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Moral Reasoning Theory and Illegal Behaviour by Adults with Intellectual Disabilities

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Abstract

Many studies conclude there is a strong relationship between moral reasoning and illegal behaviour amongst young offenders. However, there has been no research examining this relationship amongst people with intellectual disabilities. There is some empirical evidence to suggest that the relationship between moral reasoning and illegal behaviour may be curvilinear, such that lower moral reasoning and higher moral reasoning relates to lower rates of illegal behaviour and inappropriate conduct. Given this, and evidence that people with intellectual disabilities are reasoning at a lower moral stage than their same-age peers, it is proposed that some people with intellectual disabilities may actually be less likely to engage in illegal behaviour because they are reasoning at an earlier moral stage, while those with 'borderline' intelligence would be more likely to engage in illegal behaviour. This suggests that the relationship between moral reasoning and illegal behaviour is moderated by intelligence, and this has implications for the design of intervention programmes for people with intellectual disabilities, but further research is needed.

Moral Reasoning Theory and Illegal Behaviour by Adults with Intellectual Disabilities

Meta-analytic studies have demonstrated a strong relationship between moral reasoning and illegal behaviour, including both crimes and antisocial behaviour amongst young offenders (Blasi, 1980; Nelson, Smith, & Dodd, 1990; Stams, Brugman, Deković, & van Rosmalen, 2006). The most recent study reported that moral reasoning is lower amongst 'delinquent' adolescents than 'non-delinquents', with a large effect size of $d=0.76$ (Stams, et al., 2006). However, these meta-analytic studies do not include populations of people with intellectual disabilities (ID). As a consequence little is known about the relationship between moral reasoning and illegal behaviour for this group.

In this paper, we present a brief summary of moral reasoning theory, followed by a discussion of the proposed relationships between moral reasoning, intelligence and illegal behaviour. We then review the relevant literature involving people with ID, and draw attention to its theoretical and empirical limitations. We conclude that, as far as is known, no studies have examined the potential relationship between moral reasoning and illegal behaviour in this population. In an attempt to address this gap, we propose that the relationship between intelligence and such behaviour is moderated by moral reasoning. The implication is that at least some people with ID may actually be less likely to engage in illegal behaviour than their counterparts in the general population. However, we recognise that, given the unsatisfactory nature of the literature, that the evidence base in support of our proposal is weak.

Moral Reasoning Theory

Piaget (1932) is credited with constructing the first psychological theory of moral development. He argued that moral development occurs in parallel with and is dependent upon logical reasoning; moral development cannot occur without associated developmental progression within the logical reasoning domain. Given the link between cognitive ability and moral reasoning, the implications for people with ID are obvious.

However, one of the difficulties with Piagetian theory is that it does not consider development beyond childhood. This difficulty was addressed by Kohlberg (1969, 1974) who proposed a stage theory of moral development that extended beyond childhood and into adolescence and adulthood. Kohlbergian moral reasoning theory originally comprised six stages, spread across three levels (Table 1), and forming a hierarchical stage model where more complex levels of moral reasoning required successful progression through earlier stages in a more or less linear fashion. The progression in moral reasoning was accompanied by a parallel developmental progression in logical reasoning, or cognitive abilities, similar to that proposed by Piaget (1932).

Over the years, there have been a wide range of criticisms of Kohlbergian moral stage theory on the grounds of cultural bias (Simpson, 1974), Western liberalism (Schweder, 1982; Sullivan, 1977), masculinist conceptualisations of morality (Gilligan, 1982), and the lack of attention paid to the important role of emotion (Sullivan, 1977). Moreover, little evidence has been found for the existence of higher order levels of moral reasoning within various populations, while stage reversal and regression have also been reported

(Simpson, 1974; Sullivan, 1977). However, Kohlberg and his colleagues attempted to address these criticisms by revising the scoring methods of their data collection instruments, revising theory and reanalysing their data (Kohlberg, Levine, & Hewer, 1983, 1984).

INSERT TABLE ONE ABOUT HERE

Nevertheless, many of the criticisms remained salient, and Gibbs (1979) argued for the separation of post-conventional reasoning completely from moral reasoning theory on the grounds that such mature levels of moral reasoning were “existential”. Drawing on evidence that post-conventional moral reasoning is achieved infrequently across cultures, Gibbs and his colleagues (1979; Gibbs, Basinger, & Fuller, 1992) revised Kohlbergian moral theory into a sociomoral stage theory regarding the reasons or justifications people give for their behaviour (Table 2), and their revisions have recently been shown to have cross cultural validity (Gibbs, Basinger, Grime, & Snarey, 2007). This sociomoral reasoning theory, and the associated instruments for measuring moral stage, have subsequently been used widely to examine the relationship between illegal behaviour and moral reasoning, and the theory has been developed further. Gibbs (2003) revisited his theoretical perspective and placed moral reasoning within the context of traditional information processing theory, drawing parallels between moral stages and schema. At

the same time, he recognised the importance of emotional states such as empathy, as considered by Hoffman (2000).

INSERT TABLE TWO ABOUT HERE

Moral Reasoning, Illegal Behaviour and Intelligence

According to Gibbs (2003), a “developmental delay in moral judgement” (p. 135) coupled with distorted cognitions and social skill deficits are common among the perpetrators of illegal behaviours, and suggested that “...antisocial behaviour stems in part from moral perception based on developmentally delayed morality” (p. 135). He argued that illegal behaviour is driven by cognitive distortions that are generated by the development of schema reflecting the individual’s moral stage. This account has been elaborated by Palmer (2003a; 2003b), who embedded moral reasoning within the context of a developmental theory that recognises the influences of peers and parents, information processing, and social and environmental factors. Like Gibbs (2003), Palmer (2003a, 2003b) proposed that immature moral reasoning leads to the generation of cognitive distortions, used by an individual to support their illegal behaviour. She thus provided a theoretical link as to why moral reasoning theory may be associated with behaviour that is against the law.

Although Gibbs (2003) stated that “moral developmental delay refers chiefly to the persistence of immature morality into adolescence and adulthood” (p. 135), one of the difficulties within this area is that the majority of studies have been conducted using populations of adolescents. The studies that have used adult participants have reported mixed findings. Watt, Frausin, Dixon & Nimmo (2000) examined the moral reasoning of adult male and female convicted offenders, and female non-offenders using Kohlbergian moral stories; there were no differences between the groups. Along the same lines, Griffore and Samuels (1978) reported no difference on a measure of moral reasoning between the performance of male convicted offenders within a maximum security prison and normative data drawn from the general population. In contrast, Thornton and Reid (1982) reported that while adult convicted offenders tended to engage in moral reasoning at Stage 2, some emergence of Stage 3 reasoning could be found among those whose crimes had a higher risk of detection. This, it was argued, suggested a tendency to think about the needs of others and society, rather than simply the possible consequences for the self, indicating greater maturity. In another study, Stevenson, Hall and Innes (2003) reported that the moral reasoning of adult convicted offenders was significantly lower than that of non-offenders, but the offenders were still reasoning at Stage 3. Finally, in a study examining the moral reasoning of adult patients within a high secure hospital in the United Kingdom (O’Kane, Fawcett, & Blackburn, 1996), it was reported that the positive relationship between moral reasoning and psychopathy evaporated when IQ was controlled, but the relationship between moral reasoning and antisocial aggression remained.

While the empirical evidence from adults is mixed, theories of moral development rest upon the premise that developmental progression is dependent upon, and occurs in parallel with, the development of cognitive ability (Gibbs, 1979; Kohlberg, 1958, 1969; Piaget, 1932). Certainly, there is evidence to suggest that cognitive development mediates moral reasoning (Tomlinson-Keasey & Keasey, 1974), and studies using large samples of children from the general population have demonstrated a significant positive relationship between intelligence and moral reasoning development (Hoffman, 1977; Johnson, 1962). Theoretically, people with a developmental delay, such as those with an ID, are therefore more likely to engage in moral reasoning at earlier developmental levels.

Such an argument has significant theoretical implications for our understanding of the propensity of people with ID to engage in illegal behaviour. There is a literature linking intelligence with offending behaviour (Farrington, 1996; Hirschi & Hindelang, 1977; Moffitt, 1993; Moffitt, Gabrielli, & Mednick, 1981), and recent large aggregate studies have suggested a relationship between intelligence and some types of offending, such as sexual offending (Cantor, Blanchard, Robichaud, & Christensen, 2005). However, many of these studies have not included people who have met the diagnostic criteria for an intellectual disability (i.e. a Full Scale IQ of less than 70, coupled with significant deficits in adaptive behaviour, with childhood onset). Moreover, the relationships between illegal behaviour, moral reasoning and ID have not been addressed. If it were assumed that the relationships between these variables were generally linear, it would be expected

that lower intelligence would be associated with both lower moral reasoning and higher rates of illegal behaviour (Figure 1a).

Figure 1 about here

However, there is some evidence within the literature suggesting that the relationship between moral reasoning and illegal behaviour may not be linear, but instead takes the form of an inverted U-curve (Figure 1b). Theoretically, the curvilinear relationship can be explained by examining the stages of moral reasoning theory: reasoning at Stage 1 is associated with obeying rules, leading to low levels of illegal behaviour. Stage 2, which is associated with an egocentric view characterised by meeting the individual's own needs, leads to an increase in disruptive behaviour. At Stage 3, which is associated with the development of moral reasoning based on maintaining relationships and a shift away from an egocentricism, illegal behaviour decreases. There is some empirical support for this relationship. As Gibbs (2003) notes, many studies have demonstrated that 'delinquent' adolescents tend to make more use of Stage 2 moral reasoning with regards to concepts such as justice and the law (Blasi, 1980; Campagna & Harter, 1975; Chandler & Moran, 1990; Gavaghan, Arnold, & Gibbs, 1983; Gregg, Gibbs, & Basinger, 1994; Nelson, et al., 1990; Trevethan & Walker, 1989). In contrast, 'non-delinquent' adolescents tend to give Stage 3 reasons for obeying the law (Gibbs, 2003). Supportive findings have also been obtained in children (Richards et al., 1992). Assuming a similar set of relationships exists amongst people with ID, then those engaging in moral reasoning at Stage 2, who would be more likely to be of 'borderline' intelligence would

be at greatest risk of behaving illegally. At both lower and higher levels of moral reasoning and intelligence, illegal behaviour would decrease (see Figure 1b).

Intellectual Disabilities, Moral Reasoning Theory, and Behaviour

Are people with ID reasoning at a lower moral stage as the theory proposes? It is difficult to draw conclusions about this issue given the heterogeneity of the population and the state of the literature. The current literature regarding the moral development of people with intellectual disabilities is problematic because it predates many of the theoretical developments that have occurred within this area. Moreover, while a few studies have included adults (e.g. Blakey, 1973), the majority of studies have included only child or adolescent participants. Often, the comparison groups are also unsatisfactory, because participants with ID are matched to (usually much younger) typically developing children, using some index of intellectual functioning such as 'mental age'.

In addition, early studies make use of unstandardised measures of moral reasoning. Measurement is an important issue within the area of moral reasoning. There are two categories of assessment measures: 1) recognition instruments, and 2) production instruments. Recognition instruments provide a set of moral justifications, traditionally following the reading of a moral dilemma, after which respondents are asked to choose which best matches their own reasoning. In contrast, production instruments require respondents to verbalise their own moral reasoning in response to questions aimed to elicit these judgements. Recognition instruments are more likely to be affected by

socially desirable responding, while production instruments have been found to discriminate more reliably between offenders and non-offenders (Blasi, 1980; Gavaghan, et al., 1983). No attention has been paid within the literature as to which method of measuring moral reasoning is most appropriate to use with people with ID and further studies are required to investigate this issue.

Notwithstanding the major theoretical and empirical limitations, the literature indicates overwhelmingly that the moral development of people with ID lags behind that of age-matched peers without ID (Bender, 1980; Blakey, 1973; Foye & Simeonsson, 1979; Gargiulo, 1984; Jackson & Haines, 1982; Kahn, 1976, 1983; Lind & Smith, 1984; Taylor & Achenbach, 1975). Most often, the moral reasoning of participants with ID matches that of typically developing younger participants, indicating a relationship with intellectual functioning. Mahaney and Stephens (1974) reported that children and adolescents with ID make progress through the developmental stages of moral reasoning, but this progress may not be as marked or as consistent as that which occurs amongst their peers without ID. Overall, the studies suggest that adults with ID are reasoning at a developmentally earlier moral stage when compared to their peers (Bender, 1980; Blakey, 1973; Foye & Simeonsson, 1979; Gargiulo, 1984; Jackson & Haines, 1982; Kahn, 1976, 1983; Lind & Smith, 1984; Taylor & Achenbach, 1975).

At present, little is known about the moral reasoning stage at which people with ID are functioning. Two studies are important and shed some light on this issue. The first, by Sigman, Ungerer and Russell (1983), is the only one to have made use of a standardised

procedure (stories from Kohlberg's Standard Scoring Manual) for measuring moral reasoning amongst a small group (N=20) of adolescent with a 'borderline' intellectual disability, although this measure of moral reasoning is relatively old. All of the participants were inpatients with behavioural difficulties on a ward within a hospital. They reported that most of their sample scored at the preconventional level (Stages 1 and 2) with scores being spread across Stages 1 to 3. The second study, by Taylor & Achenbach (1975), compared children with and without ID matched according to whether they had 'low, moderate or high' mental age. Hence, older children with ID were compared to younger children without ID. Children of lower 'mental age' were reasoning at Stage 1, with a few reasoning at moral Stage 2. None of the participants of lower or moderate 'mental age' were reasoning at Stage 3. These findings are consistent with the theoretical relationship between cognitive ability and moral reasoning development.

Is there a relationship between moral reasoning and behaviour amongst people with ID? There are only three known studies have considered this possibility. The largest study, albeit focusing on children and adolescents, is that of Moore & Stephens (1974). They examined the development of 'moral conduct' longitudinally over several years among 150 children and adolescents allocated to groups of equal size according to whether or not they had an ID. A series of structured situations was devised in which each participant's behaviour was observed in an attempt to assess 'moral conduct'. Situations were classed into those that aimed to assess self-control, honesty, stealing, mishaps,

cheating and persistence. In a second study, the moral reasoning of the same participants was assessed and reported (Mahaney & Stephens, 1974).

The initial cross-sectional data demonstrated a developmental increase in ‘moral conduct’ across age for both groups. As expected, the scores of participants with ID were poorer than for those without ID, but the difference disappeared when participants were matched according to ‘mental age’. Interestingly, the longitudinal data indicated that, among the adolescents aged 12-16 years, there was deterioration over time in their ‘moral conduct’, and this did not occur among their peers without an ID. While no reference to moral stage was made within this study, the deterioration in behaviour would be predicted by the proposed curvilinear relationship between moral reasoning and behaviour shown in Figure 1 (b).

In a different study, Jackson & Haines (1982) examined the relationship between moral reasoning and behaviour amongst children with ID. They matched children with ID according to ‘mental age’ to children without ID. They presented the Jackson Hypothetical Temptation to Steal Test, where participants are read a story about being tempted to steal and asked to say what they think they would do in that situation. This series of stories incorporated a “should” statement to elicit from participants what they thought they ‘should actually do’ in each situation. Girls without ID reported significantly more frequently than girls with ID that they would resist stealing, but there was no difference between the two groups of boys. The researchers reported no

difference between children with and without ID with respect to their report of what they “should do”, and suggested that this reflected similar levels of moral reasoning.

Finally, as previously mentioned, Sigman, Ungerer & Russell (1983) also examined the relationship between moral reasoning and behaviour in a small sample of adolescent in-patients. The mean Full Scale IQ of the sample was 70.2 suggesting that the sample had a ‘borderline’ ID overall. Stories from Kohlberg’s Standard Scoring Manual (Sigman, et al., 1983) were used to measure moral reasoning, and behaviour was measured using the Conners’ Rating Scale (Conners, 1969). The authors did not find any relationship between moral reasoning and ‘mental age’ or IQ. However, there was a significant relationship between moral reasoning and behavioural difficulties.

Intellectual Disabilities, Moral Reasoning, and Offending

There are no known studies that have investigated the relationship between moral reasoning, ID, and offending, and it has been recognised that empirical studies are needed (Lindsay, Hastings, Griffiths, & Hayes, 2007). However, there are numerous methodological difficulties with the literature that has attempted to examine offending by people with ID (for reviews see, Holland, Clare, & Mukhopadhyay, 2002; Murphy & Mason, 2007). These include the problems, well-known to criminologists (Bottomley, 1981), of using ‘official’ data collected by the criminal justice system to estimate the prevalence of criminal behaviour. This is problematic because a lot of illegal behaviour goes undetected and unreported. The proportion of illegal behaviour that is investigated, prosecuted, and results in a criminal conviction, meaning that the perpetrator is an

'offender', is even more limited. In addition, the definition and assessment of an intellectual disability remains contentious (see Holland et al., 2002; Murphy & Mason, 2007), with many studies focussing on the intelligence 'arm' of the criteria alone.

Nevertheless, given the established relationship between intelligence and illegal behaviour (Cantor, et al., 2005; Farrington, 1996; Hirschi & Hindelang, 1977; Moffitt, 1993; Moffitt, et al., 1981), the suggestion that people with ID are over-represented among those who engage in offending merits attention. There are some supportive data. For example, Hayes (1993; 1996) reported that people with ID are grossly over-represented among defendants appearing in Australian courts, while studies of a large European birth cohort have indicated that men and women with ID are more likely to have been convicted of an offence (Hodgins, 1992; Hodgins, Mednick, Brennan, Schulsinger, & Engberg, 1996).

Similarly, studies of populations of remanded or convicted prisoners in the United Kingdom and elsewhere indicate a prevalence rate from 0 to 28% (Birmingham, Mason, & Grubin, 1996; Brooke, Taylor, Gunn, & Maden, 1996; Coid, 1988; Gunn, Maden, & Swinton, 1991; MacEachron, 1979; Mulrooney, Murphy, Harrold, & Carey, 2004; Murphy, Harnett, & Holland, 1995; Singleton, Meltzer, Gatward, Coid, & Deasy, 1997). Similarly, in a recent study, (Hayes, Shackell, Mottram, & Lancaster, 2007) assessed a random sample of 140 convicted prisoners using the Wechsler Adult Intelligence Scale-III and a measure of adaptive behaviour. It was found that 7.1% of the sample obtained a Full Scale IQ score below 70. At the same time, studies suggest that 2 - 10% of men and

women who are known to ID services have had contact with the police as possible perpetrators (McBrien, Hodgetts, & Gregory, 2003; McNulty, Kissi-Deborah, & Newsom-Davies, 1995; Messinger & Apfelberg, 1961)

However, from the limited information available, the majority of individuals in contact with the criminal justice system are people whose intellectual abilities lie within the 'borderline' to 'low average' range, and do not meet all the criteria for ID. For example, in their prison study, Hayes et al. (2007) found that only four (2.8%) participants fulfilled diagnostic criteria for an ID, with both a Full Scale IQ <70 and difficulties with adaptive functioning. In contrast, 50% of their prisoners obtained IQ scores in the range 70-89, and 42.2 % had scores of 90 or more. Such results are consistent with those of the police station studies. Gudjonsson and his colleagues (Gudjonsson et al., 1993) found that 42% of their participants obtained Full Scale IQ scores within the 'borderline' range (see also Murphy and Mason, 2007, for further discussion). In fact, a recent systematic review of studies investigating the prevalence of ID amongst prisoners found that actually only between 0.5 and 1.5% of prisoners have an ID (Fazel, Xenitidis, & Powell, 2008) although they caution that their findings are likely to have been affected by methodological variations in the studies included within the review.

Similarly, McCord and McCord (1959), in a study examining the conviction rates of adolescent boys, reported that boys with an IQ ranging from 81-90 had a 44% conviction rate, while boys with an IQ above 110, and boys with an IQ of less than 80 had a much lower conviction rate of 26% and 35% respectively. Also, Gray, Fitzgerald, Taylor,

MacCulloch & Snowden (2007) reported that people with ID discharged from a secure hospital re-offended at a significantly lower rate for violent and general offences in comparison to people without ID, suggesting that people with ID have a pattern of offending that is different from people without ID.

While all of these studies must be treated with caution, the findings cast doubt on the view that the relationship between intelligence and illegal behaviour is always linear, and that people with ID are over-represented amongst populations of those engaging in illegal behaviour. Instead, these studies suggest that the pattern and rate of offending by people with an actual ID may be lower, and those with 'borderline' ID appear more likely to be overrepresented amongst populations of those who have engaged in illegal behaviour.

Although this evidence does not allow us to conclude that the relationship between moral reasoning and offending is curvilinear, and is moderated by intelligence, it does allow us to suggest that the relationships between these variables may not actually be linear.

Discussion

Drawing on previous findings involving other groups, we propose that intelligence moderates the relationship between moral reasoning and illegal behaviour and this has implications for understanding illegal behaviour among those with ID. The implications are that people with ID may be less likely, or at least as likely as people without ID to engage in illegal behaviour, while those with 'borderline' ID should be more likely to engage in illegal behaviour. However, the current evidence base is limited and further research is needed.

In terms of future research, as a first step, attention needs to be paid to the development and design of effective tools for measuring moral reasoning amongst people with ID. The literature is outdated and flawed by a range of theoretical and methodological limitations (Abel, 1941; Blakey, 1973; Boehm, 1967; Inhelder, 1966; Taylor & Achenbach, 1975) that need to be addressed. One of the key issues relates to the assessment of moral development. Recognition instruments may have greater utility for people with ID, who may have difficulties with verbal language. One problem is that some existing recognition instruments do not measure the earlier stages of moral reasoning (Rest, 1979; Rest, Narvaez, Thoma, & Bebeau, 1999) and may therefore be subject to 'floor' effects. Therefore, some development work is needed with regard to the measurement of moral reasoning amongst people with ID.

As a second step, empirical investigations of the relationships between moral reasoning, ID and illegal behaviour are needed. If the proposed relationships are found, this may lead to intervention studies. Several studies have demonstrated that self-serving cognitive distortions exist amongst sex offenders with ID (Broxholme & Lindsay, 2003; Langdon & Talbot, 2006; Lindsay & Michie, 2004; Lindsay, Whitefield, & Carson, 2007), which, based on moral reasoning theory, would relate to egocentric cognitive biases stemming from maladaptive moral schema. Most cognitive-behaviour treatment programmes regarding illegal behaviour, whether or not they involve people with an ID, focus upon correcting self-serving cognitive biases, but these interventions may not be nested within a moral reasoning framework. The use of such a framework may enable

these distortions to be targeted more effectively, improving outcome by promoting perspective-taking, and, in turn, enhancing moral reasoning. Inadvertently, this provides a theoretical rationale for group-based interventions within forensic settings, since they provide more opportunities for perspective-taking than individual treatment.

Group-based interventions for anti-social young people that focus solely on enhancing moral reasoning appear to be successful, but they do not have the desired impact on conduct (Arbuthnot & Gordon, 1986; Gibbs, Arnold, Alhborn, & Cheesman, 1984; Gibbs, Potter, & Goldstein, 1995; Niles, 1986). Theoretically, this may be because moral reasoning can be construed as distal schema within the context of a social situation, while cognitive distortions and social skills are proximal. Gibbs and his colleagues (Gibbs, 2003; Gibbs, et al., 1995) argue that proximal as well as distal interventions are required, and that when these are used, they are successful (Leeman, Gibbs, & Fuller, 1993).

Unfortunately, at present, very little can be said about the appropriateness of such interventions for people with ID. This is of concern because when these individuals have, or are suspected to have, engaged in illegal behaviours, the consequences can be very serious. They may be dealt with ‘informally’ through unplanned moves, often to distant placements, away from their local areas, and with no certainty that they will receive appropriate treatment and support (Department of Health, 2007). For those who come to the attention of the criminal justice system, the outcomes may be no better. The plight of those in prison is particularly problematic because of overcrowding, bullying and ‘churn’, where convicted prisoners are moved about the system unpredictably

(Louckes and Talbot, 2007). Consequently, further research regarding effective treatments for people with ID who are engaged in illegal behaviour is urgently needed.

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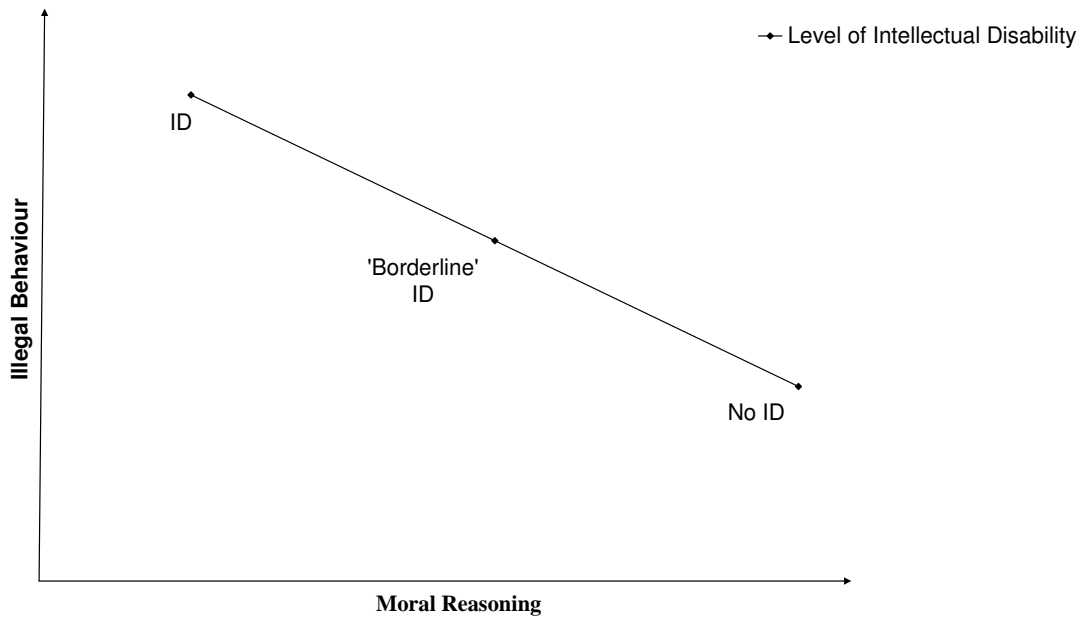
Table 1: Kohlberg's (1969) Stages of Moral Development

Level and Stage	Description
Level 1: Preconventional Stage 1: Heteronomous Morality	Egocentric viewpoint. Moral decisions based mainly on the avoidance of physical punishment associated with failure to adhere to rules. No consideration given to the interests or views of others.
Stage 2: Individualism, Instrumental Purpose, and Exchange	Concrete individualistic viewpoint. Moral decisions based mainly upon rule adherence when such adherence is congruent with meeting own needs or interests. Recognition that others also have needs to fulfil.
Level 2: Conventional Stage 3: Mutual Interpersonal Expectations, Relationships, and Interpersonal Conformity	Individual viewpoint within the context of relationships with others. Moral decisions based upon recognition of the value of being a good person within the context of relationships. Recognition of the value of mutual relationships.
Stage 4: Social System and Conscience	A viewpoint based upon an awareness of the difference between societal views and individual views in relation to society. Moral decisions based around societal laws and rules accompanied with recognition of their purpose (i.e. to allow for the continued functioning of societies). Some laws may be broken if they conflict with agreed social norms governing behaviour within society.
Level 3: Postconventional or Principled Stage 5: Social Contract or Utility and Individual Rights	A "prior-to-society" viewpoint. Moral decisions recognise that people have differing views which vary according to social group, but some higher order values are overarching and should not be violated (e.g. right to life). Recognition of the social contract which exists regarding behaviour, and some utilitarian thinking.
Stage 6: Universal Ethical Principles	A moral viewpoint. Moral decisions are based upon well developed ethical arguments or principles which drive behaviour. Laws may be broken if they violate these principles. Further recognition of concepts such as justice, human rights, and dignity.

Table 2: Gibbs' Sociomoral Stage Theory (Gibbs et al., 1992)

Level and Stage	Description
Level 1: Immature Stage 1: Unilateral and Physicalistic	Moral justifications are based upon unilateral authority and rule based, or related to punitive consequences of the violation of rules.
Stage 2: Exchanging and Instrumental	Moral justifications based upon an understanding that has arisen from social interaction with others. For example, decisions to help others may be justified because that person may help you in the future. Justifications remain superficial.
Level 2: Mature Stage 3: Mutual and Prosocial	Moral justifications are characterised by further decentration, and are based upon a prosocial understanding of emotional states (e.g. empathy), care and good conduct.
Stage 4: Systemic and Standard	Further maturity is indexed by the development of an understanding of the complex social structures in which we live. Justifications are also based upon constructs such as rights, values and character within society. Other justifications may be based upon social justice and responsibility or conscience.

a)



b)

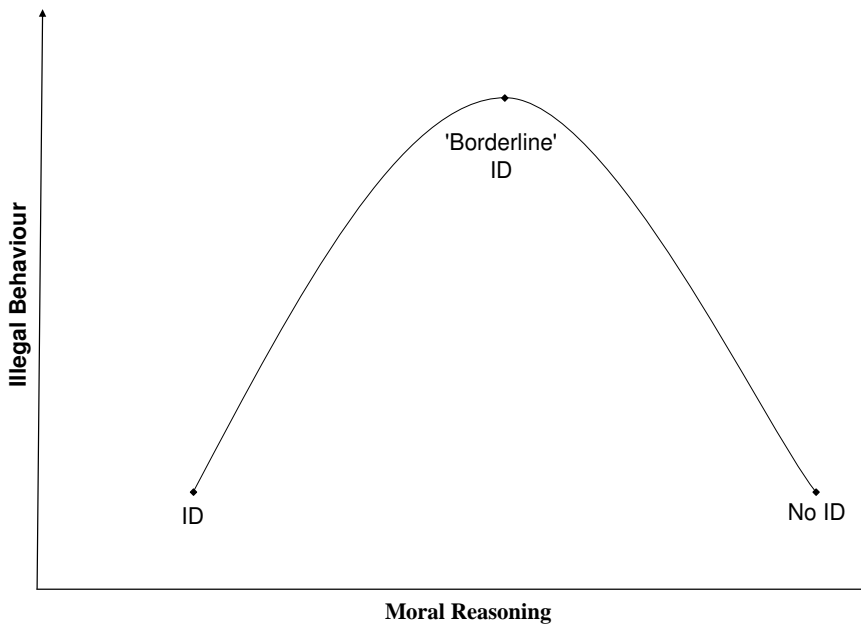


Figure 1: (a) An hypothesised moderating relationship for intelligence between moral reasoning and illegal behaviour such that the relationship between illegal behaviour and moral reasoning is linear (b) an hypothesised moderating relationship for intelligence between moral reasoning and illegal behaviour where the relationship between moral reasoning and illegal behaviour takes an inverted U-shape.