and moral action proposed by Kohlberg and based on the cognitive developmental perspective of moral development. Within this framework the expected consequences of any course of action and the subjective value these consequences have for any individual would partially determine whether a behavioural course of action would be realised (Mischel, 1974). Mischel and Mischel (1976), further argued that expectancies and subjective values of consequences are not sufficient factors for moral conduct and that self-regulation actually mediates the performance of moral behaviour.

Self-regulation is generally defined as the ability of high behavioural self-control that allows one to execute either short-term or long-term commitments, even under difficult circumstances and in the face of distractions or adversities, for long periods and without the support of external reinforcements (Mischel, 1974; Mischel and Mischel, 1976). Social learning theory argues that, while behaviour is, to a considerable degree, controlled and regulated by external reinforcers, behaviour is also regulated by each individual by the standards one has set for oneself and by the consequences one produced for oneself after judgement that behaviour has either met, or has fallen short of, these standards.

Bandura (1991; 1999) has developed a similar approach with explicit reference to morality. Social learning theory does not differentiate moral behaviour from any other kind of behaviour and the same processes of acquisition, retention, production and execution of behavioural patterns, that apply to any behavioural domain, can be employed to explain moral behaviour. Given that the focus of social learning tradition is observable behaviour, in contrast to the structural cognitive developmental perspective which focuses on qualitative progressions and differentiations of thought patterns, there
is an emphasis on the motivational or regulative aspects of behaviour, a point that has not received much attention from the Piagetian and Kolberian tradition of the study of morality. Social learning theory argues that the form of moral reasoning is not a sufficient factor for moral behaviour, as any reasons provided by different forms of reasoning based on different principles can account for both moral and immoral behaviour. Behaviour is mainly regulated by incentives that can take the form of external reinforcements and self-reinforcements, which are the main motivational determinants for any observed behaviour.

Bandura (1991) argues that any kind of detrimental action is mainly regulated by two sources of sanctions, that is, social sanctions and self-sanctions that both operate anticipatorily and provide different incentives for inhibition of immoral actions. Social censure that could take the form of legal sanctions in the most punishing aspect, is what deters people from immoral behaviour, yet as much immoral behaviour usually takes place when little external monitoring exists and is thus likely to go unnoticed. Bandura (1991) argues that is mostly the sanctions arising from oneself that would play a major inhibitory role in immoral behaviour, as people would refrain from engaging in activities that would lead to self disapproval, and it usually takes the form of self-reactive influences. Self-reactive influence, is conceived in terms of a self-regulating mechanism, which is not a fixed entity but is developed and activated according to situational factors and operates through three functions “self-monitoring of conduct; judgement of conduct in relation to personal standards and environmental circumstances; and affective self-reaction” (Bandura, 1991: 68).

One would expect that formulation of a set of standards and acquisition of self-regulating capabilities would adequately regulate behaviour in terms of moral implications and would be sufficient factors of prosocial behaviour. Bandura (1991) further argued that this might not be the case, and that there are many ways that people can engage in detrimental behaviour without any costs of self-contempt. Similar to the cognitive dissonance approach advanced by Festinger (1957), with the main idea being that inconsistency between different beliefs would lead to psychological tension motivating the individual for a reconciliation of the inconsistent beliefs and in search for rationalisation, departure of behaviour from personal standards would not necessarily lead to punishing self-reactive effects in terms of shame, guilt and reduced self-esteem.
However, there are many mechanisms that can be employed and neutralise the aversive effects of immoral behaviour or even present it as moral, thus rationalising the behaviour, which under these influences, appears neutral, the only alternative or moral. These cognitive transformations serve the function of alleviating the self-punishing consequences of transgressive behaviour by cognitively representing the behaviour as morally justifiable and acceptable both personally and socially and they include, moral justification, euphemistic labelling, advantageous comparison, displacement of responsibility, diffusion of responsibility, distorting the consequences of the action, dehumanisation of the victim and attribution of blame to the victim.

A similar conceptualisation has been proposed by Sykes and Matza (1957) as a theory of delinquency. They proposed that juvenile delinquency is not a matter of conforming to a deviant normative environment and failing to accept the prevalent value system of the society, rather, that juvenile delinquents usually resort to Justifications of their behaviour, which in effect, rationalise their delinquency acts and in that sense “the delinquent represents not a radical opposition to law-abiding but something more like an apologetic failure” (ibid: 667). These techniques of neutralisation serve two functions, to protect the delinquent from self-blame and the blame of external sources, and, as factors facilitating the occurrence of delinquent behaviour, and Sykes and Matza (1957) identify five techniques: denial of responsibility, denial of injury, denial of the victim, condemnation of the condemners and appeal to higher loyalties. It has to be noted that the definition of these Justifications is very similar to some of the mechanisms of Moral Disengagement defined by Bandura (1991). Sykes and Matza (1957) further argued that these techniques of neutralisation of the delinquent acts, operate as a definition of the situation, so as to ease delinquent behaviour in lessening the effectiveness of both social and personal controls, being extensions of the patterns of thought within society which views many injurious behaviours as acceptable under certain circumstances, e.g. killing the enemy at war is viewed as moral and expected of soldiers.

6.2.1 Self-Regulation and Feedback Control

Carver and Scheier (1998) proposed a general framework of self-regulation of behaviour based on cybernetics’ principles that are responsible for keeping the organism in a homeostatic state, through the discrepancy-reducing or negative feedback loop, the basic construct of self-regulation. The organisation of the loop relies on four elements,
the input function which brings information into the loop and could be equated with perception, a reference value which represents the standards of behaviour that have been accepted by any individual and can be of varied type, form or content and usually include "instructions, social comparison information, the norms of a society or group, a person's attitudes" (ibid: 35), a comparator which represents a structure that compares the input information with the reference value and when the input information departs from the reference value an output function is set into action which represents behaviour. According to Carver and Sheier (1982), the standards or principles are mainly "...content free. That is, the essential characteristic of a principle is that it is applicable to many kinds of behaviour" (ibid: 115). The function of the output or behaviour is to keep the input information in line with the standards of behaviour so that no discrepancy is observed between behavioural standards and perception. Carver and Scheier (1998) argued that the input information depends on the effect of the behaviour or output function on the environment, yet this input information will depend on other environmental forces termed, disturbances, which represent the effects of external to the individual variables that co-determine, with output behaviour, the input information to the loop. The feedback loop is termed self-regulatory as it regulates behaviour by reference to internal to the individual structure, yet "Its purpose is not to create behaviour. Its purpose is to create and maintain the perception of a specific desired condition: that is, whatever condition constitutes its reference value or standard of comparison" (Carver and Sheier, 1982: 113).

Carver and Sheier (1998) argued that both the reference value and the input function are the two main sources of information to the loop yet they are not equivalent to the reference value, being rather more demanding. The output mainly serves to reduce any discrepancies detected between the input and the reference value, which is also considered as relatively stable, in the sense of guiding behaviour towards or away from specified standards. Carver and Sheier (1998) however argued that discrepancy reduction can possibly be achieved in two more ways, by the impact of environmental disturbances, that is, external to the individual factors to intervene and bring input information in line with the reference value, a possibility which heavily relies on chance factors and changes in the reference value of the feedback loop, which involves more complex operations than the single feedback loop. The last process relies on the same perceptual information of the input function and it operates through another feedback
process which aims not at changing the input by the effects of output functions, that is, behaviour, but to change the reference value itself so that the discrepancy between input and reference value is more closely related. Carver and Sheier (1998) noted that the exact way that this secondary feedback process changes the reference value was not further explored, yet they argued that this process might be more gradual in comparison to the output function.

### 6.2.2 Hierarchical Organisation of Feedback Control

Carver and Scheier (1998; 1992; 1982) proposed that a way that several feedback loops can be interconnected is that of a hierarchical organisation, that is, people have goals at different levels of construction, both superordinate and subordinate, and the main idea of this hierarchical organisation of goals at different levels is that the output of a higher level feedback loop provides the reference value of the lower feedback loop, and in this way purposeful goal directed human functioning can be explained in terms of interconnected hierarchically ordered feedback loops from very abstract goals to very specific motor movements. That is, the process of achieving any goal is organised around successive and successful functioning of feedback loops, each providing the reference value to the next lower feedback loop, which are progressively more specific and concrete. The feedback loop at each level regulates input at that level and at the same time regulates some quality of that which contributes to the quality regulated at the higher level. The operation of the feedback loops at the different levels functions simultaneously, and the loops are not handled by the same processor, rather each structure regulates output information at it's level of abstraction.

While Carver and Scheier (1982) argued that human behaviour can be described as involving nine levels of control, the three higher are the most important for psychological research. The lowest of these three is termed program, and involves the specification of a general action plan that is not specific in exactly what kinds of behaviour are going to be performed, rather “it incorporates a series of implicit if-then decisions because what is done at any given point of the program depends in part on what circumstances are encountered at that point” (Carver and Sheier, 1982: 116). The superordinate to the program system is termed principle control and involves more general guidelines for action, are rather content free and specify “overriding qualities of behaviour, which can be manifested in many different programs. Principles help you
decide what programs to undertake or what choices to make as you move through a program" (Carver and Scheier, 1992: 512). The highest level of feedback control is termed system control and involves abstract qualities of the self, such as, an idealised sense of self.

Carver and Scheier (1992) further proposed that the hierchicality of the organisation of self-regulation in terms of feedback loops is characterised by certain features that help to explain human behaviour in a flexible way. The first is that goals can generally be realised in several ways, any specific act can serve the realisation of different goals, it is possible for people to try and match different reference values at the same time, not only between lower and higher levels of control but within the same level of hierarchy. When the matching of the reference values is not easy, conflict will be created. Carver and Scheier (1992) further noted that the description of human functioning in terms of self-regulation of feedback loops, provides a framework for organising and understanding how very specific acts are related to very abstract qualities of behaviours.

Carver and Scheier (1998), however, argued that not every level of control has to be fully operating all the time, and, more often than not, "lower levels of control may sometimes be functionally superordinate" (Carver and Scheier, 1992: 513) and behaviour to be mainly guided by the reference values of the program control or lower as "indeed, the need for frequent decision making that's by nature part of programs may cause this level to be functionally superordinate in self-regulation more than other levels" (ibid: 1992: 513), something that according to Carver and Scheier (1988) is evident for highly routinised, habitual, day-to-day activities. However, when that happens it is possible that discrepancies will arise when, for example, the execution of a program is not consistent with a principle. It has to be noticed that while Appley (1990) argued that the idea of self-regulation being constructed around hierarchical feedback loops, with different reference values at different levels of control is a useful and flexible framework of human behaviour, at the same time that flexibility of conceptualisation has proved difficult to operationalise and to test, empirically, the main ideas of the hierarchical organisation of feedback loops, resulting in the main ideas of this part of the model being suggestive rather than fully supported empirically (Baumeister, 1998).
6.3 Empirical Studies of Moral Disengagement and Antisocial Behaviour

Haritos-Fatouros (1988), based on the official testimonies of 21 military-police servicemen put on trial as junta torturers, and interviews with 16 ex-military servicemen during the dictatorship in Greece, attempted to explore which social learning mechanisms and principles of behaviour change were used by the Centre for Military Police Training and Special Interrogation Section of the Greek Military Police during the junta, and how they operated in order to transform young army recruits into torturers. Overlearning of violence, desensitisation to torture, role modelling from senior servicemen and several material and social reinforcements were used in an attempt to portray the potential victims of torture in a dehumanised way by blaming the victims, and creating negative attitudes towards them by describing them as worms and enemies of the country that are to be crushed. This dehumanisation blaming presentation of the potential victims was repeatedly presented to the servicemen in daily lectures in an attempt for brainwash.

Willot and Griffin (1999) through a qualitative analysis of nine semi-structured group discussions of 66 male, working class, adult offenders having committed economic crimes, attempted to explore the explanations these men provided for their crimes.

Five patterns of discourse have been identified by these discussions and the reconstruction of their meanings, in order to appear righteous, is evident in each one of them. The men in the study claimed that they have been forced into crime because of broken promises by the State and, in this way, they were attributing the blame for criminal activity to the circumstances that the State created for them. They further argued that the whole system was corrupt from 'top to bottom' and that those with power are engaged in continuous and covert criminality, so in that respect 'working on the side' while on social benefits without informing the system for this income, is not really criminal in comparison to the corruption evident in the State, and by those statements it is evident that the men in the study rely on advantageous comparison of their criminal activity with the corruption they perceive in the every day operations of those with power in the society and in that respect their criminality appears of little importance with much fewer consequences. At the same time, social expectations of them to be the main breadwinners continued to exist and crime is made a righteous choice because they need to provide for their families and, in that way, give their...
children the opportunity to escape involvement in criminal activities by providing them with an acceptable standard of living. From that pattern of discourse it is evident how Moral Disengagement operates, by morally justifying criminal activity, as it is in the service of highly valued moral, personal and social purposes, such as the current survival of their families and for creating the conditions for a better future for their children. Finally the cultural narrative of Robin Hood is employed, justifying a redistribution of wealth and by minimising the consequences of economic crime, if the victims are rich people, stealing from them is not only justifiable but heroic as well.

According to Willot and Griffin (1999), "[t]hese accounts serve to challenge normative assumptions about morality, the law and definitions of crime ... these accounts serve to justify and even valorise economic crime by constructing it as an unavoidable necessity for survival and therefore not a crime at all" (Willot and Griffin, 1999: 451). It has to be noted that, while the causal status of the several mechanisms of Moral Disengagement that could be inferred from the study cannot be supported as the results can be influenced by 'halo' effects (Rutter et al, 1998), that is, the interpretation of life events by the same informant at two separate points in time according to the set of mind of the informant, and, since relying on retrospective accounts of past criminal activity are possibly subjected to recall biases, they are, however, informative of the ways adult offenders of economic crime interpret and justify their delinquent behaviour, and provide indirect support for the role of Moral Disengagement in facilitating criminal activity from an in-depth qualitative method of inquiry.

**Experimental Studies of Moral Disengagement and Punitive Behaviour**

Bandura, Underwood and Fromson (1975), experimentally tested the hypothesis that under conditions of diffused personal responsibility for aggressive behaviour and dehumanisation of the potential victims, people would behave more aggressively in comparison to situations where expression of aggression would be personalised and the victims are described in either humanised or neutral ways. They argued that different processes are responsible for the development of aggressive behaviour, its provocation and its regulation, and once standards of behaviour have been generated through the influences of modelling and selective reinforcement, people generally regulate their actions by self-reinforcement, that is, by rewards and punishments they generate for themselves. However, under certain circumstances and as self-reinforcement is under
discriminative control (Bandura, 1991), the same moral principles or standards of behaviour can be used to account for a considerable variation in moral behaviour, since individuals can cognitively neutralise the self-punishing consequences resulting from the violation of moral standards of behaviour.

Bandura et al (1975) under controlled, experimental conditions examined how two of these mechanisms, diffusion of responsibility and dehumanisation of the victims, operated so as to make transgressive actions more easily performed. The experimental design involved two levels of responsibility, personal and diffused, and three levels of victim labelling, humanised, neutral and dehumanised. Seventy two participants were randomly allocated to each condition, and aggressive behaviour was measured by the intensity of electric shocks that the participants could select, ranging from 1 mild to 10 painful, and under these conditions, the level and the intensity of punishment applied was up to the participants to decide, as they could meet the requirements of the experiment by selecting any level of punishment they wished, even the milder ones. In this way, any expectations that the researchers themselves might have had about the punitive behaviour of the participants, which could be operating so as to confound the actual behaviour of the participants, was minimised. The results indicated significant main effects of both diffusion of responsibility and dehumanisation on the intensity of shocks delivered as well as significant interactions of the two conditions. The punitiveness of the participants was more pronounced under diffusion of responsibility and progressively more severe during humanised, neutral and dehumanised conditions. This heightened readiness for increased punitiveness under conditions of disinhibition could be attributed to the reinforcing effects of punishment. That is, the participants might have thought that increased punishment resulted in the supervisees' increased compliance with standards of performance.

To rule out this alternative explanation, Bandura et al (1975) further created a new condition within each of the three labelling conditions, divided into functional aggression, where each punishing act was followed by correct solution, and dysfunctional aggression, where each punishing act was followed by failure to provide correct solution. Overall, when punishment was effective in decreasing errors the punitiveness of the subjects was lower in comparison to punishment that failed to provide correct solution. Yet under the functional aggression condition dehumanised
subjects were treated much more aggressively with continuous escalation of punitiveness in the trials, in comparison to neutral and humanised conditions where punishment did not escalate and remained at relatively low levels. In the dysfunctional condition, where punishment failed to produce correct answers, dehumanised subjects were treated at extreme continuously escalating levels of punishment, whereas the neutral and humanised subjects were treated at moderate levels of punishment, with the humanised subjects punished at de-escalated levels after an initial increase in punitiveness.

**Correlational Studies of Moral Disengagement and Juvenile Delinquency**

Bandura, Barbaranelli, Caprara and Pastorelli (1996a), in a sample of 124 children from elementary school and 675 junior high school children, aged between 10 to 15 years with a mean age of 11.8 years examined the relations of Moral Disengagement with aggressive behaviour, as measured by the children, their parents, their teachers and peers, and delinquency as measured by the children and their parents. In respect to delinquency, Moral Disengagement was found related to delinquency both directly and through the influence of lowered prosocial behaviour, heightened aggression proness and lowered feelings of guilt, with the total number of social cognitive factors accounting for 31% of the variance of delinquent behaviour. Similar results were obtained for aggressive behaviour, apart from the fact that a direct link between Moral Disengagement and aggressive behaviour was not found, suggesting that any effect of Moral Disengagement on aggressive behaviour is fully mediated by reduced prosocial behaviour, reduced feelings of guilt and heightened proness to aggression, with a full set of social cognitive factors accounting for 34% of the variance of aggressive behaviour.

In another study by the same authors (Bandura, Barbaranelli, Caprara and Pastorelli (1996b), of 279 children aged between 11 and 14 years with a mean age of 12 years, the relation between Moral Disengagement and general problem behaviour as measured by teachers' ratings was not found. The authors, however, noted that, as the measurement of problem behaviour relied on the Child Behaviour Checklist developed by Achenbach and Edelbrock (1978 cited in Bandura et al, 1996b), which includes such diverse problem behaviours as "hyperactivity, inattentiveness, transgressive conduct, anxiety and withdrawal, somatic complaints, and obsessiveness" (Bandura et al, 1996b: 1212), this pattern of results is expected as Moral Disengagement is expected to be mainly
related to externalising and detrimental behaviour than internalising symptoms and that
the sum of both internalising and externalising behaviours could have masked the
relations of Moral Disengagement with patterns of detrimental conduct. Relating Moral
Disengagement to the three different classes of problem behaviour supported this
explanation and it was found that Moral Disengagement was significantly related to
aggression and externalised problems but not to internalised problems. The results from
both studies provide evidence for the role of Moral Disengagement in detrimental
behaviour in general and delinquency and aggression in particular for adolescents both
males and females. The causal role of Moral Disengagement, however, cannot be
inferred from these studies as they are of a cross-sectional nature. Yet, as Bandura et al
(1996a), have argued, evidence for the causal direction of Moral Disengagement in
detrimental conduct can be inferred from several experimental studies that have
manipulated one or more of these mechanisms of Moral Disengagement and found
variations in subsequent detrimental behaviour.

Cermak and Blatny (1995) explored age and sex differences on Moral
Disengagement and the relations of Moral Disengagement with several indices of
aggression in a sample of 231 school children, boys and girls aged between 10 and 15
years. Consistent with Bandura et al’s (1996a) results, boys were significantly more
likely to use Moral Disengagement than girls. Age, however, was mainly unrelated to
Moral Disengagement. Consistent with the proposition that the use of Moral
Disengagement would be associated with aggression, it was found that high Moral
Disengagement was negatively related with tolerance toward violence, fear of
punishment and irritability.

A similar interpretation was employed by Petronio (1980) who compared two groups
of male juvenile delinquents on probation for committing property offences, repeat
offenders and non-repeat offenders. Repeater offenders were defined as those boys who
“were returned to court one or more times within two years of being first placed on
probation” (ibid: 53) and non-repeaters were defined as these boys who did not return to
court during the same time frame. The boys in the two groups did not differ in terms of
socio-economic status of the family, I.Q. and age. The only significant difference
between the two groups was, contrary to expectations, that repeater offenders scored
significantly higher on moral maturity, as measured by Kohlberg’s Moral Maturity
Interview, in comparison to non-repeater offenders. Petronio (1980) interpreted the unexpected results from a perspective advanced by Sykes and Matza (1957), that is delinquents rationalise their behaviour by neutralising the consequences of deviance, in terms of self-blame and blame from external agents, and in this way the social controls inhibiting deviance are not operating and the delinquent is free to engage in deviant behaviour. Higher sets of moral standards and more abstract principles, as reflected by higher scores on moral maturity, can be employed and the neutralisation of delinquency to rely on more elaborate justification, especially when normative controls fail to justify deviance. While the results are based on a relatively small sample size and the measurement of moral maturity was made after the incidence of delinquency and can not be seen as causal to delinquency, the results are however suggestive that higher levels of moral reasoning are not necessarily related with "right" behaviour, and seem to support the idea that every deviant act can be supported by a clear conscience (Mischel and Mischel, 1976) and that "there is no theoretical guarantee that improvement in one [stage of moral reasoning] will lead to an improvement in the other [moral behaviour]. Indeed the cynical will expect the very reverse: that the more sophisticated our moral thinking, the more sophistical it is liable to be; that given man's enormous capacity for hypocrisy, self-deception and special pleading, the more adept he will be at finding some way of avoiding those claims and duties which happen not to suit him" (Locke, 1979: 179).

6.4 Summary of Research and Purpose of the Study

It has to be noticed that the results of the studies reviewed can not be readily generalised into juvenile delinquency and the study of recidivism. The experimental results of Bandura, Underwood and Fromson (1975), showed that manipulation of diffusion of responsibility and dehumanisation of the victims increase the frequency and the intensity of punitive acts. It could be argued that these results are possibly artifactual due to the experimental situations they were derived from. While such experimental studies have very well established internal validity and involve the initial manipulation of the independent variables in the forms of various cognitive mechanisms by which moral inhibitions can be disengaged and they included a direct measurement in behaviour, it has to be noted that the context they take place is mainly artificial in the sense that they do not take into account the real contexts in which most of the immoral
action is actually taking place. In the case of juvenile delinquency, especially, the results of such experimental studies are not readily generalised for the reason that most juvenile delinquency takes place within the very specific social context of peer relationships (Patterson, 1982, 1986; Rutter, Giller and Hagell, 1998; Farrington, 1995; Lober and Dishion, 1983).

The experimental results, however, were further supported by naturalistic studies, where antisocial acts were predicted by Moral Disengagement (Bandura et al, 1996, a, b). Despite the support from both experimental and field studies, for a link between Moral Disengagement and aggressive and delinquent behaviour, it has to be noted, that these results relied on indices of delinquency measuring relatively less serious and trivial acts or offences, in samples of school children and adolescents, suggesting that Moral Disengagement can be predictive of minor acts of juvenile delinquency in the general population of children and adolescents. It is still unclear whether similar results would be obtained for more serious offences and frequently institutionalised young offenders, who appear to present the main focus of concern for the juvenile justice system and society. In terms of predicting and reducing recidivism and chronic offending, it is high risk populations that have to be targeted, as it has been proposed that a degree of delinquent activity in adolescence and young adulthood is almost normative, from a statistical point of view (Rutter et al, 1998; Wolfgang et al, 1987), while it is a small proportion of adolescents who are involved in frequent and persistent offending that raises many concerns in society, the legal system and their own welfare (Rutter et al, 1998; Hagell and Newburn, 1994; Tarling, 1993). Young offenders' institutions represent a service with the aim to detain and reform these youngsters and it was thought that institutionalised young offenders could be a starting point for exploring aspects of recidivism and disengagement of morality, as most of the population that is in custody at a young offenders' institution at any given point in time will recidivate (Rutter et al, 1998).

In addition, it is possible that the ideas proposed by Bandura (1991), regarding the self-regulation of moral behaviour, reflect a breakdown in the hierarchically interrelated process of feedback control and especially at the level of principles control, where the main function of that level is to control a quality of behaviour, that is, being moral or not, which requires conformity to some standards of behaviour. At the same time the
Theory of Planned Behaviour represents a parsimonious, highly predictive model of a process of decision making, which in terms of the terminology of Carver and Scheier (1982), could represent the level of program control, the level of control that regulates decision making. Given the proposition of Carver and Scheier (1982, 1992) that all the levels of control are not necessarily engaged at the same time, and most of the times behaviour is regulated by lower levels, usually at the level of program control, and that this operation can result in discrepancies with the higher levels, it is likely that, to the extent that delinquent behaviour is viewed as the result of a rational and purposeful decision, it could be speculated that this decision to commit a delinquent act in the future is facilitated by the construct of Moral Disengagement, since by this way the conflict between two levels of self-regulation, that is the program control, reflecting a decision as described by the TPB, and principles levels of control, reflected by Moral Disengagement, could be neutralised. It could be argued that Moral Disengagement is an antecedent variable having an influence on young offenders’ intentions of re-offending by affecting their attitudes, subjective norms and perceived behavioural control regarding future offending, and from that respect it is expected that Moral Disengagement will not have a direct relation to the young offenders’ intentions of re-offending in the future, but it will be mediated by the antecedents of intentions variables as proposed by the TPB.

6.5 Pilot Study

The development of the Moral Disengagement scale was based on 251 elementary school children, 249 junior high students and 315 high school students. It consists of 32 items, representing 8 mechanisms of Moral Disengagement, each mechanism the cumulative product of 4 items. The items tap detrimental conduct in social settings, that is educational, familial, community and peer, e.g. "If people are careless where they leave their things it is their own fault if they get stolen" and "Compared to the illegal things people do, taking some things from a store without paying for them is not very serious". Bandura et al (1996a) reported internal reliability alpha coefficient of .82 and Bandura et al (1996b) an alpha coefficient of .83. A principal-component factor analysis in the aforementioned studies resulted in an one-factor solution, which adds to the scale’s validity. Further evidence for it’s construct validity comes from the positive
correlations with aggressive behaviour and negative correlations with prosocial behaviour obtained from the sample of the studies.

The Moral Disengagement Scale was developed on an adolescent population of a younger age and from different cultural origin, Italian schoolchildren, and it was decided that the scale should be pilot tested before it could be used in a sample of incarcerated Scottish young offenders. The reasons for the pilot testing of the instrument were to assess its stability over time, through test-retest reliability for a period of ten weeks, to ensure that the wording of the items were comprehensible by the Scottish young offenders, in order to enhance confidence in the reliability of the responses and, finally, to examine the evidence for its concurrent validity, that is, its relation with other variables that are expected to be related with Moral Disengagement. That is, higher scores of Moral Disengagement are expected to be related with an earlier age of onset of delinquency as reflected by age of first arrest, age of first sentence to custody and age of commitment of first offence.

6.5.1 Procedure

The pilot study was conducted in the largest Young Offenders' Institutions in Scotland where young people aged from 16 to 21 are held for various offences they have committed. It is an institution mainly aimed at holding in custody intermediate offenders for various crimes apart from serious homicides. The inmates interviewed were selected to reflect Polmont's population and the appropriate percentage from each wing was randomly selected. From the potential interviewees approached, one refused to take part in the interview and finally 36 inmates were interviewed.

6.5.2 Results

The pilot testing of the instrument involved several phases. At an initial stage 5 inmates read through the questionnaire with the instruction to identify any possible words or phrases that they did not understand, seemed rather ambiguous or in any way presented a problem to them. The adjective "obnoxious" appearing twice in the scale presented a problem of comprehension to all of them. It was decided that this adjective would be replaced by "annoying". All the other items were quite well understood since no sign of misunderstanding was shown by the inmates during the phase of the 5 interviews.
In the next phase of the pilot, 36 inmates randomly selected from the Young Offenders Institution where the study took place, were asked to complete the slightly altered measure and in addition they were asked several question about their age of onset of offending.

For each of the items the inmates indicated on a 7-point Likert-type scale their degree of agreement for each statement, resulting in a potential range of scores between 32 and 224.

The scores of the 36 subjects were quite normally distributed although the distribution was somewhat positively skewed as expected. The mean score was $m=112.1$, $s.d.=25.18$, with a minimum score of 60 and a maximum of 150.

From the initial sample selected the measure was administered again to 33 of the inmates after a ten-week period. Two inmates had been released and one had been transferred to an adult institution, so there was a reduction from 36 inmates in the original sample to 33 in the follow-up. This procedure enabled an indication of the scale’s test-retest reliability. The data were plotted and two outliers were identified and excluded from the analysis. The Pearson’s correlation coefficient was $r=.89$. Indications for the scale’s concurrent validity comes from the fact that statistically significant correlations were obtained with the age of the inmate’s first offence, first arrest and first time staying in a Young Offender’s Institution as can be seen in table 1. The alpha reliability coefficient for the measure was .89.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Moral Disengagement</th>
<th>N=31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at first arrest</td>
<td>$r=-.59$, $p&gt;.001$</td>
<td></td>
</tr>
<tr>
<td>Age at first time in young offenders’ institution</td>
<td>$r=-.40$, $p&gt;.001$</td>
<td></td>
</tr>
<tr>
<td>Age at first offence</td>
<td>$r=-.58$, $p&gt;.001$</td>
<td></td>
</tr>
</tbody>
</table>

6.5.3 Discussion

The results of the pilot study showed that the measure of Moral Disengagement needs to account for variations of language and to be adjusted to the Scottish culture and to the level of literacy of young offenders in order to provide a measure with face validity in Young Offenders Institutions and for its reliability to be enhanced by
avoiding issues of ambiguity and idiosyncratic misinterpretations of words that have not been assimilated by the Scottish culture and are not understood by the young offenders' subculture. The scale was also found stable over time as evident from a high Pearson’s Product Moment correlation coefficient (r=.89, p<.001) over a ten weeks period suggesting a high level of test-retest reliability. The scale was also found to be homogeneous with internal reliability of .89, thereby providing some evidence for the scale’s content validity. The high positive and significant correlations of Moral Disengagement with age of onset of delinquent actions suggested that the measure was significantly related, cross-sectionally, to theoretically relevant variables, as it was expected that those youngsters involved in delinquent activities from an earlier age would be prone to use the several mechanisms of Moral Disengagement at a higher degree than those who started their delinquent involvement later in adolescence, thus providing evidence for the concurrent validity of the measure. Table 1 shows that high moral disengagers were more likely to have started their criminal careers earlier in comparison to low moral disengagers, as was evident from earlier ages of commitment of their first offence, being arrested for the first time and being sentenced to custody. At the same time the results are encouraging that Moral Disengagement might be a variable significantly related to several behavioural indices of initiation of offending and recidivism, a relation worth pursuing further with a bigger sample size.

6.6 Main Study

6.6.1 Methodology

6.6.2 Procedure

One hundred and fifty-two young offenders from the largest institution in Scotland, were randomly selected to take part in an interview. The interview asked information about certain background features of the subjects such as their age, current offence, offending history, educational attainment, employment history, family issues, drug and alcohol abuse as well as their cognitive representations of future offending (See Chapter 4, Methodology). In addition, the participants completed the Moral Disengagement scale (See, Chapter 6, Pilot Study).
6.6.3 Results

The measure of Moral Disengagement showed very satisfactory internal consistency as was evident from the alpha reliability coefficient of .87 for the 152 participants of the study.

To examine the structure of the Moral Disengagement Scale and get some evidence for its validity, the measure was subjected to a principal component factor analysis with varimax rotation. The scree plot graphically suggested the emergence of one factor, and, inspection of the component matrix revealed that the items of the scale were loading on the first factor, thus suggesting a one-factor solution accounting for 21.6% of the total variance of the scale.

Moral Disengagement was unrelated to several socio-economic features of the families of the youngsters and unrelated to many of their characteristics of background and lifestyle, including legal, institutional, educational attainment, employment history and psychological functioning. The only variables found related with Moral Disengagement are shown in table 2. The presence of a social worker in the family, expected unstable living situation after custody, drug misuse before custody and intention of continuing drug misuse after custody were significantly related with higher scores of Moral Disengagement.

In contrast with the results of the pilot study where Moral Disengagement was negatively related with age of initiation of criminal behaviour, that is, the higher the Moral Disengagement, the earlier the young offenders of the study reported having been arrested, having committed their first offence and having served a custodial sentence, in the main study age of onset of criminal behaviour was found mainly unrelated to Moral Disengagement. Similarly, Moral Disengagement, contrary to expectations, was found unrelated to the rate of recidivism, as operationalised for the study as the sum of previous custodial sentences, previous non-custodial sentences and previous remands in custody divided by the age of the sample. Similarly, Moral Disengagement was found unrelated to the age of the respondents.

The relations of Moral Disengagement to several cognitive representations of future offending, to the belief-based and direct measures are reported in table 3 and table 4.
Table 5 presents the correlations of Moral Disengagement with the specific beliefs that the young offenders hold regarding their future offending. Higher Moral Disengagement was significantly related with perceptions that future offending will provide money for a favourable lifestyle, it will be exciting, it will provide means to cope with life's difficulties, it will not result in imprisonment, in difficulties for employment and loss of contact with friends.

Table 6 presents the correlations of Moral Disengagement with the specific beliefs of perceived ability to control several criminogenic factors in the future. The young offenders who thought that they would be able to find a job, to stop taking drugs, have financial means and accommodation, that they would be able to stay calm when provoked and make a new start in their lives, were less likely to report high levels of Moral Disengagement. The issue of drug misuse emerged as salient, evident from a high and significant relationship between perceived inability to desist from drug misuse in the future and higher Moral Disengagement. The significant relations of Moral Disengagement and drug misuse are also evident in table 2, where both drug misuse prior to custody and intentions to continue drug misuse were significantly related with Moral Disengagement.

Table 2: Point-Biserial Correlation Coefficients of Moral Disengagement with Background Characteristics of Young Offenders (N=152).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Moral Disengagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support from a Social Worker in the Family</td>
<td>.26**</td>
</tr>
<tr>
<td>Unstable Living Situation after Custody</td>
<td>.20*</td>
</tr>
<tr>
<td>Use of “Hard” Drugs Prior to Custody</td>
<td>.20*</td>
</tr>
<tr>
<td>Continuation of Drug Misuse After Custody</td>
<td>.28**</td>
</tr>
</tbody>
</table>

Note:
* p<.05
**p<.01

Table 3: Correlations of Moral Disengagement, and Belief-based Measures of Attitudes, Subjective Norms, Behavioural Control (N=152).

<table>
<thead>
<tr>
<th></th>
<th>Moral Disengagement</th>
<th>Intention</th>
<th>Attitude</th>
<th>Subjective Norm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>.33*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>.34*</td>
<td>.56*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>.17</td>
<td>.16</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>Behavioural Control</td>
<td>-.32*</td>
<td>-.66*</td>
<td>-.37*</td>
<td>-.11</td>
</tr>
</tbody>
</table>

Note:
*p<.01
### Table 4: Correlations of Moral Disengagement, and Direct Measures of Attitudes, Subjective Norms, Behavioural Control, Affective Self-Reactions and Personal Norm (N=152).

<table>
<thead>
<tr>
<th></th>
<th>Moral Disengagement</th>
<th>Intention</th>
<th>Attitude</th>
<th>Subjective Norm</th>
<th>Behavioural Control</th>
<th>Affective self-reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>.33**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>.28**</td>
<td>.42**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>.11</td>
<td>.28**</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioural Control</td>
<td>-.15</td>
<td>-.48**</td>
<td>-.36**</td>
<td>-.18*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective self-Reactions</td>
<td>-.31**</td>
<td>-.44**</td>
<td>-.47**</td>
<td>-.20*</td>
<td>.29**</td>
<td></td>
</tr>
<tr>
<td>Personal Norm</td>
<td>-.28**</td>
<td>-.37**</td>
<td>-.29**</td>
<td>-.32**</td>
<td>.12</td>
<td>.44**</td>
</tr>
</tbody>
</table>

Note:  
* p<.05  
** p<.01

### Table 5: Correlations of Moral Disengagement with the sum products of Belief Strength and Outcome Evaluation underlying Attitudes towards future offending (N=152).

<table>
<thead>
<tr>
<th>Behavioural Beliefs</th>
<th>Moral Disengagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides me with money to buy drugs</td>
<td>.10</td>
</tr>
<tr>
<td>Provides me with money for the lifestyle I want</td>
<td>.25**</td>
</tr>
<tr>
<td>Provides me with money for drinking</td>
<td>.13</td>
</tr>
<tr>
<td>Is an exciting experience</td>
<td>.30**</td>
</tr>
<tr>
<td>Enables me to cope with life</td>
<td>.29**</td>
</tr>
<tr>
<td>Does not result in my going to jail</td>
<td>.20*</td>
</tr>
<tr>
<td>Does not result in losing my freedom</td>
<td>.04</td>
</tr>
<tr>
<td>Does not result in losing contact with my family</td>
<td>.12</td>
</tr>
<tr>
<td>Does not result in losing contact with my friends</td>
<td>.19*</td>
</tr>
<tr>
<td>Does not result in difficulties to find a job</td>
<td>.31**</td>
</tr>
<tr>
<td>Does not result in my family being hurt and embarrassed</td>
<td>.10</td>
</tr>
<tr>
<td>Who offend</td>
<td>.17*</td>
</tr>
</tbody>
</table>

Note  
* p<.05  
** p<.01
Table 6: Correlations of Moral Disengagement with the Sum Products of Perceived Likelihood of factor’s presence in the future and Power of Control factor to inhibit future offending behaviour (N=152).

<table>
<thead>
<tr>
<th>Control beliefs</th>
<th>Moral Disengagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting a job</td>
<td>-.25**</td>
</tr>
<tr>
<td>Being away from the same old delinquent friends</td>
<td>-.14</td>
</tr>
<tr>
<td>Being off drugs</td>
<td>-.34**</td>
</tr>
<tr>
<td>Getting support from my family</td>
<td>-.14</td>
</tr>
<tr>
<td>Stopping drinking</td>
<td>-.14</td>
</tr>
<tr>
<td>Having money</td>
<td>-.16*</td>
</tr>
<tr>
<td>Keeping calm when I am provoked</td>
<td>-.20*</td>
</tr>
<tr>
<td>Having a house</td>
<td>-.21**</td>
</tr>
<tr>
<td>Moving away and making a new start</td>
<td>-.26**</td>
</tr>
</tbody>
</table>

* p<.05  
**p<.01

Two hierarchical regressions were run to examine whether any proportion of the variance of the young offenders' intentions to re-offend in the future is predicted by Moral Disengagement, over and above the contribution of the determinants of the TPB. Intentions to re-offend in the future were regressed both to the direct and belief-based measures of attitudes, subjective norms and perceived behavioural control, to examine whether the constructs are mediating the relation of Moral Disengagement to intentions, consistently under different ways of operationalisations of the constructs (Baron and Kenny, 1986). Personal norm was not included among the predictors, as it was not found consistently predictive of intentions in the first chapter. The results of the regression analyses are presented in tables 7 and 8. Moral Disengagement did not contribute to the prediction of intentions of re-offending over and above belief-based measures of attitudes and behavioural control, while it made a significant contribution to the prediction of intentions over and above the directly measured constructs of the TPB. The results are similar to the results of the previous chapters, where personal norm in Chapter 4 and perceptions of maternal protection in Chapter 5, failed to significantly predict intentions over and above the belief based measures of attitudes and perceived control.

The results reported, so far, suggest that there might not be a relation of Moral Disengagement to either the frequency of past offending or the age of initiation of offending of the young offenders, contrary to expectations and the results of previous...
studies that make such an expectation plausible. Despite this, the mean scores of the young offenders' proneness to Moral Disengagement were compared with some normative data, that is, the mean scores of Moral Disengagement of high school children, from the sample of Bandura et al (1996b). As Moral Disengagement in the Bandura et al (1996b) study was measured by a 3-point Likert-type scale and in the present study a 7-point scale was employed, the scores of the present sample were scaled down so that the mean scores of the two samples could be compared. Bandura et al (1996b) report a mean score 1.75 (s.d.=.27). The mean score of Moral Disengagement for the young offenders of the present study after being scaled down was 1.80 (s.d.=.33) suggesting higher proneness of Moral Disengagement for the young offenders in comparison to school children of the sample of Bandura et al (1996b). Whether that difference was due to chance was tested by a one sample t-test, and it was found that the difference of Moral Disengagement scores between the two samples was significant at the .05 level, t=2.05, p=.042.

Table 7: Hierarchical Regression of Intention to re-offend in the future on Direct Measures of Attitudes, Subjective Norm, Perceived Behavioural Control and Moral Disengagement (N=152).

<table>
<thead>
<tr>
<th>Predictors</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Increment to R²</th>
<th>F</th>
<th>b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>.22**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective Norm</td>
<td></td>
<td>.16*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Behaviour</td>
<td>.33</td>
<td>.32</td>
<td>.32</td>
<td>24.85</td>
<td>-.34***</td>
</tr>
<tr>
<td>Control</td>
<td>.37</td>
<td>.35</td>
<td>.03</td>
<td>8.21</td>
<td>.19**</td>
</tr>
</tbody>
</table>

Note:
* p<.05
**p<.01
***p<.001
Table 8: Hierarchical Regression of Intention to reoffend in the future on Indirect Measures of Attitudes, Subjective Norm, Perceived Behavioural Control and Moral Disengagement (N=152).

<table>
<thead>
<tr>
<th>Predictors</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Increment to R²</th>
<th>F</th>
<th>b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>.36*</td>
<td>.53</td>
<td>.52</td>
<td>56.42</td>
<td>-.49*</td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>.07</td>
<td>.52</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Behavioural</td>
<td>.53</td>
<td>.52</td>
<td>.52</td>
<td>56.42</td>
<td>-.49*</td>
</tr>
<tr>
<td>Perceived Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moral Disengagement</td>
<td>.53</td>
<td>.52</td>
<td>.01</td>
<td>.57</td>
<td>.05</td>
</tr>
</tbody>
</table>

Note:
*p<.001

6.7 Discussion

Contrary to expectations, that proness to Moral Disengagement would be associated with higher levels of frequency of delinquent involvement, Moral Disengagement was found unrelated to the rate of past recidivism of the sample, operationalised as the sum of the number of past arrests, past custodial sentences and past sentences in general divided by the age of the respondents. Moral Disengagement was unrelated to the individual indices of past recidivism rate as well as the sum product. It has to be noted that the failure to find a positive relationship between Moral Disengagement and recidivism could be attributed to the highly skewed distribution of recidivism and this lack of variability could have prevented a relationship from reaching statistical significance.

Similarly, the significant negative relations between Moral Disengagement and age of onset of delinquent involvement that were evident from the results of the pilot study, where the younger the age of the young offenders committed their first offence, were arrested and were incapacitated by a custodial sentence, the higher their Moral Disengagement were not verified in the main study. Overall, Moral Disengagement was not related to either indices of frequency or initiation of delinquent involvement. While this pattern of results could be due partly to the limited variability of recidivism, whose distribution is J-shaped (Rutter et al, 1998) they could also be due to the reliability and validity of the self-reported data. It is not certain whether the same results would have been obtained if the measurement of recidivism was based on the official files of the young offenders. However, several studies have shown that the distribution of
recidivism is considerably skewed, regardless of whether measurement of recidivism relies on official documents, self-reports or a triangulation of both, due to its very low base rate both in the general population and among juvenile offenders, which makes prediction of persistent offending considerably difficult to achieve accurately, especially when the interest is in the development of criminal careers during a long time-frame (Tarling, 1993). While it is not certain whether the same results would be found if the official files of the young offenders could have been analysed, it seems plausible to assume that the distribution of the variables of interest would not change allowing for more variability in the scores of either recidivism or age of onset. Despite this informed speculation, the relation between Moral Disengagement and recidivism should be examined by the data from official documents, which procedural problems did not allow for in the present study, as well as, self-reported data, and, it is suggested as a step for further research.

Moral Disengagement was also found mainly unrelated to age, legal and institutional variables, level of social dysfunction of the family, education and employment history and psychological problems of the youngsters. The only variables found related to Moral Disengagement were those reflecting instability of the living situation in terms of accommodation arrangements after release, the presence of a social worker in the family and the use of drugs and intention of continuation of drug misuse. While the examination of the relations of Moral Disengagement to all the above background and lifestyle variables was mainly exploratory in order to examine the pattern of relationships emerging from the data, they are in accord with the results of Bandura et al (1996a) where Moral Disengagement in school children was unrelated to several indices of social class, age, race and religion. The results are suggestive that proneness to disengage oneself from the adverse personal consequences of delinquency are mainly unrelated to the social characteristics of individuals and suggest that these mechanisms are probably operating under several circumstances and not related exclusively to these socio-demographic variables that have been found related with juvenile delinquency.

However, the results indicated that drug misuse, unstable accommodation after release from custody and social dysfunction of the family, were positively related with a higher tendency to disengage oneself from moral principles and alleviate oneself of any adverse consequences of self-contempt. Similar results were reported by Barnes, Welte,
Hoffman and Dintcheff (1999), who found Moral Disengagement to be predictive of alcohol and drug misuse in a longitudinal study of 625 males aged between 16 and 19 years. It could be argued that, situations reflecting a high level of social instability and drug misuse are associated with an increase in likelihood of offending. It seems plausible to assume that under these circumstances, Moral Disengagement is more likely to operate in order to make offending easier. In the same line of argument it could be further speculated that Moral Disengagement is likely to interact with the most proximal criminogenic needs of the young offenders, and not with the more distal ones which made them start, continue and escalate their offending, thus making offending a plausible, even justified, alternative and resulting in persistence of offending. It has to be noted, however, that all these are possible interpretations that have to be further examined, especially within the line of research suggesting that the factors responsible for initiation, escalation and persistence of juvenile offending are not necessarily the same over time and across the life span (Hirschi and Gottfredson, 1996; Loeber et al, 1991).

The results of the regression of the young offenders' intentions to re-offend in the future to the predictors of the TPB and Moral Disengagement confirmed the expectation that the relation of Moral Disengagement and intentions would be mediated by the young offenders' attitudes, subjective norms and their perceived behavioural control of future re-offending. The results are consistent with the proposition that the TPB is a parsimonious model for the prediction of intentions, an assumption that has received considerable support in the literature (Ajzen 1991; 1988) and is further confirmed in the present thesis in the behavioural domain of juvenile delinquency and recidivism in particular. The results are in accord with the results of the previous chapters of the thesis where personal norm did not consistently predict intentions of future re-offending over and above the variables of the model and where the relation of perceptions of parental child-rearing practises and intentions of re-offending were mediated by the constructs of the TPB. It has to be noted, however, that this mediating role of the variables of the model was stronger when the constructs were measured based on the specific beliefs the young offenders themselves held about future re-offending. These consistent findings, in combination with the fact the belief-based measures of attitudes and behavioural control predicted more variance of intentions in comparison to the direct measures, suggests that belief-based operationalisation of the constructs of the theory could be regarded as
more efficient, since they are based on information that is personally relevant to the participants.

The results are also consistent with the idea that Moral Disengagement could exert an influence on the young offenders' intentions of re-offending in the future. Juvenile delinquency and recidivism could be explained as a form of failure in self-regulation of moral behaviour at the level of principle control. The mechanisms of Moral Disengagement (Bandura, 1991) could represent this failure of self-regulation at the level of principles control, that is lack of attention at that level could be brought about by the operation of the mechanisms of Moral Disengagement. This would result in a decision being formulated at the program level that is supportive of the commitment of antisocial acts. From that view it was expected that Moral Disengagement would be related with the factors formulating the decision to commit an antisocial act, that is attitudes, subjective norms and behavioural control. In that case it was expected that any influence of disengagement of moral principles would have on the youngsters' intentions to re-offend in the future would be mediated by the constructs of the TPB. The results of the regression analyses were consistent with this expectation, as Moral Disengagement did not account for any amount of the variation of intentions over and above the variables of the Theory of Planned Behaviour.

However, Moral Disengagement was positively significantly and consistently related to attitudes supportive of delinquent activity in the future and negatively with the direct measurement of perceived control over future offending, suggesting that Moral Disengagement could have an effect on these beliefs. While in terms of prediction of the participants' intentions of future offending, Moral Disengagement does not provide a way of expanding the model, Moral Disengagement provides a possible way to account for variations of antisocial attitudes and perceptions of control over future offending. This possible way of examining the decisions made by young offenders', which is consistent with a view of self-regulation of behaviour in terms of hierarchically organised feedback loops (Carver and Scheier, 1998), provides another possible way to address issues of interventions towards recidivism. That is, it might be interesting to attempt to redirect the attention of young offenders at the principles of moral behaviour that they are trying to neutralise by the operation of the mechanisms of Moral Disengagement and thus enlarge the discrepancies between the different levels of
control, not allowing the decision supportive of delinquent behaviour that is assumed to be operating at the level of program control. It has to be noted, however, that the causal relationships between Moral Disengagement, the young offenders’ beliefs of future offending and actual delinquent behaviour has to be established before this conclusion can be reached. Such relations were not revealed in the present study, due to the cross-sectional nature of the design of the thesis. At the same time, there was no relationship between Moral Disengagement with an index of past recidivism for the participants of the study, although this lack of relationship could be attributed to the skewed distribution of past recidivism, a finding that is not surprising since recidivism is characterised by a low base rate both in the general population and the population of young offenders (Tarling, 1993).

Previous studies (Bandura et al, 1996a,b) have shown that the mechanisms of Moral Disengagement are related to delinquency in samples of schoolchildren and that manipulation of locus of responsibility and dehumanisation labelling of the victims are causing increased levels of punitiveness and aggression (Bandura et al, 1975). The comparison of the mean score of Moral Disengagement of the young offenders with the mean score of a sample of schoolchildren of the Bandura et al (1996b) study showed that the young offenders were significantly more prone to Moral Disengagement than the normative sample. The results are indicating that differences in Moral Disengagement are possible between institutionalised offenders and normal youngsters but not between frequent and non-frequent offenders. It could be argued that Moral Disengagement is a factor involved in pursuing questions focusing on individual differences between individuals who are criminal and those who are not, yet it might not be related to individual differences in terms of frequency and/or severity of offending, that is, when examining individual differences among those individuals that are involved in delinquency (Rutter et al, 1997). However the results should be interpreted with some caution. The difference in Moral Disengagement between the sample of young offenders and the schoolchildren of Bandura et al (1996b) could be due to the different mean age of the samples, their different cultural origin or to the fact that institutionalisation itself affected the difference, although duration of stay in the young offenders institution was not related with Moral Disengagement in the sample of young offenders. While the data suggest that young offenders are more prone to Moral Disengagement in comparison to a normative sample of schoolchildren, it is clear that
more research is needed, both between delinquent and non-delinquent youth and within offenders, to examine whether self-regulation of morality is a factor related with young people’s involvement in delinquency and their frequency of offending.
PART III

CONCLUSION
CHAPTER 7:

MAIN FINDINGS, IMPLICATIONS FOR INTERVENTION, LIMITATIONS OF THE THESIS AND RECOMMENDATIONS FOR FUTURE RESEARCH
MAIN FINDINGS, IMPLICATIONS FOR INTERVENTION, LIMITATIONS OF THE THESIS AND RECOMMENDATIONS FOR FUTURE RESEARCH

7.1 Main Findings

In Chapter 4, the reasons that could lead the young offenders to continue their offending in the future were derived from a representative sample of the largest young offenders' institution in Scotland. They were asked to provide the advantages and disadvantages of their future offending, consider the perceptions of the persons who might agree or disagree with their future offending and list what factors they thought would make them desist from future offending. In terms of the potential benefits of their future offending the factors cited by the young offenders were similar to results of previous studies, mainly materialistic gains and the excitement of offending.

However, money for drug misuse was the most often cited reason that could contribute to their re-offending in future, a factor that has not been adequately dealt with in previous studies of young offenders. It seems that while the self-reported reasons for offending by juvenile delinquents have remained relatively the same over time, the issue of drug misuse emerged in the present study as the most often cited potential criminogenic need for young offenders. In addition, drug misuse was cited as a factor that they had to control, in order to stop offending in the future. The results suggest that addiction to drugs is a major concern for the youngsters themselves, and young offenders' institutions could initiate programs addressing this issue.

Chapter 4, further partially applied the Theory of Planned Behaviour, with the aim to predict and explain the young offenders' intentions of re-offending in the future. Prediction of intentions relied on the determinants postulated by the model and it was examined whether the model could be successfully expanded by the inclusion of two variables, personal norm and affective self-reactions, that have been found predictive of intentions and behaviour in previous studies of behavioural domains related with offending. Perceived ability of controlling the factors that can potentially be criminogenic in the future emerged as the most potent predictor of intentions of re-offending in the future, followed by attitudes towards future offending. Subjective norms failed to predict any variation of intentions, and were forced out of the regression when personal norm entered the regression equation. The same pattern of results were obtained when intentions was regressed to the belief based measures of attitudes,
subjective norms and behavioural control. However, in this case, personal norm did not enter the regression equation, suggesting that more research needs to be done to clarify the extent to which the model can expand its predictive power by including such a construct. Subjective norm, similarly, emerged as a weak predictor of intentions, suggesting that either young offenders' decisions to re-offend are not influenced by social standards and normative influences, or that the operationalisation of the construct did not adequately tap social concerns of the young offenders. Again more research needs to be done for that issue to be clarified, especially when peer pressure and relations with antisocial friends have been related to juvenile delinquency and chronic offending.

Affective self-reactions were not included among the predictor variables as they were found highly related to attitudes and they would not result in predictive power over and above attitudes. It has to be noted that the amount of variance accounted for in intentions of re-offending in the future was higher for the belief-based attitudes and perceived behavioural control, than by the direct measures of attitudes, perceived control and personal norm. It seems that assessment of the constructs of the model in a more detailed and personally relevant manner, both to the participants and the behaviour under study, is a better way to operationalise the model. This approach also has the advantage of focusing and assessing the reasons that underlie decisions at least at the aggregate level of analysis. In addition, the mediating role of the constructs of the model, attitudes and perceived control, was tested in relation to several socio-demographic, legal and institutional variables that have been found predictive of recidivism. The general proposition of the model that any other variable external to the model would exert an influence on intention and behaviour, brought about by the variables of the model, was partially confirmed for behavioural intentions. The external to the model variables that were found predictive of intentions did not account for variations in the young offenders' intentions when the variables of the model entered the regression. It seems that belief-based attitudes and perceived behavioural control towards future offending provide a parsimonious combination for accounting for behavioural intentions of recidivism.

In Chapter 5 perceptions of parental child-rearing practises were examined in relation to normative data and data from previous studies on young offenders institutions. In
terms of normative data the young offenders of the study perceived their parents as high in both care and protection, thus perceiving their parents’ child-rearing practices as affectionate constraint. In terms of data from previous studies in young offenders institutions the present sample scored significantly higher in both paternal and maternal care and protection. Higher perceptions of protection are in the expected direction, higher perceptions of protective parenting have been associated with juvenile delinquency (Mak, 1994). The higher scores of perceived parental care of the young offenders in comparison to normative data, however, were rather puzzling. A possible explanation could be due to the high percentage of violent offenders in the sample. Comparison of perceived parental care between the two subgroups (property and violent offenders) showed that property offenders reported significantly lower care than violent offenders did, and property offenders reported significantly higher levels of alcohol abuse in the family. It is clear that more research needs to be done for the clarification of the associations of perceptions of parenting and juvenile offending for different groups of young offenders. In addition more research needs to be undertaken for the same issue on female young offenders.

The well-established relation of perceived parenting and juvenile delinquency was confirmed in the present study regarding parental care but not parental control. Maternal and paternal care were related to the frequency of offending, while both maternal and paternal protection were not. Similarly more research is needed for these relations to be examined in different groups of young offenders.

Perceived and actual parenting have been consistently found related to and predictive of juvenile delinquency in general and recidivism and chronic offending in particular. The relations of perceived parenting with the young offenders’ beliefs about future offending were further explored. It was found that paternal perceptions were mainly unrelated to the young offenders’ beliefs of future offending. Maternal care was found mainly related to perceptions of control of future parenting behaviour and maternal protection with favourable attitudes towards offending and intentions of recidivism. The results suggest that the perceptions of the two dimensions of maternal parenting might affect chronic offending in a different way. More research is needed, though, for this relation to be established.
Chapter 7

As perceptions of parenting are predictive of chronic offending and recidivism, and in line with the argument that the constructs of the TPB would mediate the effects of any variables external to the model and related with the behavioural domain of interest, on behavioural intentions and actual behaviour, intentions of future re-offending were regressed to the predictors of the model and perceptions of parenting. It was found that the relation of perceptions of parenting to intentions to re-offend in the future were accounted for by attitudes towards future offending. The results are consistent with a similar examination of Chapter 4, where socio-demographic, legal and institutional variables were redundant for the prediction of intentions, over and above attitudes and perceived behavioural control.

Chapter 6 examined the associations of Moral Disengagement with the young offenders’ indices of recidivism and beliefs about future offending. The measure of Moral Disengagement was pilot tested on 36 young offenders. The wording of the measure had to be slightly altered, in order to be comprehensible to the young offenders, it was found to have high test-retest reliability over a period of ten weeks, high internal validity and to be a relatively homogeneous construct, as a factor analysis suggested a one factor solution accounting for 21.6% of the total variance of the scale in the main study of 152 participants. The results suggested that the scale could be used in research in Scottish Young Offenders’ Institutions.

Moral Disengagement was found mainly unrelated to socio-demographic, institutional and offending characteristics of the young offenders, suggesting that self-regulation of morality is relatively independent of social conditions, providing a way of further examining its influence in juvenile delinquency and recidivism, in combination with the social factors that have been related to delinquency. Moral Disengagement was unrelated to frequency and age of initiation of offending, a finding that could be attributed to the J-shaped distribution of recidivism, due to its low base rate (Rutter et al, 1998), that could have prevented any association with Moral Disengagement reaching statistical significance. The young offenders, however, scored significantly higher in Moral Disengagement in comparison to normative data. The results suggest that Moral Disengagement could be a factor differentiating youngsters who are involved in offending and youngsters who are not, yet it might be unrelated with the frequency of delinquent behaviour in groups of delinquent young people. Such an interpretation,
however, could be premature since the difference of scores in Moral Disengagement between young offenders and normative data could be due to institutionalisation and, at the same time, the relation of Moral Disengagement with the frequency of offending in the young offenders, might not have been revealed due to a restricted range of values of frequency of offences.

In addition, in Chapter 6, the relations between Moral Disengagement and the young offenders’ beliefs about future offending, as organised by the TPB, were examined within the framework of self-regulation in terms of hierarchically organised feedback loops. Carver and Scheier (1998) argued that human behaviour could be explained in terms of hierarchically organised feedback loops operating at different levels of control. The framework proposed by Carver and Scheier (1998; 1992; 1982), Scheier and Carver (1988) provides a possible way to integrate the relations of Moral Disengagement and the TPB. The idea of Moral Disengagement could be stated in terms of disengagement of control at the principles level (Carver and Scheier, 1998), thereby influencing the process of decision-making, that is, the TPB at the program control (Carver and Scheier, 1998). From this perspective, Moral Disengagement was expected to influence intentions of future offending indirectly by exerting an influence on the determinants of intentions. Such an influence is, in general, proposed by Ajzen (1991; 1987; 1985), and is compatible with the ideas of Carver and Scheier (1998).

Overall the proposition of the TPB that any effects of external to the model variables on intentions and behaviour, would be mediated by attitudes, subjective norms and behavioural control, was supported regarding behavioural intentions. Attitudes and perceived behavioural control were found, consistently, to account for a significant proportion of variation of behavioural intentions across the three chapters of the thesis in comparison to many external to the model variables which have been related with delinquency and persistent offending.

7.2 Limitations of the Thesis

The study relied on verbal reports of the young offenders for the data collection. The main data gathering instrument was a structured interview aiming at assessing several demographic and institutional characteristics of the subjects as well as their attitudes and beliefs about their future offending. A criticism that could, potentially, be applied to the data collected could focus on the validity of the verbal reports.
For the validity of the demographic, institutional and offence factual information provided by the subjects to be checked, especially the number of incarcerations, remands and convictions, as an index of the frequency of recidivism, as well as, the types of offences, length of time in prison, the files of a number of the young offenders could have been reviewed, in an attempt for a between-methods triangulation of the data. Self-reported data and data derived from official files are regarded as being subject to different sources of biases and the reliance on both data sources is proposed as a way to cancel out bias inherent in each method. It has been argued that in this way "any biases inherent in particular data sources, investigator and method would be neutralised when used in conjunction with other data sources, investigators and methods" (Jick, 1979 cited in Creswell, 1994: 174). While this could enhance the validity of the information obtained and is suggested as a step in future research, unfortunately, procedural problems prevented that comparison and the data could not be triangulated in order to have more confidence in the validity of the results. In addition, the present study was a first attempt at examining the relation between several background and legal characteristics of the young offenders and their cognitive representations of offending, as well as examining these constructs with Moral Disengagement. After these relationships are first established in a certain way, by self-report information, then more rigorous methodology can be employed.

Apart from that hierarchy in goals, the general problems of reliability and validity of information which institutional records present were taken into consideration. Inmates' records are subject to the same criticisms applied to the construction of official crime statistics, which makes their face value problematic. May (1997) identifies many points in the process of an act to be recorded as an official crime. Defining an act as criminal depends on cultural factors, changes over time and is subject to the influences certain groups have in society to "frame social definitions" (ibid: 69). Offences are not always detected, because the perpetrators are not seen or because of unwillingness from both victims and witnesses to report them. This makes the detection of street offences, but especially, domestic violence offences and offences in the workplace very difficult. In addition, for an offence to be defined as one, it has to go through the discretionary procedures of victims, witnesses and the police and the institutional practices of the police and the government to deal with certain offences. Immediate decisions of the officer to define any act as criminal and act accordingly filters the crime statistics while
courts may categorise some offences, especially domestic violent acts, as trivial. In general the results for the prevalence of crime from self-report studies and victim surveys, although not without criticisms themselves, are much higher than the officially recorded crime indicating a considerable discrepancy in the estimates (Jupp, 1989; May, 1997).

The positivistic approach to official documents is the recognition of the problems of their validity which are amenable to triangulation with self-report studies to get a better estimate of any "true" value of frequency and seriousness of delinquent involvement (Jupp, 1989) while both the institutionalists and the radical approaches view official documents as an indication of the social construction of crime and the product of structural conflicts within society. Information about any indices of recidivism for the young offenders, in terms of certain indicators of their criminal careers, could have been recorded from their files, yet they would be officially defined offences filtered through a process of "interpretation, discretion and differential application and enforcement" (May, 1997: 72). After all, the respondents participating in the interview would not really have any reason, apart from deliberate deception, to lie about information that is officially recorded, since they knew that the information is available from their files. In any case, it was stressed early in the interview that any information they would provide, would be confidential, since the prison service would not have access to it.

The assessment of the validity of the beliefs and attitudes of the young offenders is a more challenging task. Agnew (1990) pointed out that a major argument against the validity of self-reported assessment of the reasons juvenile and young offenders provide for their offending, is that the youngsters themselves might be unaware of the true causes of their delinquency, thus the information they provide, might not be "correct" and it could represent little more than rationalisations of their delinquency.

Agnew (1990) argued that when dealing with the study of criminal involvement in general, the purpose of research is to examine the factors involved in criminal activity and why some people engage themselves in delinquency while other people do not. The reasons individuals themselves provide for their delinquent involvement might not be an adequate way to deal with these kinds of questions, as it is quite plausible to assume that individuals may, in fact, be unaware of the effects certain factors, such as biological or social factors, could have on delinquent involvement. Yet Agnew (1990), further argued
that when the focus of a study is to examine 'delinquent events' or 'criminal events' as opposed to criminal involvement in general, an approach of examining the reasons the individuals themselves provide for committing crimes seems to be a fruitful way of examining the most immediate and situational factors that lead to commitment of any delinquent act. Agnew (1990) argued that such an approach actually provides several advantages to other techniques of the proximal origins of delinquent acts as "using delinquent accounts may be the only way of obtaining accurate information on the individual's internal states and those aspects of the external situation that the individual is attending to" (ibid: 271), thus turning what could be considered a disadvantage of introspective verbal reports into an advantage of the individuals' subjective interpretations of the reasons for a delinquent act being committed.

While Agnew (1990) argued that individuals might not be aware of the long-term influences on their delinquent behaviour but they are aware of the short-term, immediate and proximal influences of their committing a delinquent act, Farrington (1993) further proposed that while delinquents may not be aware of the between-individual influences of delinquency they are aware of the within-individual differences of delinquent acts.

A similar point was advanced by Rutter et al (1997) who argued that an antisocial act is determined by a host of causal chains including factors exerting life-long influence and factors more proximally related to the decision to actually commit an antisocial act. One such component, possibly causally related to antisocial acts, is the perception of the costs and benefits of the commitment of the act, and from this point of view "the actual cost-benefits are not what matters; rather, it is the person's own assessment, however inaccurate and misguided, that will influence action" (Rutter et al, 1997: 101).

Rutter et al (1997) further argued that antisocial behaviour is likely to be influenced by an expectancy-value mode of decision making, like every other kind of behaviour, that is, by the rewards expected by the antisocial act and the value placed on these rewards as well as the assessment of the costs that might derive from the antisocial act, and, with few exceptions, of delinquency derived from mental illness, antisocial behaviour can be considered as a mainly rational operation. Rutter et al (1997) however, argued that people who commit antisocial acts are more prone to display a decision making style that is characterised by a lack of planning, influenced by immediate stimuli and not by long term consequences, to decide impulsively without proper appraisal of
the costs and benefits of their behaviour and escalate to situations with little opportunities of alternative acts.

Baumeister (1998), regarding the accuracy and the validity of inner private phenomena such as thoughts and feelings, concluded “Introspection may be quite valid and accurate when people are asked to report what they are thinking and feeling. It may however be quite inaccurate when people seek to analyse how they arrived at these thoughts and feelings” (ibid: 693), suggesting that introspection is a useful methodological technique to examine the content of people’s thoughts and feelings, yet it might be less desirable to examine the process by which they arrived at these thoughts and feelings as they are likely to be unaware of these processes⁴.

Nisbett and Wilson (1977) generally regarded introspective data as not very useful to reflect accurately inner cognitive events and mental processes, as they regarded people as not able to accurately access and report mental processes, since according to them, people rely on a priori causal theories to account for phenomena and even when they are correct about the causal links between a stimulus and an observable behaviour, their accounts are still likely to be due to chance because people have been lucky enough to rely on a correct causal theory held a priori.

To this argument however, Smith and Miller (1978), argued that this statement of Nisbett and Wilson (1977) is in a non-falsifiable form, it cannot be disconfirmed and thus cannot be empirically tested. It has to be noted, however, that even Nisbett and Wilson (1977) noted that people do have access to internal knowledge and that “the individual…knows what his current sensations are and has what almost all psychologists and philosophers would assert to be ‘knowledge’ at least quantitatively superior to that of observers concerning his emotions, evaluations, and plans” (ibid: 245), only being concerned about people’s inaccessibility to mental processes.

Ericsson and Simon (1980) argued that introspection could lead to reliable and valid information on cognitive processes when the processes are sought from participants with little experience in the experimental tasks. A similar view was advanced by Smith and Miller (1978) who argued that introspection could provide accurate information on cognitive processes, when this information is derived from relatively novel situations and tasks. Introspection becomes less adequate as a data collection technique under relatively over-learned situations where “mental processes are likely to function relatively automatically and hence are inaccessible” (ibid: 361). Further, Ericsson and Simon (1980) argued that inconsistencies in verbal reports with observable non-verbal behaviour, are likely to derive, from participants’ failure to retrieve relevant information from the long-term memory, when the cues used are too general and when the responses rely on incomplete memories.
Lieberman (1979) noted that behaviourism in general regarded introspection as a less adequate methodological technique basically because it involves access to private phenomena, and even if this access was ensured as accurate, valid and complete, the data derived by the technique of introspection would still be of limited value as they could not be independently confirmed by other external observers and "without any means of confirming observations, disagreements will inevitably arise and progress will become impossible" (ibid: 322).

Lieberman (1979) recognised that this argument has its merits and agreed that there was an inherent difficulty in independently confirming private and subjective phenomena. However, he proposed that independent external observation of mental events should not be the only reference point for evaluating introspective data and that verbalisations of internal mental events could still be evaluated empirically, to the extent that they were related with other data, mainly actual behavioural data and the extent to which they influence actual behaviour.

It has to be noted, and in relation to the present study, that both the Theory of Reasoned Action and the Theory of Planned Behaviour, relying on introspective verbal self-reported data, were successful across numerous behavioural domains in predicting different forms of actual behaviour as is evident from many studies and especially many meta-analytic studies (Sheppard, Hartwick and Warshaw, 1988; Randall and Wolff, 1994; Godin and Kok, 1996). In addition, Ajzen (1987) argued that the causal relationship of attitudes in actual behaviour, that is, the extent to which attitudes control actual behaviour, has been demonstrated in experimental studies where attitudes were manipulated and were found related to subsequent changes in actual behaviour which were not observed in the control groups.

Within this context, the results of the present study could be seen as promising in predicting future behaviour, although this was not empirically examined due to procedural problems and is suggested as a step for further research. In addition, the possible causal effects of the determinants proposed by the TPB, in relation to affecting future recidivism rates, could be examined by randomised experimental interventions with control groups, taking into account Rutter et al's (1998) suggestions of providing information of dose response relations, whether any beneficial changes could be attributed to the degree of the intervention, either intensity, frequency or duration, while
at the same time, the intervention delivered focuses on the variables of interest, the factors of the TPB, which are regarded as the mediating variables responsible for possible change. The last requirement would be extremely helpful for both practical and theoretical reasons by assessing the extent to which any changes produced are really brought about by the beneficial gains of the relevant factors as hypothesised by the interventions' theoretical rationale (Kazdin, 1993).

The thesis employed a cross-sectional design in an attempt to examine relations between the variables of interest and concurrently predict intentions of future re-offending among the young offenders. While the research design of the thesis enabled it to test, confirm and explore relations between the variables of interest and showed that attitudes and perceptions of ability to desist from offending can account for a relatively high amount of variation in the young offenders' intentions to re-offend in the future, neither the causal status nor the causal order of the variables were established.

What is unclear is whether the future offending beliefs are a cause or a consequence of delinquent behaviour in general (Farrington et al, 1980). Ajzen (1985, 1987, 1988; 1991) argued that behaviour is generally regulated by the beliefs people hold regarding performing a particular behaviour in a particular situation, and whatever influence past behaviour might have on future behaviour is mediated by the individuals' beliefs. Any residual prediction of past behaviour on future behaviour is attributed mainly to unmeasured variables and is, thus, treated as a boundary condition of the predictive ability of the variables of the TPB.

This assertion was not, however, tested in the present thesis, as procedural problems prevented a follow-up of the young offenders to examine the extent that their future behaviour is better predicted by attitudes and PBC about offending in the future, their level of past recidivism or a combination of them, as it was beyond the limits of the current study. It has also to be noted that the follow-up and identification in the community of young offenders, and especially, the most persistent group in terms of offending, is a particularly challenging task as they are likely to lead rather unstable and chaotic lives as was shown by Hagell and Newburn (1994).

While true causal relations can be confidently achieved by experimental manipulations of the independent variables of interest, there are several ethical and
practical problems in conducting such research e.g. experimental manipulation of delinquent behaviour (Farrington et al, 1980).

Despite these difficulties, the search for the possible causal status of general antisocial beliefs in actual behaviour of young offenders could be further examined by controlling for levels of past behaviour at Time 1, then, measurement of the variables proposed by the TPB and subsequently, after a relatively long period of time, at Time 2, assess levels of future recidivism in terms of offending behaviour (Petraitis, Flay and Miller, 1995).

Such an approach would provide evidence, beyond that for association of the variables of interest, for time ordering of the variables. If beliefs about future re-offending are predicting actual offending behaviour over and above the contribution of past levels of recidivism in a longitudinal design controlling for past behaviour, then the results would establish that beliefs of future re-offending are predicting actual offending behaviour over past recidivism. Establishing the time ordering of attitudes and PBC in relation to actual behaviour would suggest that beliefs about offending could be causally related to recidivism. According to Susser (1991) establishment of time ordering between variables of interest represents the second prerequisite, apart from association, in order to guide research in pursuing further to examine causal relations. It is suggested that further research should attempt to establish whether beliefs about future re-offending are truly predictive of actual recidivism over and above past recidivism levels in a longitudinal design. Given that controlled intervention studies targeting the constructs of the TPB, could be implemented in order to assess whether changes in young offenders' beliefs are resulting in changes of behaviour.

The thesis took place in an institutional environment. This factor could have a direct or indirect influence on the formulation of the inmates' cognitive representations of future offending. Although duration of stay in the institution was measured and statistically controlled in the analysis of the results, this does not guarantee the ecological validity of the results in other settings, e.g. community and how these variables interrelate there. On the other hand, if the interest is assessment in correctional settings and possible prediction of re-offending, the results are meaningful, as even if the institutionalised young offenders reflect official organisational practices which are possibly biased, it is still this population with which the correctional institutions and the
juvenile justice system have to deal (Hagell and Newburn, 1994). It could still be argued that as the sample was derived from one institution, the results should be seen with some caution with respect to the extent that they can be generalised to other Scottish Young Offenders' Institutions. While this objection seems justified, as different organisations reflect differences both in the populations they serve, e.g. age, sex, seriousness of offences, the practices they employ in terms of selection and assessment and even the size of the institutions (Downs and Robertson, 1991), it has to be noted that the institution from which the sample of the thesis was drawn is the largest institution in Scotland, dealing with the majority of male offenders receiving a custodial sentence in Scotland, representing the whole range of offences apart from homicides, which are, fortunately, rare among this age group and those young offenders on remand. Despite that, however, it is clear that more research is needed in more Young Offenders' Institutions and among female young offenders, in order to provide results that are more generalisable.

7.3 Implications for Intervention

It could be argued that the imprisonment of young offenders could be seen as a measure with at least two effects. Deterrence effects on the general population, meaning that the population perceives that someone who commits a crime is punished for the action and effects of incapacitation on the reduction of the overall level of criminal activity, in the sense that by removing those youngsters who commit offences from the community, they do not have any opportunities to continue their offending behaviour in the community (Rutter et al, 1998). The evidence suggesting that increasing punishment in terms of severity of consequences and/or the number of people punished in terms of deterrent effects on the general population is inconclusive (Rutter et al, 1998) the incapacitation effects of custody for reducing the overall level of criminal activity has been examined by Tarling (1993).

Tarling (1993) showed that for England and Wales and for the years 1975, 1980 and 1986 the level of criminal activity must have been reduced between 6% and 9% according to the levels of imprisonment, a finding suggesting that current levels of incapacitation through custody do not reduce criminal activity dramatically. Tarling (1993) argued that a small number of offenders are given custodial sentences and most of these sentences are too short to prevent juvenile and young offenders from continuing
their criminal careers, especially when they are released and they are at an age around the peak of offending. Tarling (1993) argued that if the criminal activity is to be reduced either the number of offenders receiving custodial sentences should be increased and/or the length of the sentencing should be increased with both alternatives resulting in an increase in the prison population and the costs related with that, and further analysed the data from England and Wales for 1975, 1980 and 1986 and found that for a decrease of 1% in the overall crime level an increase of 16% to 20% in the prison population would be required.

Overall it could be concluded that incapacitation per se does not have a dramatic influence on the levels of criminal activity in society and that reliance on custodial sentences only, with an aim of either deterrent effect on the general population or as punishment for those youngsters who offend to make them refrain from further offending is insufficient, since statistics from England and Wales showed that almost 90% of juveniles aged 14 to 16 held in custody were reconvicted within a period of two years after release from custody (Tarling, 1993).

From that perspective, Andrews et al (1990: 369) argued that “neither criminal sanctioning without provision of rehabilitative service nor servicing without reference to clinical principles of rehabilitation will succeed in reducing recidivism”. It has become rather clear that custodial sentences alone are not sufficient measures for the reduction of future criminal activity of the inmates, while there is some evidence suggesting that these institutions which provide opportunities for personal development, have more effect on future rates of recidivism (Hedderman and Sugg, 1997; Lipsey and Wilson, 1998).

Lipsey and Wilson (1998) addressed the questions of whether intervention with juveniles and young offenders in institutionalised settings produced any significant effects in reducing re-offending rates after release from the institutions and if so, which programmes were found the most effective through a meta-analytic study. It was found that groups of young offenders who have received some kind of intervention within the correctional settings had a rate of re-offending reduced by an average of 15% in comparison to control groups who received no intervention. Similar results have been reported by Andrews et al (1990) who found that the delivery of treatment can cut recidivism rates even more dramatically by about 50%, when delivered appropriately,
that is, when it focuses on high risk individuals, criminogenic needs and there is a matching of the learning style of the offenders and the treatment. In general, there seems to be little disagreement with the proposition that delivery of treatment within the correctional settings has significant and beneficial effects in terms of future recidivism rates for adolescent and young offenders (Lipsey, 1995; Lösel, 1995; Sheldrick, 1994; Mulvey, Arthur and Reppucci, 1993; Izzo and Ross, 1990).

The next question that could be asked, is what type of intervention is the most promising in reducing the general recidivism rate for institutionalised youngsters after release. This question was further examined by Lipsey and Wilson (1998), and they concluded that a clear answer is not yet available. Interpersonal skills training and family education were found to be the two interventions that showed the larger statistically significant effect sizes while multiple services and community residential programs showed statistically significant results, yet, with high heterogeneity across studies, suggesting inconsistent effects across studies. Izzo and Ross (1990) in another meta-analysis attempting to estimate the effectiveness of different types of interventions in reducing recidivism in institutionalised juvenile offenders found that these studies including a cognitive component were the most efficient in that respect and they attributed the superiority of cognitive interventions to changes in the youngsters thinking. Interventions were classified as cognitive if they included one of the following components: problem solving, negotiation skills training, interpersonal skills training, rational-emotive therapy, role-playing and modelling or cognitive behavioural modification.

Rutter et al (1998) argued that the results of meta-analyses on the effectiveness of interventions within correctional institutions can be very informative as they summarise the overall effects of individual studies, thus allowing the detection of real benefits whether large or small, and that it provides a way of pitting different kinds of interventions one against the other and detect the ones that produce the most substantial benefits. However, the results of the meta-analysis should be evaluated with some caution especially when the issue of the most effective interventions is to be inferred as not every kind of possible intervention has been implemented in the correctional system. In addition, there is a high degree of heterogeneity of both the components of the treatments delivered and the groups of youngsters who participated in the interventions,
that has not been originally assessed in the individual studies which makes it impossible to take account of these factors statistically in the meta-analysis and assess the degree to which they might be sources of variation in the overall effectiveness of the treatments. Finally most of the studies do not provide any information on either dose response relations, whether any beneficial changes were related to the degree of the intervention, whether intensity, frequency or duration, nor on the mediating variables responsible for change. The last requirement would be extremely helpful for both practical and theoretical reasons, by assessing the extent to which any changes produced are really brought about by the factors hypothesised by the interventions' theoretical rationale.

Despite these caveats in the implementation and evaluation of psychological treatments in the correctional settings for juveniles and young offenders (Andrews et al, 1990; Andrews, 1995; Gendreau and Andrews, 1990; Lipsey and Wilson 1998), the results of the meta-analytic studies are informative in that at least any kind of intervention is better than nothing, and that programs based on cognitive-behavioural principles have produced the most effective results in terms of reduction of future re-offending rates among juvenile and young offenders held in custody (Izzo and Ross, 1990; Andrews et al, 1990, Sheldrick, 1994).

Furthermore, Rutter et al (1998) noted that in general the results of the interventions were more promising when, they targeted criminogenic factors, the methods used were active and focused on problem solving, interventions were matched according to the risk of the individuals, higher risk youngsters were treated more intensively and for longer periods and the actual implementation of the intervention was the one originally intended, that is interventions with high integrity. Similar conclusions were reached by Binder (1988) who argued that there is a need for more adequate research designs combined with interventions of high integrity, examining the components of treatments delivered, that is both the informal interactions between staff and clients and the formal aspects of the interventions delivered, before any definite conclusions can be made on the effectiveness of interventions delivered within the correctional institutions.

Research, addressing issues of juvenile delinquency in general and recidivism and chronic offending in particular, has concentrated on risk and protective factors related with antisocial behaviour in an attempt to identify causes for continuing juvenile delinquency with a reluctance to address issues of the reasons and the motives that
might be related with juvenile delinquency (Rutter et al, 1997; Lynam, 1996). Farrington (1993) provided several reasons for that lack of research in the motivations of juvenile delinquents and noted the several difficulties inherent in such research. One reason is that the search for internal motives, such as instincts can result in tautological accounts of juvenile delinquency and behaviour in general as any different kind of behaviour can be attributed to an instinct, thus, theories relying on internal forces such as needs and drives, have little explanatory value (McCord, 1997).

Farrington (1993) argued that another difficulty in the study of internal motives, threatening the validity of the results, is the reliance on introspection and usually retrospective accounts of the reasons for behaviour with the objection being that people do not have access to complex mental processes and because retrospective accounts of past behaviour are likely to be influenced by, what Rutter et al (1998) called 'halo' effects, that is, a tendency of people to provide accounts of past behaviour that is in line with their present mental state, an effect that confounds any 'true' possible causes in the past with present subjective interpretations of the phenomenon of interest. This effect is most probable when the same agent is the source of information for any phenomenon that has been different in the past and has changed in the present.

However, Farrington (1993) argued that while the risk/protective factors approach in juvenile delinquency and chronic offending has provided us with a number of risk factors related to and predictive of juvenile delinquency, the exact ways that these factors are translated into actual antisocial behaviour is not known. There is a host of variables identified, mostly static factors, that in general account for a moderate degree of variation in the prediction of juvenile delinquency, yet the exact way that the influence of these factors is translated into delinquent behaviour is not specified, there are no mechanisms or processes identified as mediating that influence, which means that, apart from relative predictive information that these mainly static factors could have for the study of juvenile delinquency, the specific nature of these relationships has not been described, identified and tested.

Vennard, Sugg and Hedderman (1997) similarly, proposed that any intervention delivered in correctional settings should concentrate on criminogenic needs, such as antisocial attitudes and drug misuse, as the factors that are more proximally related with the youngsters' propensity to re-offend. Most of the interventions delivered within the
correctional settings are of a cognitive-behavioural nature, a term, that while it is not very specific in terms of the exact components of the intervention, which could vary, they can broadly be specified in terms of their aims, that is "to teach offenders to face up to what they have done, to understand their motives and to develop new coping strategies and ways of controlling their behaviour" (ibid: 6).

From this perspective, the results of the current thesis are potentially informative for the content of cognitive-behavioural interventions, that is, the beliefs and attitudes that need to be challenged within the correctional settings of Young Offenders Institutions. In addition, the TPB is a theoretical framework that provides a useful model of assessing the relevant needs of the offenders and the factors that the young offenders themselves think that are important and need to be changed in order to avoid future re-offending. It seems that the assessment of the subjectively perceived criminogenic factors is an important issue in the delivery of correctional treatment, not only because it is the subjective interpretation of factors involved in a decision to commit an antisocial act that is important (Rutter et al, 1997), but, at the same time, provides a means of assessing the criminogenic needs of individual offenders or homogeneous groups of young offenders, which could be different from individual to individual or for different groups, thus permitting a matching of the needs that are identified with the delivery of the programme. In addition, issues of self-regulation of moral behaviour and the perceived costs and benefits of future offending could be further examined in adult offenders, young and adult female offenders, to examine possible gender differences, and finally in different sub-populations of offenders, e.g. in violent and property offenders.
REFERENCES
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APPENDICES
APPENDIX I

OPEN-ENDED QUESTIONS FOR THE PILOT STUDY.
• What are the advantages of your offending?

• What are the disadvantages of your offending?

• Who approves of you continuing offending?

• Who disapproves of you continuing offending?

• What will stop you from offending in the future?

• What will make you offend in the future?
APPENDIX II

INTERVIEW SCHEDULE ADAPTED FROM LOUCKS, POWER, SWANSON AND CHAMBERS (2000).
INMATE INITIALS: AGE: YRS
LENGTH OF SENTENCE:
CURRENT OFFENCE:

1) How many times have you been sentenced to custody?
2) How many times have you been remanded in custody?
3) How many previous sentences have you had?

4) How long have you been in YOI for current stay? mths.
5) Roughly how much time in YOIs in total? mths.

6) Age at first offence: yrs
7) Age at first arrest: yrs
8) Age at first time in YOI: yrs
9) Have you ever been in residential care? Yes 0 No 0

EDUCATION/EMPLOYMENT

1) Ever attended a Special School (outwith mainstream): Yes 0 No 0
2) Poor school behaviour Yes 0 No 0
3) Truancy at school Yes 0 No 0
4) Suspended from school Yes 0 No 0
5) Poor peer relations at school Yes 0 No 0
6) Ever employed Yes O No O N/A
7) Employed at time of offence Yes O No O 0
8) Ever dismissed from job Yes O No O 0
9) Stable employment? Yes O No O 0

FAMILY BACKGROUND

1) Social work support? Yes 0 No 0 N/A
2) Family receives social assistance (benefits) O O O O
3) Little/no contact with family while in custody (visits, mail, phone etc) O O O
4) Expected unstable living situation post custody? Yes 0 No 0

5) Anyone in your immediate family served custodial sentence? O O O O (Next questions apply to family excluding yourself)
6) Is there a history of drug abuse in family? O O N/A DKn
7) Is there a history of alcohol abuse in family? O O O O
8) Anyone in your immediate family had psychiatric/ psychological treatment or counselling? O O O O
9) History of suicide or self injury in close family? O O O
PEER RELATIONSHIPS (COMMUNITY)

1) Are any of your close friends involved in criminal activity?  Yes O  No O

HISTORY OF DRUG USE

1) Have you ever taken drugs (illicitly)?  Yes O  No O

If Yes, At what age did you first take drugs illicitly?
If Yes, What was /were the first drugs used?
2) What drug did you use most often?
3) Is your drug use a problem for you?  Yes O  No O
4) Have you ever committed a crime to get drugs?  Yes O  No O
5) Have you ever committed a crime because of being on drugs?  Yes O  No O
6) Do you think you will continue (or restart) taking drugs on release?  Yes O  No O  DKnO

HISTORY OF ALCOHOL USE

1) Have you ever tried alcohol?  Yes O  No O
2) At what age did you first drink alcohol without parental supervision?

3) Was your alcohol use a problem?  Yes O  No O  Dknow O
4) Did drinking contribute to your offence?  Yes O  No O
5) Have you ever committed a crime because of being drunk?  Yes O  No O

PSYCHOLOGICAL/PSYCHIATRIC HISTORY

1) Ever been seen by psychiatrist/psychologist for treatment in the community? (excluding court reports)  Yes O  No O

2) Ever been seen by psychiatrist/psychologist for treatment in custody? (excluding court reports)  Yes O  No O

3) Ever attempted suicide/self injury?  Yes O  No O
If Yes, where:  Community O  Custody O
APPENDIX III

THE PARENTAL BONDING INSTRUMENT (PARKER, TUPLING AND BROWN, 1979).
**RELATIONSHIP WITH MOTHER**

For each statement please fill in the circle that best describes how you remember your MOTHER in the first 16 years of your life.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>She did not help me as much as I needed</td>
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<tr>
<td>She appeared to understand my problems and worries</td>
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<tr>
<td>She was affectionate to me</td>
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<tr>
<td>She liked me to make my own decisions</td>
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<tr>
<td>She tried to control everything I did</td>
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<tr>
<td>She tended to baby me</td>
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<td>She did not seem to understand what I needed or wanted</td>
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<td>She let me decide things for myself</td>
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<td>She did not talk to me very much</td>
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<tr>
<td>She was overprotective of me</td>
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RELATIONSHIP WITH FATHER

For each statement please fill in the circle that best describes how you remember your FATHER in the first 16 years of your life.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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<tbody>
<tr>
<td>He did not help me as much as I needed</td>
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<td>□</td>
<td>□</td>
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<tr>
<td>He appeared to understand my problems and worries</td>
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<tr>
<td>He was affectionate to me</td>
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<tr>
<td>He tended to babe me</td>
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<td>He did not seem to understand what I needed or wanted</td>
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<td>He let me decide things for myself</td>
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<td>He was overprotective of me</td>
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APPENDIX IV

MORAL DISENGAGEMENT SCALE (BANDURA, 1995).
For each statement please put the number that best describes the degree you agree/disagree with it. There are no right or wrong answers and you can take your time in filling in the statements.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Rather Disagree</th>
<th>Neither Agree or Disagree</th>
<th>Rather Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

1. It is all right to fight to protect your friends.

2. Slapping and shoving someone is just a way of joking.

3. Damaging some property is no big deal when you consider that others are beating people up.

4. A kid in a gang should not be blamed for the trouble the gang causes.

5. If kids are living under bad conditions they cannot be blamed for behaving aggressively.

6. It is okay to tell small lies because they don’t really do any harm.

7. Some people deserve to be treated like animals.

8. If kids fight and misbehave in school it is their teacher’s fault.

9. It is all right to beat someone who bad mouths your family.

10. To hit annoying classmates is just giving them “a lesson”.

11. Stealing some money is not too serious compared to those who steal a lot of money.

12. A kid who only suggests breaking rules should not be blamed if other kids go ahead and do it.

13. If kids are not disciplined they should not be blamed for misbehaving.

14. Children do not mind being teased because it shows interest in them.

15. It is okay to treat badly someone who behaved like a “worm.”

16. If people are careless where they leave things it is their own fault if they get stolen.

17. It is all right to fight when your group’s honour is threatened.

18. Taking someone’s bicycle without their permission is just “borrowing it.”
For each statement please put the number that best describes the degree you agree/disagree with it. There are no right or wrong answers and you can take your time in filling in the statements.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Rather Disagree</th>
<th>Neither Agree or Disagree</th>
<th>Rather Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

19. It is okay to insult a classmate because beating him/her is worse.

20. If a group decides together to do something harmful it is unfair to blame any kid in the group for it.

21. Kids cannot be blamed for using bad words when all friends do it.

22. Teasing someone does not really hurt them.

23. Someone who is annoying does not deserve to be treated like a human being.

24. Kids who get mistreated usually do things that deserve it.

25. It is all right to lie to keep your friends out of trouble.

26. It is not a bad thing to “get high” once in a while.

27. Compared to the illegal things people do, taking some things from a store without paying for them is not very serious.

28. It is unfair to blame a child who had only a small part in the harm caused by a group.

29. Kids cannot be blamed for misbehaving if their friends pressured them to do it.

30. Insults among children do not hurt anyone.

31. Some people have to be treated roughly because they lack feelings that can be hurt.

32. Children are not at fault for misbehaving if their parents force them too much.
APPENDIX V

QUESTIONNAIRE ASSESSING YOUNG OFFENDERS BELIEFS OF FUTURE OFFENDING.
For me my offending in the future is:

<table>
<thead>
<tr>
<th>Rewarding</th>
<th>1 2 3 4 5 6 7</th>
<th>Punishing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Useless</td>
<td>1 2 3 4 5 6 7</td>
<td>Useful</td>
</tr>
<tr>
<td>Good</td>
<td>1 2 3 4 5 6 7</td>
<td>Bad</td>
</tr>
<tr>
<td>Harmful</td>
<td>1 2 3 4 5 6 7</td>
<td>Beneficial</td>
</tr>
<tr>
<td>Dull</td>
<td>1 2 3 4 5 6 7</td>
<td>Exciting</td>
</tr>
<tr>
<td>Safe</td>
<td>1 2 3 4 5 6 7</td>
<td>Unsafe</td>
</tr>
<tr>
<td>Boring</td>
<td>1 2 3 4 5 6 7</td>
<td>Interesting</td>
</tr>
<tr>
<td>Wise</td>
<td>1 2 3 4 5 6 7</td>
<td>Foolish</td>
</tr>
</tbody>
</table>

How much do the following people agree with your offending in the future?

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Neither agree nor disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your mother</td>
<td>-3 -2 -1</td>
<td>0</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Your father</td>
<td>-3 -2 -1</td>
<td>0</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Your girlfriend</td>
<td>-3 -2 -1</td>
<td>0</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Your close friends who</td>
<td>-3 -2 -1</td>
<td>0</td>
<td>1 2 3</td>
</tr>
<tr>
<td>offend</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your close friends who</td>
<td>-3 -2 -1</td>
<td>0</td>
<td>1 2 3</td>
</tr>
<tr>
<td>do not offend</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How important to you generally are the views of the following people?

<table>
<thead>
<tr>
<th></th>
<th>Very unimportant</th>
<th>Neither important nor unimportant</th>
<th>Very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your mother</td>
<td>1 2 3</td>
<td>4</td>
<td>5 6 7</td>
</tr>
<tr>
<td>Your father</td>
<td>1 2 3</td>
<td>4</td>
<td>5 6 7</td>
</tr>
<tr>
<td>Your girlfriend</td>
<td>1 2 3</td>
<td>4</td>
<td>5 6 7</td>
</tr>
<tr>
<td>Your close friends</td>
<td>1 2 3</td>
<td>4</td>
<td>5 6 7</td>
</tr>
<tr>
<td>who offend</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>who do not offend</td>
<td>1 2 3</td>
<td>4</td>
<td>5 6 7</td>
</tr>
</tbody>
</table>

Moving away and making a new start will help me to stop offending in the future
False 1 2 3 4 5 6 7 True

Most people who are important to me think I should stop offending in the future
Unlikely 1 2 3 4 5 6 7 Likely

Having money to buy drugs in the future is
Completely unimportant to me 1 2 3 4 5 6 7 Very important to me
Getting a job in the future is
Out of my control  1 2 3 4 5 6 7  Under my control

Most people who are important to me approve of my offending in the future
Disapprove  1 2 3 4 5 6 7  Approve

Having money for the lifestyle I want in the future is
Completely unimportant to me  1 2 3 4 5 6 7  Very important to me

Most people I know would like me to stop offending in the future
Unlikely  1 2 3 4 5 6 7  Likely

Having money for drinking in the future is
Completely unimportant to me  1 2 3 4 5 6 7  Very important to me

Getting a job will help me to stop offending in the future
False  1 2 3 4 5 6 7  True

Being away from the same old delinquent friends will help me to stop offending in the future
False  1 2 3 4 5 6 7  True

I feel it is wrong for me to continue offending in the future
Strongly disagree  1 2 3 4 5 6 7  Strongly agree

Having excitement in my life in the future is
Completely unimportant to me  1 2 3 4 5 6 7  Very important to me

Offending in the future goes against my values.
Strongly disagree  1 2 3 4 5 6 7  Strongly agree

Staying out of the jail in the future is
Completely unimportant to me  1 2 3 4 5 6 7  Very important to me

It would be morally wrong for me to continue offending in the future
Strongly disagree  1 2 3 4 5 6 7  Strongly agree

Having my freedom in the future is
Completely unimportant to me  1 2 3 4 5 6 7  Very important to me

There is nothing bad with offending in the future
Strongly disagree  1 2 3 4 5 6 7  Strongly agree

My offending in the future will result in my losing contact with my friends who do not offend
Unlikely  1 2 3 4 5 6 7  Likely
After committing an offence I usually feel sorry for doing it
Extremely unlikely 1 2 3 4 5 6 7 Extremely likely

Having a house in the future is
Out of my control 1 2 3 4 5 6 7 Under my control

After committing an offence I feel guilty most of the times
Extremely unlikely 1 2 3 4 5 6 7 Extremely likely

Being able to find a job in the future is
Completely unimportant to me 1 2 3 4 5 6 7 Very important to me

Being off drugs will help me to stop offending in the future
False 1 2 3 4 5 6 7 True

I sometimes feel ashamed after committing an offence
True 1 2 3 4 5 6 7 False

Having contact with my family in the future is
Completely unimportant to me 1 2 3 4 5 6 7 Very important to me

My offending in the future will result in difficulties to find a job
Unlikely 1 2 3 4 5 6 7 Likely

Stopping drinking in the future is
Difficult 1 2 3 4 5 6 7 Easy

After an offence I feel some excitement in my life.
Extremely unlikely 1 2 3 4 5 6 7 Extremely likely

Keeping calm when I am provoked in the future is
Difficult 1 2 3 4 5 6 7 Easy

Being able to cope with life in the future is
Completely unimportant to me 1 2 3 4 5 6 7 Very important to me

My offending in the future will result in my losing contact with my friends who offend
Unlikely 1 2 3 4 5 6 7 Likely

My offending in the future will result in my family being embarrassed
Unlikely 1 2 3 4 5 6 7 Likely

Having money in the future is
Out of my control 1 2 3 4 5 6 7 Under my control

I intend to offend in the future
Extremely likely 1 2 3 4 5 6 7 Extremely unlikely
Having support from my family will help me to stop offending in the future
False  1  2  3  4  5  6  7  True

Being off drugs in the future is
Difficult  1  2  3  4  5  6  7  Easy

My offending in the future will result in losing my freedom
Unlikely  1  2  3  4  5  6  7  Likely

Trying not to embarrass my family in the future is
Completely unimportant to me  1  2  3  4  5  6  7  Very important to me

How much control do you have whether you stop offending in the future?
Very little control  1  2  3  4  5  6  7  Complete control

My offending in the future will result in losing contact with my family
Unlikely  1  2  3  4  5  6  7  Likely

For me to stop offending in the future is:
Easy  1  2  3  4  5  6  7  Difficult

My offending in the future will result in my going to jail
Unlikely  1  2  3  4  5  6  7  Likely

If I wanted to, I could easily stop offending in the future:
Extremely unlikely  1  2  3  4  5  6  7  Extremely likely

Moving away and making a new start in the future is
Out of my control  1  2  3  4  5  6  7  Under my control

My offending in the future will be an exciting experience
Unlikely  1  2  3  4  5  6  7  Likely

My offending will enable me to cope with life in the future
Unlikely  1  2  3  4  5  6  7  Likely

My offending in the future will provide me with money for drinking
Unlikely  1  2  3  4  5  6  7  Likely

Having a house will help me to stop offending in the future
False  1  2  3  4  5  6  7  True

Having contact with my friends who offend in the future is
Completely unimportant to me  1  2  3  4  5  6  7  Very important to me

My offending in the future will provide me with money for the lifestyle I want
Unlikely  1  2  3  4  5  6  7  Likely
My offending in the future will provide me with money to buy drugs
Unlikely 1 2 3 4 5 6 7 Likely

Having contact with my friends who do not offend in the future is
Completely unimportant to me 1 2 3 4 5 6 7 Very important to me

Keeping calm when I am provoked will help me to stop offending in the future
False 1 2 3 4 5 6 7 True

Will you offend in the future?
Definitely plan not to 1 2 3 4 5 6 7 Definitely plan to

Having money will help me to stop offending in the future
False 1 2 3 4 5 6 7 True

Being away from the same old delinquent friends in the future is
Difficult 1 2 3 4 5 6 7 Easy

Having support from my family in the future is
Out of my control 1 2 3 4 5 6 7 Under my control

My stopping drinking will help me to stop offending in the future
False 1 2 3 4 5 6 7 True