The impact of family relations and personality factors on delinquent behaviours among youth

Nadine C. Peiser
University of Wollongong
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THE IMPACT OF FAMILY RELATIONS
AND PERSONALITY FACTORS ON
DELINQUENT BEHAVIOURS AMONG YOUTH

A thesis submitted in partial fulfilment of the requirements
for the award of the degree

Ph.D (CLINICAL PSYCHOLOGY)

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by

NADINE C. PEISER

2001
DECLARATION

This thesis was completed under the supervision of Associate Professor Patrick Heaven, at the Department of Psychology, University of Wollongong. It is submitted in partial fulfilment of the requirements for the award of PhD (Clinical Psychology). I certify that this manuscript is entirely my own work. It has not been submitted for qualifications at any other academic institution.

The data reported in Study 1 were published in 1996 in the *Journal of Adolescence*, volume 19, pages 557-568 (see Appendix A). The data reported in Study 2 has being submitted for publication to *Personality and Individual Differences*. The data reported in Study 3 were presented to the *First Australian Forensic Psychology Conference*, in Sydney, 9th February 2001. The papers are co-authored by Dr Heaven.

Nadine C. Peiser
2 October 2001
DEDICATION

Dedicated to my parents

in gratitude for their support

of me as their daughter,

in gratitude for their encouragement

of me educationally which has

culminated in this PhD thesis,

in admiration of the unique people

that Mom is and Dad was,

and in awareness of

the enormous impact

they have had on my life,

and the rich contribution

they have made to who I am.

And, dedicated to my husband

who has inspired my thinking

with his thinking,

who has extended me

and opened worlds to me,

who has had faith in me.
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Abstract

Adolescent delinquency is a growing social problem affecting individuals, families, and communities. The current research comprised three studies, which sought to explore the contribution of family and personality factors to self-reported delinquency, and to discover the nature of the relationship between perceptions of parental discipline style and perceptions of the seriousness of delinquent behaviour. The first study examined the links between perceptions of family relationships, perceptions of parental discipline style, locus of control, self-esteem and self-reported delinquency among Australian high school students (N = 177). The prediction that locus of control and self-esteem would mediate the effects of family processes on delinquency was tested using structural equation modelling. Although there appeared to be a good fit between the data and the proposed model, the amount of variance explained by the predictor variables was not large. Among females, the best predictor of low levels of self-reported delinquency was an inductive discipline style, whilst for males high levels of self-reported delinquency were best predicted by a punitive discipline style. Among males, positive family relations was a significant predictor of high self-esteem. No mediating effects of self-esteem and locus of control were observed. Given these results and the findings of previous research indicating links between family process factors, Eysenck's Psychoticism (P) factor, and delinquency, the second study investigated the relationships between perceptions of parental discipline style, perceptions of parental bonding, P, and self-reported delinquency among a sample of delinquent youth (N = 39). It aimed to determine the intervening effect of P on family process factors and self-reported delinquency. As expected, this sample of delinquent youth obtained significantly
higher delinquency scores than mainstream high school students, as well as significantly higher P levels than established norms. Scores on the parental bonding instrument differed significantly in the expected direction from nondelinquent students. Self-reported delinquency was significantly related to an inductive parental discipline style and high P levels. As predicted, P mediated the effect of inductive parenting on delinquency. The third study aimed to assess the structure of adolescents’ and adults’ perceptions of the seriousness of behaviours labelled as “delinquent”, and to determine whether these perceptions vary across the sex of the respondent and sex of target (that is, the person engaging in the behaviour). A further aim was to examine whether these perceptions are linked to particular parenting discipline styles. The results indicated that, within a sample of high school students (N = 321) and their parents (N = 193), adolescent and adult perceptions of delinquent behaviours are multi-dimensional, possessing a particular structure. As expected, sex of target and sex of respondent were found to have some impact on adolescents’ perceptions of offence seriousness. Parental discipline style was found to be especially important in predicting the perceptions of adolescent boys rather than girls, as well as some perceptions of parents. In examining the contribution of family and personality factors to delinquency, all the studies in this research found parental discipline style to be a key variable. The results of the three studies are discussed with reference to previous research, recommendations for intervention and clinical practice are made, and implications of the findings for further research are noted.
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Adolescent delinquency is now a world-wide phenomenon attracting much research attention, reflecting the growing need for unravelling what has become a community, family and individual problem. While a multiplicity of factors contribute to its development, poor family management practices - in particular defective discipline - have been shown to be powerful, strong and consistent predictors (for example, Ge, Conger, Cadoret, Neiderhiser, Yates, Troughton & Stewart, 1996; Goldstein & Heaven, 2000; Gorman-Smith, Tolan, Zelli & Huesman, 1996; Loeber & Dishion, 1983; Mak, 1994; Shaw & Scott, 1991).

Based on a review of the delinquency literature, there is strong indication that the way in which a child is disciplined within the family unit is vital to gaining a deeper understanding of the nature of delinquency. This thesis explores, inter alia, the effect of family factors, in particular parental discipline style, on self-reported delinquency, as well as the importance of personality factors. In addition, it investigates whether a link exists between young people’s and adults’ perceptions of identified delinquent behaviours and the discipline style they have experienced/used.

1.1 Delinquency: the problem

The eyes of the world have been drawn to unthinkable acts of violence in recent years, committed by young people. And it is this that causes the most shock: the age of the perpetrators.
In Britain in 1993, a three year old boy was brutally murdered by two 10-year-olds (Zwi & Rifkin, 1995). In the USA there have been a number of fatal shootings by adolescents over the last few years: in 1996, a 14-year-old boy shot and killed one teacher and two students; in 1997 a 16-year-old boy killed two students, wounded seven and stabbed his mother to death, and in the same year a 14-year-old killed three students; in 1998, two boys aged 11 and 13 murdered four of their schoolmates and a teacher with 22 shots; two months later a 15-year-old killed two students, wounded more than twenty and killed his parents; less than a year later, two high school seniors aged 17 and 18 launched the Columbine massacre, murdering 13 and wounding 23 before killing themselves (Cloud, 1999; Gibbs, 1999; Pooley, 1999; Van Biema, 1999). In Australia, in 1988, a group of young people in Sydney of ages 14-, 15-, 16-, 17- and 23-years repeatedly raped and then murdered a 20 year old woman (Fife-Yeomans, 1995). In 1998, on a northern beach of Sydney, a six-year-old boy demanded money at knifepoint from two adults (Harris, 1998). More recently, in January 2001 on the Central Coast of New South Wales, a three-year-old girl was murdered in the street where she lived by a 13-year-old boy (Gibbs & Mercer, 2001).

We must critically explore the contexts of these crimes to gain a deeper understanding of what contributes to these behaviours. Based on the findings of a British commission on children and violence set up in response to the 1993 tragedy, Zwi and Rifkin (1995) point out that “the ‘causes’ of violence are multifactorial, largely social and environmental, and arise predominantly in childhood” (p. 1384).

What information do we have about such young people? In the Australian case of the murdered 20-year-old woman, the youths had been involved in less serious offences
prior to committing murder. The 23-year-old man was assessed as being intellectually among the bottom 5 per cent of the population, and the 17-year-old was a mildly mentally retarded girl who had a strong desire to be accepted by her peers. One of the youth came from a ‘broken home’, another had been in trouble since the age of five at which time he was made a ward of the court as an uncontrollable child, and the others had left their schools and homes (Fife-Yeomans, 1995). A review of the mental health and family situations of the American perpetrators of violence indicate the following: severe depression, an inferiority complex, erratic coping skills, lack of empathy and sensitivity to insults, being aggressive, lonely, shy, some coming from single parent families, others from homes with both parents or with their mother and step-father (Gabel, 1999). The possible motives provided include rejection by girls, consistent teasing (e.g. about weight, being gay), given labels (e.g. “Trench Coat Mafia”), and expulsion from school. These hardly seem adequate explanations for the shootings!

In endeavouring to understand more deeply the underlying causes of adolescent delinquency, this chapter will consider the major psychological theories and perspectives of delinquency. However, it is appropriate to first distinguish delinquency from Conduct Disorder.

1.2 Conduct Disorder versus Delinquency

Although the behaviours associated with delinquency are very similar to those characteristic of Conduct Disorder, they are distinguishable. According to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) (American Psychiatric Association, 1994, p. 85):
The essential feature of conduct disorder is a repetitive and persistent pattern of behaviour in which the basic rights of others or major age-appropriate societal norms or rules are violated. These behaviours fall into four main groupings: aggressive conduct that causes or threatens physical harm to other people or animals (Criteria A1-A7), nonaggressive conduct that causes property loss or damage (Criteria A8-A9), deceitfulness or theft (Criteria A10-A12), and serious violations of rules (Criteria A13-A15). Three (or more) characteristic behaviours must have been present during the past 12 months, with at least one behaviour present in the past 6 months.

The associated descriptive features of conduct disorder, as described by the DSM-IV, overlap with features characteristic of delinquents including a lack of empathy, lack of remorse, low self-esteem, irritability, temper outbursts, recklessness and risk-taking, and school suspension or expulsion.

Of further interest is the way in which Mak’s (1993) Self-Reported Delinquency Scale covers most of the behaviours in the four main conduct disorder behaviour groupings. Moreover, 21 of the 34 Delinquency Scale behaviour items are reflected in the identified conduct disorder behaviours. What further behaviours are included in the Delinquency Scale? Vehicle offences, alcohol and other drug offences, going to an R-rated film, and telephone misdeeds. It is thus evident that there is a large overlap between the behaviours characteristic of Conduct Disorder and those associated with delinquency. This begs the question: what distinguishes delinquency from conduct disorder?
According to dictionaries such as the Concise Oxford English Dictionary (Thompson, 1995) and The Penguin Dictionary of Psychology (Reber, 1985), delinquency involves activities that violate the legal code. This is reflected in Mak's (1993) Self-Reported Delinquency Scale which is described by Mak and Kinsella (1996) as a scale that "provides a measure of the variety of law-violating conduct problems that the respondent have engaged in during the previous year" (p. 16). Furthermore, researchers such as Binder (1988) view the law and its accompanying legal processes as the critical element that differentiates disruptive behaviour of youths (such as child aggressiveness, adolescent violence, and child psychopathology) and juvenile delinquency.

However, Binder (1988) points out that a discussion of juvenile delinquency cannot be restricted to those youth who have been defined by law and adjudicated by juvenile courts as delinquent, since (i) the juvenile system is very selective at its various stages of processing, and (ii) states (and countries) vary in the laws governing misconduct. Moreover, it has been suggested that delinquency can be conceptualised as both a legal and social term (Bartol & Bartol, 1998). From a legal perspective it is behaviour against the criminal code (as described above). From a social perspective, it "comprises a plethora of youthful behaviour deemed inappropriate" (Bartol & Bartol, 1998, p.2).

What is required for a diagnosis of Conduct Disorder? The Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition (DSM-IV) is a manual of mental disorders. Thus, Conduct Disorder is considered a mental disorder. To guide decisions regarding which conditions should be included in the manual, the DSM-IV relies on a definition of mental disorder used by the DSM-III and DSM-III-R. One
aspect of this definition is that "whatever its original cause, it must currently be considered a manifestation of a behavioural, psychological, or biological dysfunction in the individual" (American Psychological Association, 1994, p. xxi-xxii). Furthermore, for a diagnosis of Conduct Disorder, the behaviour being displayed has to be "symptomatic of an underlying dysfunction within the individual and not simply a reaction to the immediate social context" (American Psychological Association, 1994, p. 88). Where isolated conduct problems occur that do not meet the criteria for Conduct Disorder, these can be coded as Child or Adolescent Antisocial Behaviour. A criteria necessary for a diagnosis of Conduct Disorder is that "the disturbance in behaviour causes clinically significant impairment in social, academic, or occupational functioning (Criterion B)" (American Psychological Association, 1994, p. 85).

Given these definitions of delinquency and Conduct Disorder it is evident that, while there is an overlap in the behaviours associated with Conduct Disorder and delinquency, delinquency can be distinguished from Conduct Disorder in that it is not a mental disorder. While the delinquent youth may experience significant impairment in their day-to-day living, their behaviour is not necessarily a symptom of an underlying dysfunction. Thus, while young people diagnosed with Conduct Disorder are likely to be involved in delinquent activities, not all those who are described as "delinquent" fulfil the criteria of Conduct Disorder.

Having established the difference between delinquency and Conduct Disorder, and recognising the greater breadth of behaviours included in a sociolegal definition of delinquency, this thesis will focus on adolescent delinquency.
1.3 Incidence

A gender differential in delinquent behaviour is clearly evident with boys outnumbering girls in almost all offence categories, particularly for serious offences (review by Bartol & Bartol, 1998; review by Emler & Reicher, 1995; Smith, 1995). This is reflected in the statistics of those appearing before the New South Wales Children's Court on criminal matters: In the year 1997/98, 82.5% were male and 17.5% were female (NSW Department of Juvenile Justice, 1998). Moreover, 96% of young people detained in NSW Juvenile Justice Centres in this time period were male. Culturally mandated gender roles are seen to be the reason for this, girls being socialized not to be aggressive, and boys being encouraged in aggression (Campbell, 1993; Maccoby, 1986).

Australian data reveal that young people brought before the children's court in New South Wales on criminal matters range in age from 10- to 18-years of age. In the year 1997/98, 0.2% were 10 years old, 0.7% were 11 years old, 1.8% were 12 years old, 4.3% were 13 years old, 10.8% were 14 years old, 18.6% were 15 years old, 23.4% were 16 years old, 28.3% were 17 years old, 11.7% were 18 years old (NSW Department of Juvenile Justice, 1998).

In terms of the types and percentages of offences brought before the children's court in NSW in the year 1997/98, 25.8% were offences against the person (including murder, manslaughter, malicious wounding and serious assaults, robbery and extortion, and sexual offences), 42.2% were theft offences (including break and enter, steal motor vehicle, shoplifting, theft, fraud, and unlawful possession), 6.1% were drug offences
(including possessing, using, trafficking drugs, and possessing drug utensils), and 25.8% were other offences (including driving offences, firearm and weapons, property damage, offensive behaviour) (NSW Department of Juvenile Justice, 1998).

Why are young people involved in such behaviours? What contributes to their becoming involved in delinquent activity? Psychological research into delinquency has provided insight into the many factors that influence its development. It is well recognised that there are multiple causal pathways to delinquency (Sankey & Huon, 1999; Sullivan & Wilson, 1995; Thornberry, 1987). Not surprisingly, the etiology of juvenile delinquency is multifaceted, involving individual, family, subcultural, and community characteristics. Furthermore, the variables on each of these levels do not operate in isolation; rather, the risk factors associated with delinquency interact and influence each other in complex ways (for example, Bartol & Bartol, 1998; Sankey & Huon, 1999; Sullivan & Wilson, 1995). A discussion of the psychological perspectives on delinquency will provide a deeper insight and understanding into what is a complex problem.

1.4 Psychological perspectives on the causes of delinquency

Psychological research into delinquency is assisted by a spectrum of theories. These include biological theory and heredity, personality, and social factors (such as the family, peer group, school and community).

While it is evident from a generation of research that biological and genetic factors, play a crucial role in determining the potential development of delinquent behaviour,
there is abundant evidence that environmental factors shape the development of delinquent behaviour (supporting research follows). Both aspects need to be considered, since biological and genetic factors and environmental factors are not independent of each other (e.g. Pike, McGuire, Hetherington, Reiss & Plomin, 1996). However, from a clinical perspective the crucial focus is the environmental factors - in particular parenting – which are open to intervention and remediation.

Given that biological and heredity factors are not the focus of this thesis, they will be discussed briefly, followed by a discussion of the personality and environmental influences on delinquency development.

1.4.1 Biological and heredity factors

The work of Hans Eysenck has contributed greatly to psychological theorising on criminal behaviour. According to Eysenck (1983) "no clear understanding of individual differences can be gained without close attention to the role of psychophysiological variables" (p. 28, his italics). The crucial process in his theory of crime is classical conditioning. Eysenck (1977a) proposed that those involved in antisocial behaviour have a deficit in classical conditioning. In his view, classical conditioning is crucial to the socialisation of individuals to refrain from antisocial responses.

Thus, Eysenck conceptualises what we call “conscience” as a set of classically-conditioned emotional responses. If these classically-conditioned emotional responses are well developed in an individual, their conscience will be better developed and
antisocial behaviour will be less likely to develop. On the other hand, where there is poor conditionability, conscience development will be poor and under-socialised antisocial behaviour will result (Raine, 1997). For example, when a child is punished by their parents or teachers for unacceptable behaviour, the child will eventually pair the punishment with the unacceptable behaviour. The thoughts preceding the behaviour will also become conditioned. This results in the development of a conscience which can prevent the child/young person from participating in certain behaviours.

A review by Hare (1978) found support for Eysenck's view of poorer conditionability in antisocial groups. More recent studies reviewed by Raine (1993) also provide evidence of significantly poorer skin conductance conditionability in antisocials. However, while Raine and Venables (1981) found poor conditioning in antisocial children from a higher social class, this was not the case in those from lower social classes. Furthermore, Hemming (1981) found differences in his sample which consisted of criminals from relatively good social backgrounds. In discussing these findings, Raine (1997) argues that “biological predispositional variables may have greater explanatory power in antisocials from relatively benign homes where the “social push” towards antisocial behaviour is low; if individuals become antisocial therefore, it may be more for biological than social reasons” (pp. 126-127).

While Eysenck views biology and genetics as having an important role in shaping human behaviour, he also recognises the importance of the environment. For example, Eysenck (1977a) argues that in a situation of having antisocial parents, a child who is highly conditionable will become “socialised” into the antisocial habits of their parents, while a child who conditions poorly will avoid becoming antisocial. Research by Raine
and Venables (1981) provides support for this, with antisocial boys from favourable homes showing poor conditioning and antisocial boys from negative homes showing good conditionability.

Research into the influence of heredity and the environment on delinquency has used twin and adoption studies. Support has been found for the influence of both heredity and the environment (e.g. Eysenck & Gudjonsson, 1989; O'Connor, Neiderhiser, Reiss, Hetherington & Plomin, 1998). Recent research indicates that behavioural problems in young people are related to genetic factors (McGuire Neiderhiser, Reiss, Hetherington & Plomin, 1994; Ge et al., 1996; O'Connor et al., 1998; Pike et al., 1996). For example, research using an adoption design (Ge et al., 1996) found that psychiatric disorders of biological parents were significantly related to their children's antisocial/hostile behaviours. Furthermore, greater risk was found for children of biological parents with co-morbid disorders than those whose biological parents had a single disorder. In addition, according to Ge et al. (1996) the characteristics inherited by adolescents have an effect on the parenting they receive from their parents (often negative) which places them at further risk for antisocial behaviour.

While research in the field of behavioural genetics indicates that biological and genetic components play a role in antisocial behaviour, the importance of psychological and social variables are also stressed (Agnew, 1995). Edgar (1995) holds the view that while innate capacities exist, these can be "helped or hindered by the type of nurturing environment into which a child is lucky or unlucky enough to be born" (p. 14). These views are consistent with Eysenck (1996a) who views antisocial behaviour as a result of
an interaction between social and psychophysiological factors, “not a 100% biological chain of causation” (p. 150).

**Summary and conclusion**

Research provides support for Eysenck’s view of poorer conditionability in antisocial groups. Furthermore, twin and adoption studies indicate that genetic factors are involved in adolescent behavioural problems. Nevertheless, in developing an understanding of delinquency, it is evident that both the biological make-up and the socialisation history of each individual need to be considered. This is summed up in Ehrlich’s (2000) view, namely that the nature-nurture dichotomy is largely a false one, with all characteristics a result of the simultaneous influences of both.

### 1.4.2 Personality

“Troublesome, daring, dishonest, and aggressive” is the way that convicted youth have been identified from an early age by their teachers, peers, and parents (Farrington, 1986, p. 382). Research has indicated that the personality of children and adolescents is an important predictor of delinquency (for example, Conger & Miller, 1966; Eysenck & Gudjonsson, 1989; Furnham & Thompson, 1991; Gudjonsson, 1997; Heaven, 1993, 1994a, 1996a, 1996b; Loeber & Dishion, 1983; Loeber & Stouthamer-Loeber, 1987; West & Farrington, 1973, 1977).

Many personality characteristics have been associated with delinquency. For example, a difficult temperament in early childhood has been shown to predispose a
child to become aggressive and delinquent in later childhood (Pepler & Slaby, 1994). Furthermore, violent offenders often have a history of early aggression (Loeber & Hay, 1996; Olweus, 1979) and of hyperactivity, impulsivity, and attention problems (Farrington, 1991; Klinteberg, Andersson, Magnusson & Stattin, 1993; Moffitt and Silva, 1988). Three major higher-order personality factors have been argued to be crucial in predicting delinquency and criminality, namely extraversion, neuroticism and psychoticism (Eysenck, 1977a; Eysenck & Gudjonsson, 1989). Lower-order factors such as self-esteem (for example, Levy, 1997) and locus of control (for example, Shaw & Scott, 1991) have also shown a strong relationship with delinquency. The following section will focus on Eysenck’s factors, as well as provide a brief discussion of the influence of self-esteem and locus of control on delinquency.

1.4.2.1 The Eysenckian perspective

The three major personality dimensions identified by Eysenck and Eysenck (1976), are made up of elementary traits. Thus, extraversion (E) is described as sociable, lively, active, assertive, sensation-seeking, carefree, dominant, surgent, and venturesome; neuroticism (N) is described as anxious, depressed, low in self-esteem, tense, irrational, shy, moody, emotional, and with feelings of guilt; and psychoticism (P) is described as aggressive, cold, egocentric, impersonal, impulsive, antisocial, unempathic, creative, and tough-minded (Eysenck & Gudjonsson, 1989). Antisocial behaviour and criminality have been associated with high P, high N and high E scores (Eysenck, 1977b). However, findings regarding the role of the three dimensions in predicting delinquency are not unequivocal.
According to Eysenck (1983) "biological factors of psychophysiological or hormonal kind" underlie individual differences in personality (p. 16). Thus, from this perspective, an understanding of the psychophysiological processes underlying the personality dimensions can provide insight into the way in which the dimensions operate.

In terms of psychoticism, it has been found that in normal groups this personality dimension is significantly correlated with serotonin metabolites as well as with dopamine metabolites and MAO, which is also the case in people with schizophrenia (Eysenck, 1983 – personal communication with Schalling; Gray & Gray, 1994). A further association has been found between schizophrenia and the human leucocyte antigen (HLA) system (McGuffin, 1979). In groups with schizophrenia, higher psychoticism scores were to be found in those with HLA than those without HLA. According to Matthews and Deary (1998), disinhibition in high P scorers is influenced by a number of physiological systems, including "arousability of noradrenergic and dopaminergic neural pathways by intense stimulation, low levels of serotonin, high levels of the sex hormone testosterone, and low levels of the enzyme monoamine oxidase (MAO)" (p. 129).

In terms of neuroticism, Eysenck in 1967 claimed that underlying the neuroticism-stability axis are differences in the limbic system, the system which controls the autonomic system. The viscero-cortical loop interconnecting the cerebral cortex with the visceral brain (which includes the limbic system) is more excitable in people with high neuroticism. Thus, high N scorers are more easily autonomically aroused, and in stressful situations, experience distress and agitation. Independent of this system, the
reticular formation-cortex arousal loop is responsible for differences in extraversion-introversion, with extraverts tending to have lower resting arousal levels than introverts (Eysenck, 1983). Eysenck (1983) proposed that since extraverts tend to score low on arousal they seek strong sensory stimulation (such as thrill-enhancing and venturesome activities) to raise their levels. Introverts, on the other hand, tend to be highly aroused and therefore seek to avoid too much stimulation.

In a nine-year prospective study, Raine and his colleagues (Raine, Venables & Williams, 1990) used three measures of arousal (namely heart rate level, skin conductance activity, and excessive theta EEG) measured at 15-years of age in ‘normal’ schoolboys to predict criminal behaviour at 24-years of age. They found that all three measures independently predicted criminal behaviour, providing support for an arousal theory of criminal and antisocial behaviour. Furthermore, a 14-year prospective study conducted by Raine et al. (Raine, Venables & Williams, 1995) provides additional support, their results indicating that heightened levels of autonomic arousal and reactivity in young people displaying antisocial behaviour may protect them from later crime.

As mentioned earlier, Eysenck (1977a) assumes that socialised behaviour is developed through the conditioning process responsible for the creation of the “conscience”. Research by Eysenck and Levey (1972) found that introverts conditioned better than extraverts in most ordinary conditions. Given both the above points, Eysenck (1983) suggests that “the difficulties that extraverts have in forming strong conditioned responses would be responsible for their more antisocial and even criminal type of behaviour” (p. 25). More recently, Eysenck (1996a) suggested that psychoticism as
well as extraversion are important in the development of conscience. His view is that impulsivity links conditioning to personality.

A large number of studies have been conducted in the last four decades examining the relationship between psychoticism, extraversion, neuroticism and delinquency. Furnham and Thompson (1991) provide an extensive review of these to that date, presented in Tables 1, 2 and 3. The first table presents studies offering full or partial support for the Eysenckian position, while the second table presents studies that have not provided support for this position. The samples of these studies come from convicted groups. Given that criminal behaviour is often undetected and therefore more widespread than official records, Furnham and Thompson (1991) provide a third table presenting studies which have employed self-reported delinquency measures with non-convicted individuals.

The findings reveal a general lack of consistency in the results. This is further reflected in Furnham and Thompson’s (1991) research with 18-25 year olds, in which psychoticism, but not neuroticism or extraversion significantly predicted delinquency. Additional studies not reviewed by Furnham and Thompson (1991) include research with 14-year-old boys by Emler and colleagues (Emler, Reicher & Ross, 1987) which found virtually no support for neuroticism, mixed support for extraversion, and the strongest correlation between delinquency and psychoticism. Furthermore, longitudinal research by the Gluecks (cited in Binder, 1988) indicated that delinquent boys were more extraverted than non-delinquent boys. In contrast, Farrington (1992) found that while high scorers on neuroticism, but not extraversion, tended to be official offenders,
those with high scores on extraversion but not neuroticism were from the self-reported
delinquency group. High scorers on psychoticism came from both groups.

**Table 1** Tabulated studies that offer full or partial support for the Eysenckian thesis regarding crime and personality (Furnham & Thompson, 1991, p. 586,587)

Please see print copy for image
Table 1 continued

| Please see print copy for image |
Table 2  Tabulated studies that show results that do not support the Eysenckian thesis regarding crime and personality (Furnham & Thompson, 1991, p. 587)

Table 3  Tabulated studies looking at the relationship between the Eysenckian personality dimensions and self-reported delinquency (Furnham & Thompson, 1991, p. 588)
More recently, research among Australian adolescents found that psychoticism and sociability (extraversion) were significant predictors of delinquency for both males and females (Heaven, 1993). However, the various personality traits (self-esteem, venturesomeness, dysfunctional impulsiveness and anger) acted differently across the two gender groups. For males, besides dysfunctional impulsiveness, all the personality traits had significant direct effects on delinquency. For females on the other hand, no direct effects were found; rather, psychoticism mediated the effects of venturesomeness and dysfunctional impulsiveness on delinquency. In a further study, Heaven (1994a) found that for both sexes, venturesomeness and psychoticism had additive effects on vandalism and also violence (females only). A longitudinal study with Australian adolescents provides further support for the significant association between psychoticism and delinquency (Heaven, 1996a). And most recently, research by Heaven and colleagues (Heaven, Caputi, Trivellion-Scott & Swinton, 2000) indicated the overriding importance of psychoticism in predicting delinquency, with no effects found for the global measures of extraversion and neuroticism.

A range of studies have been discussed here, with the majority providing partial support for the Eysenckian position. A possible explanation for the failure to demonstrate a link between neuroticism and delinquency is given by Rushton and Chrisjohn (1981). They suggest that neuroticism is less important during the early stages of development of antisocial tendencies, while with adults the habit of anxiety assumes greater importance. In conclusion, from the research reviewed as well as from other studies (for example, Eysenck & Gudjonsson, 1989; Heaven & Virgen, 2001), it is evident that there is no doubt of the significant and consistent influence that Eysenck’s psychoticism factor has on self-reported delinquency. This is reflected in the view of
Eysenck & Gudjonsson (1989, p.88), namely that “criminality is related to certain dimensions of personality, in particular that labelled psychoticism...”.

1.4.2.2 Self-esteem

In the last fifty years, self-esteem has been identified as an important contributor to the development of delinquency. For example, research has found that individuals with high self-esteem are less likely to be delinquent than those with low self-esteem (e.g. Dinitz, Frank, Scarpitti & Reckless, 1962; Edwards, 1996; Owens, 1994; Ross, 1994, 1996; Scarpitti, Murray, Dinitz & Reckless, 1960). Within a Saudi male sample, delinquency was significantly associated with negative self-descriptions (Hilmi, 1988), and results from an Indian study showed that delinquents had lower self-image than non-delinquents (Singh, Verma, Arora & Agrawal, 1986). Within a Russian sample, low levels of self-esteem were reported in delinquent subjects (Ruchkin, Eisemann & Hagglof). Recent research in an Australian sample of youth (Levy, 1997) found that nondelinquent adolescents, non-institutionalised delinquent youth and institutionalised delinquents were distinguishable on the basis of their self-esteem scores with a progressively more negative self-concept in the latter two groups.

Research has indicated that delinquent youth obtain significantly lower scores on measures of cognitive, academic, social and general self-worth scales than do non-delinquents (Cole, Chan & Lytton, 1989; Evans, Levy, Sullenberger & Vyas, 1991; Fergusson, Lynskey & Horwood, 1996; Shore, Massimo & Ricks, 1965). Ross (1996) identified three self-esteem factors (namely self-confidence, self-rejection, and sociability) and also found a positive relationship between ‘sociability’ and two aspects
of delinquent behaviour (namely, serious gang-related activities and disciplinary infractions). This positive relationship is suggested to be a result of an emphasis on the ability to communicate in gangs. Negative relationships were found between ‘self-confidence’ and theft, profane and abusive language, and with disciplinary infractions, and between ‘self-rejection’ and theft.

Various explanations for the relationship between self-esteem and delinquency have been given. For example, according to Cohen (1955), lowered self-esteem results from the “strain” that develops when there is a discrepancy between the values and goals held by the society and the legitimate means of achieving them. From this perspective, delinquency becomes a way for youth to acquire status. Kaplan (1975, 1977, 1978, 1980) argues that negative self-esteem results from situations (including school failure, rejection by school, and parental rejection) in which the adolescent is unable to defend their self-image. Consequently they lose their motivation to comply with the patterns of behaviour endorsed by the school authority and their parents. Engagement in antisocial behaviour is a response that improves their self-esteem. More recently it has been suggested that young people with low self-esteem participate in delinquent behaviour because in doing so they are likely to lower their self-rejecting feelings (Rice, 1992) and enhance their self-esteem (Rosenberg, Schooler & Schoenbach, 1989).

1.4.2.3 Locus of control

Originally formulated by Rotter (1954) as part of his social learning theory, the concept of locus of control distinguishes people who perceive they have control over events in their lives and in their environment (internal control), from those who perceive
these events to be determined by external forces: either powerful others or events in the environment. Using the locus of control measure developed by Nowicki and Strickland (1973), research has indicated a relationship between external locus of control and delinquency (Ducette & Wolk, 1972; Kendall, Finch, Little, Chirico & Ollendick, 1978; Parrott & Strongman, 1984; Shaw & Scott, 1991), and hopelessness and suicidal potential (Melges & Weisz, 1971). On the other hand, internal locus of control has been associated with self-control (Ferrer & Krantz, 1987), higher levels of self-esteem (Gordon, 1977; Ralph, Merralls, Hart, Porter & Tan Su-Neo, 1995), being raised in a home environment that is warm and nurturing (Nowicki & Schneewind, 1982), and greater popularity among peers (Dahlquist & Ottinger, 1983).

Early research by Kendall et al. (1978) involved an examination of locus of control in ‘normal’, ‘emotionally disturbed’ and ‘juvenile delinquent’ groups. Results indicated differences between these groups, with the emotionally disturbed and juvenile delinquent groups scoring in a more external direction than the normal group, and the emotionally disturbed group scoring more in the external direction than the delinquent group. Furthermore, factor analyses indicated the multi-dimensionality of the locus of control construct, with differences in the patterning of factors among the groups. Thus, within the normal group the main factor was a generalised expectancy theme. Within the emotionally disturbed group the majority of factors reflected feelings, and the juvenile delinquent factors emphasised situations or environments (e.g., Helplessness at Home, Helplessness with Friends, and Helplessness with Parents).

A further study comparing delinquent and nondelinquent male adolescents found that delinquency was associated with greater externality (Parrott & Strongman, 1984).
Furthermore, increased externality for positive events was associated with more control in the home (that is, more rules and restrictions). The results of this study support the conceptualisation of locus of control as multi-dimensional. Research with normal adolescent samples has pointed to a multi-factor conceptualisation of locus of control, although there is little overlap in the item composition of factors (for example, Raine, Rogers & Venables, 1981; Wolf, Sklov, Hunter & Berenson, 1982; Yates, Hecht-Lewis, Fritsch & Goodrich, 1994).

Various explanations for the relationship between external locus of control and delinquency have been presented. According to Cummings (1977), an external orientation serves a purpose for those who experience failure frequently, this orientation protecting them against negative self-evaluation. Similarly, Parrott and Strongman (1984) suggest that when reinforcement is infrequent or unattainable, an external orientation may serve a defensive function. Based on their research, Parrott and Strongman (1984) argue that familial experiences are associated with the development of an external orientation. The behaviour that results from these beliefs leads to experiences that can influence their persistence. Subsequent experiences such as incarceration provide evidence of lack of personal control, increasing fatalistic feelings. According to Parrott and Strongman (1984) the relationship between restrictive parental control and an external orientation is consistent with developmental literature “which suggests that an overly restrictive home environment may limit exploration and movement toward independence (Lefcourt, 1976; Johnson & Kilmann, 1975)” (p. 469). In contrast and consistent with this, earlier research has suggested that internality is found where there is love and support from parents (MacDonald, 1971; Nowicki & Segal, 1974).
Summary and conclusion

It is evident from the research discussed that Eysenck’s theory of personality has had a major impact on research into delinquency. While the findings on extraversion and neuroticism are in part inconsistent, psychoticism has shown itself to be consistent in its predictive ability. Furthermore, measures of self-esteem indicate that overall, lower self-esteem is related to delinquency. Research in the area of locus of control indicates that a generalised external orientation characterises delinquent adolescent males.

1.4.3 Environmental factors

Several factors within the adolescent’s environment have been identified as contributing to the development of delinquency. These include school-related experiences, peer-group influences, the community, socio-economic deprivation, and family influences (for example, Bartol & Bartol, 1998; Chen, Greenberger, Lester, Dong & Guo, 1998; Farrington, 1992; Huizinga, Esbensen & Weiher, 1991; Rutter & Giller, 1983; Sankey & Huon, 1999; Sullivan & Wilson, 1995; Weatherburn & Lind, 1997, 2001). According to these authors the above-mentioned social factors do not act in isolation from each other. Three environmental factors that have received considerable attention from a psychological perspective are the school, the peer group, and the family. A discussion of these main areas of influence is presented below.
1.4.3.1 School influences

It is the school that dispenses the skills prized in contemporary society, provides the major arena in which the young can demonstrate competence, and functions as the major arena in which youth gain status.

(Dunham & Albert, 1987, p. 46)

A strong correlation between delinquency and school failure has been consistently reported by criminologists (e.g. Brier, 1995; Parrott & Strongman, 1984; Wilson & Herrnstein, 1985). Furthermore, a close relationship has been identified between delinquency and learning disabilities (Keilitz & Dunivant, 1986; Perlmutter, 1987). A review by Winters (1997) indicates that, typically, incarcerated juveniles are school drop-outs and a substantial percentage of incarcerated youth have special education needs.

Bartol and Bartol (1998) present two explanations for the association between delinquency and school failure, one they refer to as the “student deficit hypothesis” and the other as the “school deficit hypothesis”. The ‘student deficit hypothesis’ holds that the student is ill prepared for the rigours of school, begins to experience failure, becomes frustrated and angry, begins to be involved in delinquent behaviour, and drops out as quickly as possible. According to Elliott and Voss (1974) male delinquency is essentially a response to school failure. Delinquency may be a way of coping with the loss of self-esteem associated with this failure and with the social stigma associated with it.
The ‘school deficit hypothesis’ on the other hand (advocated by Schafer and Polk, 1967), puts the blame for school failure onto the school and many of its supporting groups. This position holds that the school puts labels on children such as “slow learner”, “disadvantaged”, “special learner” or “academically handicapped” and reacts to the child accordingly; the child takes on the label and begins to act accordingly, as do parents and peers. The child gets caught in a downward spiral and, as school becomes increasingly frustrating, the child starts violating the rules and regulations of the school and those of society.

Emler and Reicher (1995) suggest that delinquent behaviour is an expression of a negative orientation to formal authority and a rejection of its demands. This rejection is partly expressed in a preparedness for aggression, pursuing grievance methods which lie beyond the law. It is expressed in actions which challenge the ability of the institutional order to protect and defend the values it supports (such as property). And finally, it is expressed in direct attacks on concrete symbols of the institutional order (such as in graffiti-writing and vandalising public property), and direct defiance of the representatives of the institutional order (such as teachers and policemen).

Furthermore, Emler and Reicher (1995) suggest that the negativity towards school and its authority - expressed as delinquency - needs also to be seen in the broader social and economic context. They point out that school is rejected by adolescents partly because of what youth anticipate and experience of life beyond school, namely “unemployment and drudgery in the main” (p. 226). These authors argue that the nature of the labour market, unemployment and barriers to social mobility need to be addressed.
Summary and conclusion

It is evident that school experiences (including academic performance) are related to adolescents' antisocial behaviour and negative attitude to authority. Both the student deficit hypothesis and the school deficit hypothesis provide insight into this relationship. Furthermore, the social and economic context beyond school needs to be considered, given its effect on young people's attitudes and expectations of prospects following school.

1.4.3.2 The role of the peer group

Adolescents join gangs largely to obtain what all adolescents appropriately seek: peer friendships, pride, identity development, self-esteem enhancement, the acquisition of resources, and family and community tradition.

(Goldstein & Soriano, 1994, p. 318).

In contemporary Euro-American and other Western societies adolescence is a well-marked and elaborated social category (Fabrega & Miller, 1995). It is a time of movement from childhood into adulthood, and a time in which young people are developing and forming their identity (Erikson, 1968). Delinquent behaviour serves an important function in this development. This is reflected in the view of Emler and Reicher (1995), namely that delinquent behaviour is not "evidence for a breakdown of identity" but rather it is a way in which individuals "define where they stand" (p. 200).
Thus, delinquent behaviour is not necessarily destructive in itself, but is a way in which adolescents communicate who they are.

During the transition from childhood to adulthood belonging to a peer group is important since it enables adolescents to achieve a sense of identity and independence (Fasick, 1984). Peer groups prescribe what activities its members are involved in, its values and modes of conduct (Coleman & Hendry, 1990). Within the peer group strict normative codes exist and deviation from these norms can lead to rejection by other group members (Gavin & Furnham, 1989). Thus, participation in group-acts is crucial for group membership. Exclusivity and status for group members is achieved by the impermeability of groups (Gavin & Furnham, 1989). The authors suggest that this results in increased self-esteem for group members.

According to Emler and Reicher (1995) five key functions are performed by the delinquent peer group. It provides its members with (i) companionship (doing things together with others), (ii) anonymity (in which the individual’s personal identity and social identity merge so that there is little difference between individuals within the group), (iii) security (the group provides a place of safety), (iv) reputation management (the fact that the individual and the group behave in a manner concordant with their reputation), and (v) behavioural norms (reflecting the beliefs and values of the group). Such a view is supported by research in two groups of adolescents which found that delinquent companionship and delinquent behavioural norms made significant contributions to explaining self-reported delinquency (Heaven et al., 2000). In observing girls in New York City gangs, Campbell (1984) also found that the main reason for belonging to the gang was for companionship and security.
Given the important role that the peer group plays in the development of identity, it is not surprising that adolescent delinquent behaviour is most often committed in the company of other youth (for example, Arnett, 1992; Emler & Reicher, 1995; Heaven & Virgen, 2001). Peer norms and peer sanctions for misconduct have been shown to account for a significant amount of variance in adolescent misconduct (for example, Biglan, Metzler, Wirt, Ary, Noell, Ochs, French, & Hood, 1990; Chen et al., 1998; Kandel, 1985; Maggs & Galambos, 1993). It is not surprising therefore, that delinquent behaviour is strongly predicted by association with delinquent peers (for example, Baron & Hartnagel, 1998; Benda & Corwyn, 2000; Dishion, Patterson, Stoolmiller & Skinner, 1991; Farrington, 1989; Fergusson, Lynskey & Horwood, 1996; Heaven et al., 2000; Sankey & Huon, 1999; Simons, Whitbeck, Conger & Conger, 1991; Scholte, 1999).

Different research perspectives provide different views on how young people move into delinquent peer groups. From the perspective of Cohen (1955) lower-socioeconomic male youth have limited opportunities to gain access to mainstream, middle-class society. Furthermore, they are at a disadvantage in the school system when compared with middle class youth. Strain results, leading the youth to find other lower class boys who feel the same way. A group is formed, developing its own set of beliefs and values, inclined to violate norms, and this becomes the essence of the delinquent subculture. In these groups, delinquent boys steal for fun (not for material gain) and for the status obtained from their fellow gang members. On the other hand, Merton (1938) assumes that these boys steal for material gain and to be like mainstream society.
According to Patterson and his colleagues (Patterson, 1982; Patterson & Dishion, 1985; Patterson, Dishion & Bank, 1984; Snyder & Patterson, 1987), delinquency is largely due to faulty socialisation during childhood (coercive family processes) and where family attachments are weak or non-existent. The child's consequent inadequate interpersonal approach turns people away, ultimately leading to rejection. Unable to be accepted into mainstream society, the young person is drawn to similar youth. This increases the opportunity to learn antisocial behaviour which becomes more frequent, varied and serious over time. This finding supports that of Short and Strodtebeck (1965) – the gangs they observed were found to have members almost completely of lower-SES who were socially disabled individuals with poor interpersonal skills, limited verbal skills, and alienated from mainstream society.

Summary and conclusion

Young people move into the delinquent group for various reasons, including socioeconomic circumstances, school and peer related experiences, and family-related experiences. Whether the individual is perceived as “socially normal” or “socially inept”, the peer group fulfils important functions for the adolescent. Importantly, the delinquent peer group facilitates identity-formation in adolescents. At the same time, peers within the delinquent peer group exert significant influence on the misconduct of adolescents, sanctioning delinquent behaviour.
1.4.3.3 Family influences on delinquency

The microsystem of the family may be the single most important system in the development of delinquency. The family is, after all, the principal context in which human development takes place.


It is well documented that family functioning affects the emotional adjustment of its members. Adolescents’ emotional health has been found to be shaped by factors such as parenting styles, family communication, parental pathology, separation and divorce, family conflict, and adolescent perceptions of the family (review by Heaven, 1994b). Research by Scott and Scott (1987) indicated that individual pathology among family members (measured as neurotic symptoms, low self-esteem, and dissatisfaction with life circumstances) was significantly related to the level of interpersonal pathology displayed by the family (measured as intermember conflict, low solidarity, and member dissatisfaction). More recently, Scott and Scott (1998) investigated adolescent adjustment as a multifaceted process. They found, (among other things), that perceived parental nurturance was associated with adjustment to family, to friends, and to school. Furthermore, they found that the major effect of the family on adolescents’ adjustment was indirect, with parental nurturance affecting adolescents’ self-reported self-esteem and anxiety, and parent-reported parental punitiveness affecting adolescents’ hostility.

Extensive research indicates a strong relationship between family functioning and the development of delinquent behaviour in young people. Research suggests that delinquent adolescents perceive their families to be considerably less cohesive, less
expressive, and to have lower levels of independence among members than do members of control groups. Furthermore, they perceive their families as having higher levels of control and to participate in fewer social and recreational activities compared to other families (Bischof, Stith & Whitney, 1995). One study investigated the relationship between adolescent and parental perceptions of how family members interact with and feel about one another and official and self-reported delinquency. It was found that both parental and adolescent family process measures made independent and significant contributions to the explanation of delinquent behaviour (Krohn, Stern, Thornberry & Jang, 1992).

Studies investigating the influence of the family on delinquency distinguish between family structure and family process, with disagreement as to which is more important. Farrington (1989) argues that both are important, based on his finding that both family structure factors (i.e. economic status, parental criminality) and family process factors (i.e. harsh discipline, authoritarian child rearing, parental disagreements on discipline) were associated with violent offending. As will be seen, family structure and family process are not totally independent of each other.

1.4.3.3.1 Family structure

Adolescent delinquents often come from large families, with siblings participating in much of the same delinquent activities [concluded from an extensive review of the literature by Loeber and Stouthamer-Loeber (1986) and Loeber and Farrington (1998)]. Furthermore, middle-born children are potentially more prone toward delinquent behaviour (West & Farrington, 1973; Ernst & Angst, 1983). The single-parent family
has been marked as a risk factor for delinquency. However, some researchers have found no relationship between single-parent homes and delinquency (Gibson, 1969; Grinnell & Chambers, 1979; Hennessy, Richards & Berk, 1978). Others have found a positive relationship – such as Rankin (1983), but only for certain offences (such as running away, truancy, auto theft) and for certain types of homes (those in which neither biological parent was present). Research by Henry and colleagues (Henry, Caspi, Moffitt & Silva, 1995) indicated that single parent status, number of parent changes, and number of residence changes were associated with increased risk for violent and nonviolent convictions.

Dornbusch et al. (Dornbusch, Carlsmith, Buschwall, Ritter, Leiderman, Hastorf & Gross, 1985) found that mother-only households had a greater proportion of delinquency than households with two biological parents, even when social class and income level were taken into account. Furthermore, they found that adolescent deviance was substantially reduced by the presence of a second adult in the mother-only households; this second adult could be anyone other than a stepfather. Stepfathers have a stronger negative impact on male than on female adolescents (Dornbusch et al., 1985; Johnson, 1986). Steinberg (1987) found that adolescents living in step-parent families were as much at risk of becoming deviant as their peers living in single-parent households.

Extensive reviews of the literature (Emery, 1982; Gove & Crutchfield, 1982) indicate that children from single-parent, conflict-free homes are less likely to be delinquent than children from “intact” homes that are conflict-ridden, indicating that it is parental conflict rather than separation per se that results in delinquency.
Furthermore, according to Weatherburn and Lind (1997), it is the lack of community support rather than the rate of divorce or teenage pregnancy that contributes to delinquency. This reflects the overlap between family structure and family process, as well as the interaction with community factors.

1.4.3.3.2 Family process

As early as 1931, Shaw and McKay noted that delinquent behaviour increased when parental influence and control over their children was weakened or hampered. More recent research has indicated a strong relationship between parental practices (such as poor supervision and poor monitoring, extensive use of coercive discipline, inconsistent discipline, passive or neglectful parenting), a lack of family cohesion, and various forms of delinquency including violent delinquency (for example, Gorman-Smith et al., 1996; Loeber & Stouthamer-Loeber, 1986; McCord, 1979; Patterson, 1982, 1986a; Patterson, De Baryshe & Ramsey, 1989; Pepler & Slaby, 1994; Reid & Patterson, 1989; Scholte, 1999).

It has been suggested that deviant behaviour is learned in much the same way that any other behaviour is learned (Bartol & Bartol, 1998). Serious delinquency and violent behaviour are partly learned through the behaviour of parents. This is reflected in the view of Eron and colleagues (Eron, Huesmann & Zelli, 1991, p. 170), namely, that “parents teach children aggression by the models of behaviour they present, the reinforcements they provide for aggressive behaviour, and the conditions they furnish in the home that frustrate and victimise the child”. It is evident that aggressive methods of
It has been argued that a coercive parenting style is ultimately ineffective in controlling behaviour (Patterson, 1982, 1986b). This type of parenting is characterised by explosiveness, nattering, threats, is often inconsistent in its follow-through, and often leads to increased aggressiveness in the young person. Coercive spirals result when negative and aggressive responses are elicited by both the parent and the child/adolescent. Patterson (1982, 1986b) found that young people socialised in this environment learn to use aggressive methods in their interactions with others outside the home, resulting in rejection by peers and teachers and, ultimately, involvement in delinquent behaviour. This is supported by the findings of Simons and colleagues (Simons, Whitbeck, Conger & Conger, 1991).

Evidence shows that parents' behaviour towards their children is affected by their socioeconomic environment. A recent investigation into the relationship between economic stress, neglect and offending behaviour by Weatherburn and Lind (1997) lead them to conclude that "Economic and social disadvantage appears to increase the rate of juvenile participation in crime mainly by increasing the rate of child neglect" (p. iii). The stress that is caused by poverty can diminish parents' capacity for consistent and supportive parenting (Hammond & Yung, 1994; Larzelere & Patterson, 1990; Sampson & Laub, 1994; Vondra, 1990). For example, Larzelere and Patterson (1990) found that parents from low socioeconomic status backgrounds were more likely to engage in harsh, erratic and inconsistent discipline. Low income has been shown to increase the risk of depression in women (Dore, 1993), and depression in parents, in turn, has been
found to lead to a lowered tolerance for misbehaviour in children and the employment of highly authoritarian, over-controlling responses (Lahey, Conger, Atkeson & Treiber, 1984). A further study indicated that depressed mood in parents was inversely related to the level of nurturance shown by them (Conger, Conger, Elder, Lorenz, Simons & Whitbeck, 1992). It is not surprising that stressed parents will employ aggressive methods of discipline, since these methods of controlling a child are much easier and require less energy than methods which involve sensitivity, listening and understanding (Bartol & Bartol, 1998).

Three types of discipline have been identified by Hoffman and Saltzstein (1967), namely:

- power assertion, in which the parent capitalises on his power and authority over the child;
- love-withdrawal, i.e. direct but non-physical expressions of anger, disapproval, etc.;
- and induction, consisting of the parent’s focusing on the consequences of the child’s action for others (p. 45).

Love-withdrawal and induction are non-power assertive discipline, also described as psychological techniques. Based on Hoffman and Saltzstein’s categories, Shaw and Scott (1991) developed a measure of parental discipline style comprising three subscales: parental punitiveness, parental love-withdrawal and parental inductiveness. They found that perceived punitiveness and love-withdrawal were positively associated with self-reported delinquency, while an inductive discipline style was negatively associated with delinquency. Research has indicated that both punitive parental discipline as well as lax discipline are related to delinquency (Farrington, 1989; McCord, McCord & Zola, 1959; Wells & Rankin, 1988).
According to Hirschi (1969) good child-rearing techniques and proper discipline are the main ways of preventing and controlling delinquency. This is supported by research by Forgatch (Forgatch, 1988, as cited in Webster-Stratton, 1990) who showed that changes in parental discipline and monitoring resulted in significant reductions in child antisocial behaviour. No changes in antisocial behaviour were found in families who showed no changes in parenting skills.

From the perspective of Hirschi’s (1969) social control theory, deviant behaviour is the result of weak social bonds. These bonds consist of four factors: attachment to conventional others (for example parents, teachers and peers), commitment to conventional pursuits, involvement in conventional activities, and acceptance of conventional beliefs. Where these bonds are absent, individuals are freed to maximise their self-interest, thereby increasing the probability of criminal deviance. According to social control theory, the closeness of the adolescent to their parents and their respect for and identification with their parents is crucial in bonding the adolescent to society and keeping their behaviour within conventional boundaries. A further perspective provided by Gottfredson and Hirschi (1990) is that ineffective child-rearing affects the individual’s ability to restrain themselves from acting on their immediate impulses. Thus, in their view, low self-control has its origins in low social control during the early childhood years.

Consistent with Hirschi’s (1969) theory, research indicates that adolescents who are strongly attached to their parents are less likely to partake in delinquent behaviours than adolescents who are less attached (for example, Blaske, Borduin, Henggeler & Mann, 1989; Le Blanc, 1992; Mak, 1990, 1991). Where parental supervision, monitoring and
parent-child involvement are lacking, and where parental rejection is experienced adolescent criminal activity increases (Benda & Corwyn, 2000; Farrington, 1991; Patterson & Dishion, 1985; Simons, Robertson & Downs, 1989). Thus, latchkey children who have no adult supervision have been found to be more prone to minor delinquent behaviours than those who have some kind of adult supervision, mostly because of the increased susceptibility to peer pressure (Steinberg, 1986). Furthermore, adolescent perceptions of low care and high overprotection have been associated with higher levels of delinquency (Goldstein & Heaven, 2000; Mak, 1994, 1996a, 1996b; Mak & Kinsella, 1996). Thus, adolescents from affectionless control families showed significantly greater involvement in delinquent behaviour than adolescents from optimally bonded families, reflecting the damaging effect of a combination of parental neglect and overprotection.

Recent research has explored the genetic influences on family process (for example, Ge et al., 1996; Pike et al., 1996; Reiss, 1995; Reiss, Hetherington, Plomin, Howe, Simmens, Henderson, O'Connor, Bussell, Anderson & Law, 1995). While it has been accepted that important contributions are made by genetic factors to many behavioural outcome measures, it is only recently that "genetic analyses have uncovered substantial genetic influence on measures of the environment, especially family environment" (Pike et al., 1996, p. 600).

Pike and colleagues (1996) conducted multivariate genetic analyses of the covariance between measures of familial negativity and adolescent antisocial behaviour. When genetic differences were controlled, differential treatment by parents affected adolescent adjustment. In other words, when the young person is the object of more
parental negativity than is their sibling, they are more likely to experience adjustment problems. Furthermore, they found that the genetic contribution to the covariance between familial negativity and adolescent antisocial behaviour was substantial. The genetic contribution accounted for most of the phenotypic correlation between measures of parental negativity and antisocial behaviour. Pike et al. (1996) concluded that the association between parental negativity and adolescent antisocial behaviour is not necessarily driven by the parents' behaviour. Rather, it is "the children's genes that are reflected in both the parent's behaviour and in the adolescent adjustment" (p. 600). Nevertheless, these researchers do not deny the importance and efficacy of interventions with parents.

Summary and conclusion

It is evident that family structure and, even more so, family process factors have a major influence on the development of delinquency in adolescents. In particular, parent-child interaction has been shown to be a central variable in the etiology of antisocial behaviour. Aggressive models of parenting, coercive and inconsistent discipline, passive and neglectful parenting, poor supervision and monitoring, and poor attachment between parent and child all contribute to adolescent delinquent behaviour. Even researchers who support a significant role of genes in the associations between negative, harsh parenting and adolescent antisocial behaviour, do not deny the importance of parenting skills. Based on the research discussed, it is quite clear that the role of the family and parenting factors cannot be underestimated.
1.4.4 General summary and conclusion

The psychological perspectives reported here - namely biological factors and heredity, personality, the role of the school and peer group, and the influence of the family - provide some insight into the complexity of the etiology of adolescent delinquency.

Eysenck's theory of personality has contributed greatly to research, with psychoticism proving to be a strong and consistent predictor of delinquency. Furthermore, low self-esteem and a generalised external orientation are also related to participation in delinquent behaviour. While biological and genetic factors are involved in adolescent behavioural problems, research has indicated the need to consider the socialization history of each individual. Environmental factors such as school-related experiences, peer-group influences, and family influences make significant contributions to the development of delinquency. Given that the family is "the principal context in which human development takes place" (Bartol & Bartol, 1998, p. 147), it is not surprising that the family environment and parenting practices are central influences on delinquency.

It is important to emphasise that none of the factors described here act in isolation. Rather, the biological and genetic, personality, and social factors are interactive (for example, Sankey & Huon, 1999; Sullivan & Wilson, 1995; Thornberry, 1987). For example, research indicates that family and peer factors are linked (for example, Dishion et al., 1991; Patterson, 1986b; Patterson & Dishion, 1985; Patterson et al., 1989). Longitudinal data from Patterson and Dishion (1985) indicate that when familial
attachments are weak or non-existent, adolescents drift into delinquent peer groups in search of attachments. Furthermore, Heaven and Virgen (2001) demonstrated that personality, family, and peer group factors interact in influencing delinquency. Thornberry and colleagues (Thornberry, Esbensen and Van Kammen's study as cited in Loeber & Farrington, 1991) provide evidence for a reciprocal relationship between commitment to school and delinquent behaviour (that is, low commitment increases delinquency, and delinquency in turn reduces commitment to school). Furthermore, they found a reciprocal relationship between attachment to parents and delinquent behaviour (that is, low attachment leads to increases in delinquency and delinquency further attenuates the adolescent's attachment to parents).

1.5 The present series of studies

It is evident that the family plays a vital role in the adjustment of its children. Social control theory (Hirschi, 1969) and self control theory (Gottfredson & Hirschi, 1990) call attention to the important role that parenting plays in the development of delinquency. Taken together, the findings from the studies discussed above provide strong evidence for the central role that maladaptive family management practices play in the development of delinquency. In particular, the style of discipline used by parents has been consistently related to delinquency, specifically harsh and inconsistent discipline (e.g. Carlo, Roesch & Melby, 1998; Farrington, 1992; Gorman-Smith et al., 1996; Lefkowitz, Huesmann & Eron, 1978; Loeber & Dishion, 1983; McCord, 1979; Patterson et al., 1989; Rankin & Wells, 1990; Rutter & Giller, 1983; Shaw & Scott, 1991; Stoolmiller, Patterson & Snyder, 1997; Vuchinich, Bank & Patterson, 1992). At
the same time, research indicates that lax discipline also leads to delinquency (e.g. Hirschi, 1983; Wilson, 1980).

Discipline can be seen as a form of knowledge-transfer, with adults transferring knowledge to young people and teaching them rules. Sometimes, however, the way in which the adult teaches these rules leads to behaviours that violate the socially accepted form of behaviour. Emerging from the delinquency literature is the crucial role of discipline experienced by young people in their home environment. Based on the review of the psychosocial factors contributing to adolescent delinquency, it is believed that the way in which a child is disciplined within the family unit is vital to understanding the nature of delinquency. This is central to the series of studies to be presented here.

It is further evident from the research reviewed that various personality characteristics are significantly associated with delinquency. The Eysenckian perspective (Eysenck & Eysenck, 1976) highlights three major personality dimensions, of which psychoticism is the most strongly associated with adolescent delinquency (Eysenck & Gudjonsson, 1989; Farrington, 1992; Heaven, 1996a). Lower order personality factors such as self-esteem and locus of control have also been demonstrated to contribute significantly to delinquency (for example, Cole et al., 1989; Levy, 1997; Parrott & Strongman, 1984; Shaw & Scott, 1991).

Researchers investigating delinquency are increasingly realising the need to investigate the effect of multiple factors (Heaven et al., 2000; Rowe & Flannery, 1994; Sankey & Huon, 1999; Sullivan & Wilson, 1995). Given the large number of factors
influencing the development of adolescent delinquency, the present research sought to focus on two major areas, namely, family process and personality. It further sought to investigate the joint effects of a number of variables in both domains on self-reported delinquency.

1.5.1 Study 1

There is empirical evidence to suggest that personality factors mediate the effects of family experiences on delinquency. Shaw and Scott (1991) observed that adolescents' locus of control mediated the relationship between parent discipline style and self-reported delinquency. In other words, punitive parenting and parental love-withdrawal were significantly associated with increased reports of delinquency, these effects being mediated by an external locus of control. On the other hand, self-reported delinquent activity decreased when inductive parenting had been experienced, with the effect being mediated by an internal locus of control.

Links have been demonstrated between parent discipline style and self-esteem on the one hand, and self-esteem and delinquency on the other. Newman and Murray (1983), for instance, found that coercive rather than inductive methods of parenting, combined with low levels of parental support, produced lowered self-confidence and self-esteem among adolescents as well as problems of identity formation, externalised moral standards, and a susceptibility to peer pressure. Conversely, positive family communication has been shown to be the most powerful predictor of self-esteem and perceived fairness of parental discipline (Larzelere, Klein, Schumm & Alibrando, 1989).
As mentioned previously, it is also well documented that delinquent youth obtain significantly lower scores on measures of cognitive, social and general self-worth scales than do non-delinquents (Cole et al., 1989; Evans et al., 1991; Hilmi, 1988; Singh et al., 1986). Given these results, the possibility exists that, in addition to locus of control, self-esteem may also mediate the effect of parental influences on self-reported delinquency. As it is possible that youth who engage in delinquent and antisocial behaviours may be both externally controlled and have low self-esteem, it is important to assess the mediating influence of these personality factors.

Thus, the first study investigates the possibility that personality factors (namely, self-esteem and locus of control) act as mediating variables between two family process factors (parent discipline style and perceptions of family relationships) and self-reported delinquency, thereby extending the work of Shaw and Scott (1991).

1.5.2 Study 2

Given the results of Study 1, the second study investigates the possible mediating role of a further personality dimension that has a strong and significant influence on self-reported delinquency, namely, psychoticism (discussed in section 1.4.2). Previous research has shown psychoticism to mediate the effect of negative family communication on self-reported delinquency (Heaven, 1994a).

Given Hirschi's (1969) social control perspective which views the individual's attachment to their parents as important in bonding to society and protecting against deviance, the second study also seeks to explore the role of parental bonding as a
second family process factor. A widely used scale, the Parental Bonding Instrument
developed by Parker and colleagues (Parker, Tupling & Brown, 1979), is used to assess
individuals’ perceptions of their parents’ attitudes and behaviours on two dimensions,
care and protection. This scale has been used in research with delinquent samples in
Australia (e.g. Mak, 1996a) and in Scotland (Biggam & Power, 1998).

While Study 1 collected information from high school students, the second study
collected data from a delinquent sample.

1.5.3 Study 3

Items included in self-report delinquency scales often range from minor offences to
severe offences. This raises the question of whether the scales are more extensive than
what is taken to be “delinquent”, thereby labelling juveniles inappropriately as such.
The third study, therefore, begins by investigating both adolescents’ and adults’
perceptions of the seriousness of the behaviours identified in the Australian Self-
Reported Delinquency Scale (Mak, 1993). The importance of asking adolescents is that
they are the peers of so called “delinquents”. Once “delinquent” behaviours are
identified as serious offences by adolescents, engaging in these acts can be seen as
breaching peers’ norms and values rather than adults’ social norms and values.

Family and parenting factors have been shown to determine and shape the views,
behaviours and adjustment of family members (e.g. Bartol & Bartol, 1998; Scott &
Scott, 1987, 1998). Parental discipline style in particular has been found to have a
direct influence on adolescent involvement in delinquent behaviours (e.g. Loeber &
Dishion, 1983; Farrington, 1992; Patterson et al., 1989; Shaw & Scott, 1991). Given this, it is likely that links exist between parental discipline styles and adolescents’ perceptions of delinquent behaviours. Thus, the third study further aims to explore the nature of the relationship between perceptions of parental discipline style and perceptions of the seriousness of delinquent behaviours. It also investigates whether the perceived seriousness of behaviours is dependent on the sex of the individual engaging in the behaviour. No study to date has explored these relationships, the results of which could provide further support for the crucial role of parental discipline style in the development of adolescent delinquency.
CHAPTER TWO

STUDY ONE

Family and personality influences on self-reported delinquency among high school students

2.1 Introduction

As was discussed in the previous chapter, several family process factors have been identified as being important in shaping adolescents’ emotional health. These include parenting styles, family communication, intermember conflict, parental pathology, and separation and divorce (e.g. Heaven, 1994a; Scott & Scott, 1987, 1998). Furthermore, the relationship between family process factors and delinquency is well established. For example, research indicates that general family functioning and parental practices contribute significantly to the development of delinquency (e.g. Bischof et al., 1995; Cortes & Gatti, 1972; Gorman-Smith et al., 1996; Heaven, 1994a, 1994b; Krohn et al., 1992; Patterson & Dishion, 1985; Scholte, 1999). One aspect of family functioning that has received specific research attention is parental discipline style, with results indicating a strong relationship between harsh, power-assertive, and inconsistent discipline and adolescent delinquency and aggression (e.g. Carlo, Roesch & Melby, 1998; Farrington, 1992; McCord, 1979; Patterson et al., 1989; Rankin & Wells, 1990; Shaw & Scott, 1991; Stoolmiller et al, 1997; Stouthamer-Loeber & Loeber, 1988).

Personality factors have been shown to mediate the effect of family experiences on delinquency. For example, Shaw and Scott (1991) found adolescents’ locus of control
to mediate the effect of parent discipline style on self-reported delinquency. Given that links have been demonstrated between parent discipline style and self-esteem on the one hand, and between self-esteem and delinquency on the other (see section 1.5.1), it is proposed that self-esteem may also be an important mediator between family process factors and self-reported delinquency. It is possible that delinquent youth may be externally controlled and also have low self-esteem.

Thus, this study investigates the effects of two personality factors as mediating variables between two family process factors and self-reported delinquency.

2.2 Aims

This first study was designed to complement and expand existing research (e.g. Shaw & Scott, 1991) by investigating (i) the effect of certain family processes on adolescents' self-reported delinquency, and (ii) the role of both self-esteem and locus of control as possible mediating factors between the perceived family processes (namely, perceptions of family relationships and parental discipline style) and self-reported delinquency.

2.3 Hypotheses

It was predicted that:

1. Punitive and love-withdrawal parent discipline styles and love-withdrawal will be related to higher levels of self-reported delinquency, while an inductive discipline
style will be related to low self-reported delinquency (following Shaw & Scott, 1991).

2. Negative perceptions of family relationships will be directly related to high self-reported delinquency scores (following Bischof et al., 1995; Krohn et al., 1992).

3. Self-esteem and locus of control will mediate the effect of perceived family processes on self-reported delinquency. More specifically, (i) greater evidence of the presence of family relationship problems, punitive discipline style, and parental love-withdrawal will be related to lower self-esteem and external locus of control, which is likely to lead to higher levels of self-reported delinquency; (ii) an inductive discipline style will be related to higher self-esteem and internal locus of control, which is likely to lead to lower levels of self-reported delinquency (following Shaw & Scott, 1991).

2.4 Method

2.4.1 Respondents

The sample consisted of 105 female and 72 male high school students, aged between 15 and 16 years (mean age = 15.3 years). The students came from three high schools, two public and one private, in the Illawarra region of New South Wales. Respondents were asked to provide information about their living arrangements and the education and current occupation(s) of their parent(s). Parental occupation was categorised according to Daniel's (1983) prestige scale which ranks occupations in
Australia from high prestige (1.2) to low prestige (6.9). Table 1 presents information regarding respondents' living arrangements and Table 2 shows the occupational prestige of their parents. It is important to stress that all respondents were “normal range” adolescents, that is, they cannot be classified as offenders.

Table 1  Students' living arrangements

<table>
<thead>
<tr>
<th>Living arrangement</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(N=177)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother and father</td>
<td>140</td>
<td>79.1</td>
</tr>
<tr>
<td>Mother alone</td>
<td>16</td>
<td>9.0</td>
</tr>
<tr>
<td>Father alone</td>
<td>3</td>
<td>1.7</td>
</tr>
<tr>
<td>Mother and partner</td>
<td>11</td>
<td>6.2</td>
</tr>
<tr>
<td>Father and partner</td>
<td>4</td>
<td>2.3</td>
</tr>
<tr>
<td>Guardian</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Unanswered</td>
<td>2</td>
<td>1.1</td>
</tr>
</tbody>
</table>

From Table 1 it can be seen that the living arrangements of almost 80% of the sample was traditional, that is, students reported living with both their mother and father. Of the remainder, the majority reported living with their mother alone (9%) or with their mother and partner (6.2%).

It is evident from Table 2 that, although the parents were involved in a wide range of occupations, the sample had a middle class bias. It is not suggested that the sample is representative of Australian adolescents, although it appears sufficiently heterogeneous for the purposes of this study.
Table 2  Parents’ occupational prestige

Please see print copy for image

* Prestige categories (Daniel, 1983): 1-1.9 = e.g. judge, medical specialist; 2-2.9 = e.g. architect, accountant, solicitor; 3-3.9 = e.g. teacher, small businessperson, trained nurse, computer programmer, draftsperson; 4-4.9 = e.g. tradesperson, police constable, technician, caterer, industrial foreman; 5-5.9 = e.g. driver (taxi, bus), linesman, gardener, nurse aid, postal clerk, housewife; 6-6.9 = e.g. railway worker, factory worker, labourer, process worker.

2.4.2 Measures

A battery of self-administered questionnaires was prepared in order to assess respondents’ delinquent behaviour, perceptions of family relationships, perceptions of parental discipline style, self-esteem, and locus of control (see Appendix B). The following were included:-

(i) Self-reported delinquency (Gold, 1970)

This 14-item self-report measure assesses interpersonal violence (six items) and vandalism/theft (eight items), and has been used successfully in previous Australian research (e.g. Shaw & Scott, 1991; Heaven, 1994a). High scores on this scale indicate a
high incidence of delinquency. On the present occasion, Cronbach's alpha coefficient was 0.84.

While self-report measures of delinquency can be criticised for being vulnerable to, for example, forgetfulness and exaggeration on the part of respondents, it has been argued that self-report measures provide valid and reliable information about delinquency (Liska & Reed, 1985; Reicher & Emler, 1985; Shaw & Scott, 1991). Researchers have shown that a close relationship exists between officially adjudicated and self-reported delinquency (e.g. Reicher & Emler, 1985; Shaw & Scott, 1991), thereby providing support for the use of these measures.

(ii) Index of Family Relations (Hudson, 1982)

This 25-item scale measures the extent, severity or magnitude of problems that family members perceive in their relationships with one another. It has excellent internal consistency, known-groups validity, and good construct validity (Corcoran & Fisher, 1987). Test-retest data are not available (Tutty, 1995).

On the present occasion, the item intercorrelations were subjected to a principal components analysis with orthogonal rotation. Two components were extracted, labelled "positive family relations" and "negative family relations". The two factors were shown to have alpha coefficients of 0.94 and 0.93, respectively, eigenvalues of 13.57 and 1.45, respectively, accounted for 54.3% and 5.8% of the total variance, respectively, and were highly correlated ($r = -0.87, p < .001$). Sample items of the positive family relations scale are: "Members of my family are really good to one
another” and “My family is a real source of comfort to me”. Sample items of the negative family relations scale are: “I feel like a stranger in my family” and “There is too much hatred in my family”. The subscales were kept separate for subsequent analyses.

(iii) Parental discipline style (Shaw & Scott, 1991)

This 40-item scale measures three discipline styles, namely, perceived parental punitiveness, perceived parental love-withdrawal and perceived parental inductiveness. This scale has been successfully used among Australian adolescents in independent research (e.g. Goldstein & Heaven, 2000). The internal consistency for each scale, estimated by Cronbach’s alpha, has been found to be 0.85, 0.77, and 0.80 respectively (Shaw & Scott, 1991). On the present occasion, alpha coefficients were 0.86, 0.74, and 0.85, respectively. High scores on each scale are indicative of high levels of punitiveness, inductiveness and love-withdrawal.

(iv) Self-esteem (Rosenberg, 1979)

This well-known 10-item scale provides a measure of global self-esteem and has demonstrated reliability and validity (e.g. Byrne, 1983; Chiu, 1988). It correlates significantly with other self-esteem measures (see Corcoran & Fisher, 1987), and has suitable internal consistency. On the present occasion, Cronbach’s alpha was 0.84. Higher scores indicate higher levels of self-esteem.
(v) Locus of control (Nowicki & Strickland, 1973)

A short form of the generalised scale designed for grades 7-12 was included. This 20-item scale was used by Shaw and Scott (1991) in their research. On the present occasion, Cronbach’s alpha was 0.78. The scale has good concurrent validity, correlating significantly with other measures of locus of control (Corcoran & Fisher, 1987). Construct validation for this scale is supported by significant correlations with the Intellectual Achievement Responsibility Scale among seventh graders \((r = .31, p < 0.01)\) and with the Rotter Adult Scale amongst college students \((r = .61, p < 0.01)\). Previous research using this scale has found high correlations for internality with academic competence and social maturity (Nowicki & Roundtree, 1971). Stability of the original instrument is fair with six-week test-retest correlations of 0.66 for seventh grade and 0.71 for tenth grade students. Items were scored in the direction of externality.

2.4.3 Procedure

Students were provided with a letter from the researcher inviting them to participate in a study of various aspects of their home life, personal attitudes and behaviours. (See Appendix C for consent forms.) Once consent had been given by the students and their parents/guardian, the questionnaire was administered during school hours by the researcher. Students were assured of anonymity and confidentiality and that the information would be used for research purposes only. The questionnaire took between 15 and 30 minutes to complete.
2.5 Results

2.5.1 Descriptive Statistics

Table 3 presents the means and standard deviations on the various measures for females and males separately. Consistent with previous research, males scored significantly higher than their female counterparts on the self-reported delinquency measure (e.g. Bryan & Freed, 1982; Heaven, 1993; Shaw & Scott, 1991), and on the self-esteem measure (Heaven, 1993). Given these significant sex differences in self-reported delinquency, subsequent analyses were conducted separately for females and males.

Table 3 Mean scores and standard deviations on measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean (Female)</th>
<th>Mean (Male)</th>
<th>Standard Deviation (Female)</th>
<th>Standard Deviation (Male)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-reported delinquency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-esteem</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.5.2 Correlational analyses

Pearson correlations are presented for males and females in Table 4. It is evident that the great majority of correlations were in the expected direction and significant at
the 0.001 level. Among males and females, positive family relations was positively related to high self-esteem, negatively related to external locus of control and negatively related to self-reported delinquency. Negative family relations, on the other hand, was significantly related to low self-esteem, high external locus of control and high levels of self-reported delinquency, providing support for hypothesis 2 and partial support for hypothesis 3.

A punitive discipline style was significantly related to an external locus of control and high self-reported delinquency for both sexes, and significantly related to low self-esteem for females only. Parental love-withdrawal was significantly related to low self-esteem, external locus of control and high levels of self-reported delinquency for both sexes. On the other hand, parental induction was significantly related to high self-esteem, internal locus of control and lower levels of self-reported delinquency for both sexes. For both males and females, positive self-esteem was significantly related to low levels of self-reported delinquency and an internal locus of control, while external locus of control was significantly related to high levels of self-reported delinquency. These results provide support for hypothesis 1 and hypothesis 3.

2.5.3 Structural equation modelling

In order to test the mediating effects of personality on the relationship between family processes and delinquency, the data were subjected to a covariance analysis using the SAS procedure PROC CALIS (SAS, 1990). This technique allows "...researchers to explore various constructs and their inter-relationships as well as their causal contributions to other constructs.... (it) allows for a more thorough and inclusive
analysis of the causal paths which can lead to delinquency” (Sullivan & Wilson, 1995, p. 11). The assumptions underlying structural equation modelling were examined and met, namely that the ratio of participants to observed variables was 22:1, which is adequate (Tabachnick & Fidell, 1996, p. 774).

Multiple criteria for assessing the goodness of fit of the model were used (Parker, Bagby & Summerfeldt, 1993): Chi-square goodness-of-fit, the goodness-of-fit index (GFI), the adjusted GFI (AGFI), and the root mean-square residual (RMSR). As suggested by Parker and colleagues (1993), the following criteria were used to indicate the goodness-of-fit of the model to the data: for the chi-square test to be nonsignificant; GFI ≥ 0.85; AGFI ≥ 0.80; and RMSR ≤ 0.10. Table 5 presents the various goodness-of-fit indices for females and males.

Table 5 Goodness-of-fit indicators

The results suggest a generally good fit between the proposed model and the data. All Chi-square values were non-significant, suggesting plausability of the model. Furthermore, from Table 5 it can be seen that the GFI and AGFI values indicate an excellent fit of the data to the model. The root mean square residual indicates that the model fits particularly well to the female set of data, and was close to meeting the RMSR criterion for males.
PROC CALIS also generates output indicating the significant links in the model expressed as standardised coefficients. According to Fassinger (1987), the $t$ values should be greater than or equal to 2.0 to be considered significant. From the equations generated by the analysis, those coefficients that were significant at this level suggest that for females the best predictor of low levels of self-reported delinquency was an inductive discipline style ($t = -2.12$; see Figure 1). For males, the best predictor of high levels of self-reported delinquency was a punitive discipline style ($t = 2.08$; see Figure 2). Furthermore, among males, positive family relations was a significant predictor of high self-esteem ($t = 3.48$). Contrary to what was expected in hypothesis 3, self-esteem and locus of control did not have a mediating effect in this sample of adolescents.

Figure 1. Path diagram of causal relationships for females.

SRD: Self-reported delinquency  IND: Induction
PFR: Positive family relations  SE: Self-esteem
NFR: Negative family relations  LOC: Locus of control
PUN: Punitive discipline style  LW: Love-withdrawal
The overall variance in females’ and males’ self-reported delinquency explained by the predictor variables was not large, namely, 12% and 15% respectively.

2.6 Discussion

This discussion will focus on (1) the general findings of the first study, especially in relation to previous research, (2) implications of the findings for clinical interventions, (3) the methodological limitations of the study, and (4) directions for further research.
2.6.1 General findings

The aim of this research was to evaluate the effect of certain family processes on adolescents' self-reported delinquency, and to investigate whether self-esteem and locus of control mediate these effects. Overall, the results of this study are comparable with previous research findings, which suggest that perceived family processes are significantly related to delinquency among adolescent respondents.

The results of the correlational analyses provide support for both the first and second hypotheses in that, for both males and females, punitive and love-withdrawal discipline styles and negative perceptions of family relations were directly related to high self-reported delinquency scores. Conversely, an inductive discipline style and positive perceptions of family relations were significantly related to low self-reported delinquency scores. Furthermore, the analyses partly support the third set of hypotheses in that a) love-withdrawal was significantly related to low self-esteem and an external locus of control, b) induction was significantly related to high self-esteem and an internal locus of control, and c) a punitive discipline style was significantly related to external locus of control for both sexes and significantly related to low self-esteem in females but not males. As expected, low self-esteem and an external locus of control were associated with high self-reported delinquency. Not surprisingly, self-esteem correlated with an internal locus of control (see also Griffore, Kallen, Popovich & Powell, 1990).

The finding that a punitive discipline style in males was not significantly related to low self-esteem is somewhat surprising and not consistent with the results of other
studies. For example, Newman and Murray (1983) found that coercive parenting combined with low levels of parental support, resulted in lowered self-esteem. Similarly, Bryan and Freed (1982) found that corporal punishment in child discipline practices caused damage to self-concept. One possible explanation is found in the results of the structural equation modelling analysis, which showed that in the male sample, positive family relations significantly predicted high self-esteem. It seems that in this sample, the type of family relations experienced by the male adolescents has a greater impact on their self-esteem than the type of discipline style they perceived their parent(s) to have used. This is consistent with Ellerman (1996) who reported a strong relationship between family cohesion and high adolescent self-esteem.

The results of the structural equation modelling support the expectation that parental discipline style predicts self-reported delinquency. While an inductive discipline style was the best predictor of low levels of self-reported delinquency in females, a punitive discipline style best predicted high levels of self-reported delinquency in males. Perhaps these findings reflect sex differences in respondents' experiences of discipline, it being reported elsewhere that males receive more corporal punishment than females (e.g. Bryan & Freed, 1982).

It was predicted that perceived family relationship problems would be related to lower self-esteem and an external locus of control, which in turn would lead to higher levels of self-reported delinquency. The results indicated a link between positive family relations and high self-esteem in the male sample only, with no mediating effect evident in both sexes. The results for males are in line with the findings of Demo, Small & Savin-Williams, (1987) who found that self-esteem among males was more strongly
influenced by parent-adolescent interaction than it was for females. An explanation provided by Demo and colleagues (1987) for this gender difference is that "adolescent boys may express and communicate their self-esteem in ways that prompt parents to respond (with support, control, or communication), while girls provide fewer or more subtle expressions and thereby deny parents potential cues they need for appropriate responses" (p. 713).

A further explanation for the gender difference may be that females' self-esteem is affected by family processes not included in the present study. For example, family variables that could be considered in further research are the type and frequency of verbal criticism used by parents, parental deviance, sibling relationships and, as Edgar (1995) points out, parents' differential treatment of siblings. Furthermore, quite apart from females' experience of their family, their perception of themselves (e.g. body image) may affect their self-esteem to a greater extent than is the case for males in this age group (e.g. Furnham & Radley, 1989).

Contrary to expectations, structural equation modelling found no mediating effect of self-esteem and locus of control on family processes and self-reported delinquency. Thus, Shaw and Scott's (1991) results of a mediating effect of locus of control between the various parent discipline styles and self-reported delinquency was not replicated. How is one to explain this difference? Shaw and Scott (1991) (i) used a larger sample \( n = 231 \), compared with the present sample, \( n = 177 \), (ii) 27% of their male sample were adjudicated delinquents (there were no females in this category), and (iii) they conducted their analyses with males and females combined, even though there was a highly significant difference in delinquency scores between the sexes. Furthermore,
they analysed their data using regression analyses, whereas the present study used structural equation modelling. This is not only a more sophisticated form of analysis, but also more appropriate for reliably testing the links that exist between several independent and dependent variables.

In summary, the structural equation modelling analysis suggests a good fit between the hypothesised model and the data. The modest variance explained by the predictors of self-reported delinquency in this study, however, indicates that other factors need to be explored in future research (see below).

2.6.2 Implications of findings for clinical practice

It is evident from the results that certain forms of discipline are related to certain forms of behaviour, for example, the development of antisocial and delinquent behaviour. Since the type of discipline style used by parents has a direct effect on their children’s behaviour, it may be advisable to devise intervention strategies for children and parents (e.g. Nelsen, 1987; Edgar, 1995).

Edgar (1995) suggests that parent education/information programs could be conducted to raise the awareness of parents (and parents-to-be) regarding parenting and communication skills. According to Patterson (1980), parenting skills cannot be assumed. On the contrary, young parents are increasingly functioning in isolation, without appropriate models, information or support systems. Patterson (1980) describes the set of operations that are included in parenting skills:
(a) notice what the child is doing; (b) monitor it over long periods; (c) model social skill behaviour; (d) clearly state house rules; (e) consistently provide sane punishments for transgressions; (f) provide reinforcement for conformity; and (g) negotiate disagreements so that conflicts and crises do not escalate (p.81, his italics).

Patterson’s (1980) research provides evidence that parents can and do learn parenting techniques and how to manage antisocial children.

Nelsen (1987) presents principles, based on Adlerian philosophy, which have successfully provided parents with basic guidelines in parenting and practical techniques. Parent-management training, which aims at reducing the use of physical punishment in favour of more proactive forms of discipline, and developing clear standards for child behaviour has demonstrated some effectiveness (e.g. Forehand, Furey & McMahon, 1984; Webster-Stratton, 1991). Functional family therapy, which utilises behavioural techniques, social reinforcement, token economy, and cognitively based interventions has been shown to be effective in improving family communication and lowering recidivism (Alexander, Barton, Schiavo & Parsons, 1976; Alexander & Parsons, 1973; Klein, Alexander & Parsons, 1977). Adherence to multisystemic therapy (Henggeler, Schoenwald, Borduin, Rowland & Cunningham, 1998) aims to have an impact on antisocial behaviour by inducing change in the multiple systems in which the youth is imbedded. At the family level, it aims to increase family structure and cohesion and provide parents with the skills and resources that are needed to monitor and discipline their children effectively. The use of multisystemic therapy has resulted in improvement in family cohesion, family functioning, and parent monitoring,
and associated with this, decreases in delinquent behaviour (Huey, Henggeler, Brondino & Pickrel, 2000).

Programs can also be developed to teach teenagers prosocial behaviour. For instance, an Adlerian Counselling program has been developed in the United States which appears effective in teaching parents and professionals how to assist children in managing their misbehaviour, help them learn self-discipline, responsibility, problem-solving skills and cooperation, based on Nelsen’s (1987) principles. Likewise, The Australian Guidance and Counselling Association has more recently conducted a national project, “Teaching prosocial behaviour to adolescents”, which identified programs now in use in some Australian schools (Prescott, 1995). These programs address issues such as social skilling, development of peer relations, conflict resolution, anger management, assertiveness training, developing life skills, and many others.

Utilisation of interventions designed to enhance emotional support and bonding among family members are considered by Bischof et al. (1995) to be appropriate for most families of delinquents, as well as teaching them how to express their feelings more directly, and increasing participation in social and recreational activities. Furthermore, they suggest that a comprehensive understanding of the family would be valuable in individual intervention planning. Research by Dunn and Plomin (1990) identifies clear links between the child’s perception of differential treatment of siblings by parents (for example, affection and control), and outcomes such as antisocial behaviour and depression.
In light of this, (Edgar's (1995, p. 20) view is relevant: “The message for clinicians is that it is the differences, not the similarities, in family behaviour towards each child that matter. Parents need to understand that children are highly sensitive to differential treatment of siblings and appreciation expressed for a child's unique combination of intelligences/competences will be more helpful than unjust comparisons or even preferential treatment.”

2.6.3 Methodological limitations of the study

Gold's (1970) measure of delinquency was used in the present study to allow for comparisons with previous studies, including Shaw and Scott (1991). However, the scale has a relatively narrow definition of delinquent behaviour, focusing on interpersonal violence, vandalism and theft. It does not include, for example, items referring to illegal drug use, drunk-driving, or unsolicited sexual activity. Changes in government laws and community attitudes over time with regard to what is legal and acceptable, puts into question the relevance of Gold's Scale.

An alternative measure - which may have the advantage of being more culturally relevant and applicable to contemporary Australian adolescents - would be Mak's (1993) *Australian Self-Reported Delinquency Scale*. This scale is more comprehensive than Gold's, encompassing nine clusters of delinquent acts. Mak (1993) provides evidence of the scale's content, construct and concurrent validity, as well as its internal consistency (alpha coefficients were 0.90 for males and 0.87 for females). It has been successfully used in previous research (e.g. Heaven, 1993; Heaven et al., 2000; Mak, 1994, 1996b; Mak & Kinsella, 1996).
2.6.4 Implications for further research

Given that the variance in self-reported delinquency explained by the predictor variables was not large, it is evident that the factors considered here do not provide a complete explanation of this sample’s self-reported delinquency. This is not surprising. Previous writers have considered a wide range of factors in their investigation into delinquency, including genetics, parental criminality, family size, low income or socio-economic status, separation from the family, the child’s academic and social skills, peer influences, personality characteristics, and ineffective parenting practices (e.g. Binder, 1988; Cole et al., 1989; Heaven, 1994a; Loeber & Dishion, 1983; Patterson & Dishion, 1985; Sankey & Huon, 1999). Sullivan and Wilson (1995) proposed a conceptual model of causal and interactional relationships between individual, family, community and subcultural characteristics that may contribute to delinquency. It is clear from this model that future studies need to consider these multiple factors in the investigation of the etiology of delinquency. The results of the present study illustrate the important role that one factor, namely parental discipline style, plays in determining self-reported delinquency.

In terms of the role of personality, the present study indicates that in “normal-range” adolescents, the lower-order personality factors of self-esteem and locus of control did not act as mediators between family process and self-reported delinquency. Future research should investigate the role of other personality factors, particularly higher-order factors such as psychoticism, extraversion and neuroticism, for their potential as mediators.
Finally, the present study used "normal-range" high school students. Thus, conclusions about the etiology of delinquent behaviour are being drawn from young people who are mainly involved in the serious delinquent activities. Future research should therefore be conducted with "delinquent" samples.

2.7. Conclusion

The aim of this study was to expand existing research by investigating the effects of various family processes on self-reported delinquency, as well as the possible role of two personality factors in mediating the effect of the family processes on self-reported delinquency. While family processes, personality and self-reported delinquency were shown to be associated, the results indicate that these links are not all causal. Female and male delinquency was predicted by the type of discipline style used, and only in the male sample did family relations have an effect on self-esteem. Implications of these results for both parents, their children and young people were presented, and suggestions for future research were made. Given the relationships between family factors, personality factors and self-reported delinquency, further research must continue to explore the extent to which these factors interact, since this has implications for intervention. Thus, further exploration into the possible mediating role of personality is needed. It is possible that a higher-order personality factor such as Eysenck's P factor, may play an important mediating role in the relationship between family climate and delinquency.
STUDY TWO

Family and personality influences on self-reported delinquency among delinquent students

3.1 Introduction

Family process factors

The results of Study 1 provide further evidence of the significant role that parental discipline style plays in shaping adolescent delinquency. It is clear that punitive, love-withdrawal and inductive discipline styles have far-reaching effects on young people.

The discipline meted out by parents takes place within the context of a complex relationship between parent and child. The "bond" between parent and child has important consequences for adolescent behaviour and is another factor that has received considerable attention in understanding and predicting delinquency (for example, Biggam & Power, 1998; Goldstein & Heaven, 2000; Mak, 1994, 1996a, 1996b; Mak & Kinsella, 1996). As mentioned earlier (section 1.4.3.3.2), Hirschi's (1969) social control theory postulates that the adolescent's attachment to their parents is crucial in bonding them to society and keeping their behaviour within conventional boundaries. Furthermore, previous research (reviewed in section 1.4.3.3) provides evidence for the central importance of the parent-child interaction in the development of delinquency.
In an attempt to investigate the parent-child bond, Parker and colleagues (1979) sought to develop an instrument which would aid in the study of “optimal and distorted parental bonding” (p. 9). In particular, they wished to determine the parental contribution to the parent-child bond. Parker and his fellow researchers (1979) defined two dimensions identified from previous research: care and overprotection. The first dimension consists of items measuring the presence or absence of care. The items reflect affection, emotional warmth, empathy and closeness at one pole of the dimension, and emotional coldness, indifference and neglect at the other. The second dimension consists of items measuring the presence or absence of overprotection. At one pole of this dimension, the items reflect control, over-protection, intrusion, excessive contact, infantilisation and prevention of independent behaviour, while items at the other pole of the same dimension reflect the allowance of independence and autonomy. The care and overprotection scales formed the Parental Bonding Instrument, a measure of the quality of attachment or “bond” between parent and child. The instrument has demonstrated reliability and validity (Parker et al., 1979; Parker, 1981).

Research has indicated that the Parental Bonding Instrument is a good indicator of psychological adjustment. For example, depression in a non-clinical sample was found to be negatively correlated with parental care and positively correlated with parental control (Parker, 1979). Similarly, patients with anxiety neurosis (Parker, 1981), with obsessive-compulsive neurosis (Hafner, 1988), and with schizophrenia (Parker, Fairley, Greenwood, Jurd & Silove, 1982) reported less parental care and greater parental control. Overall, Parker (1990) suggests that “affectionless control” (that is, low care and high control) is related to neurotic conditions, while “affectionate constraint” (that
is, high care and high control) is related to dependency, hypochondriasis, asthma, and panic disorders.

Given the crucial role that parent-child attachment plays in the emotional development of children and adolescents, Canetti and colleagues (Canetti, Bachar, Galili-Weisstub, Kaplan De-Nour & Shalev, 1997) sought to determine the relationship between parental bonding and mental health in healthy adolescents. Their results indicated that adolescents who reported high care and low control (that is, "optimal bonding") also reported less psychiatric symptoms and distress, had a positive feeling of well-being and felt supported by family and friends. Conversely, adolescents who reported low care and high control ("affectionless control") showed psychological symptomatology, lesser feeling of well-being, and reported less support from those around them. These findings are consistent with those of McFarlane and colleagues (McFarlane, Bellissimo & Norman, 1995) who found that better family functioning and adolescent wellbeing were associated with "a style of parenting characterised as caring and empathic, devoid of excessive intrusion and infantilisation" (p. 860). These results provide support for Bowlby's attachment theory which postulates that normal development is thwarted if the attachment between parent and child is not optimal (Bowlby, 1969, 1988).

In line with these findings, research with Australian high school students indicated that self-reported delinquency in both boys and girls was associated with low perceived parental care and high over-protectiveness from both parents (Goldstein & Heaven, 2000; Mak, 1994). A comparison in parental bonding between Australian delinquent and nondelinquent adolescents found that perceived parental protection was
significantly higher among male and female delinquents than nondelinquents, and perceived parental care was significantly lower among male delinquents than male nondelinquents, (but this did not hold for females) (Mak, 1996a). Thus, it is evident that parenting that involves care and support, rather than control, has important consequences for adolescent behaviour outcomes.

The role of psychoticism

Having discussed the significant role of parenting in the development of delinquent behaviour, attention will be directed to another important contributing factor, namely personality. Eysenck's psychoticism factor (P) has been shown to have a strong, significant and consistent influence on self-reported delinquency (e.g. Emler, Reicher & Ross, 1987; Eysenck & Gudjonsson, 1989; Furnham & Thompson, 1991; Heaven, 1996a; Heaven et al., 2000). Eysenck describes a high scorer on his P scale as aggressive, cold, egocentric, impersonal, impulsive, antisocial, unempathic, creative, and tough-minded (Eysenck & Gudjonsson, 1989). In his recent work, Eysenck (1996b, cited in Gudjonsson, 1997) suggests that psychoticism is linked with low cortical arousal, poor conditionability, and ineffective socialisation, which in turn leads to the development of antisocial behaviour. According to Eysenck and Eysenck (1991), socialization is a relatively alien concept to high P scorers, and notions of sensitivity to other people, empathy, and feelings of guilt are unfamiliar to them.

Aggressive adolescents have been shown to have higher P scores than non-aggressive adolescents (McColloch, Gilbert & Johnson, 1990). Furthermore, the families of these adolescents showed higher levels of family conflict, negativity, and
anger than did control families. Thus, while personality factors are important, these results point us to the importance of the parent-child relationship and family environment. Recent research among Australian high school students found a relationship between family functioning and psychoticism (Heaven, 1997). More specifically, positive family communication was significantly related to lower P scores, while negative family communication was significantly related to higher P scores. A recent study by Heaven and Virgen (2001) confirmed the importance of P as a predictor of self-reported delinquency, and also showed that punitive and love-withdrawal discipline styles were significantly related to higher P scores. Thus, it is evident that perceptions of family life and parenting as well as P levels are closely connected with joint effects on the self-reported delinquency of young people.

Some evidence suggests that P mediates the effect of family factors on self-reported delinquency. An Australian study investigating the joint effects of perceptions of family functioning, venturesomeness, anger, and Eysenckian psychoticism on adolescent violence and vandalism/theft (Heaven, 1994a) found that perceptions of family communication had an influence, through P, on delinquent behaviours. Overall, negative family communication among girls increased the risk of delinquency, this effect being mediated by P. That is, the significant relationship between negative communication and violence was reduced to non-significance when the effects of P were controlled. Thus, in this sample of female adolescents, P acted as an indirect channel for family perceptions on delinquency.
3.2 Aims

Given the findings of a relationship between family processes and P (Heaven, 1994a, 1997; Heaven & Virgen, 2001), and the already demonstrated links between family processes and delinquency (see also section 1.4.3.) and between P and delinquency (see also section 1.4.2.), it is possible that P mediates the effect of other important measures of family influence on self-reported delinquency.

While the majority of research in the area of delinquency utilises high school student samples, the present study obtained its information from a delinquent sample. As far as it is possible to establish, no research among adjudicated delinquents has specifically examined the links between parental bonding and psychoticism. A subsidiary aim was also to determine whether the young people in the present study (namely, delinquent students) differed from the young people in Study 1 (namely, mainstream high school students) in their experience of parental discipline style.

3.3 Hypotheses

It was predicted that:

1. A punitive discipline style and love-withdrawal will be related to higher levels of self-reported delinquency, while an inductive discipline style will be related to low levels of self-reported delinquency (following Shaw & Scott, 1991).
2. Self-reported delinquency will be associated with low maternal and paternal care and high maternal and paternal overprotection (following Mak, 1996a).

3. Adolescents reporting “affectionless control” or “absent or weak bonding” will be more delinquent and have higher P scores than adolescents indicating experience of “optimal bonding” (following Heaven, 1997; Mak, 1994).

4. P will mediate the effects of perceived family processes on self-reported delinquency. More specifically, (i) greater evidence of a punitive discipline style, parental love-withdrawal, low care, and high overprotection will be related to higher P scores, which is likely to lead to higher levels of self-reported delinquency, and (ii) parental induction will be related to lower P scores, which is likely to lead to lower levels of self-reported delinquency (following Goldstein & Heaven, 2000; Heaven & Virgen, 2001; Shaw & Scott, 1991).

5. Delinquent adolescents will differ from mainstream high school students in their perceived parental discipline. More specifically, (i) delinquent adolescents will have experienced higher levels of punitive and love-withdrawal discipline than main-stream high school students, and (ii) delinquent adolescents will have experienced lower levels of induction than mainstream high school students (following Carlo, Roesch & Melby, 1998; Heaven & Virgen, 2001).
3.4 Method

3.4.1 Respondents

The sample consisted of 39 delinquent adolescents (34 males; 5 females) aged between 13 and 17 years of age (mean age = 14.22 years). They came from two schools in New South Wales which provide schooling for young people who have been suspended at least twice from their original main-stream high school and who have been involved with drugs, shoplifting, etc. Some students had court orders, some had previously been in Juvenile Justice Centres, and some were known to the N.S.W. Department of Community Services.

3.4.2 Measures

A battery of questionnaires was prepared in order to assess respondents' perceptions of parental discipline style, perceptions of parental attitude and behaviours, their participation in delinquent behaviour, and to assess their levels of psychoticism (see Appendix D). The following were included:

3.4.2.1 Parental discipline style (Shaw & Scott, 1991).

This is the same scale used in Study 1. On the present occasion, alpha coefficients were parental punitiveness = 0.82 (after removal of two items), parental love-withdrawal = 0.64, and parental induction = 0.76. High scores on each scale are indicative of high levels of punitiveness, love-withdrawal, and induction.
3.4.2.2 Parental Bonding Instrument (Parker, Tupling & Brown, 1979)

This 25-item questionnaire contains statements about parental behaviour to be judged by the respondent as more or less applicable to the parent, using a four-point scale. One form is completed for each parent. Two dimensions of parent-adolescent bonding are assessed, namely, care and protection, thereby yielding two scores for each parent. The care dimension includes items with content of affection and closeness at one pole and of indifference and rejection at the other. The protection dimension comprises items which suggest intrusiveness and control at the one extreme and items encouraging autonomy at the other.

The scale has demonstrated good reliability and internal consistency, and a number of studies have found no evidence of response biases due to influences of mood (Parker, 1981, 1989; Parker et al., 1979). On the present occasion, Cronbach’s alpha coefficients were Mother Care = 0.85, Mother Overprotection = 0.76, Father Care = 0.90, and Father Overprotection = 0.88, indicating good internal consistency. While high scores on the maternal/paternal Care scales are indicative of parents being warm and understanding, high scores on the maternal/paternal Protection scales suggest excessive parental control and intrusion.

Parker et al. (1979) suggest that the parental care and protection scores can be combined to examine four parenting styles: optimal bonding (high care, low overprotection), absent or weak bonding (low care, low overprotection), affectionate constraint (high care, high overprotection), and affectionless control (low care, high overprotection).
3.4.2.3 *Australian Self-Report Delinquency Scale (Mak, 1993).*

This measure was designed for use with Australian adolescents. It consists of 34 statements describing a range of marginally deviant to seriously delinquent activity that the respondent may have engaged in during the previous 12 months, including theft, vandalism, cheating, drug-taking, fighting, etc. Cronbach’s alpha for Mak’s (1993) original sample was found to be .90 for males, 0.87 for females, and 0.88 for both sexes combined. On the present occasion, the alpha coefficient was 0.94 for the whole sample. Mak (1993) found that the scale was able to discriminate between official delinquents and a matched control group, providing evidence for the concurrent validity of the scale.

3.4.2.4 *Psychoticism (Eysenck, Eysenck & Barrett, 1985).*

Corulla’s (1990) revision of Eysenck’s (Eysenck et al., 1985) short form of this scale was used. It consists of 12 items. Alpha coefficients have previously been 0.68 for 14-year-old males and 0.73 for 15-year-old males (Corulla, 1990), and 0.63 among an Australian high school sample (modal age = 16 years; Heaven et al., 2000). On the present occasion, the alpha coefficient was 0.83.

3.4.3 *Procedure*

Students were provided with a letter from the researcher inviting them to participate in a study aiming to understand young people’s views of family-life, themselves and various behaviours (see Appendix E for consent forms.) Once consent had been given
by the students and their parents/guardian, the questionnaire was administered during school hours by the researcher. Students were assured of anonymity and confidentiality and that the information would be used for research purposes only. The questionnaire took between 30 and 40 minutes to complete.

Given the sensitivity of the delinquent population and the personal nature of the questionnaire, it had been planned to administer the questionnaire through one-to-one interviews. However, given the constraints that were operating in the institutions, a number of students had to be seen together. Depending on the participant’s reading ability, the questionnaire was administered either one-to-one, or in small groups of two to four. Some students (individually or in small groups) had the questionnaire read aloud, while others elected to read the questionnaire for themselves.

3.5 Results

3.5.1 Descriptive Statistics

Mean scores, standard deviations, and alpha coefficients for each of the measures for the whole sample are presented in Table 1.

(i) Self-reported delinquency

The level of delinquent involvement reported in this sample of delinquent adolescents was significantly greater than that of mainstream male high school students. More specifically, the self-reported delinquency of the present sample ($M = 17.91, SD =$
Table 1  Descriptive statistics

<table>
<thead>
<tr>
<th>Measures</th>
<th>M</th>
<th>SD</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRD (range: 0 - 34)</td>
<td>17.91</td>
<td>9.51</td>
<td>0.94</td>
</tr>
<tr>
<td>Parental discipline style</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PUN (range: 18 - 72)</td>
<td>34.97</td>
<td>8.16</td>
<td>0.82</td>
</tr>
<tr>
<td>LW (range: 9 – 36)</td>
<td>16.65</td>
<td>4.69</td>
<td>0.64</td>
</tr>
<tr>
<td>IND (range: 10 – 40)</td>
<td>25.82</td>
<td>5.74</td>
<td>0.76</td>
</tr>
<tr>
<td>Parental bonding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M-C (range: 0 – 36)</td>
<td>23.27</td>
<td>7.52</td>
<td>0.85</td>
</tr>
<tr>
<td>M-P (range: 0 – 39)</td>
<td>15.38</td>
<td>6.94</td>
<td>0.76</td>
</tr>
<tr>
<td>P-C (range: 0 – 36)</td>
<td>20.57</td>
<td>9.60</td>
<td>0.90</td>
</tr>
<tr>
<td>P-P (range: 0 – 39)</td>
<td>13.20</td>
<td>9.05</td>
<td>0.88</td>
</tr>
<tr>
<td>Psych (range: 0 – 12)</td>
<td>5.46</td>
<td>3.36</td>
<td>0.83</td>
</tr>
</tbody>
</table>

SRD: Self-reported delinquency; PUN: Punitive discipline style; LW: Love-withdrawal; IND: Induction; M-C: Maternal-care; M-P: Maternal-protection; P-C: Paternal-care; P-P: Paternal-protection; Psych: Psychoticism

9.51) was significantly higher than Heaven’s (1993) sample of male high school students (M = 12.72, SD = 7.95; t = 3.99, p < 0.01) and Mak and Kinsella’s (1996) sample of Year 8 to 12 male high school students (M = 12.32, SD = 7.80; t = 4.24, p < 0.001). The mean score of the Lie items in the present sample is relatively high (M = 3.44, SD = 0.99) and lies between Mak’s (1993) nondelinquent (M = 3.29, SD = 0.75) and delinquent samples (M = 3.63, SD = 0.61). High values of the lie scores indicate a lower tendency towards social desirability. Thus, the scores of the present sample would suggest that respondents were not presenting themselves unrealistically.

(ii) Parental bonding measure

It can be seen from Table 1 that maternal care and overprotection scores are higher than paternal care and overprotection scores. Thus, mothers were perceived as more
caring and controlling than fathers. This result is consistent with previous research (Biggam & Power, 1998; Canetti et al., 1997; Cubis, Lewin & Dawes, 1989; Mak, 1996a, 1996b; Mak & Kinsella, 1996). While the bond with the mother is closer it is also perceived to be more restrictive. According to Canetti et al. (1997) this appears to be a "universal phenomenon" (p. 392). Although men in modern society are increasingly involved in child-rearing, there still appears to be a gap between the way in which adolescents perceive the paternal and maternal bond.

In order to test for differences in parental bonding scores between delinquents and nondelinquents, t-tests were conducted. Table 2 presents a comparison between the delinquent male students of the present study and the nondelinquent male students of Mak’s (1996a) study.

**Table 2 Parental Bonding scores of delinquent and nondelinquent male students**

<table>
<thead>
<tr>
<th>Measures</th>
<th>This study</th>
<th>Mak (1996a)</th>
<th>t-tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Delinquents</td>
<td>Nondelinquents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
</tr>
<tr>
<td>M-care</td>
<td>23.42</td>
<td>7.24</td>
<td>27.17</td>
</tr>
<tr>
<td>M-protection</td>
<td>15.08</td>
<td>5.65</td>
<td>12.09</td>
</tr>
<tr>
<td>P-care</td>
<td>20.04</td>
<td>9.05</td>
<td>24.16</td>
</tr>
<tr>
<td>P-protection</td>
<td>14.16</td>
<td>9.23</td>
<td>10.97</td>
</tr>
</tbody>
</table>

M = Maternal, P = Paternal
* $p < .10$, ** $p < .05$

It is evident from Table 2 that perceived parental care was significantly lower among male delinquents than among male nondelinquents, and that perceived parental overprotection was significantly higher among male delinquents than among male
nondelinquents. This is consistent with previous research (e.g. Mak, 1994, 1996a; see also Goldstein & Heaven, 2000).

(iii) Psychoticism

Corulla (1990) provides norms for the EPQ-R short version for various ages. For his 13-, 14-, and 15-year old mainstream high school students the mean scores on the scale were 3.85 (SD = 2.55), 4.46 (SD = 4.45), and 3.69 (SD = 2.60) respectively. For the present sample of delinquent students the mean score was 5.46 (SD = 3.36) (Table 1). This is significantly higher than the 13- and 15-year olds in the Corulla study (t = 2.53, p < .02 and t = 2.59, p < .01 respectively).

(iv) Comparison between Study 1 and Study 2 in parental discipline

Given that the majority of the present sample are male (namely, 87%), a comparison of parental discipline style scores was made between the male participants of this and the previous study. In order to determine whether the two groups differ significantly in their experience of discipline style, a one-way MANOVA was conducted, with study sample as the independent variable. Table 3 presents the means and standard deviations for both samples.

Wilks’ criterion showed that perceptions of parental discipline style were significantly affected by the group (Wilks’ Lambda = .844, F(3,84) = 5.165, p <

1 The means and standard deviations presented in Table 3 for Study 1 differ very slightly to those that were presented in Chapter 2 Table 3, (namely by 0.42 for the punitive measure, 0.19 for the love-withdrawal measure, and 0.08 for the induction measure), since the MANOVA analysis excludes students with missing data.
Table 3  *Comparison between Study 1 and Study 2 means on parental discipline style measures for males only*

<table>
<thead>
<tr>
<th>Measures</th>
<th>Study 1 (mainstream students)</th>
<th>Study 2 (delinquent students)</th>
<th><em>Univariate</em></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>M</em></td>
<td><em>SD</em></td>
<td><em>M</em></td>
</tr>
<tr>
<td>Punitive discipline style</td>
<td>44.10</td>
<td>9.47</td>
<td>38.45</td>
</tr>
<tr>
<td>Love-withdrawal</td>
<td>15.87</td>
<td>4.38</td>
<td>17.00</td>
</tr>
<tr>
<td>Inductive discipline style</td>
<td>28.69</td>
<td>6.11</td>
<td>26.80</td>
</tr>
</tbody>
</table>

* *p* < 0.05

That is, delinquent adolescents experienced significantly lower levels of punitive discipline than mainstream adolescents (*F*(1,86) = 5.941, *p* < .05). This finding is contrary to what was expected (hypothesis 4). While the mean love-withdrawal scores for the delinquent sample was higher than that of the mainstream sample as predicted, and inductiveness for the delinquent sample was lower than for the mainstream student sample as predicted, these differences are not significant.

3.5.2 Correlational analyses

Pearson correlations are presented for the whole sample in Table 4. It is evident that an inductive discipline style was significantly related to lower self-reported delinquency providing partial support for hypothesis 1 (*r* = -0.43, *p* < 0.05). As predicted in hypothesis 3, *P* was significantly related to higher levels of self-reported delinquency (*r* = 0.57, *p* < 0.01). Parental induction, maternal care and paternal care were significantly related to lower levels of *P*, partly supporting hypothesis 3 (*r* = -0.43, *p* < 0.05; *r* = -0.51, *p* < 0.01; *r* = -0.39, *p* < 0.05,
respectively). Furthermore, a punitive discipline style was significantly related to lower maternal care and higher maternal overprotection, and parental love-withdrawal was significantly related to lower paternal care and higher maternal overprotection.

### Table 4  *Pearson correlations between measures*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.SRD</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2.PUN</td>
<td>-0.13</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.LW</td>
<td>0.20</td>
<td>0.64**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.IND</td>
<td>-0.43*</td>
<td>0.22</td>
<td>0.35</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.M-C</td>
<td>-0.21</td>
<td>-0.42*</td>
<td>-0.32</td>
<td>0.23</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.M-P</td>
<td>-0.30</td>
<td>0.48*</td>
<td>0.56**</td>
<td>0.37</td>
<td>-0.40</td>
<td>--</td>
<td></td>
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</tr>
<tr>
<td>7.P-C</td>
<td>-0.23</td>
<td>-0.30</td>
<td>-0.51*</td>
<td>-0.02</td>
<td>0.42*</td>
<td>-0.22</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.P-P</td>
<td>0.17</td>
<td>0.18</td>
<td>0.35</td>
<td>0.35</td>
<td>-0.26</td>
<td>0.24</td>
<td>-0.54**</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>9.Psych.</td>
<td>0.57**</td>
<td>0.02</td>
<td>0.17</td>
<td>-0.43*</td>
<td>-0.51**</td>
<td>-0.01</td>
<td>-0.39*</td>
<td>0.08</td>
<td>--</td>
</tr>
</tbody>
</table>

* p < 0.05; ** p < 0.01

1.SRD: Self-reported delinquency
2.PUN: Punitive discipline style
3.LW: Love-withdrawal
4.IND: Inductive discipline style
9. Psych.: Psychoticism
5.M-C: Maternal-care
6.M-P: Maternal-protection
7.P-C: Paternal-care
8.P-P: Paternal-protection
3.5.3 Parental groups and adolescent adjustment

Analyses were conducted to determine whether delinquent adolescents reporting the various maternal and paternal parenting styles differ in terms of their participation in delinquent activities and in terms of their P scores. Using mean splits, the four parenting style groups (namely, optimal bonding, absent or weak bonding, affectionate constraint, and affectionless control) were formed. The cell sizes were too small to conduct one-way MANOVAs or one-way ANOVAs. Thus, t-tests were conducted to test for differences in self-reported delinquency and P between the extreme parenting groups (that is, between affectionless control and optimal bonding, as well as between absent or weak bonding and optimal bonding). Table 5 presents the mean self-reported delinquency and P scores for the four different parenting styles described by Parker et al. (1979).

Table 5 Mean delinquency and P scores for the different parenting styles

Please see print copy for image
It can be seen from Table 5 that delinquent adolescents in the “affectionless control” and “absent or weak bonding” groups reported higher levels of delinquency and P scores than those in the “affectionate constraint” and “optimal bonding” groups. T-tests indicated that the only significant difference between the parenting styles groups was in P levels between paternal absent or weak bonding and paternal optimal bonding ($t = 2.24, p < .05$). That is, adolescents who reported absent or weak bonding with their fathers had higher P scores than those who reported optimal bonding with their fathers. While the mean delinquency and P scores are in the expected direction, (that is, those who have experienced optimal bonding have lower self-reported delinquency and P scores than those who have experienced weak bonding or affectionless control), the differences are not significant due to the small number of respondents in each cell. These findings provide some support for hypothesis 3.

### 3.5.4 Regression analyses

#### (i) Factors predicting self-reported delinquency

Given that parental induction and P were significantly correlated with self-reported delinquency, a standard regression analysis was conducted in which self-reported delinquency was regressed on these two predictor variables (Table 6). The assumptions underlying the use of regression analysis were examined and met, namely, having the minimum requirement of “5 times more cases than independent variables” (Coakes & Steed, 1996, p. 130). In addition, the assumptions regarding multicollinearity and singularity were met. The overall model was significant ($F(2,21) = 6.297, p < .01$). The results showed that only P significantly predicted self-reported delinquency, explaining
37.5% of the variance of delinquency among this sample of delinquent adolescents. When additional regression analyses were conducted including the punitive and love-withdrawal discipline styles and/or the parental bonding measures, the models were not significant.

**Table 6 Multiple regression analyses**

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Predictors</th>
<th>B</th>
<th>t</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-reported delinquency</td>
<td>Induction</td>
<td>-.270</td>
<td>-1.375</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Psychoticism</td>
<td>.435</td>
<td>2.215*</td>
<td>.375</td>
</tr>
</tbody>
</table>

* p < .05.

(ii) Checking for mediation

To demonstrate a mediating effect from regression analysis, Baron and Kenny (1986) have identified certain criteria that need to be met: (i) the predictor variable(s) and the mediating variable correlate with each other and with the dependent variable, and (ii) the relationship between the predictor variable and the dependent variable is reduced to non-significance when the effects of the mediating variable are partialed out.

From the correlational analyses, it is evident that parental induction and P correlate with each other and with the dependent variable, self-reported delinquency, satisfying the first criteria. The results of the multiple regression analysis (Table 6) indicate that the effects of parental induction are reduced to non-significance in the regression model, while the effects of P remain significant. These results, presented
diagrammatically in Figure 1, support the prediction that P mediates the effect of inductive parental practices on delinquent behaviour, providing support for the third hypothesis. Thus, in this sample of delinquent adolescents, P is an important link between perceptions of parental discipline style and delinquency.

![Diagram of mediation model]

**Figure 1** Mediation of parental induction by psychoticism

Beta weights are shown, with correlations in brackets.

* $p < .05$

### 3.6. Discussion

This discussion will focus on (1) the general findings of the second study, (2) implications of the findings for clinical interventions, (3) the methodological limitations of the study, and (4) directions for further research.
3.6.1. General findings

The aim of this study was to investigate, within a delinquent sample, the relationship between two family process factors and self-reported delinquency, and to determine whether P mediates these effects. Furthermore, it aimed to compare perceptions of parental discipline within a delinquent sample and a mainstream high school sample. The results of this study partly support and extend previous research, providing further support for the crucial role of parental discipline style in the development of delinquency, and confirming the importance of the higher-order personality factor P.

Correlational analyses

As expected, and consistent with previous research, (i) an inductive form of parental discipline was significantly related to lower levels of self-reported delinquency (e.g. Goldstein & Heaven, 2000; Shaw & Scott, 1991; Study 1), and (ii) P was significantly related to higher levels of self-reported delinquency (e.g. Emler et al., 1987; Eysenck & Gudjonsson, 1989; Farrington, 1992; Furnham & Thompson, 1991; Heaven & Virgen, 2001; Heaven et al., 2000).

Contrary to what was expected and inconsistent with previous research, the results indicated that punitive and love-withdrawal discipline styles and parental bonding measures were not significantly related to self-reported delinquency. These findings are somewhat surprising. A possible explanation may lie in the small sample size and consequently, in reduced statistical power. A further explanation may lie in the order of
the questionnaires in the Survey booklet. The parental discipline style questionnaire was the first set of questions presented to the respondents. Given that the parenting experiences for many of these young people are often fraught with tension and difficulty, these questions may have been somewhat confronting to begin with, resulting in a decreased willingness to admit aspects of their parenting experience.

On the other hand, while the respondents may very well have experienced low levels of punitiveness and love-withdrawal, it might be the case that they may also have experienced lax discipline and neglect. This is reflected in the result of a negative relationship between induction and self-reported delinquency. That is, higher levels of self-reported delinquency were associated with the experience of low levels of inductive parenting, a parenting style which relies on reasoning with the young person. Moreover, the results of further analyses indicated that adolescents reporting affectionless control (i.e. a combination of parental neglect and overprotection) and absent or weak bonding reported higher levels of delinquency than those reporting optimal bonding or affectionate constraint. It has been shown that lax parenting and neglect are also predictive of self-reported delinquency (Hirschi, 1983; Stice, Barrerra & Chassin, 1993; Weatherburn & Lind, 1997; Wilson, 1980). These aspects of discipline, or lack thereof, are not covered in the parental discipline style measure utilised in this study.

It is noteworthy that a punitive discipline style was negatively correlated with self-reported delinquency although not significantly so. This is contrary to what was expected based on the results of Study 1 and previous research (e.g. Shaw & Scott, 1991; Heaven & Virgen, 2001). Furthermore, the results of the multivariate analysis of
variance comparing Study 1 and Study 2 in adolescents' experience of parental
discipline style indicated, unexpectedly, that delinquent students had experienced
significantly lower levels of punitive discipline than mainstream students. How is one
to explain these findings?

A number of factors already mentioned may have contributed to this result. Firstly,
the young people may have felt confronted by the nature of the first set of items.
Consequently, they may have been defensive in their responses, and not willing to
admit experiences of punitive forms of discipline. Secondly, rather than experiencing a
punitive form of discipline, this sample may have had a greater experience of "cool"
parenting, lax discipline, or neglect. Thirdly, they may have been trying to present
themselves in a socially desirable way. The Survey did contain a Lie scale, the mean
score indicating that the students were not presenting themselves unrealistically.
However, it occurred much later in the survey, by which time the respondents may have
been more at ease and less defensive.

Regression analyses

The results of the regression analysis indicated that P was the only significant
predictor of self-reported delinquency in this sample of delinquent adolescents,
accounting for 37.5% of the variance. Unexpectedly, induction was not a significant
predictor. Further regression analyses including the remaining discipline style and
parental bonding measures found these not to be significant predictors. Thus, for this
sample of adolescents P was the most potent predictor of self-reported delinquency,
providing further support for its importance (e.g. Eysenck 1985; Eysenck & Gudjonsson, 1989; Furnham & Thompson, 1991; Heaven et al., 2000).

While the results suggest that the family process measures are not significant predictors of self-reported delinquency, the small sample size and subsequent reduced statistical power may have contributed to this result. For example, it is worth mentioning that, while not significant, the MANOVA indicated differences between delinquents and nondelinquents in reported love-withdrawal and induction that were in the expected direction. That is, delinquent adolescents of the present study reported higher levels of parental love-withdrawal and lower levels of parental induction than the nondelinquent adolescents of Study 1. This result may well have been significant within a larger sample. Furthermore, the comparison between the delinquent male youth of the present study and the nondelinquent male youth of Mak’s (1996a) study, indicated as expected, that (i) perceived parental care was significantly lower among male delinquents than among male nondelinquents, and (ii) perceived parental protection was significantly higher among male delinquents than among male nondelinquents. Thus, caution is needed when interpreting the findings of the regression analyses. What is striking is that, in spite of the small sample size, psychoticism still stands as a strong predictor of self-reported delinquency.

It was predicted that the family factors would be related to P, which, in turn, would be related to higher self-reported delinquency. Taken together, the results of the correlational and regression analyses indicated that P acts as a mediator between parental induction and self-reported delinquency. That is, where low levels of inductive parenting are experienced, high P scores are likely, which is likely to lead to
delinquency. Thus, P acts as an indirect channel for perceptions of parental discipline style on delinquency. Consequently, the work of Shaw and Scott (1991) is extended by providing support for a further personality factor as a mediator between discipline style and self-reported delinquency. Furthermore, Heaven (1994a) found P to mediate the effect of adolescents’ perceptions of family communication on self-reported delinquency. Thus, the present study extends this research by the demonstration of a mediating effect of P between parental induction and self-reported delinquency. In addition, while the research of Heaven (1994a) was conducted with mainstream high school students, the present study demonstrated the mediating effect of P within a delinquent sample of adolescents.

Conclusion

The results of this study provide additional support for the crucial role that P plays in delinquent behaviours. Not surprisingly, young people who can be described as aggressive, cold, egocentric, impersonal, impulsive, unempathic and tough-minded (Eysenck & Gudjonsson, 1989) will be more likely to be involved in delinquent behaviours. From Eysenck’s perspective (1996a, 1996b, cited in Gudjonsson, 1997), a number of factors are responsible for the development of P, namely, low cortical arousal, poor conditionability, poor conscience development, and ineffective socialization. The present results suggest that not only does P have a direct effect on self-reported delinquency, but it also mediates the effect of parenting practices on delinquency.
When children and young people are raised in a climate of emotional coldness, indifference and neglect, or where harsh punishment is the norm, psychological symptomatology results (e.g. Canetti et al., 1997, McFarlane et al., 1995). Sadly, the environment these young people are raised in is mirrored in themselves. Thus, it is not surprising that the results of the correlational analyses indicated parental punitiveness and parental love-withdrawal to be significantly related to lower levels of maternal care and paternal care respectively which in turn were significantly related to higher levels of P. Furthermore, the correlational analyses indicated that parental induction was significantly related to lower levels of P as well as lower levels of self-reported delinquency. Taken together, it is evident that in this small sample of delinquent youth, family process factors are related in their association with P. This is not surprising given Eysenck’s (1977a, 1996a, 1996b, cited in Gudjonsson, 1997) view that psychoticism is partly a result of poor socialisation. Overall, these results provide support for the important role of parenting in the development of delinquency – whether directly (seen in the correlational analysis) or indirectly (seen in the regression analysis).

3.6.2. Implications of findings for clinical practice

*Regarding psychoticism*

From a clinical perspective, it would be valuable to intervene as early as possible in the development of traits characteristic of the P personality dimension. Traits that can be targeted in children include aggression, impulsivity, antisocial behaviour, hostility, and lack of empathy. Eysenck (1996a) recognises that high P is an important hindrance
to effective socialization. Thus, work should begin on developing appropriate skills with children who are exhibiting behaviours reflecting the P dimension. For example, in terms of aggression, cognitive-behaviour therapy is effective in addressing "the deficient and distorted social-cognitive processes in aggressive children, including distortions in their perceptions of others' and their own behaviour, biases in their attribution of the hostile intention of others, and overreliance on nonverbal direct action solutions, and underreliance on verbal assertion solutions" (Lochman, White & Wayland, 1991).

Programs for children can include developing skills in self-monitoring, social perspective taking, social problem-solving, training in self-instruction, affect labelling, and relaxation. Eysenck (1977a) recommended that positive aspects of behaviour should be strengthened, for example, through token economies. In this way the desired behaviour is rewarded and reinforced (Eysenck, 1997).

High scorers on psychoticism have been found to externally attribute blame for their criminal acts. That is, offenders report external justification for their crime such as blaming the offence on provocation or on social factors (Gudjonsson, 1984; Gudjonsson & Singh, 1989). According to Gudjonsson (1997), "emotional coldness and lack of empathy are probably the most relevant characteristics to external attribution of blame" (p. 157). Gudjonsson (1997) suggests that treatment techniques should be developed that focus specifically on overcoming high P scorers' attitudinal problems, the most effective possibly being cognitive therapy techniques. However, given differences in personality and the needs of individuals, Gudjonsson (1997) stresses the importance of matching the treatment to the individual. Furthermore, Eysenck (1997) points out the
importance of not assessing the P dimension in isolation, but rather in the context of the other dimensions of their personality.

It is important to note that high P scorers have been shown to be particularly resistant to conventional psychotherapy or counselling (Lane, 1987; Rahman & Eysenck, 1978). They are paranoid and suspicious, emotionally cold and tough-minded. According to Rahman and Eysenck (1978), these characteristics create a barrier which makes it hard to establish a therapeutic relationship. Furthermore, these people are known to fail appointments, resist treatment, and switch therapists frequently. Nevertheless, it has been suggested that cognitive therapy techniques may be the most effective form of treatment with clients who are difficult to manage (Davidson & Tyrer, 1996).

Given that some behaviours have a biological basis (e.g. Eysenck, 1983; Matthews & Deary, 1998), they may be resistant to change. Thus, in extreme cases where psychotherapeutic and behavioural techniques are proving completely ineffective, Eysenck and Eysenck (1976) and Eysenck (1997) suggest that psychopharmacological interventions may be necessary for change.

*Regarding parenting factors*

The results of the correlational analyses indicated that the experience of an inductive discipline style was significantly related to lower levels of P. Furthermore, perceptions of maternal and paternal care were also significantly related to lower levels of P. Given the strong relationship between P and self-reported delinquency (seen in the results of
the correlational and regression analyses), these results provide further support for the importance of raising parent-awareness regarding parenting and communication skills (as discussed in Chapter Two, section 2.6.2) as well as the potential implications of parenting on children’s overall health. As Shucksmith, Hendry and Glendinning (1995) indicate: “...young people’s subjective perceptions of their relationships with their parents...has important consequences for psychosocial development in adolescence...” (p. 269). Further support for the importance of intervention with parents comes from the finding that induction, through P, has an effect on delinquency. Thus, directly and indirectly, the important role of parenting to the development (or not) of delinquent behaviour is underlined.

3.6.3. Methodological limitations of the study

The primary limitation of the present study is the small sample size and the subsequent decrease in statistical power. While a larger sample was initially planned, the difficulty in gaining access to this population, resulted in a smaller sample.

A second limitation of the study is the way in which the questionnaires were administered. Given the sensitivity of this population, it had been planned to administer the questionnaires through one-to-one interviews. However, circumstances in the institutions did not allow for this, and students were seen in small groups of one to four. The presence of peers may have influenced their responses. Furthermore, given the generally lower reading age of this population, it was planned to read the questionnaire to the students and to note their responses. While some students had the questionnaire read to them individually or in small groups, other students indicated that they could
read the questionnaire themselves. This request may have been affected by the presence of their peers. Thus, it is possible that some of the respondents did not correctly read or understand the questionnaire items.

A third limitation is the order of the questionnaire. The first questionnaire in the Questionnaire Survey was the parental discipline style measure. Given the sensitive nature of this questionnaire, it is possible that having it at the beginning was too confronting for the delinquent adolescents. Respondents may have felt "on the spot" and defensive, not wanting to admit to some aspects of their parenting experience.

3.6.4. Implications for further research

Based on the limitations of the present study a number of recommendations follow: Firstly, it is recommended that the proposal of P as a mediator between various family factors and self-reported delinquency be examined within a larger delinquent sample. Not many such studies have been conducted with delinquent samples, (the majority use high school student samples), and an increase in sample size would improve statistical power. Secondly, where possible, future research should include a larger female sample in order to make comparisons between male and female delinquents on the various measures. Previous studies have found differences between males and females (e.g. Furnham & Thompson, 1991; Heaven, 1993).

It is recommended, thirdly, that qualitative as well as quantitative research be conducted with delinquent youth utilising one-to-one interviews. Qualitative research would allow for greater rapport to be established with the respondent, and the open-
ended style of questioning would allow the researcher to delve more deeply into the young person's explanations of their behaviour in a way which structured questions do not allow. Lastly, the order of the measures in the Questionnaire Survey need to be more sensitive to the nature of this sample. Rather than starting the Survey with a questionnaire that could be "confronting", the Survey could begin with a filler questionnaire, such as asking respondents what young people in general do for fun, what sports the respondent participates in, what hobbies and interests they have, etc.

It is evident that there is an inconsistent pattern in the results of research investigating the relationship between parent discipline style as measured by Shaw and Scott (1991) and self-reported delinquency. Research is thus needed to clarify the use of Shaw and Scott's (1991) measure within different samples (namely, nondelinquent and delinquent), across different ages and genders, and utilising various research techniques. Furthermore, while the questionnaire is very thorough, the inclusion of questions relating to the experience of lax discipline and neglect would be of added benefit.

Finally, the present study provides further support for the strong relationship between P and delinquency. Given this, continued research is needed in the area of intervention with young people displaying high levels of psychoticism.

3.7. Conclusion

The present study aimed to build on the first study by investigating the intervening effect of P on family process factors and self-reported delinquency within a delinquent
sample. The results supported the expectation that P acts as a mediator between parental induction and self-reported delinquency. Important contributions of the present study are: (i) evidence for the crucial role that P plays in the development of delinquent behaviours within a delinquent sample of adolescents, (ii) demonstration that, within a small sample of delinquent youth, parenting factors are closely related to P, and (iii) while the small sample size made it difficult to accurately determine the way in which the factors interact in influencing delinquency, the results serve to confirm the proposition (based on previous research) that parental discipline style is crucial to an understanding of adolescent delinquency. Given that a small minority of offenders are responsible for a large percentage of crime (e.g. Farrington, Ohlin & Wilson, 1986; Wolfgang, Figio & Sellin, 1972), the present study provides further support for the need to intervene where young people exhibit traits characteristic of P. Furthermore, the results provide additional support for the need to raise parents' awareness regarding parenting skills.
CHAPTER FOUR

STUDY THREE

Perceptions of the seriousness of delinquent behaviours.

4.1 Introduction

If family and parenting factors determine and shape the views, perceptions, behaviours and adjustment of its members (e.g. Bartol & Bartol, 1998; Scott & Scott, 1987, 1998), then it is likely that links exist between parental discipline styles and adolescents’ perceptions of delinquent behaviours. If punishment in general is designed to draw attention to the unacceptability of a particular form of behaviour, then the style of discipline experienced by a young person must by implication affect and shape their views about behaviour. The purpose of this study is to discover the nature of the relationship between perceptions of parental discipline style and perceptions of the seriousness of delinquent behaviours.

As mentioned previously (Chapter One) Hoffman and Saltzstein (1967) identified and described three types of parental discipline. An inductive style of discipline consists of the parent reasoning with their child about the causes and effects of their behaviours, and involves “the parent’s focusing on the consequences of the child’s action for others” (Hoffman & Saltzstein, 1967, p. 45). On the other hand, a punitive discipline style includes techniques such as physical punishment and material deprivation, a style of power assertion “in which the parent capitalises on his power and authority over the child” (Hoffman & Saltzstein, 1967, p.45). Parental love-withdrawal involves “direct
but non-physical expressions of anger and disapproval” (Hoffman & Saltzstein, 1967, p. 45). Overall, it is suggested that an inductive style of discipline, as compared with the punitive and love-withdrawal styles, would be most effective in developing adolescents’ sense of what is right and wrong, and consequently which behaviours are serious offences.

4.1.1 Study rationale

Issues arising from Study 1

Looking more closely at the responses to the Self-Reported Delinquency measure in Study 1, a number of issues arise. Table 1 presents the proportion of Study 1 respondents who, through the medium of Gold’s (1970) questionnaire, admitted involvement in various delinquent acts. The fact that most mainstream high school teenagers in the sample answered “never” for each item indicates that they can be described as “normal range” adolescents. Nevertheless, it is important to note that a sizeable number of respondents admitted to engaging in some of these behaviours “once or twice” or even “sometimes”. This raises the important matter of whether young people (and, indeed, their parents) perceive “delinquent” behaviours as serious offences or whether they are regarded as acceptable. The importance of asking adolescents is that they are the peers of so-called “delinquents”. Once “delinquent” behaviours have been identified as serious offences by adolescents, engaging in these acts can be seen as breaching peers’ norms and values rather than adults’ social norms and values.
Table 1  Percentage of respondents engaged in certain behaviours

Please see print copy for image
4.2 Background literature regarding perceptions of delinquent behaviours

Research into the perceptions of the seriousness of crimes has been conducted for over seventy years, beginning with Thurstone in 1927. Scales have been developed to investigate offence seriousness (for example, Sellin & Wolfgang, 1964) and have been used in a number of replication studies with a variety of cross-cultural subject groups. One reason for this research interest is that the way in which criminal behaviours are viewed by the public and legislators has implications for policing and sentencing policy.

Past research has shown that there is consistency in the way people rate the relative seriousness of offences (eg. Figlio, 1975; Levi & Jones, 1985; Corbett & Simon, 1991; O'Connell & Whelan, 1996). This is especially true for those behaviours that are the most severe. There are also group differences in the way seriousness is rated and various factors have been shown to influence such perceptions. These include level of education and age (Davis, Severy & Kraus, 1993), the amount of television news watched (Gebotys, Roberts & DasGupta, 1988), whether the respondent is generally conservative or liberal (Davis et al., 1993), and whether the respondent is an offender or not (Figlio, 1975). While agreeing on the most serious offences, police and the public differ in their ratings of the less severe offences, with the public rating minor offences more seriously than do police (Levi & Jones, 1985; Corbett & Simon, 1991).

Sex differences in seriousness ratings have also been observed. For example, Gebotys et al., (1988) found that females gave higher seriousness ratings than males to offences involving violence or the threat of violence (assault, sexual assault, robbery).
They argued that this may be due to the fact that women perceive themselves as being more vulnerable to such offences and are therefore fearful of victimisation.

Research into adolescent perceptions of seriousness has been scarce. A notable exception is a recent study of adolescents’ perceptions of the seriousness of juvenile offending (Tyson & Hubert, 1998). This study focused on cultural differences in adolescents’ perceptions of the seriousness of delinquent behaviours. Significant differences were found between young Indigenous Australians/Aborigines and those who identified themselves as white Australian, Vietnamese and Chinese. Furthermore, the students rated the more severe behaviours as serious and, consistent with previous research in adult samples, differed on items with lower rankings. Males tended to have lower ratings overall. Students who knew someone who had been in trouble with the law viewed most behaviours as less serious.

Through their research Tyson and Hubert (1998) provide an insight into adolescent perceptions of the seriousness of behaviours, indicating cultural, gender, and ranking differences. However, their research did not indicate whether these perceptions possess a particular structure, or whether the perceived seriousness of behaviours will vary depending on who (boy or girl) is engaging in the behaviour.

Thus, the first aim of the present study was to examine both adolescents’ and adults’ perceptions of the seriousness of “delinquent” behaviours. The second aim of was to extend existing research by determining whether the perceived seriousness of behaviours varies depending on the sex of the individual engaging in the behaviour (the “target”).
Hypotheses

1. Given that Mak (1993) found the items of her scale to cluster together into various groups, it was predicted that adolescents’ and adults’ perceptions of delinquent behaviours possess a particular structure.

2. It was predicted that females will rate offences involving violence or bodily harm as more serious than will males (Gebotys et al., 1988).

3. Given prevailing gender-role stereotypes suggesting that females, more than males, are expected to be warm, caring, and considerate (Golombok & Fivush, 1994), it was predicted that respondents will rate behaviours as more serious when conducted by female targets and the same behaviours as less serious when conducted by male targets.

4.3 The influence of family climate

Having discussed the results of research into perceptions of offence seriousness, attention will be turned to an important contributing factor in the development of delinquency, namely, the family environment. Since this factor has already been discussed in some detail, a brief summary follows.

It has been well documented that family functioning affects and has a significant impact on the functioning of its members (e.g. Scott & Scott, 1987, 1998). There is extensive research evidence that a strong relationship exists between family functioning
and the development of delinquent behaviour (eg. Bischof et al., 1995; Krohn et al., 1992; see also research reviewed in chapter one). For example, Bischof and colleagues (1995) found that groups of delinquents perceived their families to be less cohesive, less expressive, with lower levels of independence among members, higher levels of control, and participated in fewer social and recreational activities. In particular, parenting factors have been shown to be related to the development of delinquent behaviours of adolescent offspring, including parental practices such as poor supervision, poor monitoring, extensive use of coercive discipline, and passive or neglectful parenting (for example, Bryan & Freed, 1982; Gorman-Smith et al., 1996; Loeber & Stouthamer-Loeber, 1986; Patterson et al., 1989; Scholte, 1999).

As has been noted previously, one aspect of family functioning that has received specific research attention is parental discipline style. Evidence shows that parental use of corporal and other punishment is significantly related to self-ratings of aggression (e.g. Bryan & Freed, 1982; Lefkowitz et al., 1978), while erratic or harsh discipline has been found to be related to juvenile delinquency and anti-social behaviour (e.g. Carlo et al., 1998; Loeber & Dishion, 1983; Rankin & Wells, 1990; Rutter & Giller, 1983). Further support for the role of parental discipline style in the development of self-reported delinquency is provided by the results of Study 1 and of Study 2 which indicated that adolescents' perceptions of the discipline style they experienced are related to their involvement in delinquent behaviours.

Given that parental styles have been shown to have a direct influence on adolescent delinquent behaviours, it is therefore possible that parental discipline styles will shape the perceptions that young people have of different behaviours.
Thus, the third aim of the present study was to explore whether adolescents’ and adults’ perceptions of various behaviours are linked to their family experiences. More specifically, the aim was to investigate whether adolescents’ and adults’ perceptions of the seriousness of behaviours are related to the discipline style they reportedly have experienced (adolescents) or used (adults).

**Hypothesis 4**

Given that:

(i) an inductive discipline style involves reasoning and discussion of consequences thereby fostering a positive and constructive relationship between parent and child (Balson, 1991; Hoffman & Saltzstein, 1967), while parental punitiveness involves physical punishment, and parental love-withdrawal involves non-physical expressions of anger and disapproval, both creating fear, discouragement and at times, further resistance (Balson, 1991; Hoffman & Saltzstein, 1967), and that

(ii) the discipline style experienced by young people is related to their involvement in delinquent behaviour, with punitive and love-withdrawal styles associated with self-reported delinquency (for example, Heaven & Virgen, 2001; Shaw and Scott, 1991; and the results of Study 1),

it is suggested that an inductive style of discipline, as compared with the punitive and love-withdrawal styles, would be most effective in developing adolescents’ sense of what is right and wrong, and consequently which behaviours are serious offences.
Thus, it was predicted that experience of a particular discipline style (adolescents) or use of a particular discipline style (adults) is related to perceptions of the seriousness of delinquent behaviours. More specifically,

(a) adolescents who have experienced a punitive or love-withdrawal discipline style (that is, physical or non-physical expressions of anger and disapproval) will perceive the more unacceptable behaviours as less serious compared to those who have experienced an inductive discipline style (that is, a style which involves discussion and reasoning and is not based on power-assertion), and similarly

(b) adults who have used a punitive or love-withdrawal discipline style will perceive the more unacceptable behaviours as less serious compared to those who have used an inductive discipline style.

4.4 Method

4.4.1 Respondents

The adolescent sample consisted of 321 high school students (45.5% male and 54.5% female), between 15 and 16 years of age (mean age = 15.1 years). The students came from six high schools (four government and two private) located in the Illawarra region (population about 280,000) of New South Wales, Australia. The adult sample consisted of 193 parents (19.7% male and 80.3% female), ranging in age from 32 to 74 years (mean age = 42.7 years).

Students were asked to provide information about the education and current occupation(s) of their parent(s). Similarly, adult respondents were asked for their own
education and current occupation, as well as that of their partner (if applicable). The occupations were categorised according to Daniel's (1983) prestige scale for Australian occupations, from high prestige (1.2) to low prestige (6.9).

Table 2 shows the occupational prestige of both parents of the adolescent sample. Although they are involved in a wide range of occupations, it is evident that the sample has a middle class bias.

Table 2  Parents’ occupational prestige of the adolescent sample

<table>
<thead>
<tr>
<th>Parents’ occupations*</th>
<th>Father (n = 294)</th>
<th>Mother (n = 275)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>1 - 1.9</td>
<td>1</td>
<td>0.3</td>
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<tr>
<td>2 - 2.9</td>
<td>22</td>
<td>6.9</td>
</tr>
<tr>
<td>3 - 3.9</td>
<td>88</td>
<td>27.4</td>
</tr>
<tr>
<td>4 - 4.9</td>
<td>105</td>
<td>32.7</td>
</tr>
<tr>
<td>5 - 5.9</td>
<td>52</td>
<td>16.2</td>
</tr>
<tr>
<td>6 - 6.9</td>
<td>16</td>
<td>5.0</td>
</tr>
<tr>
<td>Retired/unemployed</td>
<td>10</td>
<td>3.1</td>
</tr>
<tr>
<td>Housewife</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Unanswered</td>
<td>27</td>
<td>8.4</td>
</tr>
</tbody>
</table>

* Prestige categories (Daniel, 1983): 1-1.9 = e.g. judge, medical specialist; 2-2.9 = e.g. architect, accountant, solicitor; 3-3.9 = e.g. teacher, small businessperson, trained nurse, computer programmer, draftsperson; 4-4.9 = e.g. tradesperson, police constable, technician, caterer, industrial foreman; 5-5.9 = e.g. driver (taxi, bus), linesman, gardener, nurse aid, postal clerk, housewife; 6-6.9 = e.g. railway worker, factory worker, labourer, process worker.

Table 3 presents the occupational prestige of the adult sample. Again, while the adults are involved in a range of occupations, there is a middle class bias. It is not suggested that the sample is completely representative of the Australian population, however, it appears sufficiently heterogeneous for the purposes of this study.
Table 3 *Occupational prestige of the adult sample*

<table>
<thead>
<tr>
<th>Parents' occupations*</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 1.9</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>2 - 2.9</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>3 - 3.9</td>
<td>74</td>
<td>38.3</td>
</tr>
<tr>
<td>4 - 4.9</td>
<td>44</td>
<td>22.8</td>
</tr>
<tr>
<td>5 - 5.9</td>
<td>20</td>
<td>10.4</td>
</tr>
<tr>
<td>6 - 6.9</td>
<td>4</td>
<td>2.1</td>
</tr>
<tr>
<td>Retired/unemployed</td>
<td>5</td>
<td>2.6</td>
</tr>
<tr>
<td>Housewife</td>
<td>42</td>
<td>21.8</td>
</tr>
<tr>
<td>Unanswered</td>
<td>3</td>
<td>1.6</td>
</tr>
</tbody>
</table>

* Prestige categories (Daniel, 1983): 1-1.9 = e.g. judge, medical specialist; 2-2.9 = e.g. architect, accountant, solicitor; 3-3.9 = e.g. teacher, small businessperson, trained nurse, computer programmer, draftsperson; 4-4.9 = e.g. tradesperson, police constable, technician, caterer, industrial foreman; 5-5.9 = e.g. driver (taxi, bus), linesman, gardener, nurse aid, postal clerk, housewife; 6-6.9 = e.g. railway worker, factory worker, labourer, process worker.

4.4.2 Measures

Respondents were each provided with a test booklet containing the following measures (see Appendix F and Appendix G):

(i) *Perceived seriousness of delinquent behaviours*

Using the items of Mak’s (1993) Australian Self-Reported Delinquency Scale and two items from Gold’s (1970) Self-Reported Delinquency Scale, students were asked to rate the seriousness of each behaviour. Responses were indicated on a Likert scale where responses were coded 1 (“Not a serious offence”) to 5 (“A serious offence”). Students were randomly assigned to receive one of two forms of the booklet. In one form (*n* = 168) students were asked about these behaviours if committed by “boys of
your age”, while in the second form students \( n = 153 \) had to judge the behaviours as committed by “girls of your age”. (Appendix F contains the questionnaire as it relates to girls.)

Responses to both forms of the questionnaire were combined and subjected to a principal components analysis with oblimin rotation (that is, simplifying factors by minimising cross products of loadings; Tabachnick & Fidell, 1989). Five components with eigenvalues greater than unity were extracted, in total explaining 53% of the variance. The rotated factor loadings are shown in Table 4.

The first factor deals with **minor offences**, such as not paying the proper fee for activities or watching an R-rated (restricted) film. The second factor deals with **theft offences** (eg. shoplifting, break-and-enter with the intention of stealing something, etc.), while the third factor deals with **physical aggression** (eg. purposefully hurting someone, using a weapon, etc.). The fourth factor comprised items dealing with **driving offences**, while the fifth factor is a **vandalism** factor (eg. purposefully damaging others’ property). The first hypothesis was therefore supported for the student sample.

Parents similarly received one of two forms of the booklet. In one form they were asked whether or not they considered each behaviour as a serious offence for Year 10 boys to do \( n = 96 \), while in the second form they had to judge the behaviours as committed by Year 10 girls \( n = 97 \). (Appendix G contains the questionnaire as it relates to boys.)
Table 4  Rotated factor loadings for the perceived seriousness of behaviours

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How serious an offence for a boy/girl your age:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. - drive an unregistered car.</td>
<td>-.086</td>
<td>-.067</td>
<td>-.015</td>
<td>.709</td>
<td>-.207</td>
</tr>
<tr>
<td>2. - drive a car or a motor bike on the road without a licence.</td>
<td>.035</td>
<td>-.020</td>
<td>-.020</td>
<td>.738</td>
<td>.002</td>
</tr>
<tr>
<td>3. - driving a car or bike when drunk or over the legal alcohol limit.</td>
<td>-.120</td>
<td>.250</td>
<td>.186</td>
<td>.544</td>
<td>.268</td>
</tr>
<tr>
<td>4. - racing with other vehicles while driving a car or motor bike on the road.</td>
<td>0.079</td>
<td>0.068</td>
<td>0.132</td>
<td>0.556</td>
<td>0.050</td>
</tr>
<tr>
<td>5. - taking and driving a car or motor bike that belonged to someone else without the owner’s consent.</td>
<td>-.059</td>
<td>.470</td>
<td>-.012</td>
<td>.516</td>
<td>.229</td>
</tr>
<tr>
<td>6. - stealing things or parts out of a car or motor bike.</td>
<td>.086</td>
<td>.441</td>
<td>.211</td>
<td>.302</td>
<td>.295</td>
</tr>
<tr>
<td>7. - stealing a bicycle or parts from a bicycle.</td>
<td>.283</td>
<td>.422</td>
<td>.194</td>
<td>.131</td>
<td>.187</td>
</tr>
<tr>
<td>8. - going to see an R film in a cinema</td>
<td>.756</td>
<td>-.244</td>
<td>-.125</td>
<td>.111</td>
<td>.049</td>
</tr>
<tr>
<td>9. - buying beer, wine, spirits or other kinds of liquor.</td>
<td>.409</td>
<td>.092</td>
<td>-.092</td>
<td>.479</td>
<td>-.191</td>
</tr>
<tr>
<td>10. - drinking alcohol in a public place, eg. disco/pub/tavern/bistro.</td>
<td>-.353</td>
<td>.125</td>
<td>-.017</td>
<td>.454</td>
<td>-.132</td>
</tr>
<tr>
<td>11. - going onto a bus or into a cinema, swimming pool, disco, etc., without paying the proper fee.</td>
<td>.681</td>
<td>.098</td>
<td>.077</td>
<td>.039</td>
<td>.085</td>
</tr>
<tr>
<td>12. - not attending classes or wagging school.</td>
<td>.544</td>
<td>.052</td>
<td>.050</td>
<td>.145</td>
<td>-.089</td>
</tr>
<tr>
<td>13. - running away from home (at least overnight).</td>
<td>.516</td>
<td>.047</td>
<td>.027</td>
<td>-.031</td>
<td>.058</td>
</tr>
<tr>
<td>14. - shoplifting from supermarkets, department stores or shops.</td>
<td>.145</td>
<td>.663</td>
<td>-.002</td>
<td>.118</td>
<td>-.043</td>
</tr>
<tr>
<td>15. - stealing money of less than $10 (in one go) from shops, school, locker rooms, home, people’s milk money, etc.</td>
<td>.171</td>
<td>.740</td>
<td>-.060</td>
<td>.014</td>
<td>-.088</td>
</tr>
<tr>
<td>16. - stealing money of $10 or more in one go.</td>
<td>.066</td>
<td>.782</td>
<td>.013</td>
<td>-.120</td>
<td>-.164</td>
</tr>
<tr>
<td>17. - breaking into a house or building with the intention of stealing something, eg. money, exam papers or other things.</td>
<td>-.120</td>
<td>.763</td>
<td>.006</td>
<td>.111</td>
<td>.023</td>
</tr>
<tr>
<td>18. - cheating or stealing food, drinks, etc. from dispenser machines.</td>
<td>.714</td>
<td>.128</td>
<td>.005</td>
<td>-.057</td>
<td>-.124</td>
</tr>
<tr>
<td>19. - obtaining free games from coin-operated game machines.</td>
<td>.688</td>
<td>-.008</td>
<td>.036</td>
<td>-.152</td>
<td>-.132</td>
</tr>
<tr>
<td>20. - purposely messing up other people’s property.</td>
<td>.167</td>
<td>.379</td>
<td>.146</td>
<td>.021</td>
<td>-.322</td>
</tr>
</tbody>
</table>
Table 4 (continued)

21. -purposely damaging property by starting a fire.  
   .241 .401 .211 .159 -.295

22. -purposely damaging things in public places.  
   .005 .429 .180 .018 -.542

23. -purposely damaging school desks/windows/other school property.  
   .209 .164 .168 .141 -.522

24. -putting graffiti on walls/toilet doors/bus panels/public places.  
   .181 .130 .095 .110 -.572

25. -taking part in a fist fight in which a group of people was  
   against another group.  
   .254 -.323 .394 .292 -.235

26. -purposely hurting or beating up someone.  
   .054 -.060 .715 .009 -.208

27. -using a weapon of some sort, eg. knife, stick, bottle in a fight.  
   -.201 -.128 .741 .168 -.086

28. -using or threatening to use force to get money or things from  
   another person.  
   -.019 .086 .672 .068 -.253

29. -using marijuana (also called grass, dope, hash).  
   .488 -.027 -.013 .403 -.120

30. -using LSD (also called acid).  
   .352 .148 .112 .299 .043

31. -abusing barbiturates by not following proper medical advice.  
   .375 .180 .069 .241 .073

32. -forcing someone to do sexual things when they did not want to.  
   .003 .134 .611 -.104 .281

33. -tricking someone on the telephone eg. false restaurant booking.  
   .418 .122 .208 .019 -.129

34. -making abusive phone calls eg. saying nasty or obscene things.  
   .302 .163 .502 .045 .103

35. -hitting a teacher.  
   .194 -.029 .624 .026 .027

36. -going onto someone's land or into some house or building  
   when not supposed to be there.  
   .454 .189 .329 -.067 -.007

Alpha coefficient  
   .79 .83 .80 .76 .76

Eigenvalue  
   11.46 2.72 1.95 1.64 1.30

% variance accounted for  
   31.8 7.6 5.4 4.6 3.6

Note. Loading > 0.50 regarded as significant

Once again responses to both forms of the questionnaire were combined and subjected to a principal components analysis with oblimin rotation. Five components with eigenvalues greater than unity were extracted in total explaining 59% of the variance. The rotated factor loadings are shown in Table 5.
Table 5  Rotated factor loadings for the perceived seriousness of behaviours

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>1</td>
</tr>
<tr>
<td>1. -drive an unregistered car.</td>
<td>-.246</td>
</tr>
<tr>
<td>2. -drive a car or a motor bike on the road without a licence.</td>
<td>-.159</td>
</tr>
<tr>
<td>3. -driving a car or bike when drunk or over the legal alcohol limit.</td>
<td>.018</td>
</tr>
<tr>
<td>4. -racing with other vehicles while driving a car or motor bike on the road.</td>
<td>-.156</td>
</tr>
<tr>
<td>5. -taking and driving a car or motor bike that belonged to someone else without the owner’s consent.</td>
<td>.161</td>
</tr>
<tr>
<td>6. -stealing things or parts out of a car or motor bike.</td>
<td>.603</td>
</tr>
<tr>
<td>7. -stealing a bicycle or parts from a bicycle.</td>
<td>.524</td>
</tr>
<tr>
<td>8. -going to see an R film in a cinema.</td>
<td>-.124</td>
</tr>
<tr>
<td>9. -buying beer, wine, spirits or other kinds of liquor.</td>
<td>.105</td>
</tr>
<tr>
<td>10. -drinking alcohol in a public place, eg. disco/pub/tavern/bistro.</td>
<td>.174</td>
</tr>
<tr>
<td>11. -going onto a bus or into a cinema, swimming pool, disco, etc., without paying the proper fee.</td>
<td>.038</td>
</tr>
<tr>
<td>12. -not attending classes or wagging school.</td>
<td>.143</td>
</tr>
<tr>
<td>13. -running away from home (at least overnight).</td>
<td>.117</td>
</tr>
<tr>
<td>14. -shoplifting from supermarkets, department stores or shops.</td>
<td>.315</td>
</tr>
<tr>
<td>15. -stealing money of less than $10 (in one go) from shops, school, locker rooms, home, people’s milk money, etc.</td>
<td>.457</td>
</tr>
<tr>
<td>16. -stealing money of $10 or more in one go.</td>
<td>.478</td>
</tr>
<tr>
<td>17. -breaking into a house or building with the intention of stealing something, eg. money, exam papers or other things.</td>
<td>.115</td>
</tr>
<tr>
<td>18. -cheating or stealing food, drinks, etc. from dispenser machines.</td>
<td>.035</td>
</tr>
<tr>
<td>19. -obtaining free games from coin-operated game machines.</td>
<td>.180</td>
</tr>
<tr>
<td>20. -purposely messing up other people’s property.</td>
<td>.106</td>
</tr>
</tbody>
</table>
### Table 5 (continued)

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>21.</td>
<td>purposely damaging property by starting a fire.</td>
<td>.441</td>
<td>.025</td>
<td>-.391</td>
</tr>
<tr>
<td>22.</td>
<td>purposely damaging things in public places.</td>
<td>.278</td>
<td>.175</td>
<td>-.537</td>
</tr>
<tr>
<td>23.</td>
<td>purposely damaging school desks/windows/other school property.</td>
<td>.172</td>
<td>.324</td>
<td>-.415</td>
</tr>
<tr>
<td>24.</td>
<td>putting graffiti on walls/toilet doors/bus panels/public places.</td>
<td>.043</td>
<td>.579</td>
<td>-.197</td>
</tr>
<tr>
<td>25.</td>
<td>taking part in a fist fight in which a group of people was against another group.</td>
<td>.119</td>
<td>.601</td>
<td>-.156</td>
</tr>
<tr>
<td>26.</td>
<td>purposely hurting or beating up someone.</td>
<td>.258</td>
<td>.217</td>
<td>.086</td>
</tr>
<tr>
<td>27.</td>
<td>using a weapon of some sort, eg. knife, stick, bottle in a fight another person.</td>
<td>.294</td>
<td>-.002</td>
<td>-.074</td>
</tr>
<tr>
<td>28.</td>
<td>using or threatening to use force to get money or things from another person.</td>
<td>.230</td>
<td>-.038</td>
<td>.029</td>
</tr>
<tr>
<td>29.</td>
<td>using marijuana (also called grass, dope, hash).</td>
<td>-.040</td>
<td>.356</td>
<td>.029</td>
</tr>
<tr>
<td>30.</td>
<td>using LSD (also called acid).</td>
<td>-.119</td>
<td>.038</td>
<td>-.058</td>
</tr>
<tr>
<td>31.</td>
<td>abusing barbiturates by not following proper medical advice.</td>
<td>-.206</td>
<td>-.067</td>
<td>-.023</td>
</tr>
<tr>
<td>32.</td>
<td>forcing someone to do sexual things when they did not want to.</td>
<td>.025</td>
<td>-.138</td>
<td>-.113</td>
</tr>
<tr>
<td>33.</td>
<td>tricking someone on the telephone eg. false restaurant booking.</td>
<td>.129</td>
<td>.401</td>
<td>.025</td>
</tr>
<tr>
<td>34.</td>
<td>making abusive phone calls eg. saying nasty or obscene things.</td>
<td>.363</td>
<td>.182</td>
<td>.066</td>
</tr>
<tr>
<td>35.</td>
<td>hitting a teacher.</td>
<td>.370</td>
<td>.212</td>
<td>.109</td>
</tr>
<tr>
<td>36.</td>
<td>going onto someone’s land or into some house or building when not supposed to be there.</td>
<td>-.009</td>
<td>.587</td>
<td>.066</td>
</tr>
</tbody>
</table>

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha coefficient</td>
<td>.82</td>
<td>.86</td>
<td>.86</td>
<td>.84</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>13.90</td>
<td>2.66</td>
<td>1.95</td>
<td>1.56</td>
</tr>
<tr>
<td>% variance accounted for</td>
<td>38.6</td>
<td>7.4</td>
<td>5.4</td>
<td>4.3</td>
</tr>
</tbody>
</table>

Note. Loading > 0.50 regarded as significant

The first factor deals with **vehicle theft offences** (e.g. stealing parts of a car/motorbike/bicycle). The second factor deals with **minor offences** such as not paying the proper fee for activities or watching an R-rated (restricted) film, while the third factor...
comprised items dealing with driving offences (e.g. drink-driving) and theft (e.g. breaking into a house to steal). The fourth factor deals with alcohol offences (e.g. buying beer, wine, spirits or other liquor), while the fifth factor comprises items dealing with physical aggression (e.g. purposely hurting or beating someone up) and drug offences (e.g. using LSD). The first hypothesis was therefore supported for the adult sample.

Comparison between student and parent factors

The student and parent factors are similar in two factors, namely, perceived seriousness of minor offences and perceived seriousness of physical aggression. There is overlap of two student factors (namely, perceived seriousness of theft offences and perceived seriousness of driving offences) with one parent factor (namely, perceived seriousness of driving offences and theft). They differ in that students have a factor dealing with perceived seriousness of vandalism, while parents have factors dealing with perceived seriousness of vehicle theft and perceived seriousness of alcohol offences. Noticeable is the lack of a student factor involving drug offences. This is a result of having chosen the five-factor solution as compared with the six-factor solution which did include a factor dealing with drug offences. The reasons for opting for the five-factor solution were that it was a “tidier solution”, and easier to interpret. Given that the student and parent factors differ considerably, further statistical comparisons could not be made.
(ii) Parental discipline style (Shaw and Scott, 1991)

This is the same measure used in the previous studies. On the present occasion, alpha coefficients for the student sample were parental punitiveness = 0.88, parental love-withdrawal = 0.77 (after removal of question 2.d), and parental induction = 0.83. For the parent sample the questionnaire was modified slightly by asking them for their perceptions of the type of disciplinary techniques they had used. Alpha coefficients for the three discipline styles were parental punitiveness = 0.75, parental love-withdrawal = 0.67 (after removal of question 2.d), and parental induction = 0.78.

(iii) Social Desirability Scale (Hays, Hayashi and Stewart, 1989)

This five-item scale measures the tendency to fake good. Fifteen student respondents and 16 adult respondents with social desirability scores in the top 5% of the respective samples were omitted from analysis.

4.4.3 Procedure

Students were invited to participate in a study of perceptions of various behaviours engaged in by young people as well as their perceptions of some aspects of family life (see Appendix H for student and parent consent forms). Once parental and student consent had been obtained, the questionnaire was administered during school hours by the researcher. Students were assured of anonymity and confidentiality and that the information would be used for research purposes only. The questionnaire took between 20 and 40 minutes to complete.
At the initial student visit, students were also given a sealed envelope for their parent/guardian inviting them to participate in the research, independent of their child’s/ward’s participation (see Appendix I for consent form). They were assured of anonymity and confidentiality and that the information would be used for research purposes only. They were also provided with a pre-stamped envelope in which to return their completed questionnaire to the researcher.

4.5 Results

4.5.1 Descriptive Statistics

(i) Means and standard deviations on the perceived seriousness factors for students

Table 6 presents the means and standard deviations on the perceived seriousness factors for female and male students as they responded to the behaviours being conducted by boys and by girls.

In order to determine whether the sex of the respondent and sex of the target had a significant effect on the perceptions of seriousness of the behaviours, a 2 x 2 MANOVA was conducted on the factor scores. Wilks' criterion showed that perceptions of seriousness were significantly affected by the sex of respondent (Wilks’ Lambda = .906, $F(5, 284) = 5.912, p < .001$). Univariate analyses showed that females perceived physical aggression as significantly more serious than did males, $F(1, 288) = 14.868, p < .001$. This provides support for the second hypothesis.
Table 6  Mean scores and standard deviations on perceived seriousness factors for female and male student respondents as they relate to female and male targets.

<table>
<thead>
<tr>
<th>Perceived seriousness factors</th>
<th>FEMALES</th>
<th>MALES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TARGET</td>
<td>Univariate F values</td>
</tr>
<tr>
<td></td>
<td>Boys</td>
<td>M</td>
</tr>
<tr>
<td>Minor offences (range: 6-30)</td>
<td>Girls</td>
<td>12.71</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11.91</td>
</tr>
<tr>
<td>Theft (range: 4-20)</td>
<td></td>
<td>15.80</td>
</tr>
<tr>
<td>Physical aggression (range: 6-30)</td>
<td></td>
<td>24.87</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15.04</td>
</tr>
<tr>
<td>Driving offences (range: 5-25)</td>
<td></td>
<td>18.85</td>
</tr>
<tr>
<td>Vandalism (range: 3-15)</td>
<td></td>
<td>9.96</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .001

Wilks’ criterion also showed that perceptions of the seriousness of minor offences (factor 1) was significantly affected by the sex of target (Wilks’ Lambda = .949, F(5, 284) = 3.070, p < .05). That is, minor offences were rated as more serious when conducted by girls than by boys, F(1, 288) = 4.494, p < .05. This lends some support to the third hypothesis. There were no other significant main effects or interactions.
(ii) Means and standard deviations on the perceived seriousness factors for parents

Table 7 presents the means and standard deviations on the perceived seriousness factors for female and male parents as they responded to the behaviours being conducted by boys and girls. In order to determine whether the sex of the respondent and sex of the target had a significant effect on the perceptions of seriousness, a 2 x 2 MANOVA was conducted on the factor scores. No significant main effect was found for the sex of respondent (Wilks' Lambda = .980, $F(5, 148) = .611, p > .05$). Thus, the second hypothesis was not supported in the adult sample. Furthermore, no significant main effect was found for the sex of target (Wilks' Lambda = .997, $F(5, 148) = .078, p > .05$), thereby not providing support for the third hypothesis in the adult sample. There were no significant interactions.

Table 7 Mean scores and standard deviations on perceived seriousness factors for female and male parent respondents as they relate to female and male targets.

<table>
<thead>
<tr>
<th></th>
<th>FEMALES</th>
<th></th>
<th>MALES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TARGET</td>
<td></td>
<td>TARGET</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>Perceived seriousness factors</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Vehicle theft</td>
<td>9.24</td>
<td>1.42</td>
<td>9.37</td>
<td>1.32</td>
</tr>
<tr>
<td>(range: 2 – 10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minor offences</td>
<td>30.59</td>
<td>7.78</td>
<td>30.99</td>
<td>6.12</td>
</tr>
<tr>
<td>(range: 9 – 45)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driving &amp; theft offences</td>
<td>18.48</td>
<td>3.24</td>
<td>19.20</td>
<td>2.19</td>
</tr>
<tr>
<td>(range: 5 – 25)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol offences</td>
<td>8.18</td>
<td>2.01</td>
<td>8.17</td>
<td>1.81</td>
</tr>
<tr>
<td>(range: 2- 10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical aggression &amp; drug offences</td>
<td>37.70</td>
<td>3.32</td>
<td>37.74</td>
<td>4.25</td>
</tr>
<tr>
<td>(range: 8 – 40)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(iii) *Comparison between students and parents on the perceived seriousness items*

From Table 8 it is evident that parents consider all the behaviours as significantly more serious than students.

### Table 8 Mean scores and standard deviations on the perceived seriousness of behaviours items for students and parents

<table>
<thead>
<tr>
<th>Item</th>
<th>Students</th>
<th>Parents</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student - How serious an offence for a boy/girl your age:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- drive an unregistered car.</td>
<td>M = 3.41</td>
<td>M = 4.42</td>
<td>9.757*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.23</td>
<td>SD = 1.04</td>
<td></td>
</tr>
<tr>
<td>- drive a car or a motor bike on the road without a licence.</td>
<td>M = 3.60</td>
<td>M = 4.57</td>
<td>10.127*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.23</td>
<td>SD = 0.90</td>
<td></td>
</tr>
<tr>
<td>- driving a car or bike when drunk or over the legal alcohol limit.</td>
<td>M = 4.35</td>
<td>M = 4.85</td>
<td>6.059*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.17</td>
<td>SD = 0.69</td>
<td></td>
</tr>
<tr>
<td>- racing with other vehicles while driving a car or motor bike on the road.</td>
<td>M = 3.53</td>
<td>M = 4.71</td>
<td>13.404*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.27</td>
<td>SD = 0.70</td>
<td></td>
</tr>
<tr>
<td>- taking and driving a car or motor bike that belonged to someone else without the owner's consent.</td>
<td>M = 4.07</td>
<td>M = 4.76</td>
<td>8.291*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.20</td>
<td>SD = 0.67</td>
<td></td>
</tr>
<tr>
<td>- stealing things or parts out of a car or motor bike.</td>
<td>M = 3.88</td>
<td>M = 4.76</td>
<td>10.899*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.20</td>
<td>SD = 0.61</td>
<td></td>
</tr>
<tr>
<td>- stealing a bicycle or parts from a bicycle.</td>
<td>M = 3.42</td>
<td>M = 4.55</td>
<td>11.785*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.28</td>
<td>SD = 0.86</td>
<td></td>
</tr>
<tr>
<td>- going to see an R film in a cinema.</td>
<td>M = 1.71</td>
<td>M = 2.44</td>
<td>6.358*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.10</td>
<td>SD = 1.27</td>
<td></td>
</tr>
<tr>
<td>- drinking beer, wine, spirits or other kinds of liquor.</td>
<td>M = 2.88</td>
<td>M = 4.04</td>
<td>10.512*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.37</td>
<td>SD = 1.06</td>
<td></td>
</tr>
<tr>
<td>- going onto a bus or into a cinema, swimming pool, disco, etc., without paying the proper fee.</td>
<td>M = 2.85</td>
<td>M = 4.05</td>
<td>10.924*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.35</td>
<td>SD = 1.05</td>
<td></td>
</tr>
<tr>
<td>- not attending classes or wagging school.</td>
<td>M = 2.19</td>
<td>M = 2.91</td>
<td>6.339*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.12</td>
<td>SD = 1.22</td>
<td></td>
</tr>
<tr>
<td>- running away from home (at least overnight).</td>
<td>M = 2.37</td>
<td>M = 3.20</td>
<td>7.104*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.20</td>
<td>SD = 1.24</td>
<td></td>
</tr>
<tr>
<td>- shoplifting from supermarkets, department stores or shops.</td>
<td>M = 2.18</td>
<td>M = 3.14</td>
<td>7.981*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.20</td>
<td>SD = 1.30</td>
<td></td>
</tr>
<tr>
<td>- stealing money of less than $10 (in one go) from shops, school, locker rooms, home, people's milk money, etc.</td>
<td>M = 3.76</td>
<td>M = 4.58</td>
<td>9.005*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.20</td>
<td>SD = 0.83</td>
<td></td>
</tr>
<tr>
<td>- stealing money of $10 or more in one go.</td>
<td>M = 3.47</td>
<td>M = 4.32</td>
<td>9.477*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.16</td>
<td>SD = 0.91</td>
<td></td>
</tr>
<tr>
<td>- breaking into a house or building with the intention of stealing something, eg. money, exam papers or other things.</td>
<td>M = 3.88</td>
<td>M = 4.53</td>
<td>7.461*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.17</td>
<td>SD = 0.77</td>
<td></td>
</tr>
<tr>
<td>- cheating or stealing food, drinks, etc. from dispenser machines.</td>
<td>M = 4.34</td>
<td>M = 4.77</td>
<td>5.137*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.13</td>
<td>SD = 0.75</td>
<td></td>
</tr>
<tr>
<td>- obtaining free games from coin-operated game machines.</td>
<td>M = 2.03</td>
<td>M = 2.72</td>
<td>6.145*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.12</td>
<td>SD = 1.13</td>
<td></td>
</tr>
<tr>
<td>- purposely messing up other people's property.</td>
<td>M = 3.24</td>
<td>M = 3.97</td>
<td>6.893*</td>
</tr>
<tr>
<td></td>
<td>SD = 1.22</td>
<td>SD = 1.07</td>
<td></td>
</tr>
<tr>
<td>- purposely damaging property by starting a fire.</td>
<td>M = 4.37</td>
<td>M = 4.83</td>
<td>6.407*</td>
</tr>
<tr>
<td></td>
<td>SD = 0.96</td>
<td>SD = 0.65</td>
<td></td>
</tr>
</tbody>
</table>
### Table 8 (continued)

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>-purposely damaging things in public places.</td>
<td>3.83</td>
<td>1.14</td>
<td>4.78</td>
<td>0.54</td>
</tr>
<tr>
<td>23</td>
<td>-purposely damaging school desks/windows/other school property.</td>
<td>3.21</td>
<td>1.23</td>
<td>4.63</td>
<td>0.73</td>
</tr>
<tr>
<td>24</td>
<td>-putting graffiti on walls/toilet doors/bus panels/public places.</td>
<td>3.04</td>
<td>1.25</td>
<td>4.12</td>
<td>0.98</td>
</tr>
<tr>
<td>25</td>
<td>-taking part in a fist fight in which a group of people was against another group.</td>
<td>2.74</td>
<td>1.26</td>
<td>3.98</td>
<td>1.10</td>
</tr>
<tr>
<td>26</td>
<td>-purposely hurting or beating up someone.</td>
<td>3.63</td>
<td>1.22</td>
<td>4.78</td>
<td>0.63</td>
</tr>
<tr>
<td>27</td>
<td>-using a weapon of some sort, eg. knife, stick, bottle in a fight</td>
<td>4.35</td>
<td>1.02</td>
<td>4.86</td>
<td>0.56</td>
</tr>
<tr>
<td>28</td>
<td>-using or threatening to use force to get money or things from another person.</td>
<td>3.94</td>
<td>1.09</td>
<td>4.78</td>
<td>0.63</td>
</tr>
<tr>
<td>29</td>
<td>-using marijuana (also called grass, dope, hash).</td>
<td>2.75</td>
<td>1.44</td>
<td>4.02</td>
<td>1.14</td>
</tr>
<tr>
<td>30</td>
<td>-using LSD (also called acid).</td>
<td>3.66</td>
<td>1.31</td>
<td>4.73</td>
<td>0.69</td>
</tr>
<tr>
<td>31</td>
<td>-abusing barbiturates by not following proper medical advice.</td>
<td>3.38</td>
<td>1.22</td>
<td>4.43</td>
<td>0.94</td>
</tr>
<tr>
<td>32</td>
<td>-forcing someone to do sexual things when they did not want to.</td>
<td>4.34</td>
<td>1.17</td>
<td>4.83</td>
<td>0.56</td>
</tr>
<tr>
<td>33</td>
<td>-tricking someone on the telephone eg. false restaurant booking.</td>
<td>2.78</td>
<td>1.37</td>
<td>3.93</td>
<td>1.10</td>
</tr>
<tr>
<td>34</td>
<td>-making abusive phone calls eg. saying nasty or obscene things.</td>
<td>3.24</td>
<td>1.21</td>
<td>4.13</td>
<td>0.91</td>
</tr>
<tr>
<td>35</td>
<td>-hitting a teacher.</td>
<td>3.70</td>
<td>1.30</td>
<td>4.71</td>
<td>0.62</td>
</tr>
<tr>
<td>36</td>
<td>-going onto someone’s land or into some house or building when not supposed to be there.</td>
<td>3.00</td>
<td>1.24</td>
<td>3.88</td>
<td>1.04</td>
</tr>
</tbody>
</table>

Note: High scores indicate perceptions of greater seriousness.
* p < 0.001

(iv) Means and standard deviations on the discipline style measures for students

Table 9 presents the means and standard deviations on the discipline style measures for female and male students. In order to test for significant gender differences in perceptions, a one-way MANOVA was conducted with sex of respondent as the independent variable. Wilk’s criterion indicated no significant differences between male and female respondents in their perceptions of the parental discipline style experienced (Wilks’ Lambda = .977, $F (3, 265) = 2.081, p > .05$).
(v) Means and standard deviations on the discipline style measures for parents

Table 10 presents the means and standard deviations on the discipline style measures for female and male parents. In order to test for significant gender differences in alleged use of these styles, a one-way MANOVA was conducted with sex of respondent as the independent variable. Wilk's criterion indicated no significant differences between male and female respondents in their use of discipline style (Wilk's Lambda = .959, $F(3, 146) = 2.099$, $p > .05$).

Table 9  Mean scores and standard deviations on parent discipline style measures for female and male students

<table>
<thead>
<tr>
<th>Measures</th>
<th>Females M</th>
<th>S.D.</th>
<th>Males M</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punitive (range: 18 – 72)</td>
<td>43.62</td>
<td>10.95</td>
<td>42.03</td>
<td>9.85</td>
</tr>
<tr>
<td>Love-withdrawal (range: 9 – 36)</td>
<td>16.85</td>
<td>5.27</td>
<td>15.70</td>
<td>4.80</td>
</tr>
<tr>
<td>Inductive (range: 10 – 40)</td>
<td>29.38</td>
<td>6.35</td>
<td>28.40</td>
<td>6.43</td>
</tr>
</tbody>
</table>

Table 10  Mean scores and standard deviations on parent discipline style measures for female and male parents

<table>
<thead>
<tr>
<th>Measures</th>
<th>Females M</th>
<th>S.D.</th>
<th>Males M</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punitive (range: 18 – 72)</td>
<td>22.78</td>
<td>5.01</td>
<td>22.06</td>
<td>5.15</td>
</tr>
<tr>
<td>Love-withdrawal (range: 9 – 36)</td>
<td>15.53</td>
<td>3.65</td>
<td>16.38</td>
<td>3.92</td>
</tr>
<tr>
<td>Inductive (range: 10 – 40)</td>
<td>35.72</td>
<td>3.87</td>
<td>35.27</td>
<td>3.73</td>
</tr>
</tbody>
</table>
(vi) Comparison between students and parents on the discipline style measures

In comparing the mean perceived discipline style scores for students (Table 9) and parents (Table 10), a striking difference is evident in their perceptions of punitiveness. Students report having experienced a much higher level of punitiveness than parents report having used (students: $M_{females} = 43.62$, $SD = 10.95$; $M_{males} = 42.03$, $SD = 9.85$ compared with parents: $M_{females} = 22.78$, $SD = 5.01$; $M_{males} = 22.06$, $SD = 5.15$). Furthermore, while not as large a difference, it is evident that parents tended to report having used a higher level of induction than students report having experienced (parents: $M_{females} = 35.72$, $SD = 3.87$; $M_{males} = 35.27$, $SD = 3.73$ compared with students: $M_{females} = 29.38$, $SD = 6.35$; $M_{males} = 28.40$, $SD = 6.43$). These results would suggest that parents' perceptions of their disciplining is more favourable than that of their children, consistent with Garbarino and Guttman (1986).

4.5.2(i) Correlational analyses for the student sample

Pearson correlations are presented for the male student sample in Table 11. Among male students, those who experienced parental love-withdrawal were less likely to view vandalism (factor 5) among girls as serious. An experience of parental induction was significantly related to a greater perceived seriousness of physical aggression (factor 3) when conducted by girls, and significantly related to a greater perceived seriousness of driving offences (factor 4) when the behaviours were conducted by both boys and girls. Pearson correlations for the female student sample are presented in Table 12. Among female students parental induction was significantly related to a greater perceived
seriousness of theft (factor 2) and a greater perceived seriousness of physical aggression (factor 3) when conducted by girls. These results provide support for the fourth and fifth hypotheses.

4.5.2(ii) Correlational analyses for the parent sample

Pearson correlations are presented for the male adult sample in Table 13. Among male parents the punitive discipline style was significantly related to a lower perceived seriousness of alcohol offences (factor 4) when the behaviours were conducted by girls. Pearson correlations for the female adult sample are presented in Table 14. Among female parents the punitive discipline style was significantly related to a lower perceived seriousness of vehicle theft (factor 1), a lower perceived seriousness of driving and theft offences (factor 3), and a lower perceived seriousness of physical aggression and drug offences (factor 5) when conducted by boys. Love-withdrawal was significantly related to a lower perceived seriousness of driving and theft offences (factor 3) when conducted by girls. These results provide support for the fourth and fifth hypotheses.

4.5.3 Multiple Regression Analyses

(i) Student sample

In order to investigate the links between students' perceptions of the seriousness of the behaviours and their perceptions of the parental discipline style they reportedly experienced, multiple regression analyses were conducted. Separate hierarchical
Table 11  *Correlations between discipline style and perceived seriousness factors for adolescent male respondents*

<table>
<thead>
<tr>
<th>Perceived seriousness Factors</th>
<th>Punitive Discipline Style</th>
<th>Love-withdrawal Discipline Style</th>
<th>Inductive Discipline Style</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Boys</td>
</tr>
<tr>
<td>F.1 – minor offences</td>
<td>0.16</td>
<td>-0.13</td>
<td>0.12</td>
</tr>
<tr>
<td>F.2 – theft</td>
<td>0.08</td>
<td>-0.06</td>
<td>0.10</td>
</tr>
<tr>
<td>F.3 – physical aggression</td>
<td>0.03</td>
<td>-0.14</td>
<td>-0.14</td>
</tr>
<tr>
<td>F.4 – driving offences</td>
<td>-0.04</td>
<td>-0.03</td>
<td>-0.01</td>
</tr>
<tr>
<td>F.5 – vandalism</td>
<td>-0.01</td>
<td>-0.16</td>
<td>-0.13</td>
</tr>
</tbody>
</table>

*p<0.05; **p<0.01*
<table>
<thead>
<tr>
<th>Perceived seriousness Factors</th>
<th>Punitive Discipline Style</th>
<th>Love-withdrawal Discipline Style</th>
<th>Inductive Discipline Style</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Boys</td>
</tr>
<tr>
<td>F.1 – minor offences</td>
<td>-0.10</td>
<td>-0.00</td>
<td>-0.06</td>
</tr>
<tr>
<td>F.2 – theft</td>
<td>-0.06</td>
<td>1.65</td>
<td>-0.08</td>
</tr>
<tr>
<td>F.3 – physical aggression</td>
<td>-0.18</td>
<td>0.07</td>
<td>0.06</td>
</tr>
<tr>
<td>F.4 – driving offences</td>
<td>-0.04</td>
<td>0.03</td>
<td>-0.07</td>
</tr>
<tr>
<td>F.5 – vandalism</td>
<td>-0.05</td>
<td>0.02</td>
<td>0.01</td>
</tr>
</tbody>
</table>

*p<0.05; **p<0.01
Table 13 Correlations between discipline style and perceived seriousness factors for adult male respondents

<table>
<thead>
<tr>
<th>Perceived seriousness Factors</th>
<th>Punitive Discipline Style</th>
<th>Love-withdrawal Discipline Style</th>
<th>Inductive Discipline Style</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Boys</td>
</tr>
<tr>
<td>F.1 – vehicle theft</td>
<td>-0.32</td>
<td>-0.54</td>
<td>0.11</td>
</tr>
<tr>
<td>F.2 – minor offences</td>
<td>0.12</td>
<td>0.69</td>
<td>0.28</td>
</tr>
<tr>
<td>F.3 – driving and theft</td>
<td>-0.28</td>
<td>-0.10</td>
<td>0.05</td>
</tr>
<tr>
<td>F.4 – alcohol offences</td>
<td>0.23</td>
<td>-0.68*</td>
<td>0.39</td>
</tr>
<tr>
<td>F.5 – physical aggression</td>
<td>-0.02</td>
<td>-0.34</td>
<td>0.09</td>
</tr>
<tr>
<td>and drug offences</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05; **p<0.01
Table 14 *Correlations between discipline style and perceived seriousness factors for adult female respondents*

<table>
<thead>
<tr>
<th>Perceived seriousness Factors</th>
<th>Punitive Discipline Style</th>
<th>Love-withdrawal Discipline Style</th>
<th>Inductive Discipline Style</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Boys</td>
</tr>
<tr>
<td>F.1 – vehicle theft</td>
<td>-0.37**</td>
<td>0.05</td>
<td>-0.21</td>
</tr>
<tr>
<td>F.2 – minor offences</td>
<td>-0.25</td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td>F.3 – driving and theft</td>
<td>-0.35*</td>
<td>0.10</td>
<td>-0.22</td>
</tr>
<tr>
<td>F.4 – alcohol offences</td>
<td>-0.23</td>
<td>0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>F.5 – physical aggression</td>
<td>-0.31*</td>
<td>-0.02</td>
<td>-0.08</td>
</tr>
</tbody>
</table>

*p<0.05; **p<0.01
regression analyses with sets of independent variables (Cohen & Cohen, 1983) were conducted for males and females. The assumptions underlying the use of regression were examined and met, namely, having the appropriate ratio of cases to independent variables (44:1 for the male sample and 37:1 for the female sample). In addition, the assumptions regarding multicollinearity and singularity, and skewness and kurtosis were also met.

The perceptions of delinquent behaviours were each regressed on the sex of target (in block one) as well as the discipline style measures (in block two) using the entry method. Table 15 presents the main significant results for male students. Four regression models were found to be significant for the male respondents (perceived seriousness of minor offences, perceived seriousness of theft, perceived seriousness of physical aggression, and perceived seriousness of driving offences). One model approached significance for the female respondents (perceived seriousness of theft: $F(2,144) = 2.881, p = .059$). Thus, the fifth hypothesis was partially supported.

Sex of target was the only significant predictor of perceived seriousness of minor offences for boys: minor offences were perceived as more serious when conducted by girls than by boys. Inductive discipline style was a significant predictor of perceived seriousness of theft for boys as well as a significant predictor of perceived seriousness of physical aggression and perceived seriousness of driving offences. Thus, male students who had experienced an inductive style were more likely to rate these behaviours as serious. In addition, love withdrawal was also a significant predictor of perceived seriousness of physical aggression among boys. It was found that male students who had experienced love-withdrawal were less likely to view physical
aggression as a serious offence. In all instances, the percentage of variance explained by the predictors was small, suggesting that other factors are also implicated in shaping adolescent perceptions of behaviours.

Table 15  *Multiple regression analyses for male students*

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Predictors</th>
<th>B</th>
<th>$R^2$</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived seriousness of minor offences $^a$</td>
<td>Target sex</td>
<td>.208</td>
<td>.043</td>
<td>2.262*</td>
</tr>
<tr>
<td>Perceived seriousness of theft $^b$</td>
<td>Inductive discipline</td>
<td>.243</td>
<td>.059</td>
<td>2.685**</td>
</tr>
<tr>
<td>Perceived seriousness of physical aggression $^c$</td>
<td>Inductive discipline</td>
<td>.246</td>
<td>.056</td>
<td>2.715**</td>
</tr>
<tr>
<td>Perceived seriousness of driving offences $^d$</td>
<td>Love-withdrawal</td>
<td>-.186</td>
<td>.090</td>
<td>-2.056*</td>
</tr>
<tr>
<td></td>
<td>Inductive discipline</td>
<td>.286</td>
<td>.082</td>
<td>3.173**</td>
</tr>
</tbody>
</table>

*a Overall model significant: $F(1,113) = 5.116, \ p < .05.$

*b Overall model significant: $F(1,115) = 7.207, \ p < .01.$

*c Overall model significant: $F(2,111) = 5.521, \ p < .01.$

*d Overall model significant: $F(1,113) = 10.066, \ p < .01.$

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

(ii) Parent sample

In order to investigate the links between adults' perceptions of the seriousness of the behaviours and their perceptions of the parental discipline style they use, multiple regression analyses were conducted. Hierarchical regression analyses with sets of independent variables (Cohen & Cohen, 1983) were conducted for the total sample given the sex disparity (83% of the sample was female). The assumptions
underlying the use of regression were examined and met, namely, having the appropriate ratio of cases to independent variables (48:1 for the total sample). In addition, the assumptions regarding multicollinearity and singularity were also met.

The perceptions of delinquent behaviours were each regressed on the sex of target (in block one) as well as the discipline style measures (in block two) using the entry method. One regression model was found to be significant (perceived seriousness of driving and theft offences: $F(2,138) = 3.668, p < .05$). A punitive discipline style was the best predictor of perceived seriousness of driving and theft offences ($R^2 = .05, B = -.188, t = -2.267, p < .05$). Thus, those parents who reported that they had used a punitive discipline style were less likely to rate these behaviours as serious. This provides some support for the fifth hypothesis.

4.6. Discussion

This discussion will focus on (1) the theoretical implications of the third study, (2) implications of the findings for clinical interventions, and (3) directions for further research.

4.6.1. General findings and theoretical implications

The aim of this study was to examine both adolescents' and adults' perceptions of the seriousness of "delinquent" behaviours and to determine whether the perceived seriousness of behaviours varies depending on who (boy or girl) is engaging in the behaviour. The present study also aimed to explore whether perceptions that
adolescents and parents have of different behaviours are linked to their family experiences; more specifically, whether adolescents’ experience of and adults’ use of a particular discipline style is related to their perceptions of the seriousness of behaviours.

(i) General findings relating to the student sample

Consistent with previous research (eg. Tyson & Hubert, 1998; O’Connell & Whelan, 1996), adolescent perceptions of delinquent behaviours are multi-dimensional with certain groups of behaviours being perceived as more serious than others. As predicted, a significant difference was found between boys and girls in their perceptions of the seriousness of physical aggression, with females perceiving physical aggression more seriously than boys, lending support to Gebotys et al. (1988). Furthermore, minor offences were rated as significantly more serious when conducted by girls than by boys.

An important contribution of the present study is the demonstration that perceptions of parental discipline styles are related to adolescents’ views about the seriousness of a range of different behaviours. In particular, experience of an inductive style was found to predict several groups of perceptions among males (eg perceived seriousness of minor offences, perceived seriousness of theft, perceived seriousness of physical aggression, and perceived seriousness of driving offences), and approached significance in predicting perceived seriousness of theft among females. Thus, inductiveness appears to be particularly important in shielding boys from the idea that participating in a variety of deviant behaviours may be attractive. These results are in line with those reports that suggest that democratic child-rearing practices promote psychological well-being in young people (eg. Lamborn, Mounts, Steinburg & Dornbusch, 1991).
These data suggest that the experience of certain types of discipline style shapes the way that young people think about various behaviours. This is not surprising, given that "the family is, after all, the principal context in which human development takes place" (Bartol & Bartol, 1998). These findings fit with research that indicates that family functioning and parenting affect adolescent adjustment (e.g. review by Heaven, 1994b; Scott & Scott, 1987, 1998). In the present study, those adolescents who experienced an inductive style of discipline seem to have a much lower tolerance for delinquent behaviours. Consistent with this finding, research indicates that the experience of harsh and inconsistent discipline is related to adolescent involvement in delinquent behaviours (e.g. Farrington, 1992; Gorman-Smith et al., 1996; Loeber & Dishion, 1983).

One notable feature of the present results is the fact that the discipline styles were not particularly important in predicting the perceptions of female respondents. The regression analyses did indicate that an inductive discipline style approached significance in predicting females' perceptions of the seriousness of physical aggression, while correlational analyses indicated that female students who experienced parental induction were more likely to view theft and physical aggression among girls as serious. Thus, it appears from these results that females' perceptions of behaviour seriousness were not unaffected by the discipline style they had experienced. However, given that males receive more corporal punishment than females (e.g. Bryan & Freed, 1982), it is possible that family factors other than parental discipline style have a greater effect on the perceptions of female adolescents. For example, parental bonding (Parker et al., 1979) may be a more significant family factor contributing to females' perceptions. Such a possibility needs empirical verification.
(ii) General findings relating to the parent sample

In line with previous research (e.g. Figlio, 1975; Levi & Jones, 1985; Corbett & Simon, 1991), adults’ perceptions of delinquent behaviours possesses a particular structure with certain behaviours being perceived as more serious than others. Inconsistent with earlier findings (e.g. Geotrys et al., 1988) female parents did not perceive physical aggression more seriously than did male parents. Furthermore, female and male parents did not perceive behaviours as more serious when conducted by female targets than by male targets. While the sample was relatively large (namely, a sample of 193 parents), the greater percentage was female (80.3% compared with 19.7% male). Thus, further research which includes a larger percentage of male parents should be undertaken in order to determine whether a predominantly female sample affected the results.

Of particular interest is the finding that adults’ perceptions of the discipline styles they have used are related to their views about the seriousness of various behaviours. More specifically, those parents who had used a punitive discipline style were less likely to rate driving and theft offences as serious. Thus, it seems that parents using a power-assertive form of discipline are less likely to consider these behaviours as serious offences. This is reflected to a certain degree in the adolescent data. While the behaviour groupings are not exactly the same for parents and adolescents and therefore cannot be directly compared, young people who had experienced an inductive discipline style were more likely to perceive theft as a serious offence (male and female adolescents) and driving offences as serious offences (male adolescents). These results would suggest that the type of discipline used by parents is not only related to their own
perceptions of behaviour-seriousness, but also to those of their offspring. This is not surprising given that parents, in raising their children, consciously and unconsciously share their values, standards and beliefs with them.

(iii) Implications of family processes

Research by Garbarino & Guttman (1986) indicated that families at high risk for adolescent maltreatment were reported to have parents who were neglectful and emotionally abusive. Adolescents from these families reported feeling unloved and worthless. The high-risk group perceived more marital and familial conflict, including conflict about child-rearing practices. Furthermore, high-risk families reported higher levels of discipline than low-risk families, with less support and more punishment.

As mentioned in Chapter 1, one of the ways that parents transfer information and knowledge to their children is via discipline. Discipline informs the young person of the parent's view of the behaviour they have been engaging in. There are various forms that discipline can take. Hoffman and Saltzstein (1967) identify three discipline styles:

- power assertion, in which the parent capitalises on his power and authority over the child; love-withdrawal, i.e. direct but non-physical expressions of anger, disapproval, etc.; and induction, consisting of the parent’s focusing on the consequences of the child’s action for others (p. 45).
While each of these styles of discipline informs the child or young person of the parent's view of their behaviour, the manner in which the discipline is given has different effects. For example, the punitive discipline style is one-way, thereby not allowing discourse between the parent and young person. On the other hand, the inductive discipline style is two-way, it is dynamic and allows discussion between the parent and young person. Furthermore, the punitive parenting style imposes a view on the young person – the parent's view, while inductive parenting results in a negotiated view of the world. Given this, it is not surprising that the type of discipline a parent uses influences their child's views and behaviours.

Children and young people brought up in homes where conflict, anger and aggression are common, where discipline is inconsistent, where punishment is harsh, where there is neglect, or where emotional abuse is experienced, cannot be unaffected. The research findings of Garbarino & Guttman (1986) indicate this to be the case: young people from these environments are adversely affected. More specifically, youth from high-risk families have significantly more internalising and externalising problems and less competencies than young people from low-risk families. It is hardly surprising, therefore, that young people and parents living in these situations view "delinquent" behaviours as less serious than those living in homes where inductive parenting is occurring. Neither is it surprising that young people with these parenting experiences are involved in delinquent activities.

The results of this study provide further support for the critical role that is played by parents as they raise their children. The manner in which parenting occurs has
far-reaching implications for the offspring. And this influence begins at birth. As Lawson (1994) points out:

If human babies are to develop into psychically healthy, independent and society-minded adult individuals, they absolutely depend on being given a good start. This good start is assured if a mother can properly love and care for her child (p. 20).

Summary

In summary, this study supports the notion that adolescent and adult perceptions of the seriousness of delinquent behaviours are multi-dimensional. It extends previous research by indicating that female adolescents perceive physical aggression more seriously than male adolescents and, that young people’s views of the seriousness of minor offences vary according to the gender of the culprit. An important contribution of the present study is the demonstration that young people’s perceptions of the discipline style they have experienced are related to their views about the seriousness of various behaviours. This supports the idea that adolescents’ perceptions of what constitutes “delinquent” behaviour are partly shaped by the way they are disciplined in the home. Furthermore, parents’ perceptions of the discipline style they have used are closely related to their views about the seriousness of certain delinquent behaviours and may consequently influence the perceptions and behaviours of their children.

4.6.2. Implications of findings for clinical practice

Research has indicated that family factors have an important influence on many aspects of the emotional, attitudinal and behavioural life of young people (e.g.
Bischof et al., 1995; Emery, 1982; Krohn et al., 1992; Scott & Scott, 1987, 1998). Previous research including the results of Study 1 and Study 2 indicate that young peoples’ perceptions of the discipline style they have experienced are related to their involvement in delinquent behaviours. Furthermore, the present study has indicated that young peoples’ experiences of parental discipline style are linked to their attitudes, namely, their views of the acceptability of various delinquent behaviours. Thus, the discipline style used by parents potentially shapes both the perceptions that young people have of delinquency as well as their involvement in delinquent behaviour.

Given the above, we would be well advised to share this knowledge with parents as well as prospective parents so that their awareness is raised regarding the potential impact of their own behaviours on the perceptions of their offspring, both directly and indirectly. Most parents are left in the dark about the results of psychological research. Unlike most professions, the important “job” of parenting does not legally demand training before a person is qualified for the job. Thus, opportunities for sharing information with parents and prospective parents, and developing their awareness should be available from early in the parenting process (eg. most new parents attend ante-natal classes).

There are numerous ways in which information can be shared with parents. For example, pamphlets and booklets could be distributed to midwives in antenatal clinics, maternity wards of hospitals, family planning clinics, psychologists and social workers in community centres, the consulting rooms of general practitioners and psychiatrists, the school office of primary and high school counsellors, and
child-care centres. These pamphlets could also include a list of references dealing with parenting and parenting issues, as well as advice as to where parents can seek help regarding disciplinary matters in later years when their children are much older. Information could also be made available to parents, guardians and grandparents through school newsletters, local and suburban newspapers, and radio programs.

Specific programs have been developed to assist parents in parenting. For example, Dinkmeyer and colleagues (Dinkmeyer, McKay, Dinkmeyer & Dinkmeyer, 1997a, 1997b, Dinkmeyer, McKay, McKay & Dinkmeyer, 1998) have developed three STEP programs (Systematic Training for Effective Parenting) which share the same philosophy but are adapted to suit parents with children of various ages. The program is based on the democratic principle of mutual respect between individuals, including between parent and child. The STEP programs introduce parents to fundamental skills of effective parenting. An Australian parenting program, PACE (Parenting Adolescents, a Creative Experience!) has been designed by Jenkin and Bretherton (1994) to help parents explore the ways a family can productively handle the issues that arise as children reach out for autonomy and independence. Most recently, Drent (2001) produced a structured, accessible and well-trialled Australian parenting program: Parenting Today.

The findings of the present study could also inform health professionals working with young people and parents, providing a clearer insight into the link between parenting practices and the attitudes of their offspring. The results could also provide valuable insight for psychologists and other health professionals working with juvenile delinquents. In particular, the knowledge that adolescents’ perceptions
of the discipline style they have experienced are related to their views about the seriousness of behaviours could contribute to their intervention with juveniles, particularly where attitude-change is being sought. One-to-one counselling with delinquents in juvenile justice centres, schools, or other institutions could use the insights gained in the exploration of adolescents' experience of parental discipline, and the way they perceive their behaviour.

4.6.3 Implications for further research

The results of this study show that the variables considered here do not provide a thorough explanation of the factors contributing to adolescent and parent perceptions of the seriousness of behaviours. Thus, future studies need to consider what other factors may be involved. The present study illustrates the important role that one factor, namely, perceived parental discipline style, plays in determining perceptions of seriousness of delinquent behaviours.

On the one hand perceived parental discipline style has been shown to predict adolescents' involvement in delinquent behaviour. On the other hand, this study has provided evidence of a link between perceived parental discipline style and adolescents' perceptions of delinquent behaviours. Thus, future research is needed to verify whether there is a direct relationship between young people's perceptions of behaviours and their involvement in these same behaviours. The results could provide further support for (i) the crucial role of parental discipline style in adolescent development, and (ii) further support for the importance of educating parents and parents-to-be about parenting.
As mentioned previously, the adult sample comprised mainly of female parents. Thus, further research is needed to determine the perceptions of a sample including a greater number of male parents.

Often there are differences between the two parents of a family in their disciplining styles. How does this inconsistency between parents affect their child’s attitudes and behaviour? Which parent “wins” in their influence on their offspring? Further research is needed to investigate the relationship between adolescents’ experience of both their mother’s discipline style and their father’s discipline style on the development of their attitudes and behaviours. The results of this research could further inform parenting programs.

4.7. Conclusion

The main aim of the present study was to explore whether perceptions that adolescents and parents have of different behaviours are linked to their family experiences. The results supported the expectation that (i) adolescents who had experienced an inductive discipline style would be more likely to rate various offences as serious, and (ii) parents who had used a punitive discipline style were less likely to rate similar behaviours as serious. So, not only does parental discipline style affect participation in delinquent behaviour (as was seen in Study 1 and Study 2), but it also significantly affects the attitudes that young people hold towards these behaviours. This has important implications for working with parents and adolescents, once again reinforcing the critical need to raise parents’ awareness regarding the potential impact of their parenting on their offspring.
5.1 Introduction

By its very nature, adolescent delinquency demands world-wide attention. While the factors contributing to delinquency are many and varied, poor family management practices have been shown to have a crucial role in its development. Thus, the overarching goal of this thesis was to investigate the effect of family factors - in particular parental disciplinary style - on (a) self-reported delinquency, and (b) adolescents’ and parents’ perceived seriousness of juvenile offences. The possible mediating effects of individual differences in parental influences on self-reported delinquency were also examined. Three studies were conducted, with the results confirming previous findings as well as extending the research to date.

This discussion will present: (i) a brief summary of the findings, (ii) the theoretical implications of the research, (iii) implications of the research for intervention and clinical practice, (iv) directions for future research, and (v) thesis conclusion.
5.2 Summary of the findings

(i) Study 1

This study set out to investigate the links between perceived family relationships, parental discipline style, locus of control, self-esteem and self-reported delinquency among Australian high school students. The prediction that locus of control and self-esteem would mediate the effects of family process on delinquency was tested using structural equation modelling. Although there appeared to be a good fit between the data and the proposed model, the amount of variance explained by the predictor variables was not large. Among females, the best predictor of low levels of self-reported delinquency was an inductive discipline style, whilst for males high levels of self-reported delinquency were best predicted by a punitive discipline style. Among males, positive family relations was a significant predictor of high self-esteem. No mediating effects of self-esteem and locus of control were observed.

(ii) Study 2

While self-esteem and locus of control did not have a mediating effect on parental discipline and self-reported delinquency, links found in previous research between family process factors, psychoticism (P) and self-reported delinquency, offered the possibility that P would act as a mediating factor between two family process factors and self-reported delinquency. Thus, the aim of the second study was to build on Study 1 by investigating, within a delinquent sample, the relationships between perceptions of parental discipline style, perceptions of parental bonding, P, and self-reported delinquency, and to determine the intervening
effect of P on family process factors and self-reported delinquency. The results suggested that not only does P have a direct effect on self-reported delinquency among adolescent delinquents, but it also mediates the effect of parenting practices on delinquency. In particular, the experience of low levels of inductive parenting increased the risk of delinquency, with this effect being mediated by P.

A further aim was to compare perceptions of parental discipline style between a delinquent sample and a mainstream high school sample. The results indicated, unexpectedly, that the delinquent adolescents of the present study reported significantly lower levels of punitive discipline than the mainstream adolescents of Study 1. While the mean love-withdrawal scores for the delinquent sample were higher than those of the mainstream sample, as predicted, and the inductive scores were lower than the mainstream students, as predicted, these differences were not significant. Possible reasons for these results were discussed.

(iii) Study 3

The aims of this study were (i) to investigate adolescents’ and adult’s perceptions of the seriousness of behaviours identified as “delinquent”, (ii) to determine whether these perceptions vary depending on the sex of the individual engaging in the behaviour, and (iii) to examine whether a link exists between perceptions of parental discipline style and perceptions of the seriousness of the behaviours. The results indicated that adolescent and adult perceptions of delinquent behaviours are multi-dimensional, possessing a particular structure. Among students, females perceived physical aggression more seriously than did males. Minor offences were rated as more serious by young people when seen to be
conducted by girls than boys. This was especially true of male respondents. Female and male parents did not perceive behaviours as more serious when conducted by female targets than by male targets.

A significant relationship was found between young people’s perceptions of the seriousness of various behaviours and the type of discipline style they reported having experienced. That is, male students who had experienced an inductive discipline style were more likely to perceive minor offences, theft, physical aggression, and driving offences as serious offences. Among female students, the result of the analysis indicated that parental induction as a factor approached significance in predicting perceptions of the seriousness of physical aggression. Within the parent sample, those who had used a punitive discipline style were less likely to rate driving and theft offences as serious.

5.3 Theoretical implications

(i) Parenting factors

Adolescent emotional health is shaped by family process factors (e.g. review by Heaven, 1994b; Parker et al., 1979; Scott & Scott, 1987, 1998). Extensive research evidence indicates a strong relationship between family functioning and parenting, and the development of delinquency (e.g. Bischof et al., 1995; Farrington, 1989; Krohn et al., 1992). In particular, the style of discipline used by parents has been consistently related to delinquency, specifically harsh and inconsistent discipline, as well as lax discipline (e.g. Carlo et al., 1998; Gorman-Smith et al., 1996; Hirshi,
The results of the present series of studies provide further evidence for the significant role that parental discipline style plays in adolescent self-reported delinquency.

Researchers and theoreticians emphasize the crucial role that parenting plays in the development of delinquency. According to Hirschi (1969) good child-rearing techniques and proper discipline are the main ways of preventing and controlling delinquency. According to social control theory (Hirschi, 1969), the closeness of the adolescent to their parents and their respect and identification with their parents, is crucial in bonding the young person to society and keeping their behaviour within conventional boundaries. Gottfredson and Hirschi (1990) suggest that ineffective child-rearing affects the individual’s ability to restrain themselves from acting on their immediate impulses. Thus, from this position, low self-control has its origins in low social control during the early childhood years.

Discipline is a form of knowledge-transfer, with the parent transferring knowledge of the acceptability and unacceptability of particular forms of behaviour to their offspring. Hoffman and Saltzstein (1967) identified three types of discipline: an inductive style, which consists of the parent reasoning with their child about the causes and effects of their behaviour, focusing on the consequences of the child’s behaviour; a punitive discipline style, which includes techniques such as physical punishment and material deprivation, with the parent capitalising on his power and authority; and parental love-withdrawal, which involves non-physical expressions of anger and disapproval. Each of these discipline styles informs the child/young person of their
parent’s view of their behaviour. However, the effect of each style is different. The inductive style is a two-way dynamic, allowing discussion between parent and young person, thereby resulting in a negotiated sense of the world. The punitive style on the other hand, is one-way, imposing the parent’s view of the world on their offspring. Given this, it is not surprising that the type of discipline chosen by a parent influences their offspring’s views and behaviours.

The environment in which parents live affects their parenting. Parents who live in poverty without adequate social supports are more likely to neglect or reject their children (Weatherburn & Lind, 1997, 2001). Research by Larzelere and Patterson (1990) indicates that parents from low socioeconomic status backgrounds were more likely to engage in harsh, erratic and inconsistent discipline. Low income has been shown to be related to depression in parents (Dore, 1993) which, in turn, has been found to lead to a lowered tolerance for misbehaviour in children and the use of highly authoritarian, over-controlling responses (Lahey, Conger, Atkeson & Treiber, 1984). According to Weatherburn and Lind (2001), unemployment influences crime through its corrosive effects on parenting.

The way in which a parent disciplines their child teaches the child how to behave. Thus, aggressive methods of discipline set up aggressive models for children to observe and model (e.g. Bartol & Bartol, 1998; Eron, Huesmann & Zelli, 1991; Neapolitan, 1981). According to Lawson (1994), aggression is a “learned behaviour. ... Aggression is absolutely taught to the child by the child’s parents” (p. 23). Patterson (1982, 1986b) indicates that young people socialised in an environment of explosiveness, threats, and inconsistent follow-through resulting in aggression between parent and child, leads to
the young person using aggressive methods outside the home, rejection by peers and teachers, and ultimately involvement in delinquency. Isolated from their school peers, and with weak attachments to their family, the young person is easily drawn into the delinquent peer group where companionship, anonymity, security, and behavioural norms are provided (Emler & Reicher, 1995).

It is not surprising that young people brought up in homes where conflict, anger, and aggression are common, where discipline is inconsistent, where punishment is harsh, where there is neglect, or where emotional abuse is experienced, are adversely affected (e.g. Garbarino & Guttman, 1986). Given that adolescent well-being is associated with "a style of parenting characterised as caring and empathic, devoid of excessive intrusion and infantilisation" (McFarlane et al., 1995, p. 860), it is not surprising that home environments as described by Garbarino and Guttman (1986) have negative consequences for young people's behaviour. Neither is it surprising that young people and parents living in these situations view "delinquent" behaviours as less serious than those living in homes where inductive parenting is occurring. It seems that the experience of an inductive style of parenting is most effective in developing an adolescent's sense of what is right and wrong and, consequently, which behaviours are serious offences.

The results of the present research support the position of Hirschi (1969) who asserts that child-rearing practices and proper discipline are critical in preventing delinquency.
(ii) Personality

The results of the second study provide partial support for Eysenck's position (Eysenck & Eysenck, 1976, 1985; Eysenck & Gudjonsson, 1989) that delinquency is related to particular personality dimensions, namely psychoticism, neuroticism, and extraversion. According to Eysenck and Gudjonsson, (1989) "criminality is related to certain dimensions of personality, in particular that labelled psychoticism..." (p. 88). Physiologically, this is seen to be a result of a link between psychoticism and low cortical arousal, poor conditionability, poor conscience development, and ineffective socialisation, which in turn leads to antisocial behaviour (Eysenck, 1996b, cited in Gudjonsson, 1997).

Using a sample of delinquent adolescents, the results of the second study add further support to the findings of previous research which indicated a strong, significant and consistent influence of P on self-reported delinquency (e.g. Emler et al., 1987; Eysenck & Gudjonsson, 1989; Furnham & Thompson, 1991; Heaven, 1996a; Heaven et al., 2000). Furthermore, the results indicated that P has an important mediating effect on parental discipline style and self-reported delinquency. That is, where low levels of inductive parenting are experienced by adolescents, high levels of P are likely, which in turn leads to higher levels of adolescent delinquency.

Research has indicated that aggressive adolescents have higher P scores than non-aggressive adolescents, and the families of these adolescents have higher levels of family conflict, negativity, and anger than control families (McColloch et al.,
1990). When children and young people are raised in an environment of emotional
coldness, indifference and neglect, psychological symptomatology results (e.g.
Canetti et al., 1997; McFarlane et al., 1995). While acknowledging that P partly has
a physiological basis (Matthews & Deary, 1998), it seems that adolescent behaviour
reflects the environment that has helped to shape them. Not surprisingly, Eysenck
(1996b, cited in Gudjonsson, 1997) perceives psychoticism as partly due to
ineffective socialization.

(iii) Contributions of the present research to existing knowledge

Using a comprehensive measure of parental discipline style, the first study
illustrated the important role that parental discipline style plays in determining self-
reported delinquency. This supports previous research which has tended to use less
comprehensive measures.

The majority of research in the area of delinquency uses mainstream high school
student samples. The second study obtained its data from a delinquent sample of
students. The results of this study provide further support for the crucial role that P
plays in the development of delinquency. Furthermore, the results indicated a
relationship between P and family process factors, in particular, parental induction
and parental care, and a mediating effect of P on parental discipline style and
delinquency. This finding supports and extends previous research (e.g. Heaven,
The important contribution of the third study is in addressing the relationship between adolescents' and adults' perceptions of the seriousness of delinquent behaviours and parental discipline style. No research to date has explored this relationship. If the home provides an environment of aggression, conflict, neglect, or emotional abuse, it is hardly surprising that its parents and children will view delinquent behaviours differently than those living in a home environment of discussion, consistent discipline, supervision, and care. Furthermore, if punishment in general is designed to draw attention to the unacceptability of a particular form of behaviour, then the style of discipline experienced by a young person must by implication affect and shape their views about behaviour, as discussed in 5.2(i). The third study suggests this to be the case.

Overall, the present research highlights the crucial role of parental discipline style in the development of adolescents' views and behaviours. Not only does parental discipline style have an impact on adolescents' participation in delinquent behaviour (seen in Study 1 and Study 2), but it also significantly affects the attitudes that young people hold towards these behaviours (seen in Study 3). These results have important implications for intervention.

5.4 Implications for intervention and clinical practice

Since the results of the current research relate to parenting factors and the personality factor P, suggestions for intervention will focus specifically on these areas. According to Weiner (1992) attention in delinquency prevention has been
shifting toward home-based interventions which involve structured family therapy, parent management training, and social skills training for adolescents.

(i) Parenting factors

"Long term trends predict the likelihood that the family will continue to be an unstable social unit. Present findings draw attention to the importance of parental style which supersedes family structure in terms of influencing adolescent well being and healthy family functioning. Rather than focusing efforts to strengthen the family, results suggest that efforts to strengthen parenting will ultimately be of more value."

(McFarlane, Bellissimo and Norman, 1995, p. 861)

According to Patterson (1980), young parents are increasingly functioning in isolation, without appropriate models, information or support systems. Parents can be assisted in their parenting through (a) strategies to raise parents’ awareness, (b) parent management training programs, and (c) structured family therapy.

(a) Given that, for most parents, their only model of parenting is the example of their own parents, raising parents’ awareness about parenting and its implications for the overall health of their offspring is crucial. The results of research in the area of parenting needs to be shared with the public, with parents, prospective parents, and health professionals.
As discussed in Chapter four, there are numerous ways by which information can be made available. For example, pamphlets and booklets could be distributed to midwives in antenatal clinics, maternity wards of hospitals, family planning clinics, psychologists and social workers in community centres, the consulting rooms of general practitioners and psychiatrists, the school office of primary and high school counsellors, child-care centres and play-groups. These pamphlets could also include a list of references dealing with parenting and parenting issues, such as Lawson’s (1994) *The consequences of “NOT GOOD ENOUGH” PARENTING*, Balson’s (1991) *Becoming Better Parents*, McFadden’s (1988) *The Simple Way to Raise a Good Kid*, and Fuller’s (2000) *Raising Real People: A Guide for Parents of Teenagers*, among others. Advice as to where parents can seek help regarding parenting and disciplinary matters could also be included. Further ways by which information could be made available to parents, guardians and grandparents is through articles in school newsletters, local and suburban newspapers, and magazines, through radio programs, and through short informative presentations at schools, community centres, play-groups, etc.

The findings of the present research could also inform health professionals working with young people and parents, providing a clearer insight into the link between parenting practices and the attitudes and behaviours of their offspring. The results could also provide valuable insight for psychologists and other health professionals working with juvenile delinquents.

(b) The objective of parent management training programs is to guide parents in their interactions with their children, increasing their awareness of problematic
behaviours, and teaching them ways to monitor and manage their child’s conduct (Weiner, 1992). Parents are encouraged to use the strategies and techniques at home, reinforcing socially appropriate behaviour, and using appropriate sanctions for inappropriate behaviour (Herbert, 1998). Research has indicated effectiveness of these efforts (e.g. Forehand et al., 1984; Kazdin, 1987; Webster-Stratton, 1991). A study with young offenders (Bank, Patterson & Reid, 1989) indicated that parent management training had positive effects on family relationships and family communication, as well as indicating a reduction in offending.

An example of a parent education program developed for high- and low-risk parents is the Family Interaction Project (FIP), adapted from a skills-training program Parenting (Guerney, 1980). The FIP course has two major thrusts: the first is directed to the affective dimension of relationships with empathy as the key skill; the second addresses the control dimension, aiming to teach parents discipline alternatives. Other programs include the STEP programs (Systematic Training for Effective Parenting) developed by Dinkmeyer and colleagues (Dinkmeyer et al., 1997a, 1997b, 1998) and the PACE program (Parenting Adolescents, a Creative Experience!) designed by Jenkin and Bretherton (1994).

(c) Structured family therapy basically aims to modify the family unit’s interaction patterns so that improved communication results, as well as increased positive reinforcement, and more effective problem-solving among family members (Tavantzis, Brown & Rohrbaugh, 1985; Weiner, 1992). Behavioural family therapy focuses on dysfunctional family interactions. Contingency contracting has been used as a way of changing such interactions in families of young offenders, with
success in reducing offending (e.g. Stumphauzer, 1976). A further study by Henderson (1981) used behavioural, cognitive, and behavioural family therapy methods in a program that successfully reduced stealing.

(ii) Psychoticism

From a clinical perspective, it is important to identify as early as possible traits characteristic of the P personality dimension. For example, traits such as aggression, impulsivity, antisocial behaviour, hostility, and lack of empathy can be targeted in children. Given that P is a hindrance to effective socialization (Eysenck, 1977a), work should begin on developing appropriate skills with children who are exhibiting behaviours reflecting high P.

Young people can be accessed within the school environment. A national project conducted by The Australian Guidance and Counselling Association, "Teaching prosocial behaviour to adolescents", identified programs in use in Australian schools (Prescott, 1995). Applied within the school context, the programs address issues such as social skilling, development of peer relations, conflict resolution, anger management, assertiveness training, developing life skills, and many others.

Social skills training is a cognitive-behavioural approach which focuses on increasing the young person's repertoire of interpersonal social skills, using exercises involving modelling, role-playing, rehearsal, and other structured tasks (e.g. Ladd, 1984; Ronan & Kendall, 1990). This form of training has been shown to
be effective in improving interpersonal relations in young people, and reducing aggressive and impulsive behaviour in non-clinical groups of school children. In the case of delinquent adolescents, effectiveness of social skills training is increased when parents also participate (e.g. Collingwood & Gentner, 1980; Serna, Schumaker, Hazel & Sheldon, 1986).

Aggression and poor control are two aspects of the behaviour of high P scorers. Thus, therapeutic work with young people could focus on their attributional processes (for example, misinterpreting others' intentions), cognitive distortions (for example, their aggression does not have injurious consequences), negotiating conflict situations, labelling affect appropriately, social-skills deficits, and general problem-solving strategies (Herbert, 1998). Individual programs that have been successfully used with delinquent youth include: self-instruction training (e.g. Snyder & White, 1979), anger-control training (e.g. McDougall, Barnett, Ashurst & Willis, 1987), training in self-governing behaviour (e.g. Fixsen, Phillips & Wolf, 1973), moral reasoning development (Gibbs, Arnold, Chessman & Ahlborn, 1984), role-taking and perspective-taking (e.g. Chandler, 1973; Chalmers & Townsend, 1990), problem-solving skills training (Kazdin, Bass, Siegel & Thomas, 1989; Kazdin, Esveldt-Dawson, French & Unis, 1987), and social-skills training (e.g. Hollin, 1990).

Treatment techniques addressing emotional coldness and lack of empathy should focus on overcoming high P scorers' attitudinal problems (Gudjonsson, 1997). While cognitive therapy techniques are most effective, the treatment must be matched to the individual. High P scorers are particularly resistant to conventional psychotherapy or
counselling (e.g. Lane, 1987). They may fail appointments, resist treatment, and switch therapists. Nevertheless, the therapy shown to be most effective is cognitive therapy (Davidson & Tyrer, 1996).

5.5 Directions for future research

The present research utilised quantitative research methods. It is suggested that qualitative research be conducted with delinquent youth, since this method of data collection would do away with the need for language-laden questionnaires. One-to-one interviews would allow for rapport to be established with the respondent, and the open-ended style of questioning would provide an opportunity to delve more deeply into the individual’s experiences, attitudes and reasoning for behaviour. The information gathered could include: a retrospective account of their childhood; self-perceptions; adolescent behaviour and involvements; family life (e.g. siblings, family conflict, parenting, neglect and/or abuse, financial situation, criminality and drugs of parents and siblings); peer groups and peer relationships; school experiences (including academic, sport, other activities, bullying or being bullied by students, relationships with teachers); and, community experiences. The biographies of respondents could be compared in order to determine if common themes and interrelationships emerge. Finally, the biographies of delinquent youth could be compared with those of non-delinquent adolescents to establish whether there are differences in the identified factors.

Given that the delinquent sample of the second study was small, additional research is needed to validate the findings. Furthermore, since most of the sample
was male, research is needed to determine the extent to which the results are applicable to a female sample.

The present research focused on personality variables as mediators between (a) family influences and (b) adolescent self-reported delinquency. Given the relationship between delinquency and association with delinquent peers and/or the development of a rebel social identity (see Section 1.4.3.2), further research could explore the possible mediating effect of such factors. Furthermore, it is possible that personality factors may act as moderator rather than mediator variables (for example, Baron & Kenny, 1986; Jessor, Van Den Bos, Vanderryn, Costa & Turbin, 1995; Windle, 1992). Thus, future research should also investigate the possible interactions between personality dispositions and family influences as predictors of delinquency.

The present studies focused on family and personality factors. In order to deepen our understanding and to aid us in prevention and intervention, research is needed with delinquent samples which explores multiple factors associated with delinquency, and their interaction with each other. For example, Sullivan and Wilson (1995) proposed a conceptual model of causal and interactional relationships between individual, family, community and subcultural characteristics that contribute to delinquency, to be measured using “multiple measured variables” (p.11).

The present research has highlighted the critical need to raise parents’ awareness regarding the potential impact of their parenting on their offspring. It has been
suggested that information could be shared with parents through pamphlets and booklets, to be distributed to various places used by the general public (including antenatal classes, doctor's rooms, community centres, child-care centres, etc.). Thus, future research needs to be directed at the development of these pamphlets.

5.6 Thesis conclusion

The implications of these studies strongly suggest that, if we are to reverse the increasing trend of delinquency in our society, we need to pay special attention to the findings of this thesis. While personality factors will always be an important contributing factor to delinquent behaviour, parenting factors clearly have a major role in the development of delinquency. If we are to tackle the worrying problem of delinquency in any meaningful way, we will need to use strategies to support the family, and in particular, to encourage inductive forms of discipline. The dynamic nature of this style of discipline requires a subtle and complex form of parenting which cannot be achieved without the wider support of the community. This must include government policy which tackles the underlying economic and social causes of child neglect and abuse. The insights gleaned from this thesis should not only be seen as valuable in their contribution to existing knowledge, but in terms of their utility for clinical practice.


Harris, S. (1998, May 17). Give me all your money, the 6-year-old armed bandit told the security guard. The Sunday Telegraph, p. 7.


APPENDICES

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APPENDIX A

Study 1 Journal publication
APPENDIX B

Study 1 Questionnaire
SURVEY QUESTIONNAIRE

Please read all instructions carefully, and answer the questions as honestly and spontaneously as possible. There are no right or wrong answers; just give your honest opinion. Please make sure that you answer all the questions.

PERSONAL DETAILS

How old are you? ____ years ____ months

Are you male or female? __________

FAMILY DETAILS

Do you live at home with: (tick which applies to you)

- both your mother and father
- mother
- father
- mother and partner
- father and partner
- guardian

PARENTS

What was the highest year of schooling that your father completed?

________________________________________________________

What is your father's current occupation?

________________________________________________________

________________________________________________________

What was the highest year of schooling that your mother completed?

________________________________________________________

What is your mother's current occupation?

________________________________________________________

________________________________________________________
These questions are designed to measure the way you feel about your family as a whole. It is not a test, so there are no right or wrong answers. Answer each item as carefully and accurately as you can by placing a number beside each one as follows:

1 = Rarely or none of the time
2 = A little of the time
3 = Some of the time
4 = A good part of the time
5 = Most of the time

1. The members of my family really care about each other.  
2. I think my family is terrific.  
3. My family gets on my nerves.  
4. I really enjoy my family.  
5. I can really depend on my family.  
6. I really do not care to be around my family.  
7. I wish I was not part of this family.  
8. I get along well with my family.  
9. Members of my family argue too much  
10. There is no sense of closeness in my family.  
11. I feel like a stranger in my family.  
12. My family does not understand me.  
13. There is too much hatred in my family.  
14. Members of my family are really good to one another.  
15. My family is well respected by those who know us.  
16. There seems to be a lot of friction in my family.  
17. There is a lot of love in my family.  
18. Members of my family get along well together.  
19. Life in my family is generally unpleasant.  
20. My family is a great joy to me.
1 = Rarely or none of the time
2 = A little of the time
3 = Some of the time
4 = A good part of the time
5 = Most of the time

21. I feel proud of my family.
22. Other families seem to get along better than ours.
23. My family is a real source of comfort to me.
24. I feel left out of my family.
25. My family is an unhappy one.

Here follow some general statements about yourself. If a statement is true for you, circle T (True). If it is not true for you, circle F (False).

27. There are times when I just don't feel good enough.
28. I feel that I have some good qualities.
29. I can do things just as well as most other people.
30. I feel that I don't have much to be proud of.
31. Sometimes I feel utterly worthless.
32. I feel that I am a person of value, equal to others.
33. I wish I could have more respect for myself.
34. I have a positive attitude to myself.
35. Generally, I feel that I am a failure.
36. It is sometimes hard for me to go on with my work if I am not encouraged.
37. I sometimes feel resentful when I don't get my way.
38. No matter who I'm talking to, I'm always a good listener.
39. There have been occasions when I took advantage of someone.
40. I'm always willing to admit when I make a mistake.
Parents use many different methods to discipline and socialize their children. The following items describe some disciplinary techniques that your parents may have used in response to different situations, as you were growing up. Please answer each item by circling one number.

<table>
<thead>
<tr>
<th>Item</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Usually</th>
</tr>
</thead>
<tbody>
<tr>
<td>41. When you broke or spoiled something at home, how often did your parents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. smack or scold you.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. say that they liked the broken or spoiled item and explain why you should be more careful in future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. tell you that they didn't like you for being so careless or destructive.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>42. If you had a temper tantrum, how often did your parents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. give you a smack.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. yell at you to stop.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. suggest alternative ways that you could use to get what you wanted.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d. isolate you in a room away from the rest of the family until the tantrum stopped.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>43. If you did not come home at the agreed time after playing with friends, how often did your parents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. not allow you to play for several days or weeks.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. say that they were worried and explain why you should keep to the agreed time in future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. show their anger and refuse to listen to your excuses.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
44. If you got into trouble with your friends at school, how often did your parents

- a. punish you by withdrawing some privilege (for example no television for a week).

- b. say that they were disappointed and suggest ways that you could stay out of trouble in future.

- c. refuse to speak to you until you had apologised to the teachers at the school.

45. If you refused to help or co-operate at home, how often did your parents

- a. punish you by refusing something that you wanted from them.

- b. tell you how disappointed they were and remind you that they couldn’t do everything themselves.

- c. say that they would send you away (for example, to boarding school) if you did not co-operate.

46. If you were rude, or said something nasty to your parents, how often did they

- a. give you a good smack and tell you never to speak that way again.

- b. show that they were hurt and explain that rudeness never helps things.

- c. say that they did not like children who showed such disrespect for their parents.
47. If you physically hurt another child, how often did your parents

   a. hurt you right back.  
      Never Rarely Sometimes Usually

   b. say that they felt sorry for the child who was hurt and point out that the other child was probably feeling bad.
      Never Rarely Sometimes Usually

   c. say that they did not want to live with someone who did such horrid things.
      Never Rarely Sometimes Usually

48. If you took something that did not belong to you, how often did your parents

   a. ask you to explain why you took the thing.  Never Rarely Sometimes Usually

   b. say that they expected you to return it.  Never Rarely Sometimes Usually

   c. give you an angry look and walk away.  Never Rarely Sometimes Usually

49. If you wanted to stay up late on a school night to watch T.V., how often did your parents

   a. yell at you for suggesting such a thing.  Never Rarely Sometimes Usually

   b. explain to you that getting a good night's sleep was more important than watching T.V.  Never Rarely Sometimes Usually

   c. look coldly at you so that you would get the message that they did not approve.  Never Rarely Sometimes Usually

50. As you were growing up, about how often did you get belted by your parents?

    __ Never
    __ Once a year
    __ Once a month
    __ Once a week
    __ Almost every day
51. As you remember your mother, for each statement, place a number beside each one as follows:

1 = Completely false
2 = Somewhat false
3 = Somewhat true
4 = Completely true

a) Never punished me. ____
b) Rarely got mad. ____
c) Wouldn't hurt me for anything. ____
d) Was always cross with me. ____
e) Never punished me physically. ____

52. As you remember your father, for each statement, place a number beside each one as follows:

1 = Completely false
2 = Somewhat false
3 = Somewhat true
4 = Completely true

a) Never punished me. ____
b) Rarely got mad. ____
c) Wouldn't hurt me for anything. ____
d) Was always cross with me. ____
e) Never punished me physically. ____

Consider the following questions from your own point of view. Make a circle around one number after each question.

<table>
<thead>
<tr>
<th>Question</th>
<th>No, never</th>
<th>Not often</th>
<th>Usually</th>
<th>Yes always</th>
</tr>
</thead>
<tbody>
<tr>
<td>59. Are you often blamed for things that just aren't your fault?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>60. Do you feel that most of the time it does not pay to try hard because</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>things never turn out right anyway?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61. Do you feel that most of the time parents listen to what their children</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>have to say?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62. When you get punished, does it usually seem it is for no good reason</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
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<td>63. Most of the time do you find it hard to change a friend's opinion?</td>
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<td>64. Do you feel that it is nearly impossible to change your parent's mind about anything?</td>
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<td>65. Do you feel that when you do something wrong there is very little you can do to make it right?</td>
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<td>66. Do you feel that one of the best ways to handle most problems is just not to think about them?</td>
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<td>67. Do you feel that when a kid your age decides to hit you, there is little you can do to stop him or her?</td>
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<td>68. Have you felt that when people were mean to you it was usually for no reason at all?</td>
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<td>69. Most of the time, do you feel that you can change what might happen tomorrow by what you do today?</td>
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<td>70. Most of the time do you find it useless to try to get your own way at home?</td>
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<td>71. Do you feel that when somebody your age wants to be your enemy there is little you can do to change matters?</td>
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<td>72. Do you usually feel that you have little to say about what you get to eat at home?</td>
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<td>73. Are you the kind of person who believes that planning ahead makes things turn out better?</td>
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<td>74. Most of the time, do you feel that you have little to say about what your family decides to do?</td>
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75. Most problems will solve themselves if you just don't fool with them.

76. When bad things are going to happen they just are going to happen no matter what you try to do to stop them.

77. When someone does not like you there is little you can do about it.

78. It is almost useless to try in school because most other children are just plain smarter than you are.

Below is a list of things that people might do. People engage in a variety of activities and might break some rules from time to time. We want to get a true picture of the things that young people do in Australia. Answer each item as carefully and accurately as you can by placing a number beside each one as follows:

1 = Never
2 = Once or Twice
3 = Sometimes
4 = Often

79. Have you ever hurt someone badly enough to need bandages or a doctor? ___

80. Have you ever got into a serious fight with a student at school? ___

81. Have you ever got something by telling a person something bad would happen to them if you did not get what you wanted? ___

82. Have you ever hit a teacher? ___

83. Have you ever taken part in a fight where a group of your friends are against another group? ___

84. Have you ever used a knife or a gun or some other thing to get something from a person? ___

85. Have you ever taken a car that didn't belong to someone in your family without permission of the owner? ___

86. Have you ever taken something not belonging to you worth less than $50? ___
1 = Never
2 = Once or Twice
3 = Sometimes
4 = Often

87. Have you ever gone onto someone's land or into some house or building when you were not supposed to be there? 

88. Have you ever set fire to someone else's property on purpose? 

89. Have you ever damaged school property on purpose? 

90. Have you ever taken something from a shop without paying for it? 

91. Have you ever taken something not belonging to you worth more than $50? 

92. Have you ever taken an expensive part of a car without permission of the owner? 

* THANK YOU FOR YOUR PARTICIPATION!

Remember, all your answers are confidential and will not be revealed to anyone.
APPENDIX C:

Study 1 Consent Forms
SURVEY OF ADOLESCENTS’ PERCEPTIONS OF HOME-LIFE AND THEIR ATTITUDES

This research project is being conducted as part of a PhD (Clinical Psychology) degree supervised by Dr Patrick Heaven in the department of Psychology at the University of Wollongong.

The following questions have been designed to investigate various aspects of adolescents' home-life and their attitudes. The questionnaire will take approximately 25 minutes to complete.

Although you will be completing this survey in class, the information you provide will be used for research purposes only and will not be seen by your school or your parents. The completed questionnaires are completely confidential. (Note that your name is not to be written on any of the pages.) You are free to withdraw from the research at any time.

If you have any queries regarding the conduct of the research please contact the Secretary of the University of Wollongong Human Research Ethics Committee on 213079.

Thank you for your help in this important area of research.

Nadine Peiser

STUDENT CONSENT

I am willing to participate in the present study, and understand that the data collected will be used to further researcher's understanding of adolescents' perceptions of home-life and their attitudes.

Signed: __________________________

Date: __________________________
Dear Parent/Guardian,

I am conducting research as part of my PhD (Clinical Psychology) degree, supervised by Dr Patrick Heaven in the Department of Psychology at the University of Wollongong. I am investigating the relationship between student behaviours and the various aspects of their perceptions of family-life and their attitudes.

The information I am collecting will be used for research purposes only, and will be treated with the strictest confidence.

Students from various high schools will be asked to complete questionnaires anonymously during class time. Your child has been selected to participate in this study. If you approve of your child participating in this research, please sign below and return to the school's secretary.

If you have any queries regarding the conduct of the research please contact the Secretary of the University of Wollongong Human Research Ethics Committee on 213079.

Thanking you.

Yours sincerely,

Nadine C. Peiser

PARENT/GUARDIAN CONSENT

I am willing for my son/daughter/ward to participate in the present study, and understand that the data collected will be used to further researchers’ understanding of adolescents’ perceptions of various behaviours done by young people.

Signed: ____________________________

Date: ____________________________
APPENDIX D:

Study 2 Questionnaire
SURVEY QUESTIONNAIRE

PLEASE CIRCLE: MALE FEMALE

YOUR AGE: ___________Years ___________Months

NB: DO NOT WRITE YOUR NAME ON THE QUESTION PAGES

There are no right or wrong answers.
Your answers are what YOU think.

NO-ONE will see this questionnaire.
It will not be shown to your parents or your teachers.
SECTION ONE

Parents use many different ways to discipline and teach their children. The following items describe some disciplinary techniques that your parents may have used in response to different situations as you were growing up. I would like you to answer each item by circling the response that is associated with a response that is true for you.

1. When you broke or spoiled something at home, how often did your parents
   a. smack or scold you? Never  Rarely  Sometimes  Usually
   b. say that they liked the broken or spoiled item and explain why you should be more careful in future? Never  Rarely  Sometimes  Usually
   c. tell you that they didn’t like you for being so careless or destructive? Never  Rarely  Sometimes  Usually

2. If you had a temper tantrum, how often did your parents
   a. give you a smack? Never  Rarely  Sometimes  Usually
   b. yell at you to stop? Never  Rarely  Sometimes  Usually
   c. suggest alternative ways that you could use to get what you wanted? Never  Rarely  Sometimes  Usually
   d. isolate you in a room away from the rest of the family until the tantrum stopped? Never  Rarely  Sometimes  Usually

3. If you did not come home at the agreed time after playing with friends, how often did your parents
   a. not allow you to play for several days or weeks? Never  Rarely  Sometimes  Usually
   b. say that they were worried and explain why you should keep to the agreed time in future? Never  Rarely  Sometimes  Usually
   c. show their anger and refuse to listen to your excuses? Never  Rarely  Sometimes  Usually
4. If you got into trouble with your friends at school, how often did your parents
   a. punish you by withdrawing some privilege (for example, no television for a week)?
   b. say that they were disappointed and suggest ways that you could stay out of trouble in future?
   c. refuse to speak to you until you had apologised to the teachers at the school?

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<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Usually</th>
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5. If you refused to help or co-operate at home, how often did your parents
   a. punish you by refusing something that you wanted from them?
   b. tell you how disappointed they were and remind you that they couldn’t do everything themselves?
   c. say that they would send you away (for example, to boarding school) if you did not co-operate?

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<th>Never</th>
<th>Rarely</th>
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6. If you were rude, or said something nasty to your parents, how often did they
   a. give you a good smack and tell you never to speak that way again?
   b. show that they were hurt and explain that rudeness never helps things?
   c. say that they did not like children who showed such disrespect for their parents?

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7. If you physically hurt another child, how often did your parents
   a. hurt you right back?
   b. say that they felt sorry for the child who was hurt and point out that the other child was probably feeling bad?
   c. say that they did not want to live with someone who did such horrid things?

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<th>Never</th>
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8. If you took something that did not belong to you, how often did your parents
a. ask you to explain why you took the thing?  
   Never  Rarely  Sometimes  Usually
b. say that they expected you to return it?  
   Never  Rarely  Sometimes  Usually
c. give you an angry look and walk away?  
   Never  Rarely  Sometimes  Usually

9. If you wanted to stay up late on a school night to watch T.V., how often did your parents
a. yell at you for suggesting such a thing?  
   Never  Rarely  Sometimes  Usually
b. explain to you that getting a good night’s sleep was more important than watching T.V.?  
   Never  Rarely  Sometimes  Usually
c. look coldly at you so that you would get the message that they did not approve?  
   Never  Rarely  Sometimes  Usually

10. As you were growing up, about how often did you get belted by your parents?
   Circle one of the following:
   Never  Once a year  Once a month  Once a week  Almost every day

11. For the next statements, circle the option which is most correct for you.

As you remember your Mother:-

a. Never punished me?  
   Completely False  Somewhat False  Somewhat True  Completely True
b. Rarely got mad?  
   Completely False  Somewhat False  Somewhat True  Completely True
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<th>Somewhat True</th>
<th>Completely True</th>
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<td>c. Wouldn’t hurt me for anything?</td>
<td>CompletelY False</td>
<td>Somewhat False</td>
<td>Somewhat True</td>
<td>Completely True</td>
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<td>d. Never punished me physically?</td>
<td>Completely False</td>
<td>Somewhat False</td>
<td>Somewhat True</td>
<td>Completely True</td>
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**As you remember your Father:**

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<th>Completely False</th>
<th>Somewhat False</th>
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<td>Somewhat False</td>
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<td>f. Rarely got mad?</td>
<td>Completely False</td>
<td>Somewhat False</td>
<td>Somewhat True</td>
<td>Completely True</td>
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<td>g. Wouldn’t hurt me for anything?</td>
<td>Completely False</td>
<td>Somewhat False</td>
<td>Somewhat True</td>
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<td>h. Never punished me physically?</td>
<td>Completely False</td>
<td>Somewhat False</td>
<td>Somewhat True</td>
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SECTION TWO

The next questions mention various attitudes and behaviours of parents. I would like you to answer each item by circling the option that is associated with a response that is true for you.

As you think of your **Mother** in the last years:

1. Spoke to me with a warm and friendly voice.  
   - Very unlike  
   - Moderately unlike  
   - Moderately like  
   - Very like

2. Did not help me as much as I needed.  
   - Very unlike  
   - Moderately unlike  
   - Moderately like  
   - Very like

3. Let me do those things I liked doing.  
   - Very unlike  
   - Moderately unlike  
   - Moderately like  
   - Very like

4. Seemed emotionally cold to me.  
   - Very unlike  
   - Moderately unlike  
   - Moderately like  
   - Very like

5. Appeared to understand my problems and worries.  
   - Very unlike  
   - Moderately unlike  
   - Moderately like  
   - Very like

6. Was affectionate to me.  
   - Very unlike  
   - Moderately unlike  
   - Moderately like  
   - Very like

7. Liked me to make my own decisions.  
   - Very unlike  
   - Moderately unlike  
   - Moderately like  
   - Very like

8. Did not want me to grow up.  
   - Very unlike  
   - Moderately unlike  
   - Moderately like  
   - Very like

9. Tried to control everything I did.  
   - Very unlike  
   - Moderately unlike  
   - Moderately like  
   - Very like

10. Invaded my privacy.  
    - Very unlike  
    - Moderately unlike  
    - Moderately like  
    - Very like

11. Enjoyed talking things over with me.  
    - Very unlike  
    - Moderately unlike  
    - Moderately like  
    - Very like
12. Frequently smiled at me. | Very unlike | Moderately unlike | Moderately like | Very like
13. Tended to baby me. | Very unlike | Moderately unlike | Moderately like | Very like
14. Did not seem to understand what I needed or wanted. | Very unlike | Moderately unlike | Moderately like | Very like
15. Let me decide things for myself. | Very unlike | Moderately unlike | Moderately like | Very like
16. Made me feel I wasn’t wanted. | Very unlike | Moderately unlike | Moderately like | Very like
17. Could make me feel better when I was upset. | Very unlike | Moderately unlike | Moderately like | Very like
18. Did not talk with me very much. | Very unlike | Moderately unlike | Moderately like | Very like
19. Tried to make me dependent on her. | Very unlike | Moderately unlike | Moderately like | Very like
20. Felt I could not look after myself unless she was around. | Very unlike | Moderately unlike | Moderately like | Very like
21. Gave me as much freedom as I wanted. | Very unlike | Moderately unlike | Moderately like | Very like
22. Let me go out as often as I wanted. | Very unlike | Moderately unlike | Moderately like | Very like
23. Was overprotective of me. | Very unlike | Moderately unlike | Moderately like | Very like
24. Did not praise me. | Very unlike | Moderately unlike | Moderately like | Very like
25. Let me dress in any way I pleased. | Very unlike | Moderately unlike | Moderately like | Very like
As you think of your Father in the last years:

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16. Made me feel I wasn’t wanted.  
17. Could make me feel better when I was upset.  
18. Did not talk with me very much.  
19. Tried to make me dependent on him.  
20. Felt I could not look after myself unless he was around.  
21. Gave me as much freedom as I wanted.  
22. Let me go out as often as I wanted.  
23. Was overprotective of me.  
24. Did not praise me.  
25. Let me dress in any way I pleased.
SECTION THREE

The following questions ask how you feel in certain situations or how you might behave in certain situations. Please answer each question with YES or NO, circling the response that is true for you.

1. Do you enjoy hurting people you like? YES NO
2. Is it important to have good manners? YES NO
3. Would you enjoy practical jokes that could sometimes hurt people? YES NO
4. Do you seem to get into lots of fights? YES NO
5. Should people always try not to be rude? YES NO
6. Do you get into trouble at school more than most other kids? YES NO
7. Do you get picked on by your teachers more than other kids at school? YES NO
8. Did it upset you a lot to see a dog or cat that has just been run over? YES NO
9. Do you like playing pranks on others? YES NO
10. Do you sometimes bully and tease other children? YES NO
11. Do you sometimes like teasing animals? YES NO
12. Do you seem to get into more disagreements/fights than others your age? YES NO
SECTION FOUR

In this section, please answer either YES or NO, circling the response that is true for you.

Have you, in the past 12 months:

1. Driven an unregistered car?       YES   NO

2. Driven a car or a motor bike on the road without a driver’s licence or a learner’s permit?   YES   NO

3. Driven a car or a bike when drunk or over the legal alcohol limit?   YES   NO

4. Raced with other vehicles while driving a car or a motor bike on the road?   YES   NO

5. Taken and driven a car or a motor bike that belonged to someone else without the owner’s consent?   YES   NO

6. Stolen things or parts out of a car or a motor bike?   YES   NO

7. Stolen a bicycle or parts from a bicycle?   YES   NO

8. Gone to see an R film in a cinema?   YES   NO

9. Failed to keep a promise?   YES   NO

10. Bought beer, wine, spirits or other kinds of liquor?   YES   NO

11. Drunk alcohol in a public place, e.g. a disco, pub, tavern or bistro?   YES   NO

12. Gone onto a bus or into a cinema, swimming pool, disco, etc., without paying the proper fee?   YES   NO
12. Not attended classes or wagged school? YES  NO
13. Run away from home (at least overnight)? YES  NO
14. Shoplifted from supermarkets, department stores or shops? YES  NO
15. Stolen money of less than $10 (in one go) from shops, school, locker rooms, home, people’s milk money, etc.? YES  NO
16. Stolen money of $10 or more in one go? YES  NO
17. Broken into a house or building with the intention of stealing something, e.g. money, exam papers, or other things? YES  NO
18. Cheated or stolen food, drinks, or other goods from dispenser machines, e.g. by tilting or banging the machines, or using the “wrong” coins? YES  NO
19. Obtained free games from coin-operated space invaders or other games machines (not including reward of good performance by machines in the form of bonus games)? YES  NO
20. Purposely messed up other people’s property, e.g. turning on water taps in people’s gardens, letting off fire-crackers in mail boxes, burning rubbish bins, etc? YES  NO
21. Purposely damaged property by starting a fire? YES  NO
22. Purposely damaged things in public places, e.g. telephone boxes, street signs, road lamps, etc.? YES  NO
23. Purposely damaged school desks, windows, or other school property, e.g. kicking holes in the wall? YES  NO
24. Put graffiti on walls, toilet doors, bus panels, or other public places?  YES  NO

III. Done something that your parents did not want you to do?  YES  NO

25. Taken part in a fist fight in which a group of people was against another group?  YES  NO

26. Purposely hurt or beaten up someone?  YES  NO

27. Used a weapon of some sort, e.g. knife, stick, chains, or bottle in a fight?  YES  NO

28. Used or threatened to use force to get money or things from another person?  YES  NO

29. Used marijuana (also called grass, dope, or hash)?  YES  NO

30. Used LSD (also called acid)?  YES  NO

31. Abused barbiturates (also called barbs) by not properly following medical advice?  YES  NO

32. Forced someone to do sexual things when that person did not want to?  YES  NO

33. Tricked someone on the telephone e.g. false restaurant booking, giving false reports of fire alarm, bomb, etc.?  YES  NO

34. Made abusive phone calls, e.g. saying nasty or obscene things?  YES  NO

PW. Been warned by the police (but without being charged) for something that you did?  YES  NO

CC. Appeared in the Children's Court for something that you did?  YES  NO

IV. Told a lie to someone?  YES  NO
APPENDIX E:

Study 2 Consent Forms
UNIVERSITY OF WOLLONGONG
Department of Psychology

SURVEY OF YOUNG PEOPLE'S PERCEPTIONS OF FAMILY-LIFE, THEMSELVES, AND VARIOUS BEHAVIOURS

Research conducted by NADINE PEISER

This research project is being conducted as part of a PhD (Clinical Psychology) degree, supervised by Associate Professor Patrick Heaven in the Department of Psychology at the University of Wollongong.

1. The questionnaire I have prepared is aiming to understand young peoples' attitudes and their behaviours, such as their views of family-life and themselves. Your answers may help to provide better understanding of the needs of young people.

2. You will be completing the survey in class-time; it will take approximately 30 to 40 minutes to complete.

3. The information you give me will be used for research purposes only and will not be seen by any school staff or your parents/guardian. Nobody else will see the information you give me. Note that your name is not to be written on any of the pages. The unidentifiable information received from you will be used for publishing a PhD thesis.

4. Your participation in this research is voluntary; you are free to refuse to participate and you are free to withdraw from the research at any time. If there are any particular questions that you do not wish to answer, you do not have to. If you choose not to participate or if you withdraw, you will not be penalised in any way.

If you would like to discuss this research further please contact Nadine Peiser on (02) 4221 4513 or Associate Professor Patrick Heaven on (02) 4221 4070. If you have any questions regarding the conduct of the research please contact the Secretary of the University of Wollongong Human Research Ethics Committee on (02) 4221 4457.

Thank you for your help in this important area of research.

Research Title: Survey of young people's attitudes and behaviour

I, ................................................. (your name) consent to participate in the research conducted by Nadine Peiser as it has been described to me in the information sheet. I understand that the data collected will be used to explore young people's ideas about family-life and themselves and their attitudes to various behaviours, that it will be analysed by Nadine Peiser and will be part of her PhD Thesis write-up. I consent for the data to be used in this manner. My consent is voluntary and I understand that all information will be handled in the strictest confidence and that my name will not appear in any reports. I further understand that there is no penalty or prejudice of any kind for not participating in the study and that I can withdraw at any time.

Signature of participant ............................................. Date ....../..../........
Dear Parent/Guardian,

I am conducting research as part of my PhD (Clinical Psychology) degree, supervised by Associate Professor Patrick Heaven in the Department of Psychology at the University of Wollongong. The questionnaire I have prepared is aiming to understand young people’s attitudes and their behaviours, such as their views of family life and of themselves.

Your child’s school has been chosen to participate in this study. The questionnaires will be completed anonymously during class time.

The information I am collecting will be used for research purposes only, and will be treated with the strictest confidence. It will not be seen by the school staff. Your child will be requested not to write his/her name on the questionnaire. The information received, will be used for publishing a PhD thesis.

If you approve of your child/ward participating in this research, please sign below and give it to your son/daughter/ward to return to the appointed staff member.

If you would like to discuss this research further please contact Nadine Peiser on (02) 4221 4513 or Dr Patrick Heaven on (02) 4221 4070. If you have any questions regarding the conduct of the research please contact the Secretary of the University of Wollongong Human Research Ethics Committee on (02) 4221 4457.

Thanking you for your help in this important area of research.

Yours sincerely,

Nadine Peiser

PARENT/GUARDIAN CONSENT

I am willing for my son/daughter/ward to participate in the present study, and understand that the data collected will be used to further researchers’ understanding of young people’s attitudes and behaviour. Further, I understand that the information will be used for research purposes only, and will be treated with the strictest confidence.

Signature .................................................. Date......../....../.........
APPENDIX F:

Student sample

Study 3 Questionnaire
SURVEY QUESTIONNAIRE

Please read all instructions carefully, and answer the questions as honestly and spontaneously as possible. There are no right or wrong answers; just give your honest opinion. Please make sure that you answer all the questions.

PERSONAL DETAILS

How old are you? ____ years ____ months

Are you male or female? _________________

FAMILY DETAILS

PARENTS

What was the highest year of schooling that your father completed?

What is your father's current occupation? (Please do not give the name of his employer or work-place.)

What was the highest year of schooling that your mother completed?

What is your mother's current occupation? (Please do not give the name of her employer or work-place.)
Young people get into trouble for various behaviours. We are interested in whether or not you consider it a serious offense for a girl of your age to do each of the listed behaviours. Please answer each item as carefully and accurately as you can by circling the number on the scale for each behaviour mentioned.

1. A girl of your age driving an unregistered car.
   a serious offense 1 2 3 4 5 not a serious offense

1. A girl of your age driving a car or a motor bike on the road without a driver's licence or a learner's permit.
   a serious offense 1 2 3 4 5 not a serious offense

2. A girl of your age driving a car or a bike when drunk or over the legal alcohol limit.
   a serious offense 1 2 3 4 5 not a serious offense

3. A girl of your age racing with other vehicles while driving a car or a motor bike on the road.
   a serious offense 1 2 3 4 5 not a serious offense

4. A girl of your age taking and driving a car or a motor bike that belonged to someone else without the owner's consent.
   a serious offense 1 2 3 4 5 not a serious offense

6. A girl of your age stealing things or parts out of a car or a motor bike.
   a serious offense 1 2 3 4 5 not a serious offense

7. A girl of your age stealing a bicycle or parts from a bicycle.
   a serious offense 1 2 3 4 5 not a serious offense

8. A girl of your age going to see an R film in a cinema.
   a serious offense 1 2 3 4 5 not a serious offense
9. A girl of your age buying beer, wine, spirits or other kinds of liquor.

a serious offense 1 2 3 4 5 not a serious offense

5. A girl of your age drinking alcohol in a public place, e.g. a disco, pub, tavern or bistro.

a serious offense 1 2 3 4 5 not a serious offense

6. A girl of your age going onto a bus or into a cinema, swimming pool, disco, etc., without paying the proper fee.

a serious offense 1 2 3 4 5 not a serious offense

12. A girl of your age not attending classes or wagging school.

a serious offense 1 2 3 4 5 not a serious offense

13. A girl of your age running away from home (at least overnight).

a serious offense 1 2 3 4 5 not a serious offense

14. A girl of your age shoplifting from supermarkets, department stores or shops.

a serious offense 1 2 3 4 5 not a serious offense

15. A girl of your age stealing money of less than $10 (in one go) from shops, school, locker rooms, home, people's milk money, etc.

a serious offense 1 2 3 4 5 not a serious offense

16. A girl of your age stealing money of $10 or more in one go.

a serious offense 1 2 3 4 5 not a serious offense

17. A girl of your age breaking into a house or building with the intention of stealing something, e.g., money, exam papers, or other things.

a serious offense 1 2 3 4 5 not a serious offense
18. A girl of your age cheating or stealing food, drinks, or other goods from dispenser machines, e.g. by tilting or bnging the machines, or using the “wrong” coins.

<table>
<thead>
<tr>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>not a serious offense</th>
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19. A girl of your age obtaining free games from coin-operated space invaders or other games machines (not including reward of good performance by machines in the form of bonus games).

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20. A girl of your age purposely messing up other peoples' property, e.g., turning on water taps in people's gardens, letting off fire-crackers in mail boxes, burning rubbish bins, etc.

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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
</table>

21. A girl of your age purposely damaging property by starting a fire.

<table>
<thead>
<tr>
<th>a serious offense</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>not a serious offense</th>
</tr>
</thead>
</table>

22. A girl of your age purposely damaging things in public places, e.g., telephone boxes, street signs, road lamps, etc.

<table>
<thead>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>not a serious offense</th>
</tr>
</thead>
</table>

23. A girl of your age purposely damaging school desks, windows, or other school property, e.g., kicking holes in the wall.

<table>
<thead>
<tr>
<th>a serious offense</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>not a serious offense</th>
</tr>
</thead>
</table>

24. A girl of your age putting graffiti on walls, toilet doors, bus panels, or other public places.

<table>
<thead>
<tr>
<th>a serious offense</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>not a serious offense</th>
</tr>
</thead>
</table>

25. A girl of your age taking part in a fist fight in which a group of people was against another group.

<table>
<thead>
<tr>
<th>a serious offense</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>not a serious offense</th>
</tr>
</thead>
</table>
26. A girl of your age purposely hurting or beating up someone.

   a serious offense  1  2  3  4  5 not a serious offense

27. A girl of your age using a weapon of some sort, e.g., knife, stick, chains, or bottle in a fight.

   a serious offense  1  2  3  4  5 not a serious offense

28. A girl of your age using or threatening to use force to get money or things from another person.

   a serious offense  1  2  3  4  5 not a serious offense

29. A girl of your age using marijuana (also called grass, dope, or hash).

   a serious offense  1  2  3  4  5 not a serious offense

30. A girl of your age using LSD (also called acid).

   a serious offense  1  2  3  4  5 not a serious offense

31. A girl of your age abusing barbiturates (also called barbs) by not properly following medical advice.

   a serious offense  1  2  3  4  5 not a serious offense

32. A girl of your age forcing someone to do sexual things when that person did not want to.

   a serious offense  1  2  3  4  5 not a serious offense

33. A girl of your age tricking someone on the telephone e.g., false restaurant booking, giving false reports of fire alarm, bombs, etc.

   a serious offense  1  2  3  4  5 not a serious offense

34. A girl of your age making abusive phone calls, e.g., saying nasty or obscene things.

   a serious offense  1  2  3  4  5 not a serious offense
35. A girl of your age hitting a teacher.

   a serious offense 1 2 3 4 5 not a serious offense

36. A girl of your age going onto someone's land or into some house or building when not supposed to be there.

   a serious offense 1 2 3 4 5 not a serious offense

Here follow some general statements about yourself. Please circle the most appropriate number.

37. I am always courteous even to people who are disagreeable.

   1. definitely false
   2. mostly false
   3. don't know
   4. mostly true
   5. definitely true

38. There have been occasions when I took advantage of someone.

   1. definitely false
   2. mostly false
   3. don't know
   4. mostly true
   5. definitely true

39. I sometimes try to get even rather than forgive and forget.

   1. definitely false
   2. mostly false
   3. don't know
   4. mostly true
   5. definitely true

40. I sometimes feel resentful when I don't get my way.

   1. definitely false
   2. mostly false
   3. don't know
   4. mostly true
   5. definitely true
41. No matter who I'm talking to, I'm always a good listener.

1. definitely false
2. mostly false
3. don't know
4. mostly true
5. definitely true

Parents use many different methods to discipline and socialize their children. The following items describe some disciplinary techniques that your parents may have used in response to different situations, as you were growing up. Please answer each item by circling one number.

42. When you broke or spoiled something at home, how often did your parents

   a. smack or scold you. 1 2 3 4
   b. say that they liked the broken or spoiled item and explain why you should be more careful in future. 1 2 3 4
   c. tell you that they didn't like you for being so careless or destructive. 1 2 3 4

43. If you had a temper tantrum, how often did your parents

   a. give you a smack. 1 2 3 4
   b. yell at you to stop. 1 2 3 4
   c. suggest alternative ways that you could use to get what you wanted. 1 2 3 4
   d. isolate you in a room away from the rest of the family until the tantrum stopped. 1 2 3 4
44. If you did not come home at the agreed time after playing with friends, how often did your parents

- a. not allow you to play for several days or weeks. 1 2 3 4
- b. say that they were worried and explain why you should keep to the agreed time in future. 1 2 3 4
- c. show their anger and refuse to listen to your excuses. 1 2 3 4

45. If you got into trouble with your friends at school, how often did your parents

- a. punish you by withdrawing some privilege (for example no television for a week). 1 2 3 4
- b. say that they were disappointed and suggest ways that you could stay out of trouble in future. 1 2 3 4
- c. refuse to speak to you until you had apologised to the teachers at the school. 1 2 3 4

46. If you refused to help or co-operate at home, how often did your parents

- a. punish you by refusing something that you wanted from them. 1 2 3 4
- b. tell you how disappointed they were and remind you that they couldn't do everything themselves. 1 2 3 4
- c. say that they would send you away (for example, to boarding school) if you did not co-operate. 1 2 3 4
<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Usually</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>47. If you were rude, or said something nasty to your parents, how often did they</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. give you a good smack and tell you never to speak that way again.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. show that they were hurt and explain that rudeness never helps things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. say that they did not like children who showed such disrespect for their parents.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>48. If you physically hurt another child, how often did your parents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. hurt you right back.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. say that they felt sorry for the child who was hurt and point out that the other child was probably feeling bad.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. say that they did not want to live with someone who did such horrid things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>49. If you took something that did not belong to you, how often did your parents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. ask you to explain why you took the thing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. say that they expected you to return it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. give you an angry look and walk away.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>50. If you wanted to stay up late on a school night to watch T.V., how often did your parents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. yell at you for suggesting such a thing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. explain to you that getting a good night's sleep was more important than watching T.V.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. look coldly at you so that you would get the message that they did not approve.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
51. As you were growing up, about how often did you get belted by your parents?

   ___ Never
   ___ Once a year
   ___ Once a month
   ___ Once a week
   ___ Almost every day.

52. As you remember your mother, for each statement, place a number beside each one as follows:

   1 = Completely false
   2 = Somewhat false
   3 = Somewhat true
   4 = Completely true

   a) Never punished me. ___
   b) Rarely got mad. ___
   c) Wouldn't hurt me for anything. ___
   d) Was always cross with me. ___
   e) Never punished me physically. ___

53. As you remember your father, for each statement, place a number beside each one as follows:

   1 = Completely false
   2 = Somewhat false
   3 = Somewhat true
   4 = Completely true

   a) Never punished me. ___
   b) Rarely got mad. ___
   c) Wouldn't hurt me for anything. ___
   d) Was always cross with me. ___
   e) Never punished me physically. ___

* THANK YOU FOR YOUR PARTICIPATION!
APPENDIX G:

Parent sample

Study 3 Questionnaire
SURVEY QUESTIONNAIRE

Please read all instructions carefully, and answer the questions as honestly and spontaneously as possible. There are no right or wrong answers; just give your honest opinion. Please make sure that you answer all the questions. Remember, all your answers are confidential and will not be revealed to anyone.

PERSONAL DETAILS

How old are you? ___ years ___ months

Are you male or female? _____________

What was the highest year of schooling that you completed?

What is your current occupation? (Please do not give the name of your employer or work-place.)

If applicable, what was the highest year of schooling that your partner/spouse completed?

What is your partners'/spouse’s current occupation? (Please do not give the name of their employer or work-place.)
We are interested in your perceptions of the following behaviours done by young people, that is, whether or not you consider it a serious offense for Year 10 boys to do each of the listed behaviours. Please answer each item as carefully and accurately as you can by circling the number on the scale for each behaviour mentioned.

1. Year 10 boys driving an unregistered car.

   a serious 1 2 3 4 5 not a serious offense

2. Year 10 boys driving a car or a motor bike on the road without a driver's licence or a learner's permit.

   a serious 1 2 3 4 5 not a serious offense

3. Year 10 boys driving a car or a bike when drunk or over the legal alcohol limit.

   a serious 1 2 3 4 5 not a serious offense

4. Year 10 boys racing with other vehicles while driving a car or a motor bike on the road.

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5. Year 10 boys taking and driving a car or a motor bike that belonged to someone else without the owner's consent.

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6. Year 10 boys stealing things or parts out of a car or a motor bike.

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7. Year 10 boys stealing a bicycle or parts from a bicycle.

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8. Year 10 boys going to see an R film in a cinema.

   a serious 1 2 3 4 5 not a serious offense
9. Year 10 boys buying beer, wine, spirits or other kinds of liquor.

   a serious offense 1 2 3 4 5 not a serious offense

9. Year 10 boys drinking alcohol in a public place, e.g. a disco, pub, tavern or bistro.

   a serious offense 1 2 3 4 5 not a serious offense

10. Year 10 boys going onto a bus or into a cinema, swimming pool, disco, etc., without paying the proper fee.

   a serious offense 1 2 3 4 5 not a serious offense

12. Year 10 boys not attending classes or wagging school.

   a serious offense 1 2 3 4 5 not a serious offense

13. Year 10 boys running away from home (at least overnight).

   a serious offense 1 2 3 4 5 not a serious offense

14. Year 10 boys shoplifting from supermarkets, department stores or shops.

   a serious offense 1 2 3 4 5 not a serious offense

15. Year 10 boys stealing money of less than $10 (in one go) from shops, school, locker rooms, home, people's milk money, etc.

   a serious offense 1 2 3 4 5 not a serious offense

16. Year 10 boys stealing money of $10 or more in one go.

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17. Year 10 boys breaking into a house or building with the intention of stealing something, e.g., money, exam papers, or other things.

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18. Year 10 boys cheating or stealing food, drinks, or other goods from dispenser machines, e.g. by tilting or bng the machines, or using the “wrong” coins.

   a serious 1 2 3 4 5 not a serious offense

19. Year 10 boys obtaining free games from coin-operated space invaders or other games machines (not including reward of good performance by machines in the form of bonus games).

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20. Year 10 boys purposely messing up other peoples' property, e.g., turning on water taps in people's gardens, letting off fire-crackers in mail boxes, burning rubbish bins, etc.

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21. Year 10 boys purposely damaging property by starting a fire.

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22. Year 10 boys purposely damaging things in public places, e.g., telephone boxes, street signs, road lamps, etc.

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23. Year 10 boys purposely damaging school desks, windows, or other school property, e.g., kicking holes in the wall.

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24. Year 10 boys putting graffiti on walls, toilet doors, bus panels, or other public places.

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25. Year 10 boys taking part in a fist fight in which a group of people was against another group.

   a serious 1 2 3 4 5 not a serious offense
26. Year 10 boys purposely hurting or beating up someone.

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27. Year 10 boys using a weapon of some sort, e.g., knife, stick, chains, or bottle in a fight.

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29. Year 10 boys using marijuana (also called grass, dope, or hash).

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30. Year 10 boys using LSD (also called acid).

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31. Year 10 boys abusing barbiturates (also called barbs) by not properly following medical advice.

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33. Year 10 boys tricking someone on the telephone e.g., false restaurant booking, giving false reports of fire alarm, bombs, etc.

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35. Year 10 boys hitting a teacher.

| a serious offense | 1 | 2 | 3 | 4 | 5 | not a serious offense |

36. Year 10 boys going onto someone’s land or into some house or building when not supposed to be there.

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Here follow some general statements about yourself. Please circle the most appropriate number.

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2. mostly false
3. don’t know
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5. definitely true

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1. definitely false
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1. definitely false
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41. No matter who I'm talking to, I'm always a good listener.

1. definitely false  
2. mostly false  
3. don't know  
4. mostly true  
5. definitely true

Parents use many different methods to discipline and socialize their children. The following items describe some disciplinary techniques that you may have used in response to different situations, as your children were growing up. Please answer each item by circling one number.

<table>
<thead>
<tr>
<th>Never</th>
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<th>Usually</th>
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</table>

42. When your children broke or spoiled something at home, how often did you

a. smack or scold them.
   1  2  3  4

b. say that you liked the broken or spoiled item and explain why they should be more careful in future.
   1  2  3  4

c. tell them that you didn't like them for being so careless or destructive.
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43. If your children had a temper tantrum, how often did you

a. give them a smack.
   1  2  3  4

b. yell at them to stop.
   1  2  3  4

c. suggest alternative ways that they could use to get what they wanted.
   1  2  3  4

d. isolate them in a room away from the rest of the family until the tantrum stopped.
   1  2  3  4
44. If your children did not come home at the agreed time after playing with friends, often did you

a. not allow them to play for several days or weeks. 1 2 3 4

b. say that you were worried and explain why they should keep to the agreed time in future. 1 2 3 4

c. show their anger and refuse to listen to their excuses. 1 2 3 4

45. If your children got into trouble with their friends at school, how often did you

a. punish them by withdrawing some privilege (for example no television for a week). 1 2 3 4

b. say that you were disappointed and suggest ways that they could stay out of trouble in future. 1 2 3 4

c. refuse to speak to them until they had apologised to the teachers at the school. 1 2 3 4

46. If your children refused to help or co-operate at home, how often did you

a. punish them by refusing something that they wanted from you. 1 2 3 4

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b. show that you were hurt and explain that rudeness never helps things. 1 2 3 4

c. say that you did not like children who showed such disrespect for their parents. 1 2 3 4

48. If your children physically hurt another child, how often did you

a. hurt them right back. 1 2 3 4

b. say that you felt sorry for the child who was hurt and point out that the other child was probably feeling bad. 1 2 3 4

c. say that you did not want to live with someone who did such horrid things. 1 2 3 4

49. If your children took something that did not belong to them, how often did you

a. ask them to explain why they took the thing. 1 2 3 4

b. say that you expected them to return it. 1 2 3 4

c. give them an angry look and walk away. 1 2 3 4
50. If your children wanted to stay up late on a school night to watch T.V., how often did you

a. yell at them for suggesting such a thing. 1 2 3 4

b. explain to them that getting a good night's sleep was more important than watching T.V. 1 2 3 4

c. look coldly at them so that they would get the message that they did not approve. 1 2 3 4

51. As your children were growing up, about how often did you belt them?

___ Never
___ Once a year
___ Once a month
___ Once a week
___ Almost every day.

* THANK YOU FOR YOUR PARTICIPATION!
APPENDIX H:

Study 3 Consent Forms – Student sample

(i) Student

(ii) Parent/Guardian
SURVEY OF ADOLESCENTS' PERCEPTIONS OF VARIOUS BEHAVIOURS DONE BY YOUNG PEOPLE

This research project is being conducted as part of a PhD (Clinical Psychology) degree, supervised by Dr Patrick Heaven in the Department of Psychology at the University of Wollongong.

We are interested in understanding what adolescents' perceptions are of various behaviours done by young people. For example, how serious are the behaviours? We are also interested in how young people view some aspects of family life. It will take approximately 30 minutes to complete the questionnaire.

Although you will be completing this survey in class, the information you provide will be used for research purposes only and will not be seen by your school or your parents. The completed questionnaires are completely confidential. (Note that your name is not to be written on any of the pages.) The unidentifiable information received from you, will be used for publishing a PhD thesis. You are free to withdraw from the research at any time.

If you have any queries regarding the conduct of the research please contact the Secretary of the University of Wollongong Human Research Ethics Committee on (02) 4221 4457.

Thank you for your help in this important area of research.

Nadine C. Peiser

STUDENT CONSENT

I am willing to participate in the present study, and understand that the data collected will be used to further researchers' understanding of adolescents' perceptions of behaviours done by young people and their perceptions of some aspect of family life.

Signed: ____________________________
Date: ____________________________
Dear Parent/Guardian,

I am conducting research as part of my PhD (Clinical Psychology) degree, supervised by Dr Patrick Heaven in the Department of Psychology at the University of Wollongong. I am investigating what adolescents' perceptions are of various behaviours done by young people. For instance, how serious are the behaviours? I am also interested in how young people view some aspects of family life.

The information I am collecting will be used for research purposes only, and will be treated in the strictest confidence. It will not be seen by the school and your child will be requested not to write his/her name on the questionnaire. The unidentifiable information received, will be used for publishing a PhD thesis.

Students from various high schools will be asked to complete questionnaires anonymously during class time. Your child has been selected to participate in this study. If you approve of your child participating in this research, please sign below and give it to your son/daughter/ward to return to the appointed staff member.

If you have any queries regarding the conduct of the research please contact the Secretary of the University of Wollongong Human Research Ethics Committee on (02) 4221 4457.

Thanking you.

Yours sincerely,

Nadine C. Peiser

PARENT/GUARDIAN CONSENT

I am willing for my son/daughter/ward to participate in the present study, and understand that the data collected will be used to further researchers' understanding of adolescents' perceptions of various behaviours done by young people, and their perceptions of some aspect of family life.

Signed: ____________________________

Date: ____________________________
APPENDIX I:

Study 3 Consent Forms – Parent sample
UNIVERSITY OF WOLLONGONG
Department of Psychology

Dear Parent/Guardian

I would like to invite you to participate in a research project currently being conducted by myself as part of a PhD (Clinical Psychology) degree, supervised by Dr Patrick Heaven in the Department of Psychology at the University of Wollongong.

You may or may not have chosen to give permission for your child/ward to participate in this research project. Irrespective of that decision, it would be appreciated if you would participate, as we are interested in investigating both adolescents' and parents' perceptions of (1) various behaviours done by young people, and (2) some aspects of family life.

The information you provide will be used for research purposes only and will not be seen by anyone other than the researcher and supervisor. The information you provide will be treated confidentially. Note that your name is not to be written on any of the pages. The unidentifiable information received from you, will be used for publishing a PhD thesis. You are free to withdraw from the research at any time.

If you are willing to participate, please indicate this in the space provided at the bottom of this page and return to the school with your child. The questionnaire I am asking you to complete is enclosed in the envelope. Once you have answered the questions, please return it in the pre-stamped envelope that is provided, to the University of Wollongong Psychology Department. It would be helpful if you did not discuss the questionnaire with your child until they themselves have completed a similar questionnaire.

If you have any queries regarding the conduct of the research please contact the Secretary of the University of Wollongong Human Research Ethics Committee on (02) 4221 4457.

Thank you for your help in this important area of research.

Nadine C. Peiser

WILLINGNESS TO PARTICIPATE

I am/am not willing to participate in the present study, and understand that the data collected will be used to further researchers' understanding of adults' perceptions of behaviours done by young people, and their perception of some aspect of family-life.

Signed: __________________________

Date: __________________________