

Risk profiles of youth in pre-trial detention: A comparative study of Moroccan and Dutch male adolescents in the Netherlands

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# Risk profiles of youth in pre-trial detention: A comparative study of Moroccan and Dutch male adolescents in the Netherlands

Risicoprofielen van jeugdigen in voorlopige hechtenis: een vergelijkend onderzoek naar Marokkaanse en Nederlandse jongens in Nederland  
(met een samenvatting in het Nederlands)

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Die Philosophen haben die Welt nur verschieden interpretiert; es kommt aber darauf an,  
sie zu verändern.

(Karl Marx; Uit: Thesen über Feuerbach, 1845)

Hij die niet twijfelt leert niet.

(Dirck Volckertszoon Coornhert; 1522-1590)

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# Chapter 1

## Introduction

## **Ethnic minorities, immigration and crime**

In Western countries, the involvement of ethnic minorities in youth crime is of a disproportional amount (Engen, Steen, & Bridges, 2002; Komen, 2002). In the United States, youth with a Hispanic-American or African-American background are clearly overrepresented in crime figures. For instance, whereas African-American youth between the ages of 10-17 years represented only 16% of their age group in the general population in the US in 2004, they accounted for 39% of detained youth and 36% of youths referred to juvenile courts (McCarter, 2009; Stahl, Finnegan, & Kang, 2007). In European countries, ethnic minority youths with a non-Western immigrant background<sup>1</sup>, such as Algerians in France and Moroccans in the Netherlands and Belgium, make up a large percentage of the population in justice institutions (Tonry, 1997). While they represent between 7-11% in the respective European general populations, it was found that the proportion of immigrants in European prison populations (e.g. the Netherlands, Italy, France) is between 25–50% (Rossiter & Rossiter, 2009; United Nations, 2010). Figures from the Ministry of Justice in the Netherlands indicate that 35% of youths (aged 18-24) in detention have a non-Western immigrant background (e.g., Moroccan, Antillean and Turkish), while these immigrants represent only 12% of youths in the general Dutch population (CBS Statline, 2010; Jaarrapport Integratie, 2005).

### *Explaining the overrepresentation of immigrants in crime*

#### **Socio-economic and socio-cultural disadvantages**

Various mechanisms have been put forward to explain the overrepresentation of immigrant<sup>2</sup> youths in crime. The *social disorganization theory* states that crime and delinquency are linked to unfavorable social conditions found in urban environments (Gabbidon & Greene, 2005) like high levels of poverty and unemployment, and a high population density. As a result, these youths grow up in communities in which social institutions such as school and family are less effective in regulating their behavior. Therefore, they would be more prone to become involved in crime. In line with the social disorganization theory, the *strain theory* emphasizes the influence of limited structural opportunities on criminal behavior (Gabbidon, 2005). It states that youths with an

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<sup>1</sup> The majority of these youths belong to the second generation of immigrants, as they have not migrated themselves but have parents who were born outside the Netherlands (De Valk, 2010).

<sup>2</sup> It is worth noting that an immigrant background refers to a specific category of ethnic minority populations. An immigrant background entails specific characteristics (e.g., migration history, reasons for leaving country of origin). In the present thesis, theories are discussed which may apply to minority populations with an immigrant background.

immigrant background suffer from social, cultural, political and economic marginalization (e.g., discrimination and barriers with respect to housing, education, career opportunities and political participation; Wortley, 2009). Facing these limited structural opportunities creates a discrepancy between a desired social status and resources to obtain this status. In other words, a marginalized position in the dominant society results in feelings of frustration (strain) and subsequently leads to criminal behavior. Thus, both social disorganization and strain theory suggest that the overrepresentation of immigrants in crime results from social and economic deprivation.

According to some researchers however, it is not so much the deprivation as such, but in particular the fact that some ethnic minorities with an immigrant background are at higher risk of experiencing their disadvantaged background than others (Agnew, Cullen, Burton, Evans, & Dunaway, 1996; Bovenkerk, 2009). Especially immigrants who are strongly oriented towards the host society, who have frequent contacts with natives, who adapt to the values of and who feel attached towards the host society, more strongly desire participation in this society, and use natives as a basis of social comparison (Correll & Park, 2005). As a result, these immigrants are more prone to experience frustration regarding the discrepancy between the goals they pursue in the host society and the goals they are able to achieve within this society. Eventually, these feelings of frustration (i.e., feeling relatively deprived) lead to the use of criminal behavior in order to achieve the desired goals in an unconventional way (e.g., by committing property-related crimes; Agnew, 2001; Baron, 2004). Indeed, it has been found that the means immigrants have in order to achieve goals in life are limited (Gowricharn, 2002) and there is also some evidence for the link between feelings of relative deprivation and delinquency (e.g., Froggio & Agnew, 2007).

#### Discriminatory practices: the bias model

According to the *bias model*, the overrepresentation of immigrant groups in crime may be the result of overt and systematic discrimination within the criminal justice system (Engen et al., 2002; Mustard, 2001; Wortley, 2009). There are indications that disparities in sentencing cause ethnic minorities youths, including immigrant groups, to be more likely to be referred to juvenile court, as well as to be detained, and to go to jail than the ethnic majority (Engen et al., 2002; Rodney & Tachia, 2004).

#### Social factors: social bonds and the social control theory

The overrepresentation of immigrant youth in crime figures may also be explained by other factors. The *social control theory* (Hirschi, 1969) focuses on the development of social bonds and relates a lack of these bonds to the development of delinquent behavior in general. This theory states that youths who fail at developing meaningful

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relationships with parents, school, peers and the community, experience less social control and would therefore be more prone to engage in crime than youths who do manage to develop social bonds. Ethnic minorities with an immigrant background may be more involved in crime since they are at increased risk of developing inhibited social bonds: due to acculturation conflicts between immigrant adolescents and their parents, the development of bonds with parents would be at risk (Albrecht, 1995). That is, children commonly become involved in the host society faster than adults, creating an 'acculturation gap' between generations that is thought to negatively affect social bonding between parents and adolescents. As a result, alienation between parents and adolescents may enhance adolescent delinquency (Szapocznik & Williams, 2000). In addition, because of their unfavorable position in society, adolescents with an immigrant background may also be at increased risk of engaging in crime as they feel less committed to the values of society. Thus, especially youths of the second, third and fourth generation of immigrants may become more involved in crime as the development of bonds (with parents and society) is at risk (Albrecht, 1995).

### Individual factors: the stress-vulnerability model

Various scholars argue that criminological theories such as the social control theory need to be modified to be applicable to *individual characteristics* (Beaver, Ratchford, & Ferguson, 2009). Former research on the causes of juvenile crime in general, showed that various individual risk factors such as mental health problems, make offending more likely (Farrington, 2005). Indeed, it has been found that nearly two thirds of the male juvenile detainees has one or more psychiatric diagnoses such as conduct disorder, ADHD and substance abuse (Doreleijers, 2005; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002; Vreugdenhil, Doreleijers, Vermeiren, Wouters, & van den Brink, 2004). Furthermore, in populations of juvenile delinquents, certain personality traits including a manipulative, unemotional, remorseless, and irresponsible (psychopathic) personality are relatively common (Forth & Burke, 1998; Sevecke, Lehmkuhl, & Krischer, 2009). These traits are strongly related to various mental health disorders (e.g., conduct disorder, ADHD; Forth & Burke, 1998) and juvenile delinquents with many psychopathic characteristics are among the most severe antisocial youths, committing more offences, beginning their criminal activities earlier, and engaging in more versatile criminal behavior than non-psychopathic juvenile delinquents (Edens, Campbell, & Weir, 2007; Gretton, Hare, & Catchpole, 2004; Kosson, Cyterski, Steuerwald, Neumann, & Walker-Matthews, 2002).

In line with the above, the *stress-vulnerability model* argues that environmental stressors such as social and economic deprivation have more impact on psychologically

vulnerable youths. There is now a large body of evidence demonstrating that individuals differ in the psychological susceptibility to environmental stressors (Gillespie, Phifer, Bradley, & Ressler, 2009). The combination of environmental variables, such as stressful living conditions, and a psychological predisposition is thought to strongly increase the likelihood of a large range of behavioral problems, including delinquent behavior (Palermo, 2010). Thus, the presence of mental health problems and specific personality traits may make individuals more prone to engage in crime. However, the extent to which these individual risk factors apply to delinquent youth with an immigrant background, remains to be examined. For instance, it was found that incarcerated ethnic minority youths (not specifically immigrant youths) show lower levels of mental health problems than incarcerated whites (e.g., Abram et al., 2003). Moreover, there is evidence that youth with an immigrant background are not at higher risk of mental health problems than youth from the general population (Stevens & Vollebergh, 2008). Thus, individual risk factors may increase the susceptibility to engage in crime when an individual encounters environmental stress, but there is no evidence for a psychologically problematic predisposition to be more prevalent among immigrant youth than among the ethnic majority in general. This means that only those immigrant youths who are more susceptible to stressors, may be at increased risk of engaging in criminal behavior.

### *Concluding*

Structural explanations for the overrepresentation of immigrant youth in crime, stress the importance of socio-economic and socio-cultural disadvantages. These disadvantages cause a marginalized position in society and feelings of frustration, which may lead to immigrant youth being more likely to engage in crime. Moreover, immigrant youths may face discriminatory processes in the criminal justice system, which also increase their overrepresentation in crime figures. Next, according to social control theory, ethnic minority youths with an immigrant background may experience a lack of social bonds. Since they would feel less committed to the values of their parents or society, they are more at risk of becoming engaged in crime. Finally, individual risk factors such as mental health problems may make individuals more prone to engage in crime. Moreover, a psychological predisposition (e.g., mental health problems, personality traits) is thought to increase the likelihood of delinquent behavior when an individual is confronted with environmental stressors. It is not likely that a psychological predisposition would be more prevalent among immigrant youths than among the ethnic majority youth. However, in conjunction with stressors, immigrants who are more susceptible may be more likely to engage in crime.

## Moroccan youth in the Netherlands

### *Overrepresentation in crime*

In the Netherlands, adolescents with a Moroccan background<sup>3</sup> are overrepresented in the population of juvenile delinquents compared to both native Dutch and other ethnic minority groups (Blom & Van der Laan, 2007; Vollebergh, 2002). For instance, Moroccan adolescents are five times more often suspected of an offence than are native Dutch adolescents (Blom & Van der Laan, 2007). Moreover, compared to other ethnic minority youths, Moroccan adolescents are most often suspected of an offence (15,5 per 100 peers), whereas Turkish adolescents (belonging to the largest immigrant group in the Netherlands) are the least often suspected of an offence (6,9 per 100 peers; Blom & Van der Laan, 2007<sup>4</sup>). For 54% of all Moroccan adolescent boys at least once a police report is recorded between the ages 12-22, compared to 41% of all Turkish youths and 20% of all native Dutch youths (Blokland, Grimbergen, Bernasco, & Nieuwbeerta, 2010). In addition, police statistics show that young Moroccan offenders commit more offences than young offenders from other ethnic groups (Blom, Oudhof, Bijl, & Bakker, 2005; Jennissen & Blom, 2007). Approximately 90% of Moroccan adolescents (between the ages 12-18) who were suspected of an offence, recidivated between 1996 and 2005 against 65% of native Dutch adolescent suspects (Jaarrapport Integratie, 2008). Finally, adolescent boys of Moroccan origin are relatively more often repeated offenders<sup>5</sup> than adolescents belonging to other ethnic groups (Tollenaar, Meijer, Huijbrechts, Blom, & El Harbachi, 2007).

Although Moroccan adolescents are clearly overrepresented in juvenile delinquency, there are indicators in literature that the criminal behavior of Moroccan adolescents shows specific characteristics. Based on police registrations, it was recently found that Moroccan adolescent and young-adult offenders are predominantly suspected of property-related offences such as shoplifting, burglary and robbery (Blokland et al., 2010). Compared to both native Dutch and other ethnic minority youth, Moroccan adolescent offenders are mostly overrepresented in this type of crime and not so much in violent (not property-related), arson or sexual offences. Furthermore, it was

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<sup>3</sup> In the present thesis, the phrases 'adolescents with a Moroccan background', 'Moroccan youths' or 'Moroccan adolescents' are used when at least one of the parents of these youths was born in Morocco (i.e., first and second generation of immigrants).

<sup>4</sup> Native Dutch adolescents are 3,2 times per 100 peers the suspect of an offence.

<sup>5</sup> The term 'repeated offender' is defined as: An adolescent between the ages 12-18 who has been registered as the suspect of an offence more than 5 times ever (Monitor Veelplegers, 2007).

found that compared to other ethnic groups, Moroccan male offenders show the highest peak in criminal behavior between the ages 12-20, and their crime rates drop to nearly the same level as native Dutch between the ages 20-25 (Blokland et al., 2010; Jennissen, 2009). In line with this finding, a recent study on repeated offenders revealed that Moroccan adolescent repeated offenders show relatively shorter criminal careers than native Dutch repeated offenders (Weijers, Hepping, & Kampijon, 2010). In short, these studies suggest that the offences conducted by Moroccan immigrant adolescents mainly consist of property related offences, which is perceived as less serious than purely violent or sexual offences. Moreover, the criminal behavior of Moroccan immigrant adolescents concentrates between early adolescence and young adulthood.

### *Explaining Moroccan youth crime*

#### Socio-economic and socio-cultural disadvantages

There is clear evidence for the unfavorable socio-economic conditions of Moroccan youth in the Netherlands. Moroccan communities<sup>6</sup> in the Netherlands are characterized by socio-economic disadvantages such as high unemployment rates, low income and educational level, poor housing conditions and population density (Junger & Polder, 1992). Moroccan youths more often drop out of school than ethnic majority youths (Dagevos, Gijssberts, & Van Praag, 2003). Consecutively, Moroccan youth in the Netherlands are far more often unemployed (28%) than native Dutch youth (12%; Forum Monitor, 2010). Considering these findings, elements of both social disorganization theory as well as strain theory may play a role in Moroccan youth crime. That is, socio-economic and socio-cultural disadvantages may result in a marginalized position in society which causes feelings of frustration. Indeed, Moroccans belong to the least privileged immigrant groups in the Netherlands, and public opinion clearly reflects this marginal status (Gijssberts, 2005; Hagendoorn & Sniderman, 2001; Van Praag, 2003). However, a disadvantaged background per se may not fully explain the amount of Moroccan youth crime. Adolescents with other ethnic backgrounds who face comparable socio-economic conditions such as Turkish adolescents, are much less overrepresented in Dutch crime figures.

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<sup>6</sup> Moroccans belong to one of the largest immigrant groups in the Netherlands (330.000 inhabitants are of Moroccan origin). In the 1960s and 1970s, Moroccan men were recruited for working in the Dutch unskilled labor market. Since then, many of these labor migrants brought their families to the Netherlands for permanent settlement. These days, about 40% of the Moroccan immigrants are born in the Netherlands and two percent of the Dutch population is of Moroccan origin.

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As mentioned before, especially immigrants who are strongly oriented towards the host society may be likely to feel *relatively* deprived (i.e., experience their disadvantaged background) and as a result be more likely to engage in criminal behavior (Agnew et al., 1996; Agnew, 2001; Correll & Park, 2005). There is some evidence for Moroccans integrating more rapidly than Turkish immigrants into Dutch society (Jaarrapport Integratie, 2008). For instance, compared to Turkish immigrants Moroccans more often report to consider themselves as Dutch, to have more contacts with native Dutch and to have more progressive values (Jaarrapport Integratie, 2005; Jaarrapport Integratie, 2008). However, research on the link between the orientation of Moroccan immigrants towards Dutch society and Moroccan youth crime is lacking.

### Discriminatory practices: the bias model

According to the bias model, Dutch police and justice institutions would use a more repressive and punitive approach towards Moroccan youth. Indeed, it has been found that adolescents with an ethnic minority background in general are convicted to longer prison sentences than native Dutch adolescents (Komen & Van Schooten, 2006; Weenink, 2007). In addition, the characteristics of Moroccan youth crime may be considered as less problematic. For instance, Moroccan adolescents are convicted for relatively less serious offences than other ethnic minority groups. This finding may reflect a more repressive approach towards Moroccan youth and it seems plausible that the chances of being caught by the police and to receive more severe punishments are higher for Moroccans than for natives. Though, the question remains to what extent this repressive approach is reflected in the overrepresentation of Moroccan youth in crime figures. Therefore, further research on the characteristics of Moroccan youth crime and its relationship to various explanatory factors is needed.

### Social factors: social bonds and the social control theory

As a result of unfavorable living conditions, a lack of social control exerted by for instance school and parents in Moroccan families, may contribute to Moroccan youth crime. As Moroccan adolescents often drop out of school (Dagevos et al., 2003), the controlling influence of this social institution becomes absent, and Moroccan youth may be more likely to engage in crime. Moreover, an 'acculturation gap' between generations is thought to negatively affect social bonding between parents and adolescents. Indeed, it has been found that delinquent adolescents with an immigrant background relatively often experience an acculturation gap with their parents (e.g., Le & Stockdale, 2008). There is also some evidence that the second generation of Moroccan immigrants in the Netherlands are more integrated into Dutch society than the first generation

(Jaarrapport Integratie, 2008), which could be an indication for the frequent occurrence of an acculturation gap between parents and children.

The social control theory states that youths who fail at developing meaningful relationships with parents, school, peers and the community, would be more likely to engage in crime as they feel less committed to the values of parents or society. There is some evidence resulting from qualitative research, suggesting that the social networks of Moroccans in the Netherlands are relatively small and that Moroccan parents experience little social bonding (Pels, Distelbrink, & Postma, 2009). In addition, previous research showed that Moroccan parents less often monitor, control and support their children when they reach adolescence (Pels & De Haan, 2003; Pels & Nijsten, 2003; Stevens et al., 2003). Thus, the controlling influence of social institutions may indeed be less effective in restraining Moroccan youth in the Netherlands. Furthermore, a recent ethnographical study further indicated that the specific circumstances in which these youths grow up (i.e., a lack of control from social institutions, unfavorable living conditions, a marginalized position) may contribute to the development of a specific street culture in which Moroccan youths feel committed to their own (unconventional) values (De Jong, 2007), again suggesting a lack of commitment to the values of parents or society. However, large-scale empirical research on both social control and social bonding and its relationship with Moroccan juvenile delinquency is lacking.

#### **Individual factors: the stress-vulnerability model**

According to the stress-vulnerability model, youths with a psychological predisposition (mental health problems, specific personality traits) may be more vulnerable to environmental stressors such as a low socio-economic status, and therefore be more likely to engage in problematic behavior. However, recent research on the mental health of Turkish, Surinamese and Moroccan immigrant children in the Netherlands, shows that the prevalence of childhood disorders does not differ for native Dutch and for non-Western immigrant children in low SES neighborhoods (Zwirs et al., 2007). Studies on other predisposing factors such as personality (e.g., psychopathic) traits regarding Moroccan youth crime are lacking. Following former findings on mental health problems in immigrant children, it is not likely that the prevalence of psychopathic traits would be higher among Moroccan youth. Research is needed in order to identify the relationship of mental health and personality traits with Moroccan youth crime.

#### ***Summarizing***

Some elements of various theories on ethnic minorities and crime apply to Moroccan youth crime in the Netherlands. That is, there may be feelings of relative deprivation due

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to a strong orientation towards Dutch society in this ethnic minority group, as well as a lack of social control exerted by for instance the parents in Moroccan families, and discriminatory processes in the juvenile justice system may account to some extent for their overrepresentation in youth crime. Next, as mentioned before, although the crime rates of Moroccan youths are high, the characteristics of their crime may be considered as less problematic. That is, Moroccan adolescents are convicted for relatively less serious offences than other ethnic minority groups and their criminal careers seem to be relatively short-lived. In line with this, the prevalence of predisposing psychological factors such as mental health problems and psychopathic personality traits among Moroccan youths in general appears not to be elevated compared to other ethnic groups.

### *Major limitations of former research*

Conclusions regarding the risk factors related to Moroccan youth crime remain tentative, since research thus far is limited in a number of ways. First, large-scale empirical studies using offender samples comprising Moroccan youth are scarce (Hamerlynck, 2008; Vreugdenhil et al., 2004). In addition, these former studies (on mental health problems), did not include comparison groups consisting of non-incarcerated Moroccans and native Dutch from the general population. Therefore, the extent to which the level of mental health problems in Moroccan and native Dutch offenders deviates from this level in the respective general populations, remains unexamined. Second, research on for instance parenting practices and acculturation of Moroccan families have mostly been conducted in the general population using self-report delinquency measures. Since underreporting of (serious) delinquent behavior may be relatively common in self-report studies, and general population studies do not include large numbers of adolescents who show serious delinquent behavior, previous studies show important limitations in this respect as well (Piquero, MacIntosh, & Hickman, 2002). Third, former research examining the relationship between Moroccan youth crime and for instance orientation towards Dutch society, mostly used only one type of informants (i.e., only Moroccan parents or only Moroccan youths), while it is important to gain insight in the adolescent perspective as well as in the parental perspective. Thus, in order to conduct research regarding the risk factors linked to Moroccan youth crime, it is important to a) include an offender population, b) to include comparison groups from the general population and c) to use information from both adolescents and their parents.

## **The present thesis**

To gain insight into those risk factors that contribute to delinquent behavior in Moroccan immigrant adolescents in the Netherlands, the risk profiles of Moroccan and native Dutch incarcerated adolescents are examined and compared to their respective peers in the general population. Data are used from a large sample of incarcerated boys of Moroccan and native Dutch origin. In addition, in order to take into account the baseline level of various risk factors in the respective general populations, comparison samples are used from both ethnic groups in the Dutch general population. Thus, a four-group design is used to allow intra- and interethnic comparisons. This means that the research in the present thesis is the first to examine Moroccan youth crime in the Netherlands, by using a large sample of incarcerated youth, by including various environmental and individual factors which are relevant to various theories on ethnic minority crime, and by using a four-group design. Therefore, this thesis is the first to shed light on various factors that are related to Moroccan youth crime by using quantitative data from both an offender population and the general population.

Various questions arising from the above mentioned explanations for Moroccan youth crime remain to be examined. First of all, to what extent do young Moroccan offenders, compared to native Dutch, represent a specific offender type in youth crime in the Netherlands? Does the nature of their crimes indeed reflect a less severe offender profile as compared to native Dutch? Second, in the light of their socio-cultural position in the Netherlands, the question arises whether Moroccan incarcerated boys are differently acculturated towards the Dutch society and their own ethnic group than Moroccan boys from the general population. Thus, to what extent are Moroccan youth offenders and their non-incarcerated peers integrated into Dutch society? Third, how is a lack of social control or social bonds as reflected by the parent-adolescent relationship, related to Moroccan youth crime? Fourth, regarding individual risk factors, what is the prevalence of mental health problems among Moroccan youth offenders compared to native Dutch youth offenders and their peers in the respective general populations? And what are the differences in the prevalence of other individual risk factors such as psychopathic traits?

## *Expectations*

The central hypotheses of this thesis are the following. In line with former findings and theoretical assumptions, a less problematic profile overall is expected for Moroccan adolescent offenders than for native Dutch. First, this implies that their offending behavior is of relatively less severity, and this would be in line with the most recent findings on the offending behavior of Moroccan youths. Second, since feelings of relative deprivation may play a role in their criminal involvement, it is expected that the level of

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orientation towards Dutch society may be higher for Moroccan youth offenders than for Moroccan adolescents from the general population. Furthermore, in line with former findings regarding their family factors, less social control by for instance the parents in Moroccan families is expected. Finally, since socio-cultural and social factors (i.e., orientation towards Dutch society, parenting) are expected to play a particularly important role in Moroccan youth criminality, individual risk factors such as mental health problems and psychopathic traits, are expected to be less prevalent among Moroccan adolescent offenders than among native Dutch offenders. The latter would also be in line with recent findings on the level of mental health in immigrant populations in the Netherlands. In sum, the risk profile of Moroccan adolescent offenders is expected to be less problematic compared to the risk profile of native Dutch adolescent offenders.

### **Setting of the present studies**

#### *Participants*

##### **Incarcerated adolescent boys**

Participants in this study were 299 adolescents aged 12-18 years (all males) consecutively placed in pre-trial detention in 10 (of 11) juvenile justice institutions in the Netherlands between May 2006 and February 2008. Pre-trial detention is imposed when a person is suspected of a serious offence, having to be examined, awaiting trial, and if detention is thought to be necessary for the protection of others or the youngster himself. All adolescents in pre-trial detention who were of Moroccan or Dutch native origin, remained in the juvenile justice institution for over a week and were allowed to receive a visitor, were eligible for inclusion in the study. Of all eligible adolescents, 476 incarcerated adolescents were asked to participate in the study, 315 incarcerated adolescents were interviewed, 161 boys refused to participate, and 16 interviews were found to be incomplete, leaving 299 complete interviews (total response rate 66%, response rate native Dutch boys 73%, and response rate Moroccan boys 62%).

From all adolescents, 141 were of Moroccan origin (of 93% both parents were born in Morocco, of the other participants at least one of the parents was born in Morocco), 19% of the Moroccan adolescents were born in Morocco, the others were born in the Netherlands. The remainder of the sample consisted of 158 Dutch native adolescents (both of the parents were born in the Netherlands). From all Dutch adolescents, 5% had one or two grandparents on father's side born outside the Netherlands and 9,5% had one or two grandparents on mother's side born outside the Netherlands (e.g., other West-European countries, Indonesia or Dutch Antilles). The mean age of the adolescent participants was 16,4 years (SD 1,27).

Of the incarcerated boys who completed the interview, 274 parents were asked to participate in the study (25 parents could not be asked to participate because their addresses were unavailable: they moved, or their son did not give permission to his parent to participate in this study). Eighty-four parents refused to participate and 22 parents were not found at home by the interviewers. One-hundred sixty-eight parents consented to participation in the study (total response rate 61%, response rate Dutch parents 50%, and response rate Moroccan parents 70%).

### Data collection

To recruit the participants, the researchers weekly received an overview from the Dutch Ministry of Justice (Department of Juvenile Justice Institutions), which contained information on all Moroccan and Dutch adolescents who were placed in pre-trial detention in a juvenile justice institution in the prior week. Within a week after being placed in a juvenile justice institution, the adolescents were asked by institutional workers to participate in an interview. The adolescents received a letter which contained information on the purpose and content of the interview. If an adolescent consented to participation, an appointment was made for an interview at the juvenile justice institution. Interviews lasted two hours at most and consisted of both interview components and filling out self-report questionnaires. Subjects received a telephone card as compensation for participating.

All parents received a letter containing the aims of the study. Moroccan parents were sent an introductory letter in Dutch and Moroccan-Arabic and within a couple of weeks a trained Moroccan interviewer visited the parents' home to ask them to participate. Dutch parents were contacted by telephone to make an appointment for the interview. Dutch parents had to be able to speak and read Dutch. If a parent consented to participation, an appointment was made for an interview (consisting of both interview components and self-report questionnaires). Parent and adolescent participants were assured of the confidentiality of their spoken and written responses and data were archived anonymously. Moreover, written informed consent was obtained from the participants. Participants received compensation, adolescents received telephone cards which they could use within the juvenile justice institution and parents received a gift certificate. The research protocol was approved by the Ethical Board of the Department of Social Sciences and the Ministry of Justice in the Netherlands.

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### *Comparison samples*

In order to compare characteristics of Moroccan adolescent offenders and their parents with the characteristics of Moroccan and native Dutch adolescents and their parents in the general Dutch population, three comparison samples were used.

#### Moroccan immigrant general population sample

Data were used of parent and adolescent interview-pairs originating from a study in which a sample of 1,127 children aged 4 through 18 with at least one parent born in Morocco, were randomly selected from municipal registers of Rotterdam and The Hague. Data collection took place from April 2001 to July 2002. A total of 819 parents participated in the study (response rate 73%) and 91% of the approached adolescents consented to participation. The data collection procedure and in- and exclusion criteria are described in detail elsewhere, see Stevens et al. (2003).

#### Dutch general population sample

Data on mental health were used of parent and adolescent interview-pairs originating from a larger study performed in the Dutch province of Zuid-Holland (including Rotterdam and The Hague). Data collection took place between December 2003 and April 2005. Of the 2,317 eligible children aged 6 through 18, who were randomly selected from municipal registers, 74% parents participated (N = 1,710). The data collection procedure and in- and exclusion criteria are described in detail elsewhere, see Tick et al, (2007) and Tick et al. (2008).

#### Dutch parents in the general population

Data were used of interviews with mothers that were collected as part of a national research on children/adolescents and their parents, 'Child-rearing in the Netherlands in the 90s'. The families were selected from a larger sample of 10,000 families representative of Dutch population and were first contacted by phone. From all contacted families with adolescent children, 53% agreed to participate. The data collection procedure and in- and exclusion criteria are described in further detail elsewhere, see Deković (1999).

### **Structure of this thesis**

First, since findings show that the offending behavior of Moroccan youth offenders differs from the offending behavior of native Dutch, in **Chapter 2** the offending profiles of Moroccan adolescents and native Dutch adolescents in pre-trial detention are compared using police records of both Moroccan and native Dutch adolescents. The type of crimes,

the amount of offences on the police records, and the age of the adolescents when they were incarcerated for the first time, are compared cross-ethnically.

Second, it is important to examine the extent to which Moroccan adolescents in the Netherlands are oriented towards Dutch society and their own ethnic group. The question arises whether Moroccan incarcerated boys are differently acculturated towards Dutch society and their own ethnic group than Moroccan boys from the general population. In **Chapter 3** the level of acculturation towards Dutch society is examined for both Moroccan incarcerated adolescents as well as for Moroccan adolescents in the general non-incarcerated population.

Third, there are indications that the parent-child relationship of Moroccan incarcerated youth in the Netherlands is characterized by less parental control and less parent-adolescent bonds. Since a lack of social control and social bonds may enhance adolescent criminal behavior, **Chapter 4** examines the mother-son relationships of Moroccan and native Dutch incarcerated adolescents using data from both incarcerated boys as well as from comparison samples in the general Dutch population.

Fourth, while psychiatric disorders are highly prevalent among youth offenders in general, limited research is available on the mental health of incarcerated immigrant youths. Therefore, **Chapter 5** focuses on differences in mental health among Moroccan and native Dutch incarcerated youths in the Netherlands. Differences in the level of emotional and behavioral problems of incarcerated Moroccan and native Dutch youth are examined. In order to take into account the baseline level of mental health problems in the general population, the scores of the incarcerated groups are also compared to the scores of native Dutch and Moroccan adolescents in the Dutch general population.

Fifth, the prevalence of psychopathic traits in youth offender populations is relatively high. However, it is not expected that these traits are more prevalent among Moroccan youth offenders, since a less problematic profile overall is expected for this offender group. First, since studies regarding the psychometric properties of psychopathy measures with ethnic minority youths are lacking, the cross-ethnic generalizability of the Youth Psychopathic traits Inventory is examined in **Chapter 6**. Second, since research suggests that there are variants of psychopathy, it is of importance to investigate the psychopathy construct in youth offender populations. Therefore, **Chapter 7** examines psychopathic subtypes in a study comprising both native Dutch as well as Moroccan incarcerated adolescents. Finally, in **Chapter 8**, the findings of the above mentioned studies are summarized and a general discussion and conclusions are presented.



## Chapter 2

# Moroccan adolescent suspect offenders in the Netherlands: Ethnic differences in offender profiles

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**Abstract**

Ethnic minority youths are overrepresented in the juvenile justice system in Western societies. However, research on the nature of crime committed by these youths is lacking. In the present study, offending patterns of incarcerated native Dutch adolescents and adolescents of Moroccan origin were compared. Criminal record data were used to examine the offence history of 291 incarcerated adolescents. Offender types were determined through latent class analysis. Adolescents of Moroccan origin were incarcerated more often, for more offences and at a younger age than native Dutch adolescents. A four class model of offender types was found: property offenders, violent offenders, sexual offenders and arsonists. Property offenders were merely Moroccan adolescents, the other offender types consisted predominantly of native Dutch adolescents. Moroccan adolescents in pre-trial detention in the Netherlands can be characterized as early starting offenders who persist in being incarcerated for property-based crime.

## Introduction

Since the 1980s, crime statistics in Western societies reflect an ongoing rise of violent and nonviolent crime (Boone & Moerings, 2007; Komen, 2002; Pfeiffer, 2000). This general trend is prevalent in adult as well as in juvenile crime rates, youth violent crime however, accounts for most of the total growth (Komen, 2002). For instance, in the Netherlands, police statistics show a general increase in violent offences in youths, especially robbery and bodily harm (Boone & Moerings, 2007; Komen, 2002; Pfeiffer, 2000). As a result of the higher crime figures, a more punitive and repressive sentencing policy in European countries and in the US has emerged. Together, these processes have led to higher rates in the number and length of prison sentences (Junger-Tas, 1998; Pfeiffer, 2000) and an increased risk for youths to end up in detention (Pfeiffer, 2000). Indeed, during the last 10 years the total number of incarcerated juvenile offenders in the Netherlands increased by 100% (Boone & Moerings, 2007).

One of the factors that previously has been linked to the rise of juvenile crime in Western societies, is the increasing number of ethnic minorities in the juvenile justice system (Engen et al., 2002; Komen, 2002; Rodney & Tachia, 2004). For instance, African-American youth aged 10 to 17 years represent only 15% of their age group in the US, and account for 26% of juvenile arrest rates and 32% of delinquency referrals to juvenile court. Since 1997, the rate of institutional confinement for Hispanic Americans was more than double the rate for non-Hispanic white youth (Engen et al., 2002; Snyder & Sickmund, 1999). Likewise, in European countries, ethnic minority groups such as Algerians in France, West Indians in England and Moroccans in the Netherlands account for a disproportionately large percentage of the population in justice institutions (Tonry, 1997). Recent figures from the Ministry of Justice in the Netherlands indicate that two-third of juveniles in justice institutions have an ethnic minority background (e.g., Moroccan, Antillean and Turkish), while these minorities represent only 20% of juveniles in the general Dutch population (Komen & Van Schooten, 2006).

Since ethnic minority youths are clearly overrepresented in the juvenile justice system, the question arises whether the nature of the crime committed by ethnic minority youths is comparable to those of native youths. To what extent do ethnic minority youths commit various types of crime? Are the offending profiles of adolescents with an ethnic minority background different from those of native youths? Up till now, international research on the representation of ethnic minorities in distinctive offending categories is rare. Previous studies on young offender types have mostly focused on life course changes in general offending (i.e., these studies did not distinguish different types of offences), and the role of associated factors such as ethnicity has largely been ignored (Piquero, MacDonald, & Parker, 2002; Wiesner & Capaldi, 2003). This is a major

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omission in literature, since scientific knowledge on the differences in offender profiles between ethnic minority and majority youths is the first vital step in unraveling the mechanisms leading to delinquent behavior in ethnic minority youths.

Some researchers suggested that ethnic minorities are more likely to be associated with property-based offences (e.g., burglary, theft) rather than with violent offences not involving property (Rodney & Tachia, 2004; Stowell & Ramiro, 2007). This is explained by the fact that ethnic minorities often face socio-economic disadvantages (e.g., low education and income, unemployment), and in an attempt to satisfy material needs they may be more often involved in 'instrumental' crime (Hagan & Palloni, 1999; Piquero, Brame, Mazerolle, & Haapanen, 2002). However, other studies showed that ethnic minorities (e.g., African Americans, Hispanics in the United States) are more pronounced in violent crime (Sampson, Morenoff, & Raudenbush, 2005). In these studies it was argued that the context in which ethnic minority youths are often brought up is associated with specific neighborhood characteristics (e.g., living in densely populated neighborhoods, involvement with deviant peer groups, gang-membership (Ingoldsby & Shaw, 2002). Exposure to violence and crime combined with an increased interaction with deviant peers as youths grow older, may lead adolescents to believe that violence is acceptable (Ingoldsby & Shaw, 2002). In order to gain knowledge on the differences in offending profiles between ethnic minority and ethnic majority youths, the present study examines the offending patterns of Moroccan adolescents in the Netherlands and compares these to offending patterns of Dutch native adolescents.

Moroccans belong to one of the largest immigrant groups in the Netherlands (330.000 inhabitants are of Moroccan origin). Migration began in the 1960s when Moroccan men were recruited for working in the Dutch labor market. Since then, many of these labor migrants brought their families to the Netherlands and stayed permanently. Nowadays, about 40% of the Moroccan immigrants are born in the Netherlands and two percent of the Dutch population is of Moroccan origin. Moroccan communities in the Netherlands are characterized by socio-economic disadvantages such as high unemployment rates, low income and educational level, poor housing conditions and population density (Harchaoui, 2001; Junger & Polder, 1992).

Dutch police records show that Moroccan adolescents, in comparison to both native Dutch and other ethnic minority groups, are overrepresented in the population of juvenile delinquents and in justice youth care (Blom et al., 2005; Junger, 1990; Vollebergh, 2002). For instance, Moroccan adolescents are five times more often the suspect of an offence than are Dutch native adolescents (Blom & Van der Laan, 2006). Compared to Turkish adolescents, relatively many Moroccan adolescents commit criminal acts. Moreover, Moroccan boys in the Netherlands come in contact with police and justice

institutions at a relatively young age (Van Gemert, 1998) and police statistics show that young Moroccan offenders are more likely to commit more offences (Blom et al., 2005; Jennissen & Blom, 2007). A quarter of the population of young offenders in juvenile justice treatment institutions is of Moroccan origin (Boendermaker, 1995). In line with international studies, however, few studies exist on the representation of Moroccan youths in different types of offences (Jennissen & Blom, 2007). According to some authors, young Moroccan offender's crime patterns are characterized by relative offence versatility (Blom et al., 2005; Blom & Van der Laan, 2006; Driessen, Volker, Op den Kamp, Roest, & Moolenaar, 2002). However, a recent study showed that adult Moroccan offenders are often suspected of property offences (non-violent and involving violence), threat, vandalism and disorderly conduct, and to a lesser degree of more serious violent or sexual offences (Jennissen & Blom, 2007).

In summary, just as adolescents from ethnic minority groups in the US and Europe, adolescents of Moroccan origin in the Netherlands are overrepresented in crime rates and in juvenile justice institutions. However, research on the ethno specificity of offender profiles is seriously lacking. In this study, we attempt to contribute to the literature in this field by comparing offender profiles of Moroccan and Dutch native incarcerated boys. Based on the literature it is expected that Moroccan adolescents are more often incarcerated and at a younger age than native Dutch adolescents. In addition, based on the possible association between socio-economic deprivation and property-based crime and the low socio-economic status of Moroccans in the Netherlands, it could be expected that property-based offences will be more prevalent among Moroccan adolescent offenders than among native Dutch adolescents. Alternatively, based on the possible association between neighborhood characteristics and violent crime and the finding that Moroccans in the Netherlands often live in relatively unsafe neighborhoods, it could also be expected that violent offences will be especially prevalent among incarcerated Moroccan adolescents.

Several research questions were addressed to gain knowledge on the offending patterns of Moroccan and native Dutch adolescent offenders in the Netherlands. Firstly, how often were adolescents of Moroccan origin and Dutch native adolescents incarcerated? Secondly, what is the prevalence of various types of offences for which adolescent offenders of Moroccan compared to Dutch native origin were incarcerated and/ or convicted? Thirdly, do Moroccan and Dutch native adolescents differ regarding the type of first offence they were incarcerated for and regarding the age at which they were incarcerated for the first time? And fourthly, to what extent do young Moroccan offenders, compared to the Dutch natives, represent a different offender type in youth crime in the Netherlands? This last question is answered by means

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of an empirical statistical method for identifying unmeasured group membership among subjects (Latent Class Analysis). That is, subjects with similar patterns of offending behavior are identified, and the representation of Moroccan and native Dutch offenders in each offender pattern is examined.

### **Method**

#### *Participants*

Participants in this study consisted of 299 adolescents aged 12-18 years (all males) who were consecutively placed in pre-trial detention in 10 (of 11) juvenile justice institutions in the Netherlands between May 2006 and February 2008. Pre-trial detention is enforced when a youngster is suspect of an offence, awaiting trial, and if detention is thought to be necessary for the protection of others or the child itself. Adolescents were all suspects of one or more offences (e.g., violent offences, property offences, and other). From all adolescents, 141 were of Moroccan origin (of 92,9% both parents were born in Morocco), of the other participants at least one of the parents was born in Morocco), 19,1% of the Moroccan adolescents was born in Morocco, the others were born in the Netherlands. The remainder of the sample consisted of 158 Dutch native adolescents (both of the parents were born in the Netherlands). From all Dutch adolescents 5% had one or two grandparents on father's side born outside the Netherlands and 9,5% had one or two grandparents on mother's side born outside the Netherlands (e.g., other West-European countries, Indonesia or Dutch Antilles). Of all adolescents in pre-trial detention who were eligible for inclusion in the sample (i.e., who were of Moroccan or Dutch native origin, remained in the juvenile justice institution for over a week and were allowed to receive a visitor) and were asked to participate in the study by an employee of the juvenile justice institution, 13% refused to participate. For 8 participants (of 299 participants) data were found to be incomplete and were not further used in the analyses. Therefore, in the present study, data were used of 291 incarcerated adolescents (137 adolescents of Moroccan origin and 154 Dutch native adolescents). The mean age of the adolescent participants was 16,4 years ( $N = 299$ ,  $SD 1,27$ ). From all participants, 27,1% dropped out of school. Most of the participants who still attended school were enrolled in a form of vocational education (30,4% low vocational education; 18,4% medium vocational education). IQ, measured by means of the RAVEN Standard Progressive Matrices showed an average of 92 IQ points (average intellectual functioning), the difference between Moroccan participants (91 IQ points) and Dutch participants (93 IQ points) was small. Of all Dutch participants, 8,3% of their parents

divorced in the past two years and 3,5% of the parents of Moroccan adolescents divorced in the past two years.

### *Procedure*

To recruit the participants, the researchers weekly received an overview from the Dutch Ministry of Justice (Department of Juvenile Justice Institutions), which contained information on all Moroccan and Dutch adolescents who were placed in pre-trial detention in a juvenile justice institution in the prior week. Within one week after being placed in a juvenile justice institution, the adolescents were asked by institutional workers to participate in an interview. The adolescents received a letter which contained information on the purpose and content of the interview, and they were informed that they would receive compensation for participating. If an adolescent consented to participation, an appointment was made for an interview at the juvenile justice institution. Interviews lasted two hours at most and consisted of both interview components and filling out self-report questionnaires such as the Youth Self-report on emotional and behavioral problems. Adolescents were assured of the confidentiality of their spoken and written responses and data were archived anonymously. Written informed consent was obtained from the participants. Participants received compensation, for example telephone cards, which they could use within the juvenile justice institution. In the present study, we only used data from criminal records and information on socio-economic status in order to examine the offence history of the participants.

### *Measures*

#### *Criminal records*

To assess the offence history of the participants, criminal records were gathered at The Dutch Ministry of Justice. The records contain information on type of offence(s) committed in the past (offences as formulated in youth criminal law), age at first offence and the offence for which an adolescent is currently placed (the *index offence*) in pre-trial detention in a juvenile justice institution. In order to classify the different offences of youth criminal law into different offence categories, we followed the classification system introduced by (Van Kordelaar, 2002). In Table 1 the offence categories which were used for statistical analyses are presented. The difference between a property offence involving violence and a minor violent offence is that the latter does not involve any material gain. Aggravated assault, kidnapping, manslaughter and murder were taken together in one subtype (Severe Offences) as the number of participants which committed those offences separately, was too small for further analyses. Participants

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were almost never incarcerated for drug offences, therefore we did not further use this type of offence in the analyses.

### Socio-economic status

In order to determine the socio-economic status (SES) of the participants, postal codes of their parent's homes were used. The Netherlands Bureau for Economic Policy Analyses (Social and Cultural Planning Office) calculates SES scores (which are based on mean income, education level, percentage unemployed and percentage households per neighborhood) for all postal codes in the Netherlands (Knol, 1998). These SES scores are originally provided in an order number (0-4) with three decimal places; we classified the scores into low (0-1), medium (1-3) and high (3-4) SES.

### *Statistical analyses*

To test differences in the amount and types of offences for which Moroccan and native Dutch participants have been incarcerated and/ or convicted, the type of index offence they were incarcerated for, the type of first offence and the age at which they were incarcerated for their first offence, Chi-square and T-tests were used. In order to identify different offender types within the total sample of Moroccan and native Dutch adolescent offenders, Latent Class Analysis (LCA) was used. LCA is a statistical method which is used to identify a set of mutually exclusive latent classes that account for the distribution of cases that occur within a cross tabulation of observed variables (McCutcheon, 1987). In other words, the purpose of a LCA is to find the smallest number of classes of individuals with similar patterns of, in this case offending behavior, that can explain the relationships among a set of variables. Thus, LCA can be used to identify classes of participants with comparable patterns of offending history. The parameters in a LCA model are class specific symptom profiles (which give the probabilities of a set of items for a particular class) and latent class probabilities (which estimate the likelihood for individuals to belong to each of the classes). Individuals are classified to the group with their highest class probability. The number of latent classes is determined by testing the goodness of fit of models with N latent classes using the Vuong-Lo-Mendell-Rubin likelihood ratio test. To test the representation of Moroccan and native Dutch offenders in each of the classes, Chi-square tests were used. Logistic Regression Analyses were used to test for effects of socio-economic status on the representation of the ethnic groups in each offender type.

Table 1 Offence categories

| Offence category  | Offences   |
|---|--|
| Drug offences   | property/ traffic/ smuggling/ manufacturing of soft and/ or hard drugs   |
| Minor violent offences (penalty 12-24 months of imprisonment)       | resistance/ obstinacy<br>simple assault<br>simple assault causing bodily harm<br>vandalism/ material damage  |
| Property offences without violence                                  | receiving unlawfully obtained goods<br>embezzlement<br>deception/ fraud<br>theft<br>embezzlement in function<br>burglary committed without/ with others<br>participating in a criminal organization<br>counterfeiting/ forgery/ coining        |
| Moderate violent offences (penalty 24/36-72 months of imprisonment) | threaten with violence<br>weapon property<br>overt assault/ battery committed with others<br>overt assault/ battery committed with others and causing bodily harm and/ or material damage<br>overt assault/ battery causing severe bodily harm |
| Property offences involving violence                                | theft involving violence<br>extortion  |
| Severe violent offences (penalty 96-240 months of imprisonment)     | aggravated assault<br>kidnapping   |
| Sexual offences   | sexual intercourse with child (12 years or younger)<br>sexual intercourse with adolescent (12 – 16 years)<br>fornication with an unconscious person, mentally disordered or child<br>indecent exposure<br>indecent assault<br>rape             |
| Arson   | arson compromising safety of material goods<br>arson causing mortal danger<br>arson causing severe bodily harm   |
| Mortal offence  | manslaughter   |
| Mortal offence extra  | murder   |

Note. Adapted from Van Kordelaar (2002)

## Results

### *Offence history*

Moroccan participants had been *incarcerated more often* (including the index offence;  $M = 1,59$ ;  $SD = 0,86$ ;  $N = 137$ ) than native Dutch participants ( $M = 1,22$ ;  $SD = 0,50$ ;  $N = 154$ ) ( $t = -4,539$ ,  $df = 289$ ,  $p < 0,00$ ). This could not be explained by age differences, since no differences in age were found between the Moroccans ( $M = 16,3$ ;  $SD = 1,26$ ) and the Dutch ( $M = 16,6$ ;  $SD = 1,28$ ) in our population. Because individuals can be incarcerated for multiple offences at the same time, we also tested whether the *amount of offences* for which participants had ever been incarcerated differed for native Dutch and participants of Moroccan origin. Moroccans had been incarcerated for significantly more offences ( $M = 3,5$ ;  $SD = 1,96$ ;  $N = 137$ ), than native Dutch participants ( $M = 2,6$ ;  $SD = 1,61$ ;  $N = 154$ ) ( $t = -4,437$ ,  $df = 289$ ,  $p < 0,00$ ).

Furthermore, Table 2 shows the type of offences for which native Dutch and Moroccan participants had been placed in pre-trial detention at the time of the interview (index offence). Moroccan participants were significantly more often suspect of property offences and property offences involving violence than native Dutch participants. Native Dutch participants were significantly more often suspect of minor violent offences, severe offences, sexual offences and arson than Moroccan participants ( $\chi^2 = 55$ ,  $df = 8$ ,  $p < 0.01$ ).

Table 2 Type of index offence by ethnic group

|                       | Offence type         |                        |                |                   |                 |                 |        |
|-----------------------|----------------------|------------------------|----------------|-------------------|-----------------|-----------------|--------|
|                       | Property non violent | Property with violence | Minor violence | Moderate violence | Severe offences | Sexual offences | Arson  |
| Dutch<br>(N = 154)    | 24,2%*               | 15%*                   | 5,9%*          | 10,5%             | 17%*            | 15%*            | 10,5%* |
| Moroccan<br>(N = 137) | 48,2%*               | 32,1%*                 | 1,5%*          | 5,8%              | 5,8%*           | 5,8%*           | 0,0%*  |

Note. Percentages are based on dichotomous scores on offence type and show for which type of offences participants have been placed in pre-trial detention at the time of the interview. \* Significant differences based on Chi-square results ( $p < 0.01$ )

Table 3 shows the type of offences for which native Dutch and Moroccan participants had ever been incarcerated at the time of the interview (*offence history*). Since data on total offence history were used, participants could score on various offence categories. Consistent with the foregoing, Moroccan participants were significantly more often incarcerated for property offences and property offences involving violence than Dutch

native participants. Native Dutch participants were significantly more often incarcerated for sexual offences and arson. Furthermore, it was found that of all property offences for which participants were incarcerated and which were committed together with others (in a group of two or more individuals), 65% of these offences were on account of the Moroccan participants and 35% were on account of the native Dutch participants.

Table 3 Type of offences (based on offence history) by ethnic group

|                    | Offence type         |                        |                |                   |                 |                 |        |
|--------------------|----------------------|------------------------|----------------|-------------------|-----------------|-----------------|--------|
|                    | Property non violent | Property with violence | Minor violence | Moderate violence | Severe offences | Sexual offences | Arson  |
| Dutch (N = 154)    | 49,4%*               | 22,7%*                 | 16,2%          | 27,9%             | 19,5%           | 16,2%*          | 11,7%* |
| Moroccan (N = 137) | 82,5%*               | 45,3%*                 | 10,9%          | 20,4%             | 10,2%           | 5,8%*           | 2,2%*  |

Note. Percentages are based on dichotomous scores on offence type and show for which type of offences participants have ever been incarcerated. \* Significant differences based on Chi-square results ( $p < 0.01$ ).

### *First offences*

The mean age of all participants when they were incarcerated for their first offence was 15,9 years ( $N = 290$ ;  $SD = 1,37$ ). Moroccan participants were incarcerated for their first offence at a mean age of 15,7 years ( $SD = 1,33$ ;  $N = 137$ ) while Dutch native participants were older when they committed their first offence: 16,2 years ( $SD = 1,36$ ;  $N = 153$ ), a significant difference ( $t = 3,09$ ,  $df = 288$ ,  $p < 0.01$ ). First offences in the total group of participants mainly consisted of property offences without, and property offences involving violence (57,7%; see Table 4). The least common first offences committed in this sample were arson and severe violent offences. The type of first offence for which Moroccans and Dutch natives were incarcerated differed significantly ( $\chi^2 = 46,8$ ,  $df = 8$ ,  $p = 0.00$ ). Again Moroccans were significantly more often incarcerated for property offences and property offences involving violence (see Table 4). Native Dutch participants were significantly more often incarcerated for a first offence characterized by violence (moderate violence, severe offences), and offences which are sexual in nature and arson.

Table 4 Type of first offence by ethnic group

|                       | Offence type         |                        |                |                   |                 |                 |        |
|-----------------------|----------------------|------------------------|----------------|-------------------|-----------------|-----------------|--------|
|                       | Property non violent | Property with violence | Minor violence | Moderate violence | Severe offences | Sexual offences | Arson  |
| Dutch<br>(N = 154)    | 22,1%*               | 18,2%*                 | 5,2%           | 11,7%*            | 15,6%*          | 15,6%*          | 10,4%* |
| Moroccan<br>(N = 137) | 40,1%*               | 37,2%*                 | 3,6%           | 5,8%*             | 6,6%*           | 5,8%*           | 0,0%*  |

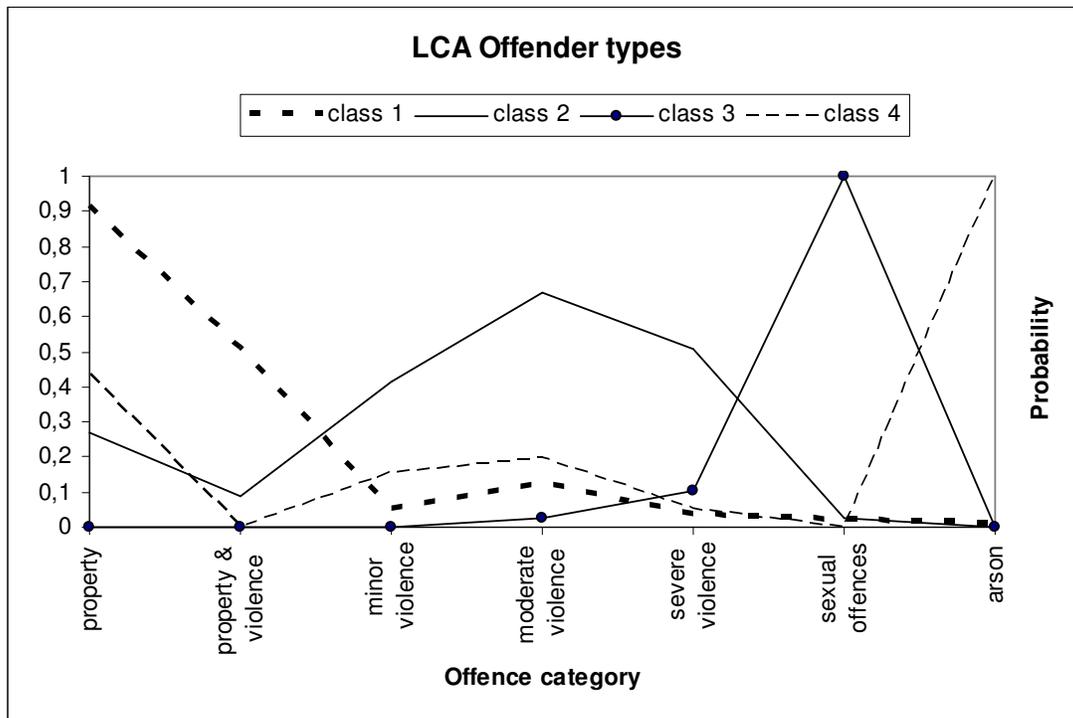
Note. Percentages are based on dichotomous scores on offence type and show for which type of first offences participants were incarcerated. \* Significant differences based on Chi-square results ( $p < 0.01$ ).

### Offender types

#### Latent Class Analysis

Latent Class Analysis was performed based on offence history (dichotomous scores on the seven offence types for which offenders had ever been incarcerated). LCA showed a significant four-class model for the total group of juvenile delinquent offenders, which was the best fitting LCA-solution according to the Vuong-Lo-Mendell-Rubin likelihood ratio test ( $p < 0.01$ ). The average class probabilities were high (.94 - .98), which indicated that offenders were properly classified to their latent class. Graph 1 shows the observed probabilities of the seven dichotomous offence categories for the four classes. Class 1 (63% of 291 offenders) was characterized by high probabilities on property offences and to a lesser degree on property offences involving violence. Probabilities on the other offence categories were below 0.1. Class 1 therefore, could be termed 'property offenders'. Class 2 (20% of 291 offenders) was characterized by high probabilities on moderate violent and severe violent offences, moderate probabilities on minor violent offences, low probabilities on property offences, and no sexual offences or arson, Class 2 therefore was termed 'violent offenders'. Class 3 (10% of 291 offenders) was characterized by high probabilities on sexual offences and low probabilities on severe offences. Adolescents in this class did not commit or were not suspect of property offences, property offences involving violence, minor and moderate violence or arson. Class 3 was termed 'sexual offenders'. Class 4 (7% of 291 offenders) was characterized by high probabilities on arson, moderate probabilities on property offences and low probabilities on minor and moderate violence. Probabilities on the other offence categories were below 0.1. Class 4 therefore, could be termed 'arsonists'.

Graph 1 Four class model of offender types



### Ethnicity and offender types

The representation of Moroccan and native Dutch offenders differed significantly in each class (Chi = 45,9, df = 3, p < 0.00). Table 5 shows to what extent Moroccan and native Dutch adolescent offenders were present in each class. Class 1 'property offenders' consisted of 62% Moroccan adolescents and 38% native Dutch adolescents, Class 2 'violent offenders' consisted of 25,4% Moroccan adolescents and 74,6% native Dutch adolescents, Class 3 'sexual offenders' consisted of 21,4% Moroccan adolescents and 78,6% native Dutch adolescents and Class 4 'arsonists' consisted 10% Moroccan adolescents and 90% native Dutch adolescents. Thus, Moroccan adolescent offenders were overrepresented in the 'property offenders' class and native Dutch adolescent offenders were predominantly 'violent offenders', 'sexual offenders' and 'arsonists'.

Table 5 Representation of ethnic groups in offender classes

|                    | Offender class     |                   |                  |           |
|--------------------|--------------------|-------------------|------------------|-----------|
|                    | Property offenders | Violent offenders | Sexual offenders | Arsonists |
| Dutch (N = 154)    | 38,0%*             | 74,6%*            | 78,6%*           | 90,0%*    |
| Moroccan (N = 137) | 62,0%*             | 25,4%*            | 21,4%*           | 10,0%*    |

\* Significant differences based on Chi-square results (p < 0.01).

### Ethnicity, socio-economic status and offender types

To investigate whether the ethnic differences in offender types could be explained by ethnic differences in socio economic status, the following analyses were conducted. Firstly, it was found that the level of socio-economic status of the Moroccans was significantly lower than the socio-economic status of Dutch native participants ( $\chi^2 = 27,1$ ,  $df = 2$ ,  $p < 0.00$ ). Of the Moroccan adolescents 67% had a low SES, 27% had a medium SES and 6% had a high SES. Of the native Dutch adolescents, 36% had a low SES, 49% had a medium SES and 15% had a high SES.

Secondly, logistic regression analyses were conducted to identify the effects of ethnicity and SES class (low, medium, high) on each of the offender classes. In congruence with the results presented in Table 5, it was found that all offender classes were strongly affected by ethnicity; being of Moroccan origin was significantly related to the property offender class ( $R^2 = .20$ ,  $OR = 5.95$ ,  $CI = 3.44-10.30$ ,  $p = .00$ ) and being of native Dutch origin was significantly related to the sexual offender class ( $R^2 = .06$ ,  $OR = .28$ ,  $CI = 0.11-0.70$ ,  $p = .01$ ), the violent offender class ( $R^2 = .08$ ,  $OR = .31$ ,  $CI = 0.16-0.58$ ,  $p = .00$ ) and the arsonist class ( $R^2 = .12$ ,  $OR = .11$ ,  $CI = 0.03-0.49$ ,  $p = .00$ ).

Two offender classes were affected by SES. Low SES (in comparison to high SES), was significantly related to the property offender class ( $R^2 = .05$ ,  $OR^{low} = 3.36$ ,  $CI^{low} = 1.52-7.39$ ,  $p = .00$ ), indicating that boys with a low SES were more likely to be in the property offender class than boys with a high SES. Medium SES (in comparison to high SES) was not related to the property offender class ( $OR^{medium} = 2.08$ ,  $CI^{medium} = 0.93-4.64$ ,  $p = .07$ ). Low and medium SES (in comparison to high SES) were significantly related to the violent offender class ( $R^2 = .03$ ,  $OR^{low} = .35$ ,  $CI^{low} = 0.15-0.80$ ,  $p = .01$ ;  $OR^{medium} = .38$ ,  $CI^{medium} = 0.16-0.89$ ,  $p = .03$ ). Thus, boys with a low and medium SES were less likely to be in the violent offender class than boys with a high SES. Finally, low and medium SES (in comparison to high SES) were not related to the sexual offender class ( $R^2 = .02$ ,  $OR^{low} = 1.11$ ,  $CI^{low} = 0.23-5.34$ ,  $p = .90$ ;  $OR^{medium} = 2.21$ ,  $CI^{medium} = 0.48-10.28$ ,  $p = .31$ ) and the arsonist class ( $R^2 = .02$ ,  $OR^{low} = .49$ ,  $CI^{low} = 0.12-2.01$ ,  $p = .32$ ;  $OR^{medium} = .87$ ,  $CI^{medium} = 0.22-3.43$ ,  $p = .84$ ).

Thirdly, adding SES to the regression model did not reduce the effect of ethnicity on the property and violent offender class; being of Moroccan origin was as strongly related to the property offender class ( $R^2 = .21$ ,  $OR = 5.67$ ,  $CI = 3.18-10.12$ ,  $p = .00$ ) and the violent offender class ( $R^2 = .11$ ,  $OR = .31$ ,  $CI = 0.16-0.61$ ,  $p = .00$ ). However, in general the SES effects decreased when adding ethnicity in the model; low SES (in comparison to high SES) was no longer related to the property offender class ( $R^2 = .21$ ,  $OR^{low} = 1.89$ ,  $CI^{low} = 0.79-4.55$ ,  $p = .16$ ) or the violent offender class ( $R^2 = .11$ ,  $OR^{low} = .46$ ,  $CI^{low} = 0.19-1.12$ ,  $p = .09$ ). The negative effect of medium SES (in

comparison to high SES) was still significant in the regression model for the violent offender class ( $OR^{\text{medium}} = .36$ ,  $CI^{\text{medium}} = 0.15-0.88$ ,  $p = .03$ ). In summary, although the socio-economic status between the ethnic groups differed significantly, and effects of SES on the property and violent classes were found, the ethnic differences in the property and violent offender classes could not be explained by the differences in socio-economic status between Moroccans and Dutch natives.

## Discussion

The primary purpose of this study was to compare the nature of the crime for which adolescent offenders of Moroccan and Dutch origin are incarcerated, and to identify whether young Moroccan offenders represent a specific offender type in youth crime in the Netherlands. Analysis of criminal record data showed that on the one hand, adolescents of Moroccan origin were incarcerated more often, were incarcerated for more offences, and were younger when they were incarcerated for the first time than Dutch native adolescents. On the other hand, they were incarcerated for other types of offences than native Dutch offenders. Moroccan adolescents were more often incarcerated for property-based offences (e.g., burglary, theft) than Dutch native adolescents, and less often incarcerated for violent offences, sexual offences and arson than Dutch native adolescents. Moroccan adolescents in the present study can thus be characterized as early starting offenders who persist in being incarcerated for the same type of crime: property-based offences.

Using Latent Class Analysis, a four class model of offender profiles was found for the adolescent offenders. It was shown that Moroccan and Dutch adolescent offenders have distinctive offender profiles: Moroccans overall can be characterized as *property offenders*, Dutch adolescent offenders as *violent* and *sexual* offenders and *arsonists*. Our findings are in line with an earlier Dutch study demonstrating that adult Moroccan offenders were relatively more often suspect of property offences (both non-violent and involving violence) but relatively less often suspect of sexual and severe violent offences (Jennissen & Blom, 2007). In contrast, we did not find support for the relative offence versatility of young Moroccan offender's crime patterns mentioned by other authors (Blom et al., 2005; Driessen et al., 2002).

As outlined in the introduction, research on the representation of ethnic minority youths in distinctive offender types is very rare (Piquero, MacDonald et al., 2002; Wiesner & Capaldi, 2003). This is a major omission since knowledge on the nature of crime committed by ethnic minority youths is needed to gain insight into the causes of their overrepresentation in crime statistics. Some researchers previously hypothesized that ethnic minorities relatively often conduct violent offences, because of the neighborhoods

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in which many of them were raised and because of their relatively high involvement with deviant peers (Ingoldsby & Shaw, 2002; Sampson et al., 2005). In the present study we did not find support for this hypothesis. This could be explained by the fact that research demonstrating this association is predominantly based on African-American and Latin-American minority groups in the United States, and the historical context and living conditions of these minority groups in the suburbs of North American cities may not be comparable to those of adolescents of Moroccan origin in the Netherlands. Other researchers previously suggested that immigrants and ethnic minorities are more likely to be associated with property-based offences rather than with other types of offences (Rodney & Tachia, 2004; Stowell & Ramiro, 2007). The results from the present study showed that Moroccan adolescent offenders, who belong to one of the largest ethnic minority groups in the Netherlands, can indeed be characterized as property offenders. This possible link between property-based offences and an ethnic minority position has been explained by various authors (Hagan & Palloni, 1999; Junger-Tas, 2001).

Firstly, adolescents with an ethnic minority background are confronted with restricted socio-economic opportunities. Ethnic minority youths are more prone to drop out of school than ethnic majority youths (Dagevos et al., 2003), which decreases their chances of a proper education. Consecutively, ethnic minority youths are less often able to meet the high job requirements imposed upon by the labor market (e.g., regarding level of education, communicative skills) than ethnic majority youths (Junger-Tas, 2001). These (and other) processes have led to high unemployment rates in ethnic minorities. For instance, 27% of Moroccan youth in the Netherlands is unemployed compared to 9% of native Dutch youth (Dagevos, 2006). As ethnic minority youths attempt to satisfy basic subsistence needs while moving through the stages of seeking, finding and losing employment, they may be more likely to become involved in 'instrumental' property-based crime (Hagan & Palloni, 1999). In the present study however, the overrepresentation of Moroccans in the property offender class could not be explained by the low socio-economic position of this group. Thus, the straightforward differences in socio-economic status between ethnic minority and majority groups do not account for our differences in offender profiles between Moroccan and Dutch native adolescents. This is in line with earlier findings which show that effects of socio-economic status overall do not explain the differences in problem behavior between ethnic minority and majority youth (Stevens & Vollebergh, 2008).

Furthermore, the specific ethno-cultural position of ethnic minority groups may contribute to the tendency of committing predominantly property crime. Moroccan migrants are different in terms of religion, culture, education and language than Dutch natives and therefore face difficulties in participation in society's institutions and the

development of interpersonal contacts with members of the majority group (Harchaoui, 2001; Junger-Tas, 2001). This is especially the case when the ethnic majority population does not accept the lifestyle and customs of the ethnic minority group, which to some extent seems to be at hand for Moroccan immigrants in the Netherlands (Junger-Tas, 2001). These social exclusion mechanisms increase a marginalized position in society (e.g., not feeling accepted in the host country and feeling discriminated; Junger-Tas, 2001), which in turn may result into a chronic feeling of low hopes for a prosperous future in this society and of indifference. This mechanism may make an individual more prone to steal from the dominant society.

Next, it is worth noting that theories of deprivation suggest higher levels of crime involvement of immigrants as social deprivation (i.e., unemployment, poor education, low average income, low socio-economic status) make immigrants a distinct social group (Albrecht, 1995). According to Social Control Theory (Gottfredson & Hirschi, 1990), immigrants may be more involved in crime since they are inhibited in developing bonds to the new society. Especially youths of the second, third and fourth – but not the first – generation of immigrants may become more involved in crime as they face concentrated disadvantage (Morenoff & Astor, 2006), and the development of bonds (with parents and society) is at risk due to acculturation conflicts between immigrant generations (Albrecht, 1995). In line with this, we found that Moroccan adolescent suspect offenders and their parents are more oriented towards Dutch society than non-incarcerated Moroccan adolescents and their parents in the Netherlands (Stevens, Veen, & Vollebergh, 2008).

Finally, another explanation for the overrepresentation of ethnic minorities regarding property offences, is that these groups may not be treated the same as the ethnic majority group in the criminal justice system. Various international studies found that the overall overrepresentation of ethnic minorities in the juvenile justice system can be the result of disparities in sentencing (Engen et al., 2002; Mustard, 2001). Minority youths are more likely to be referred to juvenile court, to be detained and to go to jail than the ethnic majority youths (Rodney & Tachia, 2004). In the present study we found that Moroccan adolescent offenders were placed in pre-trial detention more often, often for less serious (i.e., property) offences and at a younger age than native Dutch offenders. Our findings might therefore also be the result of a more repressive and punitive approach towards Moroccan youth. Furthermore, being detained before trial (pre-trial detention) increases the probability that a prison sentence will be imposed after trial (Hagan & Palloni, 1999). Thus, possible ethnic disparities in sentencing could also lead to higher conviction rates and prison sentences for Moroccan youth in the Netherlands. In line with this, a recent study in the Netherlands revealed that adolescents

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with an ethnic minority background are convicted to longer prison sentences than native Dutch adolescents (Komen & Van Schooten, 2006).

The present study was one of the first examining the role of ethnicity in distinctive offender profiles. The results of this study are subject to some limitations. Firstly, we only included adolescents who were placed in pre-trial detention in a juvenile justice institution. This means that some incarcerated participants in this study only reached the status of 'suspect' and it is unknown whether these adolescents were guilty or may have proven to be innocent. Nevertheless, adolescents in pre-trial detention represent the most heterogeneous subpopulation in juvenile justice institutions, providing us a broad overview of all incarcerated youth in the Netherlands with a Dutch and Moroccan ethnic background: these boys have been incarcerated for all types of offences and have not yet been placed in a specific department within juvenile justice institutions. The sample in the present study gives us insight into all adolescent offender types and youths incarcerated in a juvenile justice institution within a given period. Secondly, regarding the use of criminal records, no information was available on the dark number of offences (the number of offences not known to the police). For that reason, it is likely that the offence history of the participants in this study represents only some part of their criminal career. Yet, the advantage of using criminal records is that these are not subject to socially desirable answers of the youths themselves and give rather accurate information on dates of offences and sentencing in the past. Thirdly, former research in the United States demonstrated ethnic differences in the choice of crime victims. For instance, African-American offenders commit much more (violent) crimes against whites than whites commit crimes against African-Americans (DiLulio, 2005). Since individuals from ethnic minorities may be more prone to steal from the dominant society due to a marginalized position, this might also affect their choice of crime victims. However, as information on the victims was not at hand in the present study, we were unable to examine target choices in the offending behavior of Moroccan and native Dutch participants. Finally, the use of cross-sectional data makes it difficult to examine a causal relationship between offender types and explanatory variables (in this case socio-economic status). Future research should include a longitudinal design allowing the study of offending patterns from childhood into adulthood for different ethnic groups.

Despite these limitations, the findings presented here point to the fact that Moroccan and native Dutch adolescents have highly distinctive offender profiles, showing that ethnic differences in the nature of crime cannot be ignored in research comparing the development of delinquent behavior in ethnic minority and majority youths. Moreover, the finding that Moroccan adolescents are far more often incarcerated for property offences than Dutch native adolescents, which could be seen as a relatively less

serious type of crime, is of societal importance. Firstly, for the public opinion on crime in ethnic minority groups, it is important to make known that although Moroccan adolescents are more often incarcerated than Dutch native adolescents, their criminal behavior overall is less serious than the criminal behavior of Dutch native youths. Secondly, understanding ethnic differences in offending behavior is highly relevant, since this may have implications for the accessibility of ethnic minorities to intervention and treatment. Various intervention programs have been developed in the past decades as an alternative solution to incarceration and imprisonment (e.g., Functional Family Therapy, Multisystemic Therapy; Breuk et al., 2006). Especially youth offenders who commit less serious forms of crime and do not directly form a threat to the community, could benefit from interventions for which they do not have to be removed from their homes. Participation to these intervention programs is hindered by longer pre-trial incarceration and imprisonment periods. Since incarcerated youths of Moroccan origin primarily commit less serious types of offences, this may have consequences for their access to alternative intervention programs. Furthermore, prolonged duration of incarceration and imprisonment periods interferes with school performance and leads to dropping out of school. Thus, incarcerating youths faster and detaining them for a longer time, does not enhance their educational level and subsequently their chances on the labor market. In summary, Dutch society should be aware of the long term effects of a repressive approach towards Moroccan youth in the light of their socio-economic opportunities and socio-cultural integration in the future.



## Chapter 3

# Acculturation and juvenile delinquency: is integration a promise or a threat?

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**Abstract**

A widely held presupposition holds that integration provides a strong foundation for optimal child outcomes. In contrast, the classical strain and segmented assimilation theory indicate that a strong orientation towards the host society increases the risk of child delinquency. Alternatively, acculturation differences between parents and children may be responsible for child delinquency. Since empirical research on this subject is scarce and limited, this study tested these contrasting theoretical notions, by comparing acculturation orientations of Moroccan immigrant boys in pre-trial detention and in the general population as well as these orientations of their parents. Results showed that boys in pre-trial detention as well as their parents were overrepresented in the integrated psychological acculturation classes. Also, parents with a son in pre-trial detention were twice as likely to have Dutch friends and more often used Dutch language with important others. No difference in intergenerational acculturation gap between both populations was found.

## Introduction

Although several studies reported that immigrants are less criminally involved than their native counterparts (e.g., Ousey & Kubrin, 2009), it has also become clear that some immigrant groups are clearly overrepresented in crime figures (Wortley, 2009). For instance in European countries, Algerian immigrant adolescents in France and Moroccan immigrant adolescents in the Netherlands make up a remarkably large percentage of the population in justice institutions (Tonry, 1997). Hence, it is of vital importance to gain insight into the mechanisms leading to delinquency in immigrant adolescents. One factor that is argued to influence differences in immigrant delinquency is a person's acculturation orientation, i.e., the way in which people relate to their ethnic and host culture.

Acculturation orientations can best be understood as bidimensional, in which the orientation towards the host culture and the culture of origin should be perceived of as independent processes (e.g., Nguyen, Messé & Stollak, 1999; Ryder, Alden, & Paulhus, 2000). Based on these two dimensions, four distinct acculturation strategies have been conceptualized (e.g., Berry, 1997): Assimilation (orientation to the host culture at the cost of adherence to one's own culture of origin), Integration (adherence to the culture of origin as well as orientation to the host culture), Separation (rejection of the host culture and adherence to the own cultural heritage) and Marginalization (rejection of both cultures). Moreover, it has been recognized that these four acculturation orientations consist of different components, such as cultural practices (e.g., language use, social contacts, and cultural habits), cultural values (belief systems associated with a specific group such as conformity to norms, emotional self-control, and collectivism) and cultural identifications (attachments to cultural groups; e.g., Schwartz, Unger, Zamboanga & Szapocznik, 2010).

A widespread presupposition holds that a strong orientation to both the culture of origin and the host culture (i.e., integration) provides the strongest foundation for optimal child outcomes (e.g., Berry, 1997). Although this has been confirmed by a number of empirical studies on child depression and anxiety (e.g., Koneru, Weisman de Mamami, Flyn & Betancourt, 2007; Schwartz et al., 2010), contrasting findings may be expected for adolescent delinquency.

### *Theoretical perspectives on acculturation orientations and delinquency*

Acculturation orientations may be of vital importance in understanding differences in criminal behavior of immigrant adolescents (e.g., Smokowski, David-Ferdon & Stroupe, 2009). As mentioned above, integrated adolescents may be less likely to show delinquent behavior than other adolescents. Although the mechanisms behind this

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relationship have mostly remained implicit, it has been argued that because of their acculturation orientation, integrated adolescents may more easily use social support systems from both their ethnic group and the host society than other adolescents, or their acculturation orientation may reflect a personality capable of dealing with two distinct cultural groups (Berry, 2006), which consequently may protect those adolescents against delinquent behavior. Or as Berry (2006) pointed out: 'In the simplest version of this explanation, integration involves two positive orientations, marginalization involves two negative ones, while assimilation and separation involve one positive and one negative relationship' (Berry, 2006, pp 51, line 22-25). Thus, adolescents, who are strongly oriented towards the host culture and their culture of origin, may be at relatively low risk of engaging in delinquent behavior.

Other theoretical perspectives lead to opposite expectations, however. Using Merton's classical strain theory (1956), it can be hypothesized that regardless of their orientation towards their own ethnic group, adolescents who are strongly oriented towards the receiving society are at increased risk of delinquency. One of the core ideas of this theory holds that deviance is expected to result from inconsistencies between pursued goals and the means of achieving those goals available. Juveniles as well as adults may turn to delinquency in frustration of being unable to achieve wanted goals (Bankston & Zhou, 1997). Indeed, the means immigrants have to achieve important goals in life may be limited, because social exclusion of immigrants continues to be a widespread practice (Gowricharn, 2002). This may be especially problematic for those who are strongly oriented towards the host society. Immigrants who have frequent contacts with natives, who adhere to values of and are strongly attached towards the host country, may more strongly pursue successful participation in the host country as a goal in their lives, since they are more likely to use (values of) natives as a basis of comparison (e.g., Correll & Park, 2005). Thus, for those who are strongly oriented towards the receiving society, inconsistencies between pursued and achieved goals may be relatively large, possibly causing delinquency.

Although the mechanism is different, based on the segmented assimilation theory (Portes & Zhou, 1993), a similar expectation can be formulated. According to this theory, immigrants oriented towards the host country may be at increased risk of delinquency, since a considerable part of them may not become involved into the white middleclass, but in the underclass. Since delinquency is more prevalent in the latter context, this may also increase the likelihood of delinquency in those immigrants (Portes & Zhou, 1993; Smokowski, Rose & Bacallao, 2009). On top of this, it has been argued that adolescents who are oriented towards the host country, are especially susceptible to negative peer pressures and therefore to delinquency (e.g., Samaniego & Gonzales,

1999). The idea is that these adolescents tend to become more involved in activities outside the family domain and are therefore more prone to defy authority and show tolerance to deviant behavior (Turjeman, Mesch & Fishman, 2008).

Finally, the parents may also play a pivotal role in the relationship between acculturation orientations and adolescent delinquency (e.g., Szapocznik, Kurtines, & Fernandez, 1980). Children commonly become involved in the host culture faster than adults, creating an 'acculturation gap' between generations that is thought to foster parent-adolescent conflict. This cultural gap can result in alienation between parents and adolescents and may fuel adolescent rebellion or delinquency (Szapocznik & Williams, 2000). Presupposing that parents predominantly are oriented towards the culture of origin, it has been suggested that adolescents who are highly involved in the host culture or hardly involved in the culture of origin, are at highest risk of deviant behavior (Smokowski & Bacallao, 2006).

Thus, based on the previously outlined theoretical perspectives different expectations can be formulated regarding the relationship between acculturation orientations and adolescent delinquency. First, adolescents with an integrated acculturation orientation may be least likely to show delinquent behavior. Second, it has been argued that a weak orientation towards the ethnic culture and a strong orientation towards the host culture may increase the risk of adolescent delinquency, since adolescents with this acculturation pattern are most likely to have conflicts with their parents. Third, in a context of limited opportunities, the strain theory and segmented assimilation theory expect a strong orientation towards the host culture to be associated with high levels of adolescent delinquency.

### *Reviewing the empirical research*

Although there is ample research on the association between acculturation orientations and adolescent emotional and behavioral problems (e.g., Berry, Phinney, Sam & Vedder, 2006; Kvernmo & Heyerdahl, 2003; Liu, Lau, Chia-Chen Chen, Dinh & Kim, 2009), the empirical research which uses adolescent delinquency as an outcome is scarce and limited in a number of ways. First, acculturation orientations were predominantly measured with a simple proxy such as generational status (i.e., country of birth) or a unidimensional acculturation measure (i.e., in which it is presupposed that a strong orientation to the host culture automatically implies a weak orientation to one's own culture of origin), discarding the complex nature of acculturation orientations (e.g., Juang & Nguyen, 2009; Nguyen et al., 1999). Most studies focused on generational status, and reported that levels of self-reported delinquency were lower among first-generation immigrant adolescents than among those from later immigration generations (Bui, 2009;

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Bui & Thongniramol, 2005; Fridrich & Flannery, 1995; Nagasawa, Qian & Wong, 2001; Pérez, Jennings & Gover, 2008; Samaniego & Gonzales, 1999; Willgerodt & Thompson, 2006). In studies assessing behavioral acculturation (e.g., host culture language use, social contacts, and cultural habits), no relationship between violent delinquency and adolescent's English proficiency (Pérez, et al., 2008) or English language use with parents (Nagasawa et al., 2001) was found. Additionally, using a unidimensional behavioral acculturation scale on host culture language use, customs and habits, results showed that adolescents from various ethnic backgrounds who scored high on host behavioral acculturation, reported relatively high levels of delinquency (Hishinuma et al., 2005; Kwong Wong, 1997). Finally, studies assessing identity acculturation came up with contradictory findings. Le and Stockdale (2008) reported that ethnic identity (i.e., feelings of belonging, commitment to and exploration of the own ethnic group) was not related to serious violent behavior and Go & Le (2005) found that the search for ethnic identity was positively associated with self-reported delinquency. In sum, the available research roughly indicates that adolescents who are oriented towards the host culture are more likely to have committed offences. However, it is problematic to draw firm conclusions, since most studies did not do justice to the multifaceted and complex nature of acculturation orientations (e.g., Juang & Nguyen, 2009; Nguyen et al., 1999). In fact, by now there is ample evidence that acculturation orientation measures should independently assess the orientation towards the host culture and the culture of origin (e.g., Nguyen et al., 1999; Ryder et al., 2000) and that acculturation orientations should consist of different components (such as cultural practices and cultural identifications; e.g., Schwartz et al., 2010). Thus, research on the relationship between acculturation orientations and adolescent delinquency that use bidimensional acculturation models aimed at different acculturation components is highly necessary.

Secondly, research on acculturation orientations and adolescent delinquency is limited, since the possible influence of parental acculturation has been largely ignored up till now. On the one hand, using the theoretical mechanisms outlined above, parental acculturation per se may be related to adolescent delinquency, on the other it may be the acculturation gap between parents and adolescents that is responsible for the relationship with adolescent delinquency. Research on adolescent delinquency, has predominantly focused on the latter. Kwong Wong (1997) found that the relationship of adolescent English use to delinquency was significant and positive for those whose parents showed low English language proficiency, whereas this relationship was much weaker for the parents who showed high levels of English language proficiency. In line with these findings, Le & Stockdale (2008) found a positive relationship between perceived acculturation dissonance as reported by the adolescent and adolescent

delinquency. Thus, although research on the importance of parental acculturation for adolescent delinquency is extremely scarce, there is some indication that delinquent adolescents relatively often experience an acculturation gap with their parents.

Thirdly, virtually all studies on the relationship between acculturation orientations and adolescent delinquency used measures of self-reported delinquency. Since underreporting of (serious) delinquent behavior is relatively common in self-report studies, and general population studies may not have been able to include large numbers of adolescents who show serious delinquent behavior (Piquero, MacIntosh, & Hickman, 2002), the generalizability of the findings of previous research to seriously delinquent adolescents may be limited. To our knowledge, only one study examined acculturation orientations in a sample of juvenile offenders, but did not draw a comparison with juveniles from a normative population, which makes it problematic to study the linkage between acculturation orientations and delinquency (Knight, Vargas-Chanes, Losoya, Cota-Robles, Chassin & Lee, 2009). In sum, the current literature on acculturation orientations and adolescent delinquency needs research making use of bidimensional acculturation instruments covering several acculturation components, assessing both adolescents and their parents. Using samples in which juvenile offenders are compared with adolescents from the general population may contribute to the literature as well, since it tests the generalizability of current findings to serious adolescent delinquents.

### *The present study*

This study is directed towards extending the literature on acculturation and adolescent delinquency, by comparing several acculturation orientations of Moroccan immigrant boys in pre-trial detention and from the general population as well as those orientations of their parents. Bidimensional acculturation instruments were assessed with regard to behavioral and identity acculturation using an empirical way of classifying individuals. To gain more knowledge on the tenability of the outlined theoretical perspectives, we investigated the socio-economic context in which the boys were raised, and the extent to which adolescents and their parents adhered to different acculturation orientations in both groups of boys.

Based on the outlined theoretical perspectives and the available empirical research, several hypotheses can be formulated. Although inconsistent with the notion that integration provides the strongest foundation for optimal child outcomes, classical strain theory, segmented assimilation theory and most empirical research expect higher levels of orientation towards the host country in the sample of boys in pre-trial detention than in the general population sample. Additionally, the 'acculturation gap' theory expects

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that delinquent boys are less strongly oriented towards their ethnic group than boys from the general population, which is supported by some, but not all available empirical literature. These expectations may not only account for the acculturation orientations of the adolescents, but also for parents' acculturation.

### **Methods**

#### *Participants*

##### Moroccan immigrants in the Netherlands

Moroccan immigrants belong to one of the largest immigrant populations in the Netherlands (Dutch Central Bureau of Statistics, 2001). In the 1960s and 1970s, Moroccan men came to the Netherlands to fill the gaps in the lower segments of the Dutch labor market, which has resulted into an ongoing unfavorable socioeconomic position in the Netherlands (e.g., Dagevos, Gijsberts & Van Praag, 2003). From the early 1970s on, many Moroccan migrants brought their families to the Netherlands. Initially, both the Dutch government and the Moroccan migrants expected their stay to be temporarily, but most of them eventually settled permanently. Although labor migration has decreased considerably since the 1980s, there is still some influx of Moroccan immigrants because of the fact that a considerable number of the pioneering generation's offspring gets their spouses from Morocco.

##### Pre-trial detention sample

Participants consisted of 138 boys aged 13-18 years and one of their parents ( $N = 84$ ) of Moroccan origin (i.e., at least one of the parents of the boys was born in Morocco) who were consecutively taken into pre-trial detention in 10 (out of 11) juvenile justice institutions in the Netherlands between May 2006 and February 2008. This sample originated from a larger study on boys of Moroccan and Dutch origin in pre-trial detention (Veen, Stevens, Doreleijers, Van der Ende & Vollebergh, 2010). In the Netherlands, pre-trial detention is enforced when a youngster is suspect of an offence, awaiting trial, and if detention is thought to be necessary for the protection of others or the child itself. Adolescents were all suspect of one or more offences (as formulated in youth criminal law), ranging from property offences to sexual offences, violent offences and arson. The mean age of the participants was 16,4 years. Eighty percent of the boys were born in The Netherlands, the others were born in Morocco.

In order to approach the participants, the researchers weekly received an overview from The Dutch Ministry of Justice, containing information on all adjudicated adolescents who were placed in pre-trial detention in a juvenile justice institution in the

prior week. Eligible for inclusion were those adolescents who were of Moroccan or Dutch native origin, who remained in the juvenile justice institution for over a week, and who were allowed to receive a visitor. Adolescents had to be able to read and speak Dutch. Adolescents with intellectual disabilities, as registered by the institutional workers of the juvenile justice institution, were excluded from the sample. The adolescents received a letter which contained information on the purpose of the interview and were asked to participate in the study by an employee of the juvenile justice institution. If the adolescent consented to participation, an appointment was made for an interview at the juvenile justice institution. Of the boys with a Moroccan origin who were requested to participate in the study, 62% were interviewed.

In the original study, 273 parents of the boys in pre-trial detention of Dutch or Moroccan origin were asked to participate (8% of the parents could not be asked to participate because their addresses were unavailable, they moved, or their son did not give permission for his parent to participate in this study). Of those parents, 168 parents consented to participation in the study (total response rate 62%). Of the parents with a Moroccan background, 70% took part in the study (N = 87). However, 84 parental interviews were used for the current study, since three participating parents were born in the Netherlands. In 74% of the Moroccan families, the mother participated in the study (in 26% it was the father who was interviewed), 14% of the parents had been divorced. The mean age of the parents was 46.7 years.

Parents received a letter containing the aims of the present study in Dutch and Moroccan-Arabic and within a couple of weeks a trained Moroccan interviewer visited the parents' home to ask them to participate. Parent and adolescent participants were assured of the confidentiality of their spoken and written responses and data were archived anonymously. Moreover, written informed consent was obtained from the participants. Participants received compensation, adolescents received telephone cards which they could use within the juvenile justice institution and parents received a gift certificate. The research protocol was approved by the Ethical Board of the Department of Social Sciences and the Ministry of Justice in the Netherlands.

### General population sample

Data were used from a larger study, in which a sample of 1,127 children aged 4 through 18 with at least one parent born in Morocco, was randomly selected from municipal registers of Rotterdam and The Hague (Stevens et al., 2003). From that sample, 819 of their parents participated in the original study (response rate 73%). Four hundred fifteen parents were interviewed about a child in the age of 11 through 18, and asked for permission to interview their child as well. Ten parents did not grant

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permission to interview their child, and 29 adolescents refused to participate (response rate 91%). Furthermore, another 11 adolescents whose parents were not interviewed participated in the study. In the present study, we only used data of Moroccan-born parents of male adolescents aged 13 through 18 ( $N = 150$ ), and male adolescents themselves ( $N = 142$ ). The mean age of the participating boys was 15.2 years, which was significantly younger than the mean age of the boys in pre-trial detention (16.4;  $t = -6.5$ ,  $df = 278$ ,  $p < .01$ ). Sixty-four percent of the boys were born in the Netherlands, 34% were born in Morocco, and 2% percent of the boys were born elsewhere. In the population of boys in pre-trial detention, a larger percentage were born in the Netherlands than in the general population ( $\chi^2 = 10.5$ ,  $df = 2$ ,  $p < .01$ ). In 77% of the general population families, the mother participated (in the other cases, the father was interviewed), in 4% of the families parents had been divorced, and the mean age of the participating parent was 45.2. No differences in gender and mean age of the participating parent were found between the parents from the general population and parents with a son in pre-trial detention ( $\chi^2 = 0.2$ ,  $df = 1$ ,  $p = .65$ ;  $t = -1.3$ ,  $df = 228$ ,  $p = .19$ ). However, in our general population sample parents were less often divorced ( $\chi^2 = 8.1$ ,  $df = 3$ ,  $p = .04$ ).

Data collection took place from April 2001 to July 2002. Parents and adolescents were sent an introductory letter in Dutch and Arabic describing the aims of the study. About 1 to 2 weeks later, a trained Moroccan interviewer visited the respondents' homes. The interviewer asked one of the parents of the randomly selected adolescent to participate in the study. After the interview, we asked the parents for permission to interview their 11- to 18- year-old child. If they consented, the adolescents were asked to participate. In both parent and adolescent interviews, the interviewer read the questions aloud and filled out the questionnaire.

### *Measures*

#### **Behavioral acculturation**

To assess behavioral acculturation, we asked the adolescents and parents how often they used Dutch and Moroccan language when talking to important others, i.e., their partner, parents/children, other relatives and Moroccan friends. Items were rated on a 5-point Likert-type scale ranging from never to always. 'Talking Dutch with important others' was measured by a 3 or 4-item instrument (3 items for adolescents, 4 items for adults) with an alpha of .85 for adults and .50 for adolescents. The 3 or 4-item instrument 'Talking Moroccan with important others' consisted of the same items regarding Moroccan language use (alpha: adults = .67; adolescents = .65). Furthermore, adolescents and parents were asked whether they had one or more Dutch or Moroccan friends.

### Psychological acculturation

An adapted version of the Psychological Acculturation Scale (PAS; Tropp, Erkut, Coll, Alarcon, & Garcia, 1999) was used to measure the adolescent's and parent's sense of belonging and emotional attachment towards Dutch and Moroccan people and culture, which consists of two 6-item subscales (the Dutch Psychological Acculturation Scale (D-PAS) and the Moroccan Psychological Acculturation Scale (M-PAS)). Items were for instance 'I feel comfortable with Dutch people', 'Moroccan people understand me' and 'I feel proud to be a part of Dutch culture' (see also Figure 1 and 2). Items were rated on a 3-point scale: 0 = disagree, 1 = do not agree or disagree, 2 = agree. Strong psychometric properties of the instrument were demonstrated in a previous paper (Stevens et al., 2004). For the current populations, the alphas were .82 for the D-PAS of the boys and .90 for the D-PAS of the parents. For the M-PAS, alphas were .79 for the boys and .81 for the parents. In order to conduct latent class analyses, which enables us to identify groups of boys/parents with a similar pattern of psychological acculturation, we transformed our items into dichotomous variables (0 = disagree / do not agree or disagree, 1 = agree). Finally, to assess the acculturation gap between parents and their children, we used these identified psychological acculturation classes. Families in which parents showed a different acculturation pattern than their child, were indicated as facing an acculturation gap.

### Neighborhood SES

To determine the socio-economic status (SES) of the direct neighborhood, postal codes of the families' homes were used. The Netherlands Social and Cultural Planning Office calculates SES scores (which are based on mean income, education level, percentage unemployed and percentage households per neighborhood) for all postal codes in the Netherlands (Knol, 1998). These SES scores can be classified into low, medium and high SES. However, since only 7% of the families were of high SES, we dichotomized our scores into low and medium/high.

### Work, education, and Dutch fluency

Participating parents were asked whether (s)he and her/his partner had a paid job during the last two years, enabling us to distinguish between the percentage of mothers and fathers of the adolescents working in this period. Similarly, the highest level of education finished in the Netherlands by the mother and father of the adolescents were obtained. Originally, scores ranged from 0 = no education or primary school to 3 = high level of vocational training or university, but since only 0.4% of the mothers and 5% of the fathers finished a medium or high level of education, we compared mothers/fathers with and without any finished secondary education in the Netherlands. Finally, parents

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were asked to what extent (s)he and her partner was able to speak the Dutch language (0 = not at all to 3 = very well). Adolescents were asked whether they were currently (i.e., for the boys in pre-trial detention prior to incarceration) attending school and on which school level (0 = low, 1 = medium/high).

### *Data analyses*

First, in order to investigate differences in adolescent and parental behavioral acculturation and in socio economic indices, t-tests and Chi-square tests were conducted comparing the general and pre-trial detention population. Since the boys in pre-trial detention were significantly older than the boys from the general population, we tested whether revealed differences in adolescent behavioral acculturation should not be accounted for by these age differences, by means of logistic regression analyses. In addition, using Latent Class Analysis (LCA), we empirically assessed groups of immigrants with comparable psychological acculturation orientations. Up till now, most research studying Berry's acculturation orientations, classified individuals as high or low on host-culture acquisition and on heritage-culture retention by means of a priori values such as sample median or mean (e.g., Eyou et al., 2000; Farver, Bhadha, & Narang, 2002). The use of a priori classification rules assumes that all four categories exist and are equally valid (Rudmin, 2003). However, since studies that empirically assessed groups of immigrants with comparable acculturation orientations suggested that not all orientations may exist in a given sample and additional acculturation orientations may be identified (e.g., Schwartz & Zamboanga, 2008; Stevens, Pels, Vollebergh & Crijnen, 2004), we decided to also use an empirical method of assessing acculturation orientations. LCA is a statistical method which is used to identify a set of mutually exclusive latent classes that account for the distribution of cases that occur within a cross tabulation of observed variables (McCutcheon, 1987). In other words, the purpose of a LCA is to find the smallest number of classes of individuals with similar patterns of, in this case psychological acculturation, which can explain the relationships among a set of variables. The parameters in a LCA model are class specific symptom profiles (which give the probabilities of a set of items for a particular class) and latent class probabilities (which estimate the likelihood for individuals to belong to each of the classes). Individuals are classified to the group with their highest class probability. The number of latent classes is determined by testing the goodness of fit of models with N latent classes using the Vuong-Lo-Mendell-Rubin likelihood ratio test and goodness of fit indices such as Entropy. To test the representation of the pre-trial detention and general population in each of the latent classes, and the acculturation gap between parents and adolescents in both populations, Chi-square tests were used.

**Results**

*Behavioral acculturation*

Differences on behavioral acculturation between boys in pre-trial detention and in the general population and their parents are presented in Table 1. It was found that boys in pre-trial detention less often used Moroccan language with important others than boys from the general population. This difference could not be accounted for by age differences between both groups of boys, since no relationship was found between age of the boys and Moroccan language use ( $t = 1.2, df = 273, p = .21$ ). For the parents, a difference in language use with important others was revealed as well: Parents with a son in pre-trial detention more often used Dutch language with important others, and were two times more likely to have Dutch friends than the other parents. For the boys, there was no relationship between detention and ethnic background of their friends.

Table 1 Differences between pre-trial detention and general population on adolescent and parental behavioral acculturation

|  | General population | Pre-trial detention population | Test                    |
|--|--------------------|--------------------------------|-------------------------|
| <b>Parental behavioral acculturation</b>           |                    |                                |                         |
| Dutch language use with important others (0-16)    | 2.1 (3.3)          | 4.4 (4.7)                      | $t=-4.4; df=223; p<.00$ |
| Moroccan language use with important others (0-16) | 15.3 (2.0)         | 15.6 (1.2)                     | $t=-1.2; df=225; p=.22$ |
| Dutch friends (% yes)                              | 23%                | 46%                            | $Chi=13.3; df=1; p<.00$ |
| Moroccan friends (% yes)                           | 87%                | 83%                            | $Chi=0.77; df=1; p=.40$ |
| <b>Adolescent behavioral acculturation</b>         |                    |                                |                         |
| Dutch language use with important others (0-12)    | 7.2 (2.3)          | 7.2 (2.5)                      | $t=-0.3; df=271; p=.80$ |
| Moroccan language use with important others (0-12) | 7.7 (2.4)          | 6.3(2.7)                       | $t=4.2; df=273; p<.00$  |
| Dutch friends (% yes)                              | 72%                | 78%                            | $Chi=1.5; df=1; p=.21$  |
| Moroccan friends (% yes)                           | 98%                | 99%                            | $Chi=1.0; df=1; p=.33$  |

Note. Standard deviation between brackets

*Psychological acculturation*

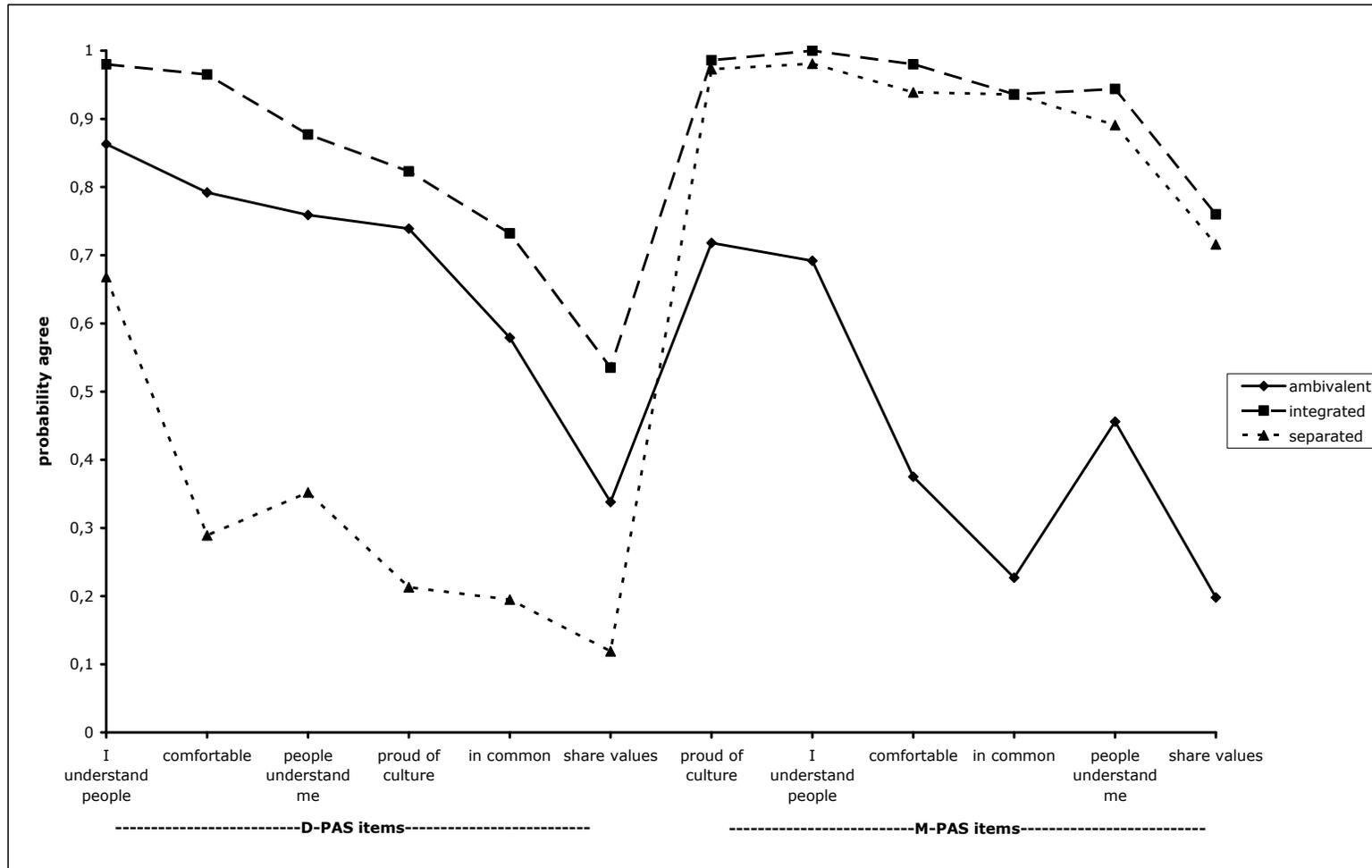
To study differences in psychological acculturation in the general and pre-trial detention population, groups of boys/parents with a similar pattern of psychological acculturation were identified, using latent class analyses. Although the alphas of the D-PAS and M-PAS were high, we chose to include all items of the D-PAS and M-PAS separately in our latent class analyses, since it was previously found that this offers relevant information about the relative position of each item within a class (Stevens et al., 2004). For the boys, the Vuong-Lo-Mendell-Rubin likelihood ratio test indicated a three-class solution.

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The two-class model improved the one-class model ( $p > .01$ ) and the three-class solution turned out to be a better fit to the data than the two-class model ( $p = .01$ ). However, the four-class model did not significantly improve the model ( $p = 0.33$ ). Also, the Entropy of the two-class model was satisfactory (0.80), indicating a good model fit as well. Finally, class sensitivity, the average class probability after classifying the adolescents, was high (0.86 – 0.92), which showed that the adolescents were properly classified to their particular acculturation class.

In Figure 1, the adolescent psychological acculturation classes are presented. An integrated, separated and ambivalently acculturated class was found. The integrated class consisting of 52% of the boys, was characterized by high probabilities for Moroccan psychological acculturation and high to moderate probabilities for Dutch psychological acculturation. Highest probabilities regarding Dutch psychological acculturation were found for the items 'I understand Dutch people' and 'I feel comfortable with Dutch people' and the lowest probability for the item 'I share most of my beliefs and values with Dutch people'. Thirty-seven percent of the boys belonged to the separation class, scoring high on Moroccan psychological acculturation and low on Dutch psychological acculturation (except for the item 'I understand Dutch people'). The remainder of the population (11%) was characterized by an ambivalent acculturation pattern, generally showing moderate scores on both Dutch and Moroccan psychological acculturation, although the Dutch scores were somewhat higher than the Moroccan.

Figure 1 Three class model of adolescent psychological acculturation



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Next, differences on psychological acculturation between boys in pre-trail detention and from the general population were tested. A significant difference was found in the representation of boys from both populations in the three acculturation classes (see Table 2). The boys in pre-trail detention were clearly overrepresented in the integrated class, whereas the boys in the general population were relatively often part of the separation class. A logistic regression analysis indicated that the differences in psychological acculturation between the general and pre-trail detention population were not confounded by differences in age between both groups of boys. Controlling for age of the boys, integrated boys were found to be almost 3.5 times as likely to belong to the pre-trail detention group than separated boys ( $R^2 = .25$ ,  $OR = 3.3$ ,  $CI = 1.9 - 5.9$ ,  $p < .00$ ), whereas no differences occurred between ambivalently acculturated and integrated boys.

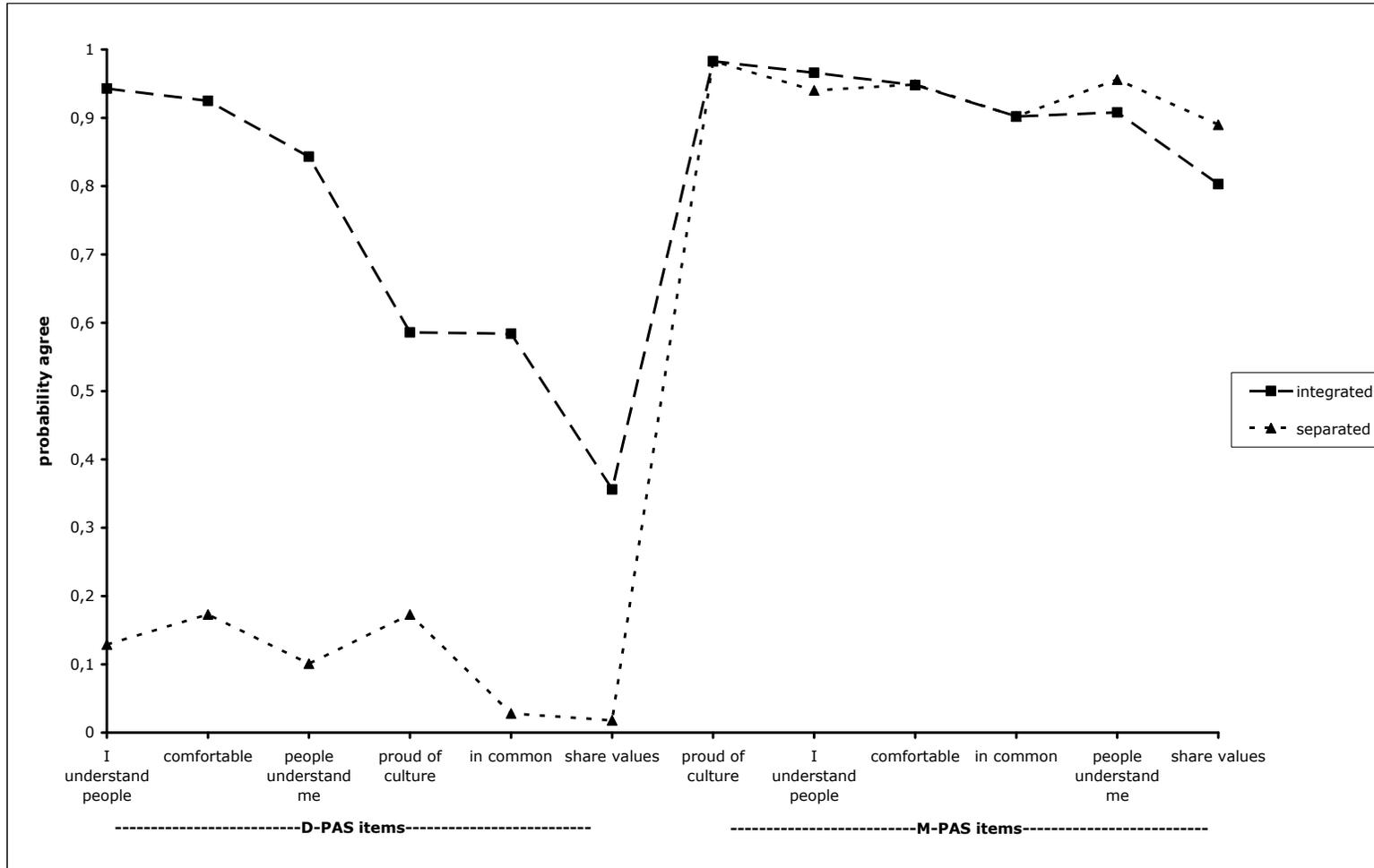
Table 2 Representation of pre-trail detention and general population in adolescent psychological acculturation classes

|  | Adolescent psychological acculturation classes |           |            |
|--|--|-----------|------------|
|  | Integrated                                     | Separated | Ambivalent |
| General population<br>(N = 142)          | 37%  | 51%       | 12%        |
| Pre-trail detention population (N = 138) | 67%  | 22%       | 11%        |

Note. Chi-square = 26.9,  $df = 3$ ,  $p < .00$

For the parents, latent class analysis indicated a two-class solution as the best fitting model. Using the Vuong-Lo-Mendell-Rubin likelihood ratio test, it was found that the two-class solution improved the one-class solution ( $p < .01$ ), whereas the three-class solution did not improve the two-class model ( $p = .20$ ). In addition, the Entropy of the two-class model was satisfactory (0.89), which indicates a good model fit. Class sensitivity was high (.95 - .97). The parental acculturation patterns are presented in Figure 2. Fifty percent of the parents were classified as integrated, indicating a high to medium score regarding Dutch psychological acculturation and a high score regarding Moroccan psychological acculturation. The other 50% of the parents were part of a separated psychological acculturation class, characterized by very low scores on Dutch psychological acculturation and very high scores on Moroccan psychological acculturation.

Figure 2 Two class model of parental psychological acculturation



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It was tested whether the parents of both groups of boys were differently represented in the two psychological acculturation classes. Indeed, considerable differences were found between both groups of parents. Sixty-nine percent of the parents with a son in pre-trail detention were characterized by an integrated acculturation pattern, whereas this was only the case for 38% of the general population parents (see Table 3).

Table 3 Representation of pre-trail detention and general population in parental psychological acculturation classes

|   | Parental psychological acculturation classes |           |
|---|--|-----------|
|   | Integrated                                   | Separated |
| General population<br>(N = 150)         | 38%  | 62%       |
| Pre-trail detention population (N = 84) | 69%  | 31%       |

Note. Chi-square = 20.8, df = 1, p < .00

#### *Acculturation gap between parents and adolescents*

To gain insight into differences in acculturation gap between the pre-trail detention and general population, we distinguished those families in which parents belonged to a different psychological acculturation pattern than their children, from families in which parent and child shared an acculturation pattern. Data of both the parent and the child were available for 217 families, and indicated that in 47% of the families, parents showed a different psychological acculturation pattern than their children. Remarkably, boys in pre-trail detention were as likely to be faced with an acculturation gap with their parents as boys from the general population (46% vs. 47%; Chi-square = 0.0, df = 1, p = .98).

#### *Socio-economic status*

Finally, the socio-economic context in which boys in pre-trail detention and boys from the general population were raised was investigated (see Table 4). A difference on neighborhood SES was found, revealing that the percentage of boys growing up in a low SES neighborhood was considerably smaller for the pre-trail detention population than for the general population. However, the results did not show differences with regard to the percentage of parents having a paid job and educational background of the parents. Overall, the socio economic position of the Moroccan parents in our samples was extremely low, with less than one third of the fathers having a paid job, and hardly any parents who finished secondary or vocational education. For the boys however, differences in school records between the pre-trail and general population were clear.

Boys in pre-trial detention had been dropped out of school much more often and more often attended a low level of education than boys from the general population. To rule out that differences in school dropout and school level between both groups of boys were influenced by age differences between the groups, logistic regression analyses were conducted. Controlling for age of the adolescents similar results were found, since boys who had been dropped out of school were almost 5 times as likely to belong to the pre-trial detention population ( $R^2 = .17$ ,  $OR = 4.7$ ,  $CI = 1.7 - 13.0$ ,  $p < .00$ ), and boys attending a low level of education were 2.3 times as likely to belong to the pre-trial detention group ( $R^2 = .16$ ,  $OR = 2.3$ ,  $CI = 1.3 - 4.2$ ,  $p < .01$ ).

Table 4 Differences between pre-trial detention and general population on several indicators of socio-economic status

|  | General population | Pre-trial detention population | Test                    |
|--|--------------------|--------------------------------|-------------------------|
| Neighborhood SES (% low)                       | 97%                | 66%                            | Chi=42.2; df= 1; p <.00 |
| <b>Parental work, education, Dutch fluency</b> |                    |                                |                         |
| Paid job mother (% yes)                        | 5%                 | 11%                            | Chi=2.2; df=1; p=.14    |
| Paid job father (% yes)                        | 32%                | 31%                            | Chi=.02; df=1; p=.88    |
| Education in the Netherlands mother (% yes)    | 3%                 | 6%                             | Chi=1.5; df=1; p=.22    |
| Education in the Netherlands father (% yes)    | 9%                 | 15%                            | Chi=1.7; df=1; p=.19    |
| <b>Adolescent school drop out and level</b>    |                    |                                |                         |
| School drop out (% yes)                        | 4%                 | 22%                            | Chi=20.6; df=1; p<.00   |
| School level (% low)                           | 39%                | 51%                            | Chi=3.2; df=1; p=.07    |

Note. Standard deviation between brackets

## Discussion

Integration, i.e., a person's strong orientation to both the culture of origin and the host culture, has widely been presupposed to provide a strong foundation for optimal child outcomes (e.g., Berry, 2006). However, although integration may decrease the risk of child mental health problems (e.g., Koneru et al., 2007), our results indicate that this acculturation orientation may not prevent children from delinquent behavior. In our study, Moroccan immigrant boys in pre-trial detention and their parents reported a stronger orientation towards the host country, in this case the Netherlands, than Moroccan immigrant boys and their parents from the general population. This relatively strong orientation towards the host country was found for both behavioral and psychological acculturation orientations, and for both adolescents and parents. Boys in pre-trial

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detention and their parents were clearly overrepresented in the integrated and underrepresented in the separated psychological acculturation class. Roughly two thirds of the adolescents in pre-trial detention and their parents reported a considerable attachment and sense of belonging towards Dutch and Moroccan culture and people, whereas this was only true for about one third of the general population. Also, parents with a son in pre-trial detention were twice as likely to have Dutch friends and more often used Dutch language with important others.

To explain these results, three theoretical mechanisms have been proposed in the introduction. First of all, we reasoned that Merton's classical strain theory (1956) may provide an explanation, the core idea of this theory being that inconsistencies between pursued goals and the means of achieving those goals available may lead to delinquency. We argued that especially Moroccan immigrants with a strong orientation towards Dutch people and who adhere to Dutch values aim to become socially and economically successful in Dutch society. Since these pursued goals may not always be realistic, it may increase the risk of delinquency. Obviously, our results showed that Moroccan immigrant boys in pre-trial detention and their parents reported higher levels of attachment towards the Dutch and more often had contacts with Dutch people. In addition, Moroccan boys in pre-trial detention were considerably less often raised in a neighborhood of low SES than boys from the general population, which may also trigger striving for goals of successful socio economic and social participation in Dutch society. In contrast, our results made painfully clear that the socio economic status of Moroccan immigrants in the Netherlands is not promising, as it was for instance found that in both the pre-trial detention and general population only one third of the fathers had had a paid job during the last two years. In addition, since Dutch natives perceive Moroccans as lowest in the ethnic hierarchy in the Netherlands (Hagendoorn & Snyder, 2001), it may be rather difficult for Moroccan immigrants to become fully part of Dutch society. A similar mechanism has been proposed by Turjeman and colleagues (2008). The authors reasoned that the extent to which adolescents feel connected to the host culture may not so much reflect their actual social situation and acceptance level within the host society, but the extent to which they desire to be part of this society. This situation, in which immigrants subjectively belong to the new culture but objectively do not, provokes negative social outcomes such as delinquent behavior.

Secondly, the segmented assimilation theory argues that immigrants who are oriented towards the host country may be at increased risk of delinquency, since a considerable part of them may not become involved into the white middleclass, but in the underclass. Notwithstanding our results that Moroccan immigrant boys in pre-trial detention were less likely to grow up in a low SES neighborhood than Moroccan

immigrant boys from the general population, this study also showed that the group of Moroccan immigrant boys in pre-trial detention in majority are raised within a low socio economic neighborhood. The latter might indicate that at least to some extent Moroccan immigrant boys become delinquent because of their (and their parents') involvement in the Dutch underclass.

Thirdly, the poor quality of the relationship between parents and children has frequently been used as an explanation for the relationship between adolescents' strong orientation towards the host culture and their delinquent behavior. In short, since children commonly become involved in the host culture much faster than adults, and differences in culture of origin and host cultural orientation between family members are thought to precipitate conflicts between parents and adolescents (e.g., Szapocznik et al., 1980), adolescents with a strong orientation towards the host culture may at increased risk of delinquent behavior. However, interestingly enough our results were not in line with this explanation, since Moroccan immigrant boys in pre-trial detention as often encountered an acculturation gap with their parents as their peers from the general population. This might imply that acculturation gaps may not be as important for adolescent development as has generally been assumed or that acculturation gaps may be related to some, but not all adolescent outcomes (such as adolescent delinquency). Up till now, empirical research has not been able to shed light into these matters, as for child outcomes such as emotional and behavior problems, some found a (perceived) acculturation gap between parents and children to be related to mental health problems (e.g., Farver, Narang & Bhadha, 2002; Schofield, Parke, Kim & Coltrane, 2008; Ying & Han, 2007), whereas others did not find such a relationship (Lau et al., 2005; Pasch et al., 2006). Moreover, two previous studies on the relationship between acculturation gaps and adolescent delinquency, did find an association (Kwong Wong, 1997; Le & Stockdale, 2008). The contrasting results of the current study may be explained by the fact that in both previous studies adolescents were asked to provide information on their parents' acculturation orientation or on perceived acculturation differences between them and their parents, whereas we used self-reports of both the adolescent and parent to assess acculturation orientations. Possibly, it is not so much the objective acculturation difference between parents and children, but the perceived acculturation distance of adolescents with their parents that predicts conflicts between them, which consequently may increase the risk of adolescent delinquency.

This study was the first to examine the relationship between acculturation orientations and adolescent delinquency, using several bidimensional acculturation measures assessed by both adolescent and parent in a pre-trial detention and general population sample. As such it strongly contributes to the knowledge in this research area.

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Nevertheless, some limitations of this study should also be noted. First, the cross-sectional nature of the study makes it hard to draw conclusions about the direction of the relationship between acculturation orientations and adolescent delinquency. Second, although we have no reason to expect these results to be applicable only to Moroccan immigrants in the Netherlands, different results might be found in other immigrant populations. Third, the time difference of six years between the data collection in the pre-trial detention and general population sample might have affected the orientation towards Dutch people and society. However, since previous research found a weak relationship between psychological acculturation and length of residence in the Netherlands (Stevens et al., 2003) and the political climate in the Netherlands has become more restrictive towards immigrants in the last ten years (e.g., Vasta, 2007), it is highly unlikely that this time difference should be perceived as an explanatory factor for our results.

In conclusion, this study showed that acculturation orientations are of vital importance in understanding criminal behavior of immigrant adolescents, since boys in pre-trial detention and their parents showed a remarkably stronger orientation towards the host culture than boys and their parents from the general population. The extremely low socio economic context and low ethnic status of these immigrants leads us to expect that, at least to a certain extent, this phenomenon may be explained by the immigrants' inability to pursue their goals in life. To fully grasp the mechanisms behind these results, more longitudinal and experimental research is necessary.

## Chapter 4

# Ethnic differences in the mother-son relationship of incarcerated and non-incarcerated male adolescents

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Submitted for publication

**Abstract**

*Background.* In the Netherlands, youths of Moroccan origin account for a disproportionately large percentage of the population in juvenile justice institutions. Previous research showed that Moroccan adolescents in pre-trial arrest are characterized by less serious offending behavior (i.e., primarily property-based) and lower levels of mental health problems than native Dutch adolescents in pre-trial arrest. To date, little is known about the parent-child relationship of these adolescents. *Methods.* In the present study, differences in the patterns of parenting between families of incarcerated and non-incarcerated adolescents were examined, and it was analyzed if these differences between incarcerated and non-incarcerated adolescents were the same for Moroccans and native Dutch. Patterns of parenting were identified through latent class analysis. *Results.* A three class model of mother-son relationship types was found: a low-conflict mother-son relationship type, a high-conflict mother-son relationship type, and a neglectful mother-son relationship type. Compared to the native Dutch adolescents, Moroccans (both in the incarcerated and non-incarcerated population) more often showed a neglectful mother-son relationship type. For Moroccans, no differences in mother-son relationship types were found between the incarcerated and non-incarcerated adolescents, whereas considerable differences occurred between the native Dutch incarcerated and non-incarcerated adolescents. *Conclusions.* These findings are in line with the less problematic profile of Moroccan adolescents in pre-trial arrest in the Netherlands compared to native Dutch adolescents in pre-trial arrest.

## **Introduction**

In Western societies, youths belonging to an ethnic minority group are disproportionately likely to become engaged in criminal behavior (Engen et al., 2002; Rodney & Tachia, 2004; Sickmund, Sladky, & Kang, 2008; Tonry, 1997). For instance in the US, African-American youth aged 10 to 17 years represent only 15% of their age group, but they account for 26% of juvenile arrest rates and 32% of delinquency referrals to juvenile court. Likewise, in European countries, ethnic minority youths such as West Indians in England and Algerians in France, are clearly overrepresented in juvenile justice institutions (Tonry, 1997). In the Netherlands, youth of Moroccan origin is by far the most conspicuous ethnic group in this respect, with 3% percent in the total population of youth aged 10 to 20 years, but over 25% percent of the total population of incarcerated youth (Boendermaker, 1995).

In a previous study, it was found that Moroccan adolescents in pre-trial detention in the Netherlands represent a specific offender type (Veen, Stevens, Doreleijers, & Vollebergh, in press). Analyses of criminal record data showed that Moroccan adolescents compared to Dutch native adolescents in pre-trial detention, were more often incarcerated for property-based offences with or without violence, and less often for violent and sexual offences and for arson. Van der Vinne (1999) showed that the violence used in property offences involving violence, often is relatively light. In about 50% of the cases, the violence used consisted of threats in order to obtain property, and in many other cases, light violence was used in order to escape from the crime scene or to flee from the police. Thus, Veen, Stevens, Doreleijers and Vollebergh (in press) clearly showed that a considerable amount of Moroccan adolescents who were in pre-trial detention were incarcerated for less serious offences than their Dutch native peers in pre-trial detention. Moreover, these Moroccan incarcerated adolescents showed lower levels of mental health problems than native Dutch incarcerated adolescents (Veen, Stevens, Doreleijers, van der Ende, & Vollebergh, 2010). Compared to Moroccan adolescents in the general population, incarcerated Moroccan adolescents showed higher levels of internalizing and externalizing behavior, but this difference between the general and incarcerated population was much larger for native Dutch adolescents, with native Dutch incarcerated revealing the highest levels of problem behavior. In the current study, we compare the mother-son relationship of Moroccan and native Dutch incarcerated and non-incarcerated male adolescents.

### *Parenting and delinquency*

There is substantial evidence that a positive parent-adolescent relationship consisting of a combination of parental supervision and support protects adolescents against

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delinquency (Deković, Wissink, & Meijer, 2004; Gorman-Smith, Tolan, & Henry, 2000). In criminological theories, absence of these parenting behaviors is even considered as a strong predictor of juvenile delinquency. Up till now, most research exploring the link between family functioning and juvenile delinquency in general, focuses on the impact of discipline methods and parental monitoring. These studies showed that adolescents who often have conflicts with their parents, or who receive little parental support, are at increased risk of juvenile delinquency (Deković, 1999; Gorman-Smith et al., 2000). In addition, low levels of parental monitoring and high levels of harsh parental disciplining are related to high levels of delinquent behavior in adolescents (Lahey, Van Hulle, D'Onofrio, Rodgers, & Waldman, 2008; Patterson & Stouthamer-Loeber, 1984; Sampson & Laub, 1994).

However, since parental discipline may be perceived differently in groups originating from various cultures, it has also been suggested that the association between parental discipline and delinquency may vary across cultural groups (Rudy & Grusec, 2001). There is some empirical evidence that the relationship between parental discipline and externalizing behavior is absent or even negative for African-American adolescents, whereas a positive relationship was found for Caucasians (Deater-Deckard, Dodge, Bates, & Pettit, 1996). In addition, parental monitoring may have a stronger effect on adolescent delinquency in groups belonging to the ethnic minority than to the ethnic majority. That is, ethnic minority members often live in relatively economically deprived and disorganized neighborhoods, and the protective effect of parental monitoring to adolescent delinquency may be even stronger in such circumstances (Barnett, 2008; Sampson & Laub, 1994). In accordance, it was found that a lack of parental monitoring was a stronger predictor of adolescent offending for adolescents belonging to ethnic minority groups than for Caucasians (Bird et al., 2001; Cernkovich & Giordano, 1987; Smith & Krohn, 1995). However, other studies showed that these ethnic differences are rather small (Vazsonyi & Pickering, 2003; Wissink, Deković, & Meijer, 2006). Thus, as findings on ethnic differences in the relationship between parenting and delinquency are inconsistent, general conclusions based on previous findings may be questionable, and further research on this subject is needed.

### *Parenting in Moroccan families in the Netherlands*

Moroccans belong to one of the largest immigrant groups in the Netherlands. Migration began in the 1960s when Moroccan men were recruited for working in the Dutch labor market. Since then, many of these labor migrants brought their families to the Netherlands and stayed permanently. Nowadays, about 40% of the Moroccan immigrants are born in the Netherlands. Moroccans belong to the least privileged

migrant groups in the Netherlands, and public opinion clearly reflects this marginal status (Gijsberts, 2005; Hagendoorn & Sniderman, 2001; Van Praag, 2003). The Moroccan culture is characterized by an emphasis on the collective interest of the family, and compliance to parents and older family members (Stevens, Vollebergh, Pels, & Crijnen, 2007b). Findings from small-scale, qualitative studies indicate that the parenting style of Moroccan parents on average is characterized by more authoritarian discipline than the parenting style of Dutch parents (Pels & Nijsten, 2003). Furthermore, it was found that Moroccan parents less often monitor, control and support their children when they reach adolescence (Pels & De Haan, 2003; Pels & Nijsten, 2003; Stevens, Vollebergh, Pels, & Crijnen, 2007a). Possibly, Moroccan parents consider the upbringing of their children completed at an earlier stage than Dutch parents. A previous large-scale study in Moroccan families in the Netherlands revealed positive correlations between parental affection and discipline, which may imply that parental strictness entails elements of parental interest and warmth in this ethnic group (Stevens, Vollebergh, Pels, & Crijnen, 2007b). This may have implications for the relationship between parental discipline and problem behavior. Indeed, this study revealed no association between parental discipline and internalizing problems. The former indicated that there may be considerable differences in the upbringing and the relationship between parenting and delinquency for Moroccan compared to native Dutch families in the Netherlands.

#### *Limitations of former research*

Economic disadvantage is related to negative parenting behaviors such as high levels of strict discipline and low levels of parental warmth (e.g., Barnett, 2008). As socio-economic conditions of ethnic minority groups are relatively unfavorable, it is of importance to take this factor into account when examining ethnic differences in the association between parenting and juvenile delinquency. Former studies in various ethnic populations have often overlooked socio-economic status as a factor in their analyses. Furthermore, previous research focused on different independent parenting variables (e.g., discipline methods, parental monitoring) in relation to juvenile delinquency, using a variable-centered approach. This is a limitation, as this approach does not capture overall family patterns (Mandara, 2003). Furthermore, most former studies were conducted in the general population using self-report delinquency measures. Since underreporting of (serious) delinquent behavior may be relatively common in self-report studies, and general population studies may not have been able to include large numbers of adolescents who show serious delinquent behavior, previous studies show important limitations in this respect as well (Piquero, MacIntosh et al., 2002).

### *The present study*

This study examines the mother-son relationships of Moroccan and native Dutch delinquent adolescents using an incarcerated sample and comparison samples from the general population. Socio-economic status of the participants is taken into account in all analyses. In the present study, a typological approach is used in which different family types are identified and their association with adolescent delinquency is examined.

Three research questions are addressed in this study. First, what patterns of parenting can be identified in a population of incarcerated and non-incarcerated adolescents in the Netherlands? Second, how do patterns of parenting in families of incarcerated adolescents compare to patterns of parenting in families of non-incarcerated adolescents? Third, are these differences the same across ethnic groups (Moroccan and native Dutch adolescents)? In line with previous research on the parent-adolescent relationship and juvenile delinquency, it is expected that patterns of parenting in families of incarcerated adolescents will more often be characterized by low levels of parental monitoring and parental affection and high levels of parental discipline than the patterns of parenting in families of non-incarcerated adolescents. We expect the differences between incarcerated and non-incarcerated boys to be smaller for the Moroccan than for the Dutch adolescents, since our previous studies indicated that Moroccan incarcerated boys in pre-trial detention show a less problematic profile than their native Dutch peers. In addition, overall we expect that patterns of parenting in Moroccan families are more often characterized by low levels of affection, parental monitoring and high levels of discipline, compared to the patterns of parenting in native Dutch families.

## **Method**

### *Participants*

#### *Mothers of incarcerated boys*

In the present study, interview data on mothers of incarcerated boys are included, as youth detained under criminal law in juvenile justice institutions merely consist of male detainees, and participating parents in this study were predominantly mothers. The boys were consecutively placed in pre-trial detention in 10 (out of 11) juvenile justice institutions in the Netherlands between May 2006 and February 2008. In the Netherlands, criminal legislation for youths applies to persons aged 12 to 18. Pre-trial detention is enforced when a youngster is suspect of an offence, awaiting trial, and if

detention is thought to be necessary for the protection of others or the adolescent itself. These adolescents were all suspects of one or more offences.

All mothers received a letter containing the aims of the present study. Moroccan mothers were sent an introductory letter in Dutch and Moroccan-Arabic and within a couple of weeks a trained Moroccan interviewer visited the parents' home to request them to participate. Data collection took place at the participants' homes, where questionnaires were handed over to the parent. The questions were read aloud and were filled out by the interviewers. Dutch parents were contacted by telephone to make an appointment for the interview. Data collection took place at the participants' homes, where questionnaires were filled out by the parent. Participants were assured of the confidentiality of their spoken and written responses and data were archived anonymously. Moreover, written informed consent was obtained from the participants. Participants received compensation (a gift certificate). The research protocol was approved by the Ethical Board of the Department of Social Sciences of Leiden University and the Ministry of Justice in the Netherlands. For a more detailed description of the data collection procedure see Veen et al., (2010).

Two-hundred seventy-three parents were asked to participate in the study. Eighty-four parents refused to participate and 22 parents were not found at home by the interviewers. Thus in total, 167 parents were interviewed, which is a total response rate of 61% (response rate Dutch parents 50%, and response rate Moroccan parents 70%). Of these 167 parental interviews, 129 interviews were conducted with the mother and were used in the present study. Sixty-six mothers were of Moroccan origin (i.e., she or the father of her son was born in Morocco) and 63 mothers were of native Dutch origin. Since incomplete participation of the parents may have caused some bias in the findings of the present study, we tested if adolescents, whose parents completed the interview, scored significantly different on self-reported internalizing and externalizing problems than adolescents whose parents did not participate in the study. No differences were found on internalizing problems ( $F = 0.392$ ,  $df = 1$ ,  $p = 0.53$ ) or externalizing problems ( $F = 1.106$ ,  $df = 1$ ,  $p = 0.29$ ).

#### Moroccan immigrant parents in the general population

Data were used of interviews conducted with mothers originating from a larger study, in which a sample of 1,127 children aged 4 through 18 with at least one parent born in Morocco, were randomly selected from municipal registers of Rotterdam and The Hague. Parents and adolescents were sent an introductory letter in Dutch and Arabic describing the aims of the study and within a couple of weeks a trained Moroccan interviewer visited the respondents' homes to request them to participate. Data collection took place

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at the participants' homes, where questionnaires were handed over to the parent. The questions were read aloud and filled out by the interviewers. Data collection took place from April 2001 to July 2002. A total of 819 parents participated in the total study (response rate 73%). In the present study mother-reported data of male adolescent participants, aged 13 through 18 ( $N = 116$ ), were used. The data collection procedure and in- and exclusion criteria are described in detail elsewhere (Stevens et al., 2003).

### Dutch parents in the general population

Data were used of interviews with mothers that were collected as part of a national research on children/adolescents and their parents, 'Child-rearing in the Netherlands in the 90s'. The families were selected from a larger sample of 10,000 families representative of Dutch population and were first contacted by phone. In the phone interview the general purpose of the study was explained and it was checked if the parents had an adolescent child. From all contacted families with adolescent children, 53% agreed to participate. Data collection took place at the participants' homes, where questionnaires were administered individually to adolescents, mothers, and fathers. In the present study we used mother-reported data of male adolescent participants who were in the age of 13 through 18 ( $N = 208$ ). The sample consisted of 508 families with adolescents aged 12 through 18. The data collection procedure and in- and exclusion criteria are described in further detail elsewhere, see Deković (1999).

### Measures

#### Mother-son relationship

To assess maternal parenting practices, two subscales of the Nijmegen Rearing Questionnaire (Gerris et al., 1993) were used: Affection Expression and Discipline. Mothers were asked to indicate on a 6-point scale (1 = highly disagree to 6 = highly agree) whether they agreed with the items. Affection Expression consists of nine items which measure the extent to which the mother shows positive affection towards the child (e.g., 'I often tell my child that I love him/her'). Discipline consists of five items concerning different types of punishment used by the mother (e.g. 'Most of the time, when my child does something he/she is not allowed, I slap him/her', 'I punish my child by sending him/her to his/her room'). Parental monitoring was measured by means of a six-item instrument on a 4-point scale (1 = nothing to 4 = everything). Mothers were asked to indicate how much they know about, for example, their child's friends, how their child spends free time or how their child spends money (Brown, Mounts, Lamborn, & Steinberg, 1993). To assess the amount of conflicts between adolescents and their mothers, the Parent-Adolescent Conflict List (Noom & Dekovic, 1998) was used. Mothers were asked

to indicate on a 5-point scale (1 = never to 5 = very often) how often they quarrel with their son/daughter about 15 issues (e.g. 'academic achievement', 'curfew', 'home chores', 'son's/daughter's friends', etc.). The questionnaires were translated into Moroccan-Arabic and to check the accuracy of the translation we performed an independent back translation into Dutch. The questionnaires were read aloud to the mothers. Reliabilities of the Moroccan-Arabic translations were comparable to the reliabilities of the Dutch versions. The alphas of the Affection Expression scale were .84 for the Dutch version and .87 for the Moroccan-Arabic version. The alphas of the Discipline scale were .79 for the Dutch version and .86 for the Moroccan-Arabic version. The alphas of the Parental monitoring scale were .83 for the Dutch version and .91 for the Moroccan-Arabic version.

In order to determine underlying dimensions of the Parent-Adolescent Conflict List, factor analysis was used. Exploratory factor analysis (i.e., Principal Component Analysis) revealed three factors (eigenvalues > 1.0) and Varimax rotation (with Kaiser Normalization) showed three distinct factors. Factor 1 represented parent-child conflicts about issues outside the home, whereas Factor 2 represented parent-child conflicts about in-home issues, and Factor 3 represented one item (conflicts about son's girlfriend). The first two factors indicated a 46% explanation of the variance across all 15 items. As Factor 3 consisted of one item only, this item was not further used in the analyses. One item (conflicts about father's/ mother's new partner) had low factor loadings on all extracted factors, this item was not retained. Thus, two underlying dimensions of the Parent-Adolescent Conflict List were used as two subscales: Conflicts about issues outside the home and Conflicts about in-home issues. Reliabilities of the two subscales were comparable for Dutch and Moroccan-Arabic versions; the alphas of the Conflicts about issues outside the home subscale were .82 for the Dutch version and .87 for the Moroccan-Arabic version, the alphas of the Conflicts about in-home issues subscale were .70 for the Dutch version and .80 for the Moroccan-Arabic version.

#### Educational level

Parental educational level was scored on a 4-point scale: 0 = elementary school or uncompleted elementary school, 1 = lower level of secondary or vocational education, 2 = medium level of secondary or vocational education and 3 = higher level of vocational education or university. The highest educational level of the father or the mother was used to score educational level of the family. For statistical analyses, the scores were classified into 'low educational level' (0-1), 'moderate educational level' (2) and 'high educational level' (3).

### *Statistical analyses*

In order to identify different mother-son relationship types within the total sample of native Dutch and Moroccan parents of incarcerated and non-incarcerated adolescents, Latent Class Analysis (LCA) was used. LCA is a statistical method which is used to identify a set of mutually exclusive latent classes that account for the distribution of cases that occur within a cross tabulation of observed variables (McCutcheon, 1987). In other words, the purpose of a LCA is to find the smallest number of classes of individuals with similar patterns of, in this case mother-son relationships, which can explain associations of a set of variables. The parameters in a LCA model are class specific symptom profiles (which give the probabilities of a set of items for a particular class) and latent class probabilities (which estimate the likelihood for individuals to belong to each of the classes). Individuals are classified to the group with their highest class probability. The number of latent classes is determined by testing the goodness of fit of models with N latent classes using the Vuong-Lo-Mendell-Rubin likelihood ratio test and goodness of fit indices such as the Akaike Information Criterion, the Bayesian Information Criterion and Entropy. To test the representation of native Dutch and Moroccan parents of incarcerated and non-incarcerated adolescents in each of the classes, Chi-square tests were used. In order to identify the relationship of incarceration of the child and ethnicity on each of the mother-son relationship types, logistic regression analyses were conducted. Interaction effects between incarceration and ethnicity on mother-son relationships were tested using logistic regression analyses.

## **Results**

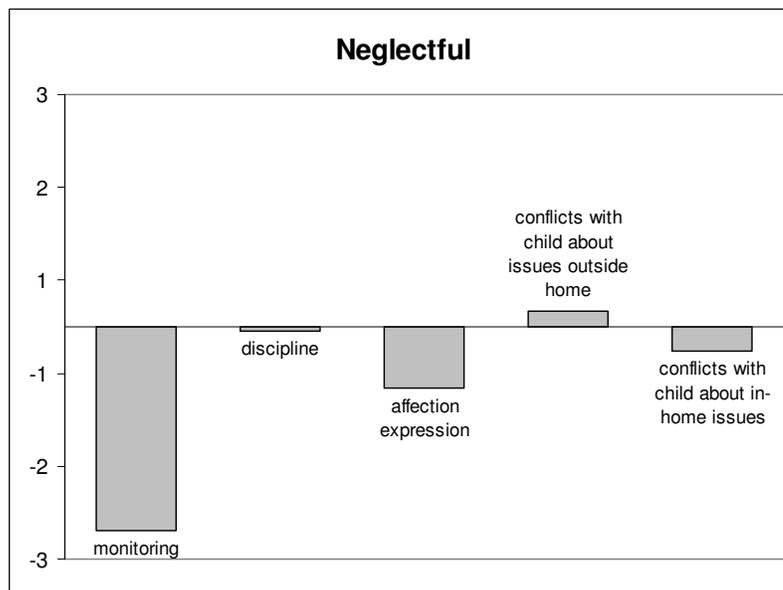
### *Mother-son relationship types*

Latent Class Analysis was performed based on mother-son relationship characteristics. LCA showed a significant three-class model for the total group of native Dutch and Moroccan mothers (of incarcerated adolescents and non-incarcerated adolescents), which was the best fitting LCA-solution according to the Vuong-Lo-Mendell-Rubin likelihood ratio test ( $p < 0.05$ ). The Akaike Information Criterion and the Bayesian Information Criterion were both lower for the three-class model (AIC = 6241.991 and BIC = 6332.541) than for the two-class model (AIC = 6308.574 and BIC = 6374.428), indicating a better model fit. A four-class model did not improve the model fit. Moreover, the Entropy of the three-class model was satisfactory (0.75), indicating a good model fit as well. The average class probabilities were high (.84 - .90), which indicated that the participants were properly classified to their latent class. Graph 1 shows the standardized scores on each mother-son relationship characteristic for Class 1.

## Ethnic differences in the mother-son relationship

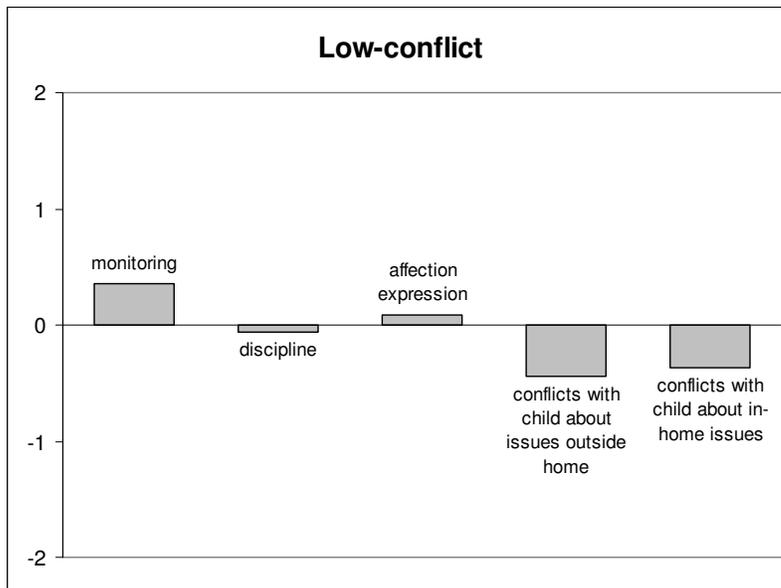
Class 1 (8% of 453 participants) was characterized by extreme low scores on monitoring, indicating a very low awareness in parents of their child's affairs, low scores on affection expression and average scores on conflicts with child about issues outside the home. This class was also characterized by slightly below average scores on conflicts with the child about in-home issues and almost average scores on discipline. Class 1 therefore, could be termed *neglectful mother-son relationship*, see Graph 1. Class 2 (64% of 453 participants) was characterized by above average scores on monitoring, below average scores on conflicts with the child (on in-home issues and issues outside the home) and almost average scores on affection expression and discipline. Class 2 therefore was termed *low-conflict mother-son relationship*, see Graph 2. Class 3 (28% of 453 participants) was characterized by high scores on conflicts with the child about in-home issues and issues outside the home, somewhat above average scores on discipline, but slightly below average scores on monitoring and average scores on affection expression. Class 3 was termed *high-conflict mother-son relationship*, see Graph 3.

Graph 1 Neglectful mother-son relationship type

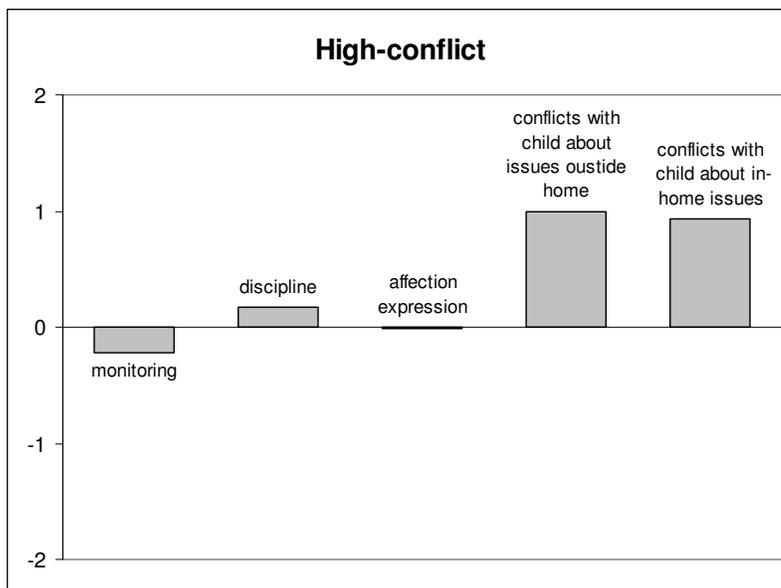


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Graph 2 Low-conflict mother-son relationship type



Graph 3 High-conflict mother-son relationship type



### *Mother-son relationship types and population samples*

The neglectful mother-son relationship type was predominantly found in the Moroccan incarcerated population (15,2%), the Moroccan non-incarcerated population (12,9%), and in the native Dutch incarcerated population (9,5%), see Table 1. In the native Dutch non-incarcerated population, only 1,0% of the mothers reported this mother-son relationship type ( $\chi^2 = 24.3$ ,  $df = 3$ ,  $p = 0.00$ ). The low-conflict mother-son relationship

## Ethnic differences in the mother-son relationship

type was found in 75,5% of the families in the non-incarcerated population and in 57,1% of the Dutch families with an incarcerated son (Chi = 11.2, df = 3, p = 0.01). The high-conflict mother-son relationship type was predominantly (33,3%) found in the Dutch incarcerated population (Chi = 3.1, df = 3, p = 0.38).

Table 1 Representation of mother-son relationship types in population samples

|                  | Neglectful |          | Low-conflict |          | High-conflict |          |
|------------------|------------|----------|--------------|----------|---------------|----------|
|                  | Dutch      | Moroccan | Dutch        | Moroccan | Dutch         | Moroccan |
| Non-incarcerated | 1.0%       | 12.9%    | 75.5%        | 62.1%    | 23.6%         | 25.0%    |
| Incarcerated     | 9.5%       | 15.2%    | 57.1%        | 63.6%    | 33.3%         | 21.2%    |
| Total            | 3.0%       | 13.7%    | 71.2%        | 62.6%    | 25.8%         | 23.6%    |

Logistic regression analyses were conducted to identify the direct relationships between ethnicity and incarceration of the child with the three mother-son relationship types, see Table 2. Initially, our bivariate analyses showed that incarcerated boys were more likely to have a neglectful mother-son relationship and that non-incarcerated boys were more likely to have a low-conflict relationship with their mother. When ethnicity, educational level of the parents, single-parenting and age of the child were included in the multiple regression models, these effects did not remain significant. Next, ethnicity was significantly related to the neglectful mother-son relationship type. Mothers of Moroccan origin were (nearly five times) more likely to report this type of mother-son relationship, and this effect (OR = 3.91, CI 1.45-10.56, p = 0.01) remained significant when all other variables were included in the multiple regression model.

In addition, interaction effects of incarceration and ethnicity to the three mother-son relationship types were tested, see Table 2. Only for Dutch native families, incarcerated boys more often had a neglectful mother-son relationship than boys who were not incarcerated (OR = 7.27, CI = 1.24-42.56, p = 0.03), whereas no such differences were found for families of Moroccan origin (OR = 1.13, CI = 0.46-2.76, p = 0.79). Similarly, incarceration of the child was significantly related to a low-conflict mother-son relationship in Dutch families (OR = 0.47, CI = 0.25-0.89, p = 0.02), i.e., mothers of non-incarcerated children more often reported a low-conflict mother-son relationship type. This effect was not found in families of Moroccan origin (OR = 1.06, CI = 0.55-2.05, p = 0.86).

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Table 2 Main- and interaction effects of incarceration and ethnicity to mother-son relationship types

| Factor                      | Neglectful |            |           |            | Low-conflict |           |           |           | High-conflict |           |           |           |
|-----------------------------|------------|------------|-----------|------------|--------------|-----------|-----------|-----------|---------------|-----------|-----------|-----------|
|                             | Bivariate  |            | Multiple1 |            | Bivariate    |           | Multiple1 |           | Bivariate     |           | Multiple1 |           |
|                             | OR         | CI 95%     | OR        | CI 95%     | OR           | CI 95%    | OR        | CI 95%    | OR            | CI 95%    | OR        | CI 95%    |
| Incarceration               | 2.56**     | 1.25-5.23  | 1.71      | 0.79-3.71  | 0.63**       | 0.41-0.97 | 0.70      | 0.44-1.10 | 1.17          | 0.74-1.87 | 1.27      | 0.78-2.08 |
| Ethnicity                   | 5.24**     | 2.31-11.89 | 3.91**    | 1.45-10.56 | 0.68         | 0.46-1.01 | 0.87      | 0.54-1.41 | 0.89          | 0.57-1.38 | 0.73      | 0.43-1.23 |
| Ethnicity*<br>incarceration | -          | -          | 0.14**    | 0.02-0.92  | -            | -         | 2.22NB    | 0.93-5.33 | -             | -         | 0.52      | 0.20-1.35 |

Note. \*\* p < 0.05; NB p = 0.07; 1Multiple logistic regression analyses are controlled for age of the child, educational level of the parents, single-parenting; Ethnicity (native Dutch = 0, Moroccan = 1, reference category = native Dutch), Incarceration (non-incarcerated = 0, incarcerated = 1, reference category = non-incarcerated).

## Discussion

The purpose of this study was to examine differences in patterns of parenting between families of incarcerated and non-incarcerated adolescents, and to examine these differences across ethnic groups (Moroccan and native Dutch families). Using Latent Class Analysis, a three class model of mother-son relationships was found: a low-conflict mother-son relationship type, a high-conflict mother-son relationship type, and a neglectful mother-son relationship type. It was found that the low-conflict mother-son relationship type, characterized by relatively low levels of mother-son conflicts, above average monitoring, and average affection and discipline, was most common in all populations (i.e., incarcerated, non-incarcerated, native Dutch and Moroccan families), but was found most often in native Dutch families of non-incarcerated boys. The high-conflict mother-son relationship type, characterized by high levels of mother-son conflicts and average affection was found in about a quarter of all populations, and was slightly more prevalent in the Dutch incarcerated sample than in the other samples. Finally, the neglectful mother-son relationship, which indicated a low awareness in parents of their child's affairs and little affection, was found in a small percentage of all populations, but was virtually absent in the Dutch native non-incarcerated sample.

In line with previous research on the parent-adolescent relationship and juvenile delinquency, it was expected that patterns of parenting in families of incarcerated adolescents would be more often characterized by low levels of parental monitoring and parental affection and high levels of parental discipline than these patterns in families of non-incarcerated adolescents. Indeed, the neglectful mother-son relationship was less likely to be reported by native Dutch mothers of non-incarcerated adolescents than by native Dutch mothers of incarcerated adolescents. However, in contrast to our expectations, a mother-son relationship type characterized by high levels of parental discipline was not found in the present study. For Moroccan families, the absence of a mother-son relationship type comprising high disciplining, may reflect a change in parenting behavior over time, i.e., when their children reach adolescent age. For instance, previous small-scale research showed that Moroccan parents less often monitor and control their children when they reach adolescence. Finally, the high-conflict mother-son relationship type, which indicated the presence of mother-son conflicts, was only slightly more prevalent among families of incarcerated adolescents.

For Moroccan families no associations were found between the neglectful mother-son relationship type and incarceration, but a Moroccan background as such was found to be associated with the neglectful mother-son relationship type, even when taking the educational level of the parents, single-parenting, and incarceration of the

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child into account. In fact, the neglectful mother-son relationship type was clearly present in a small percentage (14%) of Moroccan families. These findings are in line with previous small-scale, qualitative research, which showed that the mother-son relationship of Moroccan mothers and their sons is sometimes characterized by little support and control (Pels & De Haan, 2003; Pels & Nijsten, 2003). This may be explained by the fact that Moroccan parents consider the upbringing of their sons completed at an earlier age than Dutch parents.

This study is the first to examine ethnic differences in the association between mother-adolescent relationships and juvenile delinquency using an incarcerated sample and comparison samples of non-incarcerated adolescents. Some limitations of this study should be noted. First, the cross-sectional nature of the study makes it difficult to examine causal pathways regarding ethnic differences in parent-adolescent relationships and juvenile delinquency. Second, the identification of mother-son relationship types was based on self-report instruments and may to some extent have been subject to social desirability (i.e., biased self-presentation). However, in contrast to most studies on ethnic differences in mother-son relationships and juvenile delinquency, a four-group design was used. As such, it was possible to control for a general social desirability tendency by making comparisons between Moroccan families of incarcerated adolescents and Moroccan families of non-incarcerated adolescents. Finally, in the present study only mothers were included. This means that the role of the father in the parent-child relationship was not examined. Since maternal and paternal parenting behaviors may have differential effects on adolescent behavior, future research should examine these effects on delinquent behavior across ethnic groups. In addition, it would also be desirable to include data on the parent-child relationship from multiple sources, such as adolescent-reports and father-reports.

Despite these limitations, our findings indicated that mother-son relationship types of incarcerated Moroccan adolescents and non-incarcerated Moroccan adolescents are rather comparable. This is in line with previous studies which revealed that Moroccan adolescents in pre-trial detention in the Netherlands represent an offender type characterized by less serious offending behavior and less mental health problems than native Dutch adolescent offenders. Finally, in the present study, a neglectful mother-son relationship was found to be more prevalent among Moroccan than among native Dutch families: in one-seventh of the Moroccan families a neglectful mother-son relationship was reported. It seems likely that boys brought up in these families are at an increased risk of a problematic development, as could be reflected in the substantial overrepresentation of this group in youth detention. This implies that support is warranted for these boys.

## Chapter 5

# Ethnic differences in mental health among incarcerated youths: Do Moroccan immigrant boys show less psychopathology than native Dutch boys?

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European Child and Adolescent Psychiatry (2010), 19(5), 431-440

**Abstract**

*Background.* Psychiatric disorders are highly prevalent among incarcerated youth. However, whereas ethnic minority youths are overrepresented in the juvenile justice system, limited research is available on their mental health. In this study, differences in mental health problems between incarcerated adolescents of native Dutch and Moroccan origin, were examined. *Methods.* Child Behavior Checklist and Youth Self-Report scores were compared between incarcerated adolescents of native Dutch and Moroccan origin. Their scores were also compared to those of native Dutch and Moroccan immigrant youths in the general, non-incarcerated population. *Results.* Native Dutch incarcerated adolescents showed higher levels of various mental health problems than incarcerated adolescents with a Moroccan background. Compared to the general population, incarcerated youths showed higher levels of mental health problems, but this deviation was much larger for native Dutch than for Moroccan immigrant youths. These ethnic differences in mental health problems could not be explained by ethnic differences in socio-economic background and social desirable answering tendencies. *Conclusions.* Incarcerated youths of Moroccan origin show less psychopathology than incarcerated native Dutch youths, which might be explained by disparities in sentencing procedures and ethnic differences in offending behavior.

## Introduction

The prevalence of psychiatric problems among incarcerated youths is extremely high (Abram, Teplin, McClelland, & Dulcan, 2003; Vincent, Grisso, Terry, & Banks, 2008). Nearly two-third of the male juvenile detainees has one or more psychiatric diagnoses, even after excluding disorders that include delinquent behavior (Teplin et al., 2002; Vreugdenhil et al., 2004). Substance use, ADHD and behavioral disorders are the most prevalent, and approximately half of the incarcerated adolescents in the US has an affective or anxiety disorder (Abram et al., 2003). In addition, adolescents in detention and correctional facilities are about 10 times more likely to suffer from psychosis than the general adolescent population (Fazel, Doll, & Langstrom, 2008).

However, whereas ethnic minority youths are overrepresented in the juvenile justice system (Sickmund et al., 2008), limited research is available on ethnic differences in mental health problems among incarcerated youths (Teplin et al., 2002; Vaughn, Davis, Fernandes, & Howard, 2008; Vincent et al., 2008; Vreugdenhil et al., 2004). Some US studies examined ethnic differences in prevalence rates of psychiatric diagnoses. It was generally found that incarcerated African-American youths have lower rates of psychiatric disorders such as disruptive behavior disorder and substance use disorder, and lower rates of co-morbidity than Caucasians (Abram et al., 2003; Teplin et al., 2002). Studies using self-report instruments also found that Caucasian youth in the juvenile justice system report more psychiatric symptoms than ethnic minority youth. Caucasians generally reported higher levels of substance use, somatic complaints, suicide ideation and angry-irritable symptoms (Cauffman, 2004), social problems, thought problems, externalizing behavior (Karnik, Jones, Campanaro, Haapanen, & Steiner, 2006) and higher levels of mental health distress (Vaughn et al., 2008) than ethnic minority youths in juvenile justice settings. A meta-analysis on self-reported symptoms indicated that incarcerated Caucasians are more likely to report substance use problems and suicide ideation than incarcerated ethnic minority youths (Vincent et al., 2008).

In sum, the available research shows that incarcerated ethnic minority youths overall show lower levels of mental health problems than incarcerated ethnic majority youths. However, these studies do not warrant general conclusions, which is due to several limitations. First, European research on mental health problems of incarcerated ethnic minority youth is scarce (Hamerlynck, 2008; Vreugdenhil et al., 2004), which is problematic since the characteristics of ethnic minority populations in Western Europe are largely incomparable to those of minority populations in the US (Stevens & Vollebergh, 2008). Second, to date, none of the research used a comparison group consisting of non-incarcerated minority and majority youth. Yet, it is essential to have information on mental health problems in general population youths, because it enables us to examine

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the extent to which the level of mental health problems in both ethnic incarcerated groups deviates from this level in the respective general populations. Third, former studies did not include parent-reported data. The parental perspective may enrich our knowledge on mental health problems in incarcerated youth (Wasserman, McReynolds, Lucas, Fisher, & Santos, 2002).

The present study examines ethnic differences in self- and parent-reported mental health problems among ethnic minority and majority youths in the incarcerated and the general, non-incarcerated population in the Netherlands. The study focuses on youths of native Dutch origin and youths belonging to one of the largest ethnic minority groups in the Netherlands, the Moroccans. Dutch police records show that Moroccan adolescents, in comparison to both native Dutch and other ethnic minorities, are overrepresented in juvenile justice settings (Blom et al., 2005). A quarter of the population of young offenders in juvenile justice institutions is of Moroccan origin (Boendermaker, 1995), while Moroccans represent only 2% of the general Dutch population. Since youth detained under criminal law in juvenile justice institutions merely consists of male detainees, the present study focuses only on boys.

Two research questions are addressed. Are there differences in the level and the character of mental health problems between native Dutch and Moroccan immigrant incarcerated boys? And to what extent do the scores of both groups of incarcerated boys deviate from the scores in the respective general populations? The latter question enables us to take into account the baseline level of mental health problems in the general populations of both ethnic groups. We expect that the prevalence of self- and parent-reported mental health problems is higher among both native Dutch and Moroccan immigrant incarcerated adolescents than among youths in the general population. In addition, in line with previous research in the US, we expect that native Dutch incarcerated adolescents and their parents report higher levels of mental health problems than incarcerated boys of Moroccan origin and their parents.

## **Method**

### *Participants*

#### **Incarcerated youth sample**

Participants consisted of 298 boys aged 12-18 years who were consecutively placed in pre-trial detention in 10 (out of 11) juvenile justice institutions in the Netherlands between May 2006 and February 2008. In the Netherlands, criminal legislation for youths only applies to persons aged 12 to 18 (Vreugdenhil et al., 2004). Pre-trial detention is

enforced when a youngster is suspect of an offence, awaiting trial, and if detention is thought to be necessary for the protection of others or the child itself.

In order to approach the participants, the researchers weekly received an overview from The Dutch Ministry of Justice, containing information on all adjudicated adolescents who were placed in pre-trial detention in a juvenile justice institution in the prior week. Eligible for inclusion were those adolescents who were of Moroccan or Dutch native origin (i.e., for the Moroccan adolescents this meant that at least one of their parents had to be born in Morocco, for the native Dutch that both parents were born in the Netherlands), who remained in the juvenile justice institution for over a week, and who were allowed to receive a visitor. Adolescents had to be able to read and speak Dutch. Adolescents with intellectual disabilities, as registered by the institutional workers of the juvenile justice institution, were excluded from the sample. The adolescents received a letter which contained information on the purpose of the interview and were asked to participate in the study by an employee of the juvenile justice institution. If the adolescent consented to participation, an appointment was made for an interview (consisting of both interview components and self-report questionnaires such as the Youth Self-Report, version 1991 (Achenbach, 1991a)) at the juvenile justice institution. Four hundred seventy six incarcerated adolescents were asked to participate in the study, 315 incarcerated adolescents were interviewed (total response rate 66%, response rate native Dutch boys 73%, response rate Moroccan boys 62%), and 17 interviews were found to be incomplete, leaving 298 complete interviews.

Because the percentage of 12-year olds in the incarcerated sample was much smaller (three boys) than in the general population samples, the data of these boys were left out of the analyses. This resulted in a total of 296 boys in the present study. Adolescents were all suspect of one or more offences (as formulated in youth criminal law), ranging from property offences to sexual offences, violent offences and arson. The mean age of all participants when they were incarcerated for their first offence was 15,9 years. Moroccan participants were incarcerated for their first offence at a mean age of 15,7 years, and Dutch participants at a mean age of 16,2 years. Hundred forty-one adolescents (47%) were of Moroccan origin (of 93% both parents were born in Morocco, of 7% one of the parents was born in Morocco). Nineteen percent of the Moroccan adolescents was born in Morocco, the others were born in the Netherlands. The remainder of the sample (53%) consisted of 158 Dutch native adolescents.

Of the incarcerated boys who completed the interview, 273 parents were asked to participate in the study (24 parents could not be asked to participate because their addresses were unavailable, they moved, or their son did not give permission for his parent to participate in this study). Eighty-four parents refused to participate and 22

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parents were not found at home by the interviewers. One-hundred sixty-eight parents consented to participation in the study (total response rate 62%, response rate Dutch parents 50%, response rate Moroccan parents 70%). For five parents data were found to be incomplete and were not further used in the analyses. Of the 163 completed interviews, 76 interviews were with native Dutch parents and 87 interviews were with parents of Moroccan origin. All parents received a letter containing the aims of the present study. Moroccan parents were sent an introductory letter in Dutch and Moroccan-Arabic and within a couple of weeks a trained Moroccan interviewer visited the parents' home to ask them to participate. Dutch parents were contacted by telephone to make an appointment for the interview. Dutch parents had to be able to speak and read Dutch. All parents completed the Child Behavior Checklist, version 1991.

Parent and adolescent participants were assured of the confidentiality of their spoken and written responses and data were archived anonymously. Moreover, written informed consent was obtained from the participants. Participants received compensation, adolescents received telephone cards which they could use within the juvenile justice institution and parents received a gift certificate. The research protocol was approved by the Ethical Board of the Department of Social Sciences and the Ministry of Justice in the Netherlands.

### Moroccan immigrant general population sample

Youth Self-report (1991) and Child Behavior Checklist (1991) data were used of parent and adolescent interview-pairs originating from a larger study, in which a sample of 1,127 children aged 4 through 18 with at least one parent born in Morocco, were randomly selected from municipal registers of Rotterdam and The Hague. Data collection took place from April 2001 to July 2002. A total of 819 parents participated in the study (response rate 73%) and 91% of the approached adolescents consented to participation. The data collection procedure and in- and exclusion criteria are described in detail elsewhere (Stevens et al., 2003). In the present study we only used data of male adolescent participants, aged 13 through 18 (N = 142).

### Dutch general population sample

We used Youth Self-report (2001) and Child Behavior Checklist (2001; Achenbach & Rescorla, 2001b) data of parent and adolescent interview-pairs originating from a larger study performed in the Dutch province of Zuid-Holland (including Rotterdam and The Hague). Data collection took place between December 2003 and April 2005. Of the 2,317 eligible children aged 6 through 18, who were randomly selected from municipal registers, 74% parents participated (N = 1,710). Of the adolescent participants, 20% were of non-Dutch origin (at least one parent born outside the

Netherlands). The data collection procedure and in- and exclusion criteria are described in detail elsewhere (Tick, van der Ende, & Verhulst, 2007; Tick, van der Ende, & Verhulst, 2008). In the present study, we only used data of male adolescent participants aged 13 through 18, whose parents were both born in the Netherlands ( $N = 304$ ).

### *Measures*

#### Emotional and behavioral problems

The Youth Self-Report (YSR) was used to obtain self-reports on emotional and behavioral problems. The Child Behavior Checklist (CBCL) was used for parent-reports. The questionnaires are interrelated and have good validity (Achenbach & Rescorla, 2001b). Respondents were asked to rate the occurrence of problems in the preceding six months. The YSR consists of 102 items and the CBCL consists of 118 items, scored on a three-point response scale: 0 = not true, 1 = somewhat or sometimes true and 2 = very true or often true. The items are scored on eight syndrome scales as defined by Achenbach (1991b): Withdrawn, Somatic Complaints, Anxious/Depressed, Social Problems, Thought Problems, Attention Problems, Delinquent Behavior and Aggressive Behavior. The sum of scores of the first three syndromes indicates the broadband scale Internalizing, and the sum of scores on the Delinquent and Aggressive Behavior syndromes indicates the broadband scale Externalizing. All problem items are summed to calculate a Total Problems score. The CBCL and YSR were revised in 2001 and these versions were used in the Dutch general population sample. Since data of the Moroccan immigrant sample were already available at the start of the present study and the older versions of the YSR and CBCL (1991) had been used in that study, we decided to use these older versions in the incarcerated sample as well. In the present paper, we analyzed the items that were in all versions for all samples. Therefore, we excluded 5 new items in the Dutch general population sample. One item in the earlier versions ('I use alcohol or drugs') was separated into two questions ('I use alcohol' and 'I use drugs'). Therefore, we calculated a combination score of the two items for the Dutch general population sample, based on the highest score of the two questions, see also Tick et al. (2008).

In order to interview the parents in the Moroccan samples, the CBCL was translated into Moroccan-Arabic. Reliabilities of the Moroccan-Arabic translation of the CBCL were comparable to the reliabilities of the Dutch version. The alphas of most syndrome scales range from .56 to .88; the alphas of the broadband scales range from .82 to .89. Since all adolescent participants received Dutch education, we used the Dutch versions of the YSR in all adolescent samples. Good reliabilities for the Dutch YSR and CBCL have been established elsewhere (Verhulst, Van der Ende, & Koot, 1996; Verhulst, Van der Ende, & Koot, 1997b).

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### Socio-economic status

To determine the socio-economic status (SES) of the participants, postal codes of their parents' homes were used. The Netherlands Social and Cultural Planning Office calculates SES scores (which are based on mean income, education level, percentage unemployed and percentage households per neighborhood) for all postal codes in the Netherlands. These SES scores are originally provided in an order number (0-4) with three decimal places (Knol, 1998); we classified the scores into low (0-1), medium (1-3) and high (3-4) SES.

### Social desirability

To assess a social desirable response style, incarcerated subjects and their parents were provided a 10-item version of the Marlowe-Crowne Social Desirability Scale (Strahan & Gerbasi, 1972). Two examples of the items include 'I have never intensely disliked anyone' and 'I like to gossip at times'. The items refer to socially approved but uncommon behaviors and socially disapproved but common behaviors. Each item is scored as true or false. Social desirable answers are assigned a score of 1, answers which are not social desirable are assigned a score of 0. The score for each subject is the sum of scores from the individual items. The reliability and clinical utility of The Marlowe-Crowne Social Desirability Scale in forensic settings has been established elsewhere (Andrews & Meyer, 2003).

### Offender type

To assess the offence history of the participants, police records were gathered at The Dutch Ministry of Justice. The records contain information on type of offence(s) committed in the past (offences as formulated in youth criminal law), and age at first offence. We classified the incarcerated adolescents into four different offender categories, see (Veen et al., in press); Property offenders, Sexual offenders, Violent offenders and Arsonists. In the present study, Sexual offenders, Violent offenders and Arsonists were considered as Serious offenders and Property offenders were considered as Non-serious offenders.

### *Statistical analyses*

Ethnic differences in mental health problems among incarcerated and general population youth of native Dutch and Moroccan origin were tested by conducting multigroup analyses. To account for non-normal distributed data and non-homogeneity of covariance matrices of the dependent variables, analyses were conducted in the software package Mplus version 5 which enables non-parametric testing. Chi-square difference testing was applied to demonstrate the differences between the groups. To control for the dependent variables in each analysis, we first entered the syndrome

scales simultaneously in a separate analysis, then we analyzed the broadband scales simultaneously in another separate analysis, and finally we analyzed the total problem scale separately. We tested whether interaction effects between ethnicity (native Dutch and Moroccan) and population (general population and incarcerated population) on mental health problems were present using multiple regression analyses. To control for age and socio-economic status (SES), these variables were included as covariates in all analyses. To control for the possible effects of social desirability on ethnic differences in mental health in incarcerated youth, we included this variable as a covariate in the analyses on incarcerated youths. Finally, we tested differences in the level of mental health problems between serious offenders and non-serious offenders using MANOVA's.

## Results

### *Descriptives*

Table 1 shows age, socio-economic status and the mean scores on the Marlowe-Crowne Social Desirability Scale for each group. Socio-economic status differed significantly between each group ( $F = 111.83$ ,  $df = 3$ ,  $p < 0.01$ ). Furthermore, Moroccan incarcerated boys scored significantly higher on the Marlowe-Crowne Social Desirability Scale than native Dutch incarcerated boys ( $F = 35.41$ ,  $df = 1$ ,  $p < 0.00$ ). Likewise, Moroccan parents with an incarcerated son scored significantly higher on the Marlowe-Crowne Social Desirability Scale than native Dutch parents with an incarcerated son ( $F = 72.66$ ,  $df = 1$ ,  $p < 0.00$ ). Social desirability correlated significantly negatively with the Total Problems of the Youth Self-Report ( $r = -.54$ ) and the Total Problems of the Child Behavior Checklist ( $r = -.32$ ).

**Table 1 Mean age, socio-economic status and social desirability (SD)**

|                | Age             | SES          | Social Desirability<br>Adolescents | Social Desirability<br>Parents |
|----------------|-----------------|--------------|------------------------------------|--------------------------------|
| GPD<br>N = 304 | 15.60d (1.85)   | 2.11d (0.71) | -                                  | -                              |
| GPM<br>N = 142 | 15.20a (1.71)   | 1.04a (0.18) | -                                  | -                              |
| ID<br>N = 156  | 16.12c (1.22)   | 1.81c (0.69) | 5.3a (1.92)                        | 7.1a (1.72)                    |
| IM<br>N = 139  | 15.82b,c (1.23) | 1.40b (0.61) | 6.7b (2.15)                        | 9.0b (1.17)                    |

Note. GPD = General Population Dutch, GPM = General Population Moroccan, ID = Incarcerated Dutch, IM = Incarcerated Moroccan; a,b,c,d Different subscripts refer to significant differences ( $p < 0.05$ ) between the groups (within columns)

*Self-reported symptoms*

Table 2 shows the mean scores on all YSR scales (dependent variables) for each group, controlled for age and SES. To test whether the mean scores differed between the groups, a multigroup testing procedure was used. First, in the overall model, a baseline Chi-square was computed with no equality constraints for all groups on all YSR syndrome scales ( $\chi^2 = 77,239$ ,  $df = 48$ ; unconstrained model). Next, the dependent variables were constrained to be equal for all groups on each of the syndrome scales and the Chi-square was calculated ( $\chi^2 = 362,184$ ,  $df = 72$ ; constrained model). The Chi-square difference between the unconstrained and constrained model revealed that the four groups scored significantly different on the syndrome scales of the YSR ( $\Delta\chi^2 = 284,945$ ,  $df = 24$ ,  $p < 0.01$ ). The same Chi-square difference testing procedure was used for the scores on the broadband scales and the Total Problems scale, again the Chi-square difference tests indicated that the four groups differed on these YSR scales. To test which scale scores differed between which groups, we used the same Chi-square difference testing procedure with the unconstrained model as the baseline model and a model in which we systematically constrained the scores on each syndrome scale, the broadband scales and the Total Problems score between two groups. This resulted in six comparisons for each scale, thus in total 66 Chi-square tests.

Compared to youth offenders of Moroccan origin, Dutch native offenders scored higher on the Anxious/Depressed, Attention Problems, Thought Problems, Delinquent and Aggressive Behavior syndrome scales, on the Internalizing and Externalizing broadband scales and on the Total Problems scale. These differences remained significant when corrected for social desirability; Anxious/Depressed ( $F = 7.392$ ,  $df = 1$ ,  $p = .01$ ), Attention Problems ( $F = 28.216$ ,  $df = 1$ ,  $p = .00$ ), Thought Problems ( $F = 18.808$ ,  $df = 1$ ,  $p = .00$ ), Delinquent Behavior ( $F = 31.635$ ,  $df = 1$ ,  $p = .00$ ), Aggressive Behavior ( $F = 27.228$ ,  $df = 1$ ,  $p = .00$ ), Internalizing ( $F = 4.424$ ,  $df = 1$ ,  $p = 0.04$ ), Externalizing ( $F = 38.013$ ,  $df = 1$ ,  $p = 0.00$ ) and Total Problems ( $F = 25.002$ ,  $df = 1$ ,  $p = 0.00$ ). Effect sizes for above differences varied from small to medium effects; Anxious/Depressed (Partial Eta Squared = 0.03), Attention Problems (Partial Eta Squared = 0.09), Thought Problems (Partial Eta Squared = 0.06), Delinquent Behavior (Partial Eta Squared = 0.10), Aggressive Behavior (Partial Eta Squared = 0.09), Internalizing (Partial Eta Squared = 0.02), Externalizing (Partial Eta Squared = 0.12) and Total Problems (Partial Eta Squared = 0.08). Furthermore, compared to the general population, Dutch native incarcerated youths reported more problems on all but one scale (Social Problems) than non-incarcerated native Dutch youths. Incarcerated youths of Moroccan origin reported significantly more Withdrawn Behavior, Somatic

Complaints, Thought Problems and Delinquent Behavior, Internalizing and Total Problems than non-incarcerated youths of Moroccan origin.

Furthermore, we tested whether interaction effects between ethnicity and population on the YSR scales were present. The Beta-weights of the main and interaction effects, corrected for age and SES are shown in Table 3. Interaction effects were found for the following YSR scales: Anxious/Depressed, Attention Problems, Delinquent Behavior and Aggressive Behavior, Internalizing, Externalizing and Total Problems, generally showing that incarcerated youths experience higher levels of mental health problems than youths in the general population, and that these differences are much larger for Dutch youths than for Moroccan youths.

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Table 2 Self-reported symptoms, estimated sample means

|                | WTH                  | SOM                | AXD                | ADD                | THT                | SOC                  | DEL                | AGG                 | INT                 | EXT                 | Total Problems      |
|----------------|----------------------|--------------------|--------------------|--------------------|--------------------|----------------------|--------------------|---------------------|---------------------|---------------------|---------------------|
| GPD<br>N = 304 | 2.480 <sup>b</sup>   | 1.609 <sup>a</sup> | 3.398 <sup>a</sup> | 4.628 <sup>b</sup> | 1.609 <sup>c</sup> | 2.243 <sup>a,b</sup> | 3.332 <sup>a</sup> | 6.437 <sup>a</sup>  | 7.332 <sup>b</sup>  | 9.770 <sup>a</sup>  | 29.164 <sup>b</sup> |
| GPM<br>N = 142 | 2.077 <sup>a</sup>   | 1.606 <sup>a</sup> | 3.500 <sup>a</sup> | 2.972 <sup>a</sup> | 0.570 <sup>a</sup> | 1.838 <sup>a</sup>   | 3.007 <sup>a</sup> | 5.592 <sup>a</sup>  | 7.014 <sup>a</sup>  | 8.599 <sup>a</sup>  | 23.310 <sup>a</sup> |
| ID<br>N = 156  | 3.308 <sup>c</sup>   | 2.679 <sup>b</sup> | 6.128 <sup>b</sup> | 6.429 <sup>c</sup> | 2.404 <sup>d</sup> | 2.462 <sup>b</sup>   | 7.878 <sup>c</sup> | 10.359 <sup>b</sup> | 11.692 <sup>c</sup> | 18.237 <sup>b</sup> | 46.436 <sup>c</sup> |
| IM<br>N = 139  | 2.914 <sup>b,c</sup> | 2.273 <sup>b</sup> | 3.978 <sup>a</sup> | 3.468 <sup>a</sup> | 1.144 <sup>b</sup> | 2.144 <sup>a,b</sup> | 4.453 <sup>b</sup> | 5.360 <sup>a</sup>  | 8.906 <sup>b</sup>  | 9.813 <sup>a</sup>  | 28.885 <sup>b</sup> |

Note. GPD = General Population Dutch, GPM = General Population Moroccan, ID = Incarcerated Dutch, IM = Incarcerated Moroccan; WTH = Withdrawn, SOM = Somatic Complaints, AXD = Anxious/depressed, ADD = Attention Problems, THT = Thought Problems, SOC = Social Problems, DEL = Delinquent Behavior, AGG = Aggressive Behavior, INT = Internalizing, EXT = Externalizing; a,b,c,d Different subscripts refer to significant differences ( $p < 0.05$ ) between the groups (within columns), controlled for age and SES

Table 3 Main- and interaction effects on self-reported symptoms

|               | WTH                 | SOM                | AXD                 | ADD                 | THT                 | SOC                 | DEL                 | AGG                 | INT                 | EXT                 | Total Problems      |
|---------------|---------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Ethnicity     | -0.103 <sup>*</sup> | -0.075             | -0.127 <sup>*</sup> | -0.343 <sup>*</sup> | -0.299 <sup>*</sup> | -0.095 <sup>*</sup> | -0.246 <sup>*</sup> | -0.252 <sup>*</sup> | -0.129 <sup>*</sup> | -0.273 <sup>*</sup> | -0.281 <sup>*</sup> |
| Incarceration | 0.172 <sup>*</sup>  | 0.211 <sup>*</sup> | 0.210 <sup>*</sup>  | 0.191 <sup>*</sup>  | 0.169 <sup>*</sup>  | 0.070               | 0.467 <sup>*</sup>  | 0.209 <sup>*</sup>  | 0.238 <sup>*</sup>  | 0.341 <sup>*</sup>  | 0.312 <sup>*</sup>  |
| Interaction   | 0.010               | -0.033             | -0.133 <sup>*</sup> | -0.106 <sup>*</sup> | -0.026              | 0.012               | -0.235 <sup>*</sup> | -0.212 <sup>*</sup> | -0.081 <sup>*</sup> | -0.242 <sup>*</sup> | -0.157 <sup>*</sup> |

Note. Beta-weights are corrected for age and SES. Beta-weights of the interaction effects are corrected for age, SES and the main effects of ethnicity and population. Ethnicity (native Dutch = 0, Moroccan immigrant = 1); Incarceration (general population = 0, incarcerated population = 1). WTH = Withdrawn, SOM = Somatic Complaints, AXD = Anxious/depressed, ADD = Attention Problems, THT = Thought Problems, SOC = Social Problems, DEL = Delinquent Behavior, AGG = Aggressive Behavior, INT = Internalizing, EXT = Externalizing; \* Refers to a significant main effect of ethnicity (Moroccan immigrant or native Dutch), being incarcerated or not (general population or incarcerated population), or a significant interaction effect between ethnicity and incarceration on the eight syndrome scales, the broadband scales and the Total Problems score,  $p < 0.05$

*Parent-reported symptoms*

Table 4 shows the mean scores on all CBCL scales for each group, controlled for age of the adolescent and SES. The four groups scored significantly different on the CBCL scales ( $\Delta\chi^2 = 157,003$ ,  $df = 24$ ,  $p < 0.01$ ). To test which scale scores differed between which groups, the same Chi-square difference testing was used as with the self-reported data.

Compared to parents of Moroccan origin, native Dutch parents reported their incarcerated sons as showing significantly more Attention Problems, Thought Problems, Social Problems, Delinquent and Aggressive Behavior, Externalizing and Total Problems. These differences remained significant when corrected for social desirability; Attention Problems ( $F = 6.963$ ,  $df = 1$ ,  $p = .01$ ), Thought Problems ( $F = 8.212$ ,  $df = 1$ ,  $p = .01$ ), Social Problems ( $F = 7.107$ ,  $df = 1$ ,  $p = .01$ ), Delinquent Behavior ( $F = 22.662$ ,  $df = 1$ ,  $p = .00$ ), Aggressive Behavior ( $F = 7.683$ ,  $df = 1$ ,  $p = .00$ ), Externalizing ( $F = 13.989$ ,  $df = 1$ ,  $p = 0.00$ ) and Total Problems ( $F = 8.394$ ,  $df = 1$ ,  $p = 0.00$ ). Effect sizes for above differences varied from small to medium effects; Attention Problems (Partial Eta Squared = 0.04), Thought Problems (Partial Eta Squared = 0.05), Social Problems (Partial Eta Squared = 0.05), Delinquent Behavior (Partial Eta Squared = 0.13), Aggressive Behavior (Partial Eta Squared = 0.05), Externalizing (Partial Eta Squared = 0.09) and Total Problems (Partial Eta Squared = 0.05). Furthermore, parents of native Dutch incarcerated youths reported more problems on all scales than parents of general population native Dutch youths. Moroccan parents of incarcerated youths reported their sons as showing significantly more Withdrawn Behavior, Anxious/Depressed symptoms, Attention Problems, Social Problems, Delinquent Behavior, Internalizing and Total Problems than parents of non-incarcerated Moroccan youths.

Next, we tested interaction effects between ethnicity and population on all CBCL scales (see Table 5). Interaction effects were found for the following scales: Withdrawn, Attention Problems, Thought Problems, Social Problems, Delinquent Behavior and Aggressive Behavior, Externalizing and Total Problems, again showing that parents of incarcerated youths report higher levels of these mental health problems than parents of youths in the general population, and that these differences are much larger for Dutch youths than for Moroccan youths.

Finally, since some of the findings may have been biased because of incomplete sampling of the parents in the incarcerated population, we tested if adolescents whose parents completed the interview, scored significantly different on the broadband scales of the YSR from adolescents whose parents did not participate in the study. No significant differences were found on the Internalizing scale ( $F = 0.392$ ,  $df = 1$ ,  $p = 0.53$ ) or the Externalizing scale ( $F = 1.106$ ,  $df = 1$ ,  $p = 0.29$ ).

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Table 4 Parent-reported symptoms, estimated sample means

|                | WTH                | SOM                  | AXD                | ADD                | THT                | SOC                | DEL                | AGG                  | INT                 | EXT                  | Total Problems      |
|----------------|--------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------|---------------------|----------------------|---------------------|
| GPD<br>N = 293 | 2.321 <sup>a</sup> | 1.034 <sup>a</sup>   | 2.577 <sup>a</sup> | 3.679 <sup>b</sup> | 0.464 <sup>a</sup> | 1.443 <sup>b</sup> | 1.717 <sup>a</sup> | 4.874 <sup>a</sup>   | 5.802 <sup>a</sup>  | 6.590 <sup>a</sup>   | 21.392 <sup>a</sup> |
| GPM<br>N = 138 | 2.493 <sup>a</sup> | 1.087 <sup>a</sup>   | 2.942 <sup>a</sup> | 2.891 <sup>a</sup> | 0.384 <sup>a</sup> | 1.116 <sup>a</sup> | 2.478 <sup>b</sup> | 5.928 <sup>a,b</sup> | 6.384 <sup>a</sup>  | 8.406 <sup>a,b</sup> | 20.935 <sup>a</sup> |
| ID<br>N = 76   | 4.224 <sup>b</sup> | 1.803 <sup>b</sup>   | 6.224 <sup>b</sup> | 7.724 <sup>d</sup> | 1.763 <sup>b</sup> | 3.145 <sup>c</sup> | 8.500 <sup>d</sup> | 12.776 <sup>c</sup>  | 11.632 <sup>b</sup> | 21.276 <sup>c</sup>  | 48.382 <sup>b</sup> |
| IM<br>N = 87   | 3.414 <sup>b</sup> | 1.402 <sup>a,b</sup> | 6.345 <sup>b</sup> | 5.057 <sup>c</sup> | 0.529 <sup>a</sup> | 1.621 <sup>b</sup> | 3.448 <sup>c</sup> | 6.713 <sup>b</sup>   | 10.678 <sup>b</sup> | 10.161 <sup>b</sup>  | 30.161 <sup>c</sup> |

Note. GPD = General Population Dutch, GPM = General Population Moroccan, ID = Incarcerated Dutch, IM = Incarcerated Moroccan; WTH = Withdrawn, SOM = Somatic Complaints, AXD = Anxious/depressed, ADD = Attention Problems, THT = Thought Problems, SOC = Social Problems, DEL = Delinquent Behavior, AGG = Aggressive Behavior, INT = Internalizing, EXT = Externalizing; a,b,c,d Different subscripts refer to significant differences ( $p < 0.05$ ) between the groups (within columns), controlled for age of adolescent and SES

Table 5 Main- and interaction effects on parent-reported symptoms

|               | WTH     | SOM    | AXD    | ADD     | THT     | SOC     | DEL     | AGG     | INT    | EXT     | Total Problems |
|---------------|---------|--------|--------|---------|---------|---------|---------|---------|--------|---------|----------------|
| Ethnicity     | -0.031  | -0.027 | -0.001 | -0.217* | -0.178* | -0.202* | -0.201* | -0.116* | -0.017 | -0.155* | -0.181*        |
| Incarceration | 0.257*  | 0.138* | 0.424* | 0.381*  | 0.269*  | 0.266*  | 0.474*  | 0.320*  | 0.366* | 0.397*  | 0.406*         |
| Interaction   | -0.093* | -0.059 | -0.005 | -0.112* | -0.227* | 0.136*  | -0.359* | -0.261* | -0.053 | -0.313* | -0.199*        |

Note. Beta-weights are corrected for age and SES. Beta-weights of the interaction effects are corrected for age, SES and the main effects of ethnicity and population. Ethnicity (native Dutch = 0, Moroccan immigrant = 1); Incarceration (general population = 0, incarcerated population = 1). WTH = Withdrawn, SOM = Somatic Complaints, AXD = Anxious/depressed, ADD = Attention Problems, THT = Thought Problems, SOC = Social Problems, DEL = Delinquent Behavior, AGG = Aggressive Behavior, INT = Internalizing, EXT = Externalizing; \* Refers to a significant main effect of ethnicity (Moroccan immigrant or native Dutch), being incarcerated or not (general population or incarcerated population), or a significant interaction effect between ethnicity and incarceration on the eight syndrome scales, the broadband scales and the Total Problems score,  $p < 0.05$

*Mental health problems and offender type*

Serious offenders in the incarcerated sample scored significantly higher on Externalizing ( $M = 16.18$ ,  $SD = 8.23$ ) than Non-serious offenders ( $M = 12.94$ ,  $SD = 8.88$ ;  $F = 9.962$ ,  $df = 1$ ,  $p = 0.00$ ). Serious offenders did not score significantly higher on Internalizing ( $M = 11.46$ ,  $SD = 7.79$ ) than Non-serious offenders ( $M = 9.77$ ,  $SD = 7.99$ ;  $F = 3.225$ ,  $df = 1$ ,  $p = 0.07$ ). In addition, the difference on Externalizing did not remain significant when controlling for ethnicity ( $F = 0.005$ ,  $df = 1$ ,  $p = 0.95$ ). Likewise, parents of Serious offenders reported significantly higher scores on Externalizing ( $M = 17.78$ ,  $SD = 14.04$ ) than parents of Non-serious offenders ( $M = 13.64$ ,  $SD = 11.92$ ;  $F = 4.043$ ,  $df = 1$ ,  $p = 0.05$ ), and the scores for Internalizing were not higher for Serious offenders ( $M = 11.05$ ,  $SD = 7.85$ ) than for Non-serious offenders ( $M = 11.10$ ,  $SD = 6.97$ ;  $F = 0.002$ ,  $df = 1$ ,  $p = 0.96$ ). Finally, in accordance with the self-reported scores, the difference on Externalizing reported by the parents did not remain significant when controlling for ethnicity ( $F = 0.204$ ,  $df = 1$ ,  $p = 0.65$ ).

**Discussion**

The purpose of this study was to examine ethnic differences in mental health problems among incarcerated boys of native Dutch and Moroccan origin. As expected, analysis of self- and parent-reported mental health problems showed that native Dutch offenders had significantly more mental health problems compared to youth offenders of Moroccan origin. In line with previous US research, native Dutch adolescent offenders showed higher levels of mental health problems overall, and more Anxious/Depressed symptoms, Attention Problems, Thought Problems, Social Problems, Delinquent Behavior and Aggressive Behavior in particular. Next, a clear difference between incarcerated and general population youths was found. Incarcerated youths were at increased risk of virtually all CBCL and YSR problem scales. However, differences between general population and incarcerated youths were much larger for native Dutch than for Moroccan immigrant youths, as was indicated by several interaction effects between ethnicity and population. Whereas native Dutch incarcerated youths showed much higher levels of psychopathology than their peers in the general population, these differences were small for Moroccan immigrant youths.

How can we explain these differences in mental health problems between Dutch native and Moroccan immigrant youth? First, ethnic minority youths are often brought up in situations of socio-economic disadvantage, which have been suggested as main determinants of the increased risk for ethnic minority youths to get engaged in criminal behavior (McNulty & Bellair, 2003; Vaughn et al., 2008). However, ethnic differences in

mental health problems did not disappear when controlling for socio-economic status in the present study. Although some residual effect of socio-economic status may still have been present, this finding is in line with earlier studies which showed that straightforward differences in socio-economic status between ethnic minority and majority groups do not explain the differences in problem behavior between ethnic minority and majority youth (Stevens & Vollebergh, 2008).

Second, the lower level of mental health problems of ethnic minority youth offenders may be the result of social desirability bias: both adolescents and parents with an ethnic minority background possibly underreport mental health problems as they are aware of their low status in society, and do not want to confirm the negative perception about their children or themselves (Cauffman, 2004; Stevens et al., 2003). In the present study, ethnic differences between incarcerated Moroccan and native Dutch youths remained significant when corrected for social desirability bias, which is an indication against this second hypothesis. However, despite the statistical correction for this response style, underreporting of problems due to a social desirable bias may still have been present. Since we compared ethnic differences in the incarcerated group with ethnic differences in the general population, we therefore controlled for a general ethnic tendency of answering in a social desirable way.

Third, an alternative explanation for the lower levels of mental health problems of incarcerated minority adolescents, is that these youths may not be treated the same as ethnic majority youths in the juvenile justice system (Engen et al., 2002; Mustard, 2001). In fact, it has been found that minority youths are referred to juvenile court and are taken into pre-trial arrest for less serious offences than ethnic majority youths (Engen et al., 2002; Rodney & Tachia, 2004). As less serious offences may be associated with lower levels of psychiatric symptoms (Sheidow et al., 2008), incarcerated ethnic minority youths entering the juvenile justice system may reveal fewer psychiatric symptoms than incarcerated ethnic majority youths (Vreugdenhil et al., 2004). Furthermore, we previously found that Moroccan adolescent offenders in the Netherlands represent a specific offender type in youth crime (Veen et al., in press). Our analysis of police record data showed that Moroccans were incarcerated more often for property-based offences, and less often for more serious offences such as violent and sexual offences and arson, than native Dutch adolescents. This offending pattern of Moroccan incarcerated adolescents may be the result of a higher prevalence of less serious delinquency in these youths, but it could also be the result of disparities in juvenile justice practice (Rodney & Tachia, 2004). In the present study, we initially found a relationship between serious offender types and higher levels of externalizing problems. However, this relationship does not offer an explanation for the ethnic differences in mental health

problems in the incarcerated population. In fact, native Dutch incarcerated boys seem to report higher levels of mental health problems than Moroccan incarcerated boys, irrespective of their serious offending behavior. Thus, ethnic differences in mental health problems of incarcerated adolescent coexist with ethnic differences in offending behavior.

The present study was the first examining ethnic differences in mental health problems between incarcerated and general population youths, using a four group design. Some limitations of this study should be mentioned. First, the cross-sectional nature of the study makes it difficult to examine causal pathways between ethnic differences in mental health problems of incarcerated youths and explanatory variables such as socio-economic status. Yet, due to the design of this study, it was possible to use the level of mental health problems of different ethnic groups from the general population as a benchmark. Inter- and intra-cultural comparisons of mental health problems between incarcerated and general population youths strengthen the findings of this study.

Second, as information on sentencing processes was not at hand, we were unable to examine the effect of disparities in juvenile justice procedures on the large discrepancy of mental health problems between Moroccan immigrant and native Dutch youths in juvenile justice institutions. Third, due to practical considerations we did not include diagnostic interviews or teacher report forms in the present study. The level of mental health problems measured by self-report instruments may to some extent be subject to social desirability (i.e., biased self-presentation). However, in contrast to most studies on self-reported mental health problems in incarcerated samples, we included additional parent-reported information on the mental health of the subjects. Moreover, we corrected for social desirability bias in the incarcerated population and showed that ethnic differences between incarcerated Moroccan and native Dutch youths remained significant.

Fourth, previous research has indicated that although Moroccan youth and their parents in the general population report lower CBCL and YSR scores than Dutch youth, their teachers report higher problem scores (Stevens et al., 2003). This means that Moroccan parents and adolescents may underreport problems relative to Dutch parents and adolescents, but that teachers' reports indicate more problems for Moroccan youth. However, it may also be possible that teachers report higher problem scores because of ethnic prejudice. Given the findings in the present study, in which a general social desirable tendency was controlled by comparing ethnic differences in the incarcerated and in the general population, it seems that incarcerated Moroccan youth indeed do have fewer problems than incarcerated Dutch youth.

Fifth, it is important to note that the time difference between the collection of data in the incarcerated sample and the general population samples, may have affected findings. However, previous research showed that problem scores of children and adolescents in the general population did not change significantly over a ten year time period (Verhulst, Van der Ende, & Rietbergen, 1997), which is an indication against the possible influence of time differences in data collection. Furthermore, we had to eliminate five items from the YSR and CBCL in the analyses since our data included two different versions. Although this may have caused a minimal loss of information, in previous research the two versions provided comparable scores (e.g., Tick et al., 2007; Tick et al., 2008). Finally, the response rates of the incarcerated adolescents and their parents were modest compared to the response rates in the general population samples. This may have biased findings as lower response rates are generally associated with lower scores.

In conclusion, our findings indicate that native Dutch adolescent offenders show higher levels of mental health problems than incarcerated adolescents with an ethnic minority (Moroccan) background. Indeed, in comparison with the general population, incarcerated youths show higher levels of mental health problems, but this deviation is much larger for native Dutch youths than for Moroccan youths. Both self- and parent reported data offer strong support for these conclusions. Overall, it seems that native Dutch adolescent offenders report both higher levels of mental health problems and also commit more serious offences than Moroccan adolescent incarcerated boys. The differences in mental health problems may have clinical implications. For instance, native Dutch incarcerated youth may need relatively more mental health care in comparison to Moroccan incarcerated youth. In contrast, Moroccan incarcerated youth may need other forms of support, such as more intensive educational training, to enhance their chances on the labor market and hereby decreasing the risk of becoming involved in crime. Finally, since we controlled for socio-economic background and social desirability bias, we hypothesize that disparities in sentencing procedures may play a role in the incarceration of ethnic minority youths with relatively lower levels of mental health problems. Future research is needed to further unravel the influence of sentencing procedures, as this may have implications for the practice of juvenile justice.

## Chapter 6

# Cross-ethnic generalizability of the three-factor model of psychopathy: the Youth Psychopathic traits Inventory in an incarcerated sample of native Dutch and Moroccan immigrant boys

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**Abstract**

*Background.* Previous research provides support for the existence of the psychopathy construct in youths. However, studies regarding the psychometric properties of psychopathy measures with ethnic minority youths are lacking. *Methods.* In the present study, the three-factor structure of the Youth Psychopathic traits Inventory (YPI) was examined for both native Dutch youth (N = 158) and an ethnic minority group, Moroccans (N = 141), in an incarcerated adolescent population in the Netherlands. *Results.* Our results showed that the three-factor structure of the YPI is comparable across an ethnic majority and an ethnic minority group in an incarcerated sample in the Netherlands. Moreover, associations between psychopathic traits and mental health problems were similar for both ethnic groups. *Conclusion.* The results support the cross-ethnic generalizability of the three-factor model of psychopathy as measured through the Youth Psychopathic traits Inventory.

## Introduction

Psychopathy is a clinical construct describing a manipulative, unemotional, remorseless, and irresponsible personality, which is often viewed as a severe form of antisocial personality disorder in adults (Hare, 1998). Recently, a growing body of research examining psychopathic traits in youths, provides support for the existence of a psychopathic construct in children and adolescents that strongly, at least on the surface, resembles psychopathy in adults and remains relatively stable during the transition from adolescence to adulthood (Andershed, 2010; Burke, Loeber, & Lahey, 2007; Farrington, 2005; Van Baardewijk et al., 2008). Similar to adult criminals with many psychopathic traits, juvenile delinquents with many psychopathic characteristics are among the most severe antisocial youths, committing more offences, beginning their criminal activities earlier, and engaging in more versatile criminal behavior than non-psychopathic juvenile delinquents (Edens et al., 2007; Gretton et al., 2004; Kosson et al., 2002). In addition, it has been found that psychopathic traits in adolescents are strongly related to various mental disorders such as conduct problems and attention deficits (Forth & Burke, 1998).

Recently, Andershed, Kerr, Stattin and Levander (2002) developed a self-report measure of psychopathic personality traits for youths (the Youth Psychopathic traits Inventory; YPI) based on the three-factor model of psychopathy (Cooke & Michie, 2001). The three-factor model represents a constellation of interpersonal (e.g., arrogant, manipulative), affective (e.g., callous, unemotional) and lifestyle (e.g., irresponsible, antisocial) characteristics. Various studies provided support for the three-factor structure of the YPI in both community and offender samples of youths in the U.S. and in West-European countries (Andershed, Hodgins, & Tengstrom, 2007; Poythress, Dembo, Wareham, & Greenbaum, 2006; Skeem & Cauffman, 2003). Furthermore, studies show that YPI scores correlate positively with parent-reported externalizing behavior, that the affective factor of the YPI is positively related to parent-reported attention problems (Dolan & Rennie, 2007) and that the lifestyle factor is positively correlated with self-reported internalizing problems (Poythress et al., 2006).

However, whereas ethnic minority youths account for a large percentage of youth offender populations in the U.S. and West-European countries (Sickmund et al., 2008; Tonry, 1997) and these youths may be at high risk of psychopathic traits, studies regarding psychometric properties of psychopathy measures in ethnic minority groups of youths are lacking. It is essential to examine the cross-ethnic generalizability of the YPI, since the expression of personality characteristics could vary across ethnic groups (Cooke, Michie, Hart, & Clark, 2005). The purpose of the present study is two-fold. First, the three-factor structure of the YPI is examined among both native Dutch incarcerated boys and incarcerated boys of Moroccan origin. Secondly, the relation of the YPI to various

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emotional and behavioral problems is explored among both native Dutch incarcerated boys and incarcerated boys of Moroccan origin.

### **Methods**

#### *Participants*

Participants in this study consisted of 299 adolescents aged 12-18 years (all males) with a Moroccan or native Dutch background, who were consecutively placed in pre-trial detention in 10 (of 11) juvenile justice institutions in the Netherlands between May 2006 and February 2008. In the Netherlands, Moroccan immigrant youths belong to one of the largest ethnic minorities, and account for a disproportionately large percentage of the population in juvenile justice institutions. A quarter of the young offenders in these institutions is of Moroccan origin, while Moroccans represent only 2% in the general Dutch population.

Adolescents were all suspects of one or more offences (e.g., violent offences, property offences, sexual offences) and were awaiting trial. From all adolescents, 141 were of Moroccan origin (of 93% both parents were born in Morocco, of the other participants at least one of the parents was born in Morocco), 19% of the Moroccan adolescents were born in Morocco; the others were born in the Netherlands. The remainder of the sample consisted of 158 Dutch native adolescents (both of the parents were born in the Netherlands). The mean age of the total group of adolescent participants was 16,4 years ( $N = 299$ ,  $SD 1,27$ ).

Of all adolescents in pre-trial detention who were eligible for inclusion in the sample (i.e., who remained in the juvenile justice institution for over a week, who were allowed to receive a visitor, and who were asked to participate in the study by an employee of the juvenile justice institution), 13% refused to participate. If an adolescent consented to participation, an appointment was made for an interview at the juvenile justice institution. Adolescents were assured of the confidentiality of their spoken and written responses and data were archived anonymously. Written informed consent was obtained from the participants.

#### *Measures*

##### Youth Psychopathic traits Inventory

The YPI was used to obtain self-reports on the core traits of psychopathy (Andershed et al., 2002). The YPI consists of 50 items and respondents were asked to rate the degree to which the individual items apply to them using a 4-point response scale: 1 = does not apply at all, 2 = does not apply well, 3 = applies fairly well and 4 = applies very well.

## Cross-ethnic generalizability of the three-factor model of psychopathy

The items are scored on ten subscales with five items each: Dishonest Charm, Grandiosity, Lying, Manipulation, Callousness, Unemotionality, Remorselessness, Impulsiveness, Thrill-seeking, and Irresponsibility. Examples of items are: 'I have the ability to con people by using my charm and smile', 'I have the ability not to feel guilt and regret about things that I think other people would feel guilty about', and 'I like to do things just for the thrill of it'. The ten subscales are best represented by three higher order factors, the Interpersonal factor, the Affective factor and the Lifestyle factor. Good reliabilities for the YPI subscales and factors have been established elsewhere (Andershed et al., 2002).

### Youth Self-report

The Youth Self-Report (YSR) was used to obtain self-reports on emotional and behavioral problems. Respondents were asked to rate the occurrence of problems in the preceding six months. The YSR consists of 102 items scored on a three-point response scale: 0 = not true, 1 = somewhat or sometimes true and 2 = very true or often true. The items are scored on eight syndrome scales as defined by Achenbach: Withdrawn, Somatic Complaints, Anxious/Depressed, Social Problems, Thought Problems, Attention Problems, Delinquent Behavior and Aggressive Behavior. Good reliabilities for the YSR have been established elsewhere (Achenbach, 1991a; Verhulst et al., 1997b).

### *Statistical analyses*

A multiple group confirmatory factor analysis (CFA) was conducted to examine the similarity of the three-factor structure for the native Dutch and Moroccan immigrant incarcerated adolescents. Since the total sample consisted of 299 participants and an item-based CFA requires a larger number of subjects, a parcel-based CFA was used. The use of parcels as indicators for latent variables has some advantages, for instance parcels are more reliable and valid indicators of latent variables and the use of parcels reduces the number of parameters that have to be estimated in a model (MacCallum, Widaman, Zhang, & Hong, 1999). As the YPI was designed for research on the subscale level, the ten subscales of the YPI were used as parcels in the CFA. The CFA was conducted in the software package Mplus version 5, using the Maximum Likelihood estimation method and the Satorra-Bentler scaled Chi-square test for non-normal data. The model fits were evaluated by means of three indices: the comparative fit index (CFI, a value of 0.95 or more indicates a good fit), the root mean square error of approximation (RMSEA, which estimates the likelihood of model misspecification with a value of 0.08 or less indicative of an acceptable to a good fit) and the standardized root-mean-square residual (SRMR, a value of 0.08 or less is indicative of an acceptable to a good fit). Differences in model fit between the unconstrained and constrained model

were tested using the Chi-square difference test with Satorra-Bentler scale correction,  $\Delta CFI$ ,  $\Delta RMSEA$  and  $\Delta SRMR$  with critical values of less than 0.005, less than 0.010 and less than 0.025 respectively (Chen, 2007). Measurement invariance is demonstrated as soon as the differences in model fit indices between the unconstrained and the constrained model are insignificant.

The three-factor model was tested consisting of (1) the Interpersonal factor, including the subscales Dishonest Charm, Grandiosity, Lying, and Manipulation; (2) the Affective factor, including the subscales Remorselessness, Unemotionality, and Callousness; and (3) the Lifestyle factor, including the subscales Thrill-seeking, Impulsivity, and Irresponsibility. Using a multi-group CFA, differences between Moroccan immigrant and Dutch native boys in the factor structure of the YPI were tested. The reliabilities of the factor scores, ethnic differences in mean YPI scores and the inter-correlations of the YPI factors were calculated in SPSS version 16.0. Next, the factor scores of the YPI were correlated to the syndrome scales of the YSR to explore their relationship with various emotional and behavioral problems for both ethnic groups. It was also tested whether differences in these correlations between the native Dutch adolescents and Moroccan adolescents were significant using Fisher's Z test. To estimate the magnitude of the difference between two correlations, the effect size measure 'q' was used (Cohen, 1988).

## Results

### *Multi-group confirmatory factor analysis*

First, the three-factor structure was examined in an unconstrained model for both ethnic groups with no equality constraints concerning the factor loadings. The fit indices of the unconstrained model showed a good fit to the data of the three-factor model ( $\chi^2 = 95,399$ ,  $p < 0.01$ ,  $CFI = 0.961$ ,  $RMSEA = 0.057$ ,  $SRMR = 0.052$ ). Second, the three-factor model also showed a good fit to the data in a constrained model with invariant factor loadings across ethnic groups ( $\chi^2 = 101.618$ ,  $p < 0.01$ ,  $CFI = 0.962$ ,  $RMSEA = 0.054$ ,  $SRMR = 0.063$ ). Finally, the difference in model fit between the unconstrained and the constrained model was not statistically significant (corrected difference  $\chi^2 = 5.317$ ,  $df = 7$ ,  $p = 0.62$ ,  $\Delta CFI = 0.001$ ,  $\Delta RMSEA = 0.003$ ,  $\Delta SRMR = 0.011$ ), demonstrating that the three-factor model in which the factor loadings were the same for Moroccan immigrant and native Dutch boys, showed an equally good fit to the data compared to the unrestricted model in which factor loadings and intercepts were allowed to differ between Moroccan immigrants and Dutch native adolescents.

*Internal consistency, mean factor scores and factor score inter-correlations*

Additionally, the internal consistency of the three factors of the YPI was found to be satisfactory to good. Cronbach's alphas for the factors were: Interpersonal factor = 0.87 (in both subsamples 0.87), Affective factor = 0.73 (0.61 for the Moroccan and 0.80 for the native Dutch adolescents) and Lifestyle factor = 0.84 (0.80 for the Moroccan and 0.83 for the native Dutch adolescents). Next, it was found that the three factors of the YPI were significantly correlated to one another, both for native Dutch and Moroccan adolescents, see Table 1. Ethnic differences in mean item scores on the three YPI factors are shown in Table 2. Native Dutch incarcerated adolescents reported significantly higher item scores on the Interpersonal factor, the Lifestyle factor and the YPI total score than Moroccan incarcerated adolescents.

Table 1 Inter-correlations of the YPI factors

|                      | Native Dutch (N = 158) |                  | Moroccan (N = 141) |                  |
|----------------------|------------------------|------------------|--------------------|------------------|
|                      | Affective factor       | Lifestyle factor | Affective factor   | Lifestyle factor |
| Interpersonal factor | 0.45**                 | 0.55**           | 0.44**             | 0.53**           |
| Affective factor     |                        | 0.42**           |                    | 0.48**           |

\*\* p < 0.01

Table 2 Mean item scores of the adolescents on the three YPI factors (mean item scores and SD)

|                        | Interpersonal factor | Affective factor | Lifestyle factor | Total score YPI |
|------------------------|----------------------|------------------|------------------|-----------------|
| Native Dutch (N = 158) | 1.68* (0.46)         | 2.06 (0.47)      | 2.44* (0.58)     | 2.03* (0.40)    |
| Moroccan (N = 141)     | 1.53* (0.44)         | 1.98 (0.38)      | 2.04* (0.53)     | 1.81* (0.37)    |

\* p < 0.05

*Relationship between YPI and emotional and behavioral problems*

The three factors of the YPI correlated both significantly and positively with most of the syndrome scales of the YSR, see Table 3. As expected, the strongest correlations were found between the three factors and Delinquent Behavior and Aggressive Behavior. The Interpersonal factor and the Lifestyle factor correlated positively with all of the subscales of the YSR. Next, the Affective factor correlated positively with Attention Problems, Delinquent Behavior, and negatively with Anxious/ Depressed. Two significant differences between native Dutch and Moroccan immigrant adolescents emerged in the correlations between the three factors and the syndrome scales of the YSR. The Affective factor correlated negatively to Somatic Complaints for native Dutch adolescents, but this correlation was positive for Moroccan adolescents ( $r = -.17, p = 0.03$  and  $r = .12, p =$

0.15, respectively; with  $Z = -2.5$ ,  $p = 0.01$ ). However, the effect size of the difference between these two correlations was negligible ( $q = -.05$ ). For Moroccan adolescents the Affective factor correlated positively with Attention Problems, but no correlation was found between these variables for native Dutch adolescents ( $r = .25$ ,  $p < 0.01$  and  $r = .01$ ,  $p = 0.90$ , respectively; with  $Z = -2.1$ ,  $p = 0.04$ ). The effect size of the difference between these two correlations was small ( $q = .24$ ). All other differences in the values of correlation coefficients between native Dutch and Moroccan adolescents were both small and insignificant. In sum, the three factors of the YPI correlated similarly with the syndrome scales of the YSR for both ethnic groups.

Table 3 Correlations between the three YPI factors and YSR subscales among both ethnic groups (N = 299)

|                      | WTH   | SOM   | AXD   | ADD   | THT   | SOC   | DEL   | AGG   |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Interpersonal factor | .18** | .12*  | .21** | .21** | .26** | .17** | .42** | .48** |
| Affective factor     | .08   | -.04  | -.10* | .12*  | .10   | .05   | .32** | .37** |
| Lifestyle factor     | .20** | .18** | .25** | .54** | .36** | .13*  | .67** | .62** |

\*\*  $p < 0.01$ ; \*  $p < 0.05$ ; WTH = Withdrawn, SOM = Somatic Complaints, AXD = Anxious/depressed, ADD = Attention Problems, THT = Thought Problems, SOC = Social Problems, DEL = Delinquent Behavior, AGG = Aggressive Behavior

## Discussion

The primary purpose of this study was to examine the three-factor structure of the YPI for both native Dutch incarcerated boys and for incarcerated boys of Moroccan origin. The three-factor structure of the YPI was comparable across both ethnic groups, indicating that psychopathy manifests similarly in these two ethnic groups. Additional analyses showed satisfactory internal consistency of the YPI factors and good inter-factor correlations for both native Dutch and Moroccan incarcerated adolescents.

Secondly, the three factors of the YPI were similarly associated with mental health problems for both ethnic groups. In general, the strongest correlations were found between the externalizing subscales (delinquent and aggressive behavior) of the YSR and the lifestyle factor of the YPI, which is in line with previous findings (Dolan & Rennie, 2007). The affective factor was positively correlated with attention problems, which was also formerly found (Dolan & Rennie, 2007). As was shown previously by Poythress et al. (2006), the lifestyle factor of the YPI was positively correlated with self-reported internalizing problems. Furthermore, we found positive associations between the interpersonal and lifestyle factors of the YPI and all subscales of the YSR. The

Cross-ethnic generalizability of the three-factor model of psychopathy associations were almost similar for both ethnic groups. Two differences in the correlations emerged between native Dutch and Moroccan adolescents, but these differences were small or even negligible in magnitude.

This study was the first to examine the cross-ethnic generalizability of the three-factor model of the YPI in an ethnic majority and an ethnic minority group. A limitation of this study should be noted. Since the total sample consisted of 299 participants, parcel-based confirmatory factor analysis was used instead of an item-based CFA which requires a larger number of subjects. The use of item-based CFA is preferable because it results in a more stringent examination of the underlying factor structure of an instrument. However, the use of parcel-based CFA is practical when working with small sample sizes as this reduces the number of parameters to be estimated. Moreover, the YPI has been designed for research on the subscale (i.e., parcel) level. Future research should examine the cross-ethnic generalizability of the YPI factor structure in larger offender samples using item-based CFA.

In sum, our findings indicate that the three-factor structure of the YPI is comparable across an ethnic majority and an ethnic minority group in an incarcerated sample of youths in the Netherlands. Moreover, associations between the three components of psychopathy and psychopathology are largely similar for both ethnic groups and generally in line with former findings.



## Chapter 7

# Psychopathic subtypes and associations with mental health problems in an incarcerated sample of adolescent boys

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Submitted for publication

**Abstract**

Research suggests a distinction between high and low anxious psychopathic individuals. However, research on psychopathic subtypes in youth offender populations is largely lacking. This study examined psychopathic subtypes in a sample of incarcerated adolescents. The Youth Psychopathic traits Inventory was used to measure psychopathic traits in a sample of 299 incarcerated adolescent boys. Related (mental health) problems were measured. Within a high psychopathic subsample of incarcerated boys, two psychopathic subtypes were identified using Latent Class Analyses: a low anxious and a high anxious psychopathic type. Both subtypes showed high scores on psychopathic traits. High anxious psychopathic boys reported more (mental health) problems than non-psychopathic and low anxious psychopathic boys. This study provided support for the presence of psychopathic subtypes in a sample of incarcerated boys. The characteristics of these two subtypes are generally in line with former descriptions of low anxious and high anxious psychopathic variants.

## **Introduction**

In the past two decades, researchers have extended the construct of psychopathy downward to adolescents and children. This research generally provided support for the existence of psychopathic traits in children that, at least on the surface, strongly resemble the psychopathy construct in adults, and remain relatively stable during the transition from adolescence to adulthood (Andershed, 2010; Van Baardewijk et al., 2008). Similar to adults with psychopathic personalities, offending adolescents with psychopathic traits are among the most violent and persistent adolescent criminals. These youths commit more offences, start their criminal careers at an earlier age, commit more varied criminal acts and engage more often in institutional violence than non-psychopathic adolescent offenders (Edens et al., 2007; Lodewijks, Doreleijers, de Ruiter, & Borum, 2008).

### *Variants of psychopathy*

Accumulating research suggests that there are variants of psychopathy (Skeem, Poythress, Edens, Lilienfeld, & Cale, 2003). Karpman (1941) was the first to mention a distinction between primary and secondary adult psychopaths. Although these two variants are almost similar in the manifestation of psychopathic characteristics, primary psychopathy would be the result of a (genetically based) affective deficit and secondary psychopathy would arise from an acquired affective disturbance due to environmental influences such as parental neglect and abuse (Skeem et al., 2003). As such, anxiety distinguishes the primary from the secondary psychopath (Karpman, 1941). The secondary psychopath may be marked as a high anxious, neurotic delinquent and the behavior of the primary psychopath reflects the absence of anxiety and conscience, resulting in egoistic and uninhibited conduct. The secondary psychopath is the more impulsive and reactively aggressive variant, and the primary psychopath uses violence more callously in order to obtain a certain goal.

There is now some evidence for a distinction between primary and secondary psychopathy in terms of anxiety levels (Skeem et al., 2003). For instance, using model-based cluster analysis in a sample of adult inmates, Skeem, Johansson, Andershed, Kerr, & Louden (2007) found that, relative to primary psychopaths, secondary psychopaths report greater trait anxiety. It was also found that secondary psychopaths show comparable antisocial behavior, and somewhat lower scores on (affective) psychopathic traits than primary psychopaths (Skeem et al., 2007; Vassileva, Kosson, Abramovitz, & Conrod, 2005). Finally, it has been suggested that variants of psychopathy may be different in their responsivity to treatment (Skeem et al., 2003). Since secondary psychopaths are more capable to feel anxiety and guilt, they may be more amenable to

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treatment than primary psychopaths. Therefore, it is important to further explore variants of psychopathy in both adults and youths in order to improve treatment outcomes.

Previous research on primary and secondary psychopaths is limited in a number of ways. First, to our knowledge only one study examined variants of psychopathy in a youth offender population. Wareham, Dembo, Poythress, Childs and Schmeidler (2009) examined psychopathic subtypes in justice-involved youths enrolled in a diversion program in the U.S. A psychopathic-like group with low anxiety levels was identified and appeared to reflect a group of primary psychopaths. A secondary psychopathic-like subtype was not found. However, this study used a relatively small sample ( $N = 165$ ) which contained both male and female adolescents. Since female offenders generally show lower levels of psychopathic traits, this may have affected findings. Moreover, the sample used in this study represented a lower-risk population compared to samples used in studies on incarcerated youth populations.

Second, earlier research on psychopathic subtypes is based on heterogeneous samples of adult offenders in which only a small percentage is psychopathic (Skeem et al., 2007). Since analyses in these studies comprise both individuals with low and individuals with high psychopathic traits, it remains unclear to what extent the subtypes that are identified, genuinely represent variants of psychopathy. Therefore, Skeem et al. (2007) selected a subsample of violent, psychopathic inmates in order to identify subtypes within a relatively homogeneous subgroup, and found support for the existence of primary and secondary variants of psychopathy. Thus, it is important to first identify a group of psychopathic individuals and then to examine the presence of subtypes within this psychopathic group. This type of design has not yet been used in research on youth offender samples.

### *Psychopathic traits and mental health problems*

Studies on psychopathy in adulthood and in youth have shown that psychopathic traits are related to various mental health problems such as ADHD, conduct disorder, depression, anxiety, and substance use problems (Dolan & Rennie, 2007; Kosson et al., 2002; Poythress et al., 2006; Taylor & Lang, 2005). Some researchers explored associations of psychopathy subtypes and mental health problems in adult offender samples. Secondary psychopaths show more mental health problems, including anxiety disorders, mood disorders and withdrawn behavior than primary psychopaths (Haapasalo & Pulkkinen, 1992; Vassileva et al., 2005). In sum, psychopathic traits are related to various mental health problems in general and it appears that secondary psychopaths show more mental health problems than primary psychopaths.

### *Current study*

This study is the first to examine psychopathic subtypes in a relatively large sample of incarcerated youth. The sample consists of ethnic majority (native Dutch) youths and youths belonging to one of the largest ethnic minority groups in the Netherlands (youths of Moroccan origin). In a previous study, it was found that the three-factor structure of psychopathy was comparable across native Dutch and Moroccan incarcerated adolescents (Veen et al., in press). Moreover, relationships between the three components of psychopathy and various mental health problems were found to be similar for both ethnic groups as well.

Using a person-oriented, typological approach, a psychopathic group is first identified in which subsequently psychopathic subtypes are examined. Differences in (mental health) problems between non-psychopathic individuals on the one hand and between individuals belonging to different psychopathic subtypes on the other are explored. In line with former research in adolescent offender samples, we expect to identify a psychopathic group that scores relatively high on various psychopathic traits. In addition, we expect to identify two subtypes of psychopathic individuals within this psychopathic group which differ in their levels of anxiety. Finally, in line with previous findings, we expect that psychopathic individuals report more (mental health) problems than less psychopathic individuals, and that a high anxious psychopathic subgroup reports more mental health problems and aggressive behavior in particular, than a low anxious psychopathic subgroup.

## **Methods**

### *Participants*

Participants consisted of 299 boys aged 12-18 years who were consecutively placed in pre-trial detention in 10 (out of 11) juvenile justice institutions in the Netherlands between May 2006 and February 2008. Four hundred seventy six incarcerated adolescents were asked to participate in the study, 315 incarcerated adolescents were interviewed (total response rate 66%), and 16 interviews were found to be incomplete, leaving 299 complete interviews. In the Netherlands, criminal legislation for youths only applies to persons aged 12 to 18. Pre-trial detention is enforced when a youngster is suspect of an offence, awaiting trial, and if detention is thought to be necessary for the protection of others or the child itself. Adolescents were all suspect of one or more offences (as formulated in youth criminal law), ranging from property offences to sexual offences, violent offences and arson. The mean age of all participants when they were incarcerated for their first offence was 15.9 (SD = 1.37) years. Hundred forty-one

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adolescents (47%) were of Moroccan origin (of 93% both parents were born in Morocco, of 7% one of the parents was born in Morocco). Nineteen percent of the Moroccan adolescents were born in Morocco; the others were born in the Netherlands. The remainder of the sample (53%) consisted of 158 Dutch native adolescents. IQ, measured by means of the RAVEN Standard Progressive Matrices (Raven, Raven, & Court, 2000, updated 2004), showed an average of 92 IQ points (average intellectual functioning), differences between Moroccan participants (91 IQ points) and Dutch participants (93 IQ points) were small.

### *Procedure*

In order to approach the participants, the researchers weekly received an overview from The Dutch Ministry of Justice, containing information on all adjudicated adolescents who were placed in pre-trial detention in a juvenile justice institution in the prior week. Eligible for inclusion were those adolescents who were of Moroccan or Dutch native origin (i.e., for the Moroccan adolescents this meant that at least one of their parents had to be born in Morocco, for the native Dutch that both parents were born in the Netherlands), who remained in the juvenile justice institution for over a week, and who were allowed to receive a visitor. Adolescents had to be able to read and speak Dutch. Adolescents with intellectual disabilities, as registered by the institutional workers of the juvenile justice institution, were excluded from the sample. The adolescents received a letter which contained information on the purpose of the interview and were asked to participate in the study by an employee of the juvenile justice institution. If the adolescent consented to participation, an appointment was made for an interview (consisting of both interview components and self-report questionnaires) at the juvenile justice institution.

Participants were assured of the confidentiality of their spoken and written responses and data were archived anonymously. Moreover, written informed consent was obtained from the participants. Participants received compensation, adolescents received telephone cards which they could use within the juvenile justice institution. The research protocol was approved by the Ethical Board of the Department of Social Sciences and the Ministry of Justice in the Netherlands.

### *Measures*

#### Youth Psychopathic traits Inventory

The Youth Psychopathic traits Inventory (Andershed et al., 2002) was used to obtain self-reports on traits of psychopathy. The YPI consists of 50 items and respondents were asked to rate the degree to which the individual items apply to them using a 4-point response scale: 1 = does not apply at all, 2 = does not apply well, 3 = applies fairly

well and 4 = applies very well. The items are scored on ten subscales with five items each: Dishonest Charm (e.g., 'I have the ability to con people by using my charm and smile'), Grandiosity (e.g., 'I am more important and valuable than other people'), Lying (e.g., 'Sometimes I lie for no reason, other than because it is fun'), Manipulation (e.g., 'I can get almost anyone to believe anything'), Callousness (e.g., 'When other people have problems it is often their own fault, therefore one should not help them'), Unemotionality (e.g., 'I don't let my feelings affect me as much as other people's feelings seem to affect them'), Remorselessness (e.g., 'I have the ability not to feel guilt and regret about things that I think other people would feel guilty about'), Impulsiveness (e.g., 'It often happens that I do things without thinking ahead'), Thrill-seeking (e.g., 'I like to do things just for the thrill of it'), and Irresponsibility (e.g., 'It has happened several times that I have borrowed something and then lost it'). The ten subscales are best represented by three higher order factors, the Interpersonal factor, the Affective factor and the Lifestyle factor. In the present study, the alphas for the three factors were good: Interpersonal factor = 0.87, Affective factor = 0.73 and Lifestyle factor = 0.84.

#### Youth Self-report

The Youth Self-Report (Achenbach, 1991a) was used to obtain self-reports on emotional and behavioral problems. Respondents were asked to rate the occurrence of problems in the preceding six months. The YSR consists of 102 items, scored on a three-point response scale: 0 = not true, 1 = somewhat or sometimes true and 2 = very true or often true. The items are scored on eight syndrome scales as defined by Achenbach: Withdrawn, Somatic Complaints, Anxious/Depressed, Social Problems, Thought Problems, Attention Problems, Delinquent Behavior and Aggressive Behavior. The sum of scores of the first three syndromes indicates the broadband scale Internalizing, and the sum of scores on the Delinquent and Aggressive Behavior syndromes indicates the broadband scale Externalizing. All problem items are summed to calculate a Total Problems score. Since all adolescent participants received Dutch education, we used the Dutch versions of the YSR in all adolescent samples. Good reliabilities for the Dutch YSR have been established elsewhere (Verhulst et al., 1997b).

#### Brief Self-Control Scale

The Dutch version of the Brief Self-Control Scale (BSCS; Tangney, Baumeister, & Boone, 2004) was used for self-reports on self-control of the adolescents. The scale contains of 13 items (e.g., 'I have a hard time breaking bad habits'; 'I am good at resisting temptation'). The items are scored on a 5-point Likert scale range from 1 (not at all like me) to 5 (very much like me). In the present study, the internal consistency of the BSCS was good ( $\alpha = .77$ ).

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### Substance use

Adolescents' substance use was assessed by means of self-report. Two separate items were used concerning their drinking habits and cannabis use. The adolescents were asked how many times they drank alcoholic beverages/ used cannabis within the four weeks prior to incarceration. Response categories ranged from 0 to 13, indicating the use of alcohol or cannabis from 0 to 40 times or more in the last four weeks.

### Socio-economic status

In order to determine the socio-economic status (SES) of the participants, postal codes of their parent's homes were used. The Netherlands Bureau for Economic Policy Analyses (Social and Cultural Planning Office) calculates SES scores (which are based on mean income, education level, percentage unemployed and percentage households per neighborhood) for all postal codes in the Netherlands (Knol, 1998). These SES scores are provided in an order number (0-4) with three decimal places indicating high to low SES scores.

### *Statistical analyses*

In order to identify psychopathic individuals within the total sample of adolescent offenders, Latent Class Analysis (LCA) was used. LCA is a statistical method which is used to identify a set of mutually exclusive latent classes that account for the distribution of cases that occur within a cross tabulation of observed variables (McCutcheon, 1987). In other words, the purpose of a LCA is to find the smallest number of classes of individuals with similar patterns of, in this case the three factors of psychopathy, which can explain the relationships among a set of variables. Thus, LCA can be used to identify classes of participants with comparable patterns of psychopathic traits. The parameters in a LCA model are class specific symptom profiles (which give the probabilities of a set of items for a particular class) and latent class probabilities (which estimate the likelihood for individuals to belong to each of the classes). Individuals are classified to the group with their highest class probability. The number of latent classes is determined by testing the goodness of fit of models with N latent classes using the Vuong-Lo-Mendell-Rubin likelihood ratio test and goodness of fit indices such as the Akaike Information Criterion, the Bayesian Information Criterion and Entropy. In order to identify different psychopathic subtypes with high and low anxiety levels, LCA was used within a subgroup of high psychopathic traits types, and anxious/ depressed symptoms were included in the analysis. In order to examine the scores on various self-reported problems for the psychopathic (sub)types, MANCOVA's were used. To control for age, socio-economic status and ethnicity, these variables were included as covariates in the MANCOVA's. To

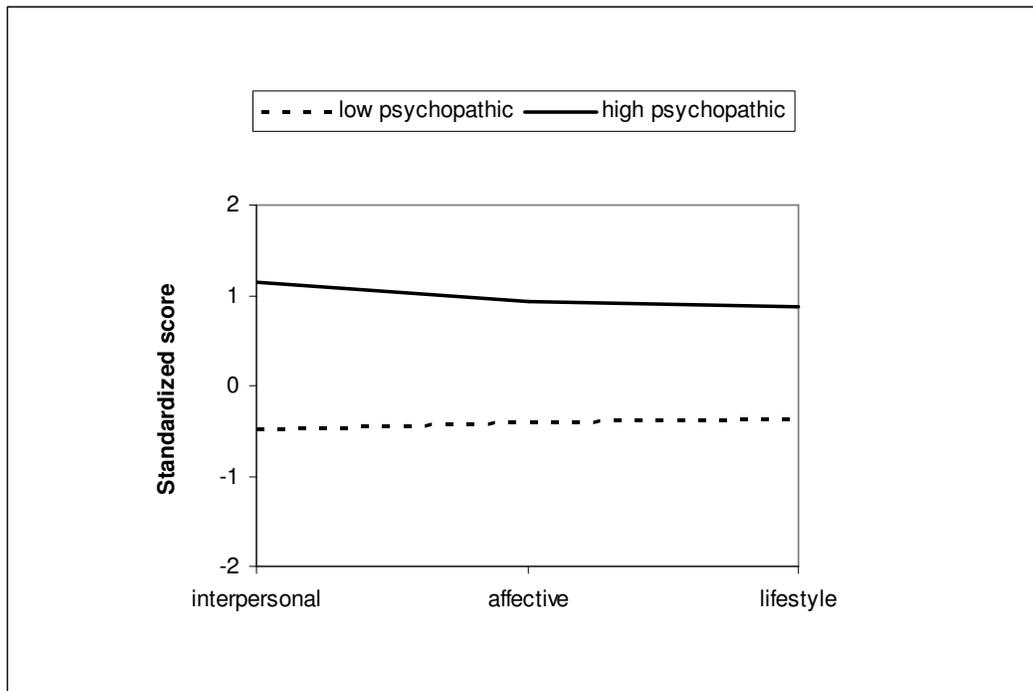
test the representation of Moroccan and native Dutch adolescents in each of the latent classes, Chi-square tests were used.

## Results

### *Psychopathic groups*

Latent Class Analysis (LCA) was performed based on the three psychopathic traits dimensions in the total sample. This analysis showed a significant two-class model to be the best fitting LCA-solution according to the Vuong-Lo-Mendell-Rubin likelihood ratio test ( $p < 0.05$ ). The Akaike Information Criterion (AIC) and the Bayesian Information Criterion (BIC) were both lower for the two-class model (AIC = 2377.332 and BIC = 2414.337) than for a single-class model (AIC = 2554.571 and BIC = 2576.774), indicating a better model fit. A three-class model did not improve the model fit. In addition, the Entropy of the two-class model was satisfactory (0.77), indicating a good model fit as well. The average class probabilities were high (0.88 - 0.95), indicating that the participants were properly classified to their latent class. Class 1 (70% of the total 299 participants) was characterized by lower than average scores on the interpersonal factor, the affective factor and the lifestyle factor of psychopathy. Class 1 therefore, could be termed *low psychopathic*. Class 2 (30% of the total 299 participants) was characterized by higher than average scores on the interpersonal factor, the affective factor and the lifestyle factor of psychopathy. Class 2 therefore was termed *high psychopathic*. Figure 1 shows the standardized scores on each psychopathy factor for both psychopathic types.

Figure 1 The two groups gained in the total sample through LCA (N = 299)



Note. The figure shows the standardized values of the three factor scores based on the total sample (N = 299). The mean standardized factor scores for the low psychopathic group are: Interpersonal factor (M = -0.491, SD = 0.55), Affective factor (M = -0.402, SD = 0.69), Lifestyle factor (M = -0.372, SD = 0.82). The mean standardized factor scores for the high psychopathic group are: Interpersonal factor (M = 1.141, SD = 0.87), Affective factor (M = 0.934, SD = 0.99), Lifestyle factor (M = 0.865, SD = 0.84).

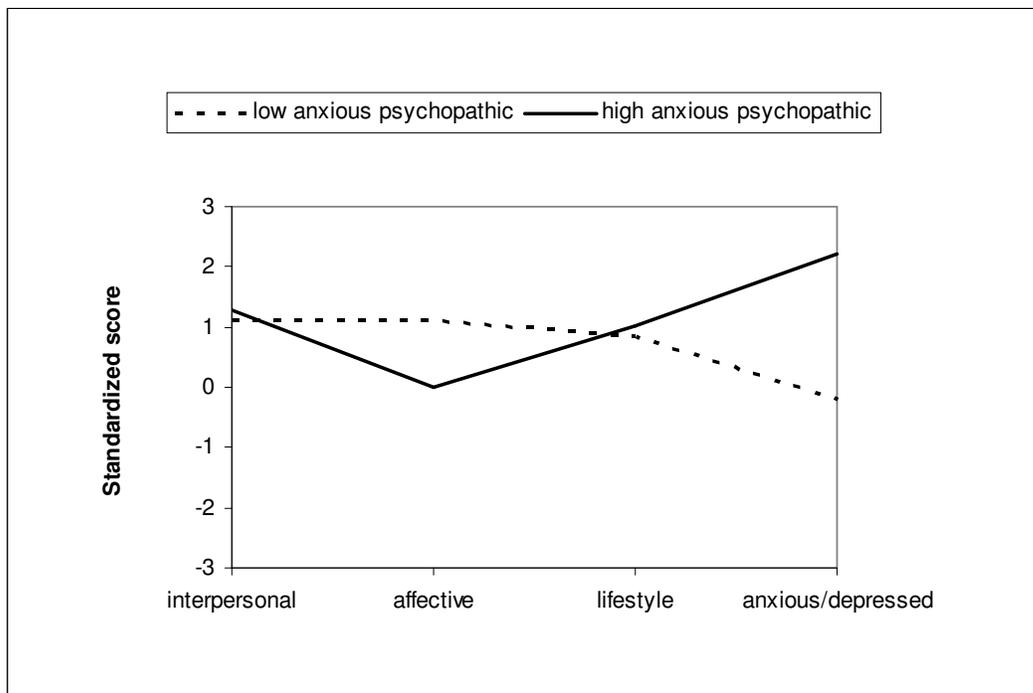
### *Subtypes within the high psychopathic group*

In order to identify subtypes within the *high psychopathic group* (N = 90), LCA was performed based on the three factors of psychopathy and the Anxious/ Depressed syndrome scale of the YSR in this *high psychopathic subsample*. The LCA showed a significant two-class model for the high psychopathic subsample to be the best fitting LCA-solution according to the Vuong-Lo-Mendell-Rubin likelihood ratio test ( $p < 0.05$ ). The AIC and the BIC were both lower for the two-class model (AIC = 1021.253 and BIC = 1053.750) than for a single-class model (AIC = 1048.106 and BIC = 1068.104), indicating a better model fit. A three-class model did not improve the model fit. In addition, the Entropy of the two-class model was high (0.90), indicating a good model fit as well. The average class probabilities were high (0.93 - 0.98), which indicated that the participants were properly classified to their latent class. Figure 2 shows the standardized values (based on the total sample) of the three psychopathy factor scores and the Anxious/ Depressed subscale score. Class 1 (86% of 90 participants) was characterized by an almost average score on Anxious/Depressed, an above average

## Psychopathic subtypes and associations with mental health problems

score on the affective factor, on the interpersonal and on the lifestyle factors of psychopathy. Class 1 therefore, could be termed *low anxious psychopathic*. Class 2 (14% of 90 participants) was characterized by a very high score on Anxious/ Depressed, an average score on the affective factor and above average scores on the interpersonal and lifestyle factors of psychopathy. Class 2 was therefore termed *high anxious psychopathic*. In order to further compare the psychopathy and Anxious/Depressed scores between the subtypes and the low psychopathic group, Table 1 shows the mean standardized scores on each of the variables for the three groups.

Figure 2 The two groups gained within the high psychopathic group through LCA (N = 90)



Note. The figure shows the standardized values of the three factor scores and the Anxious/ Depressed subscale score based on the total sample (N = 299). The mean standardized factor scores for both psychopathic subtypes are shown in Table 1.

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Table 1 Mean standardized scores of the three factors of psychopathy and the Anxious/Depressed subscale for the low psychopathic group and the psychopathic subtypes (mean and SD based on the total sample; N = 299)

|                                    | Interpersonal factor      | Affective factor           | Lifestyle factor           | Anxious/<br>Depressed      |
|------------------------------------|---------------------------|----------------------------|----------------------------|----------------------------|
| Low psychopathic group (N = 209)   | -0.49 <sub>a</sub> (0.55) | -0.402 <sub>a</sub> (0.69) | -0.372 <sub>a</sub> (0.82) | -0.058 <sub>a</sub> (0.96) |
| Low anxious psychopathic (N = 77)  | 1.120 <sub>b</sub> (0.86) | 1.093 <sub>b</sub> (0.90)  | 0.839 <sub>b</sub> (0.85)  | -0.217 <sub>a</sub> (0.62) |
| High anxious psychopathic (N = 13) | 1.269 <sub>b</sub> (0.93) | -0.006 <sub>a</sub> (0.94) | 1.018 <sub>b</sub> (0.78)  | 2.220 <sub>b</sub> (0.87)  |

Note. a,b,c,d Different subscripts refer to significant differences ( $p < 0.05$ ) between the groups (within columns).

### *Psychopathic subtypes and (mental health) problems*

Table 2 shows the scores on various self-reported problems for the *low psychopathic* group and the *low anxious psychopathic* and *high anxious psychopathic* groups, when controlling for age, socio-economic status and ethnicity. Boys in the *high anxious psychopathic* subtype reported significantly higher scores on Withdrawn, Anxious/Depressed, Attention Problems, Thought Problems, Social Problems, Delinquent, and Aggressive Behavior than boys in the *low psychopathic* group. In addition, *high anxious psychopathic* boys reported significantly more Delinquent and Aggressive Behavior than *low anxious psychopathic* boys. Both high psychopathic subtypes reported significantly less self-control and to have more deviant peers than *low psychopathic* boys. Finally, *high anxious psychopathic* boys reported to have used significantly more alcohol and cannabis in the last month prior to incarceration than boys in the *low psychopathic* group.

### *Psychopathic (sub)types and ethnicity*

The representation of native Dutch and Moroccan adolescents differed significantly between the *low psychopathic* and *high psychopathic* groups ( $\chi^2 = 9.9$ ,  $df = 1$ ,  $p = 0.00$ ). Of the Moroccan boys 21% was identified as a *high psychopathic* type and 79% was identified as a *low psychopathic* type. Of the native Dutch boys 38% was identified as a *high psychopathic* type and 62% was identified as a *low psychopathic* type. The representation of native Dutch and Moroccan adolescents did not differ per high psychopathic subtype. Of the Moroccan adolescents 87% was identified as a *low*

## Psychopathic subtypes and associations with mental health problems

*anxious psychopathic* type and 13% was identified as a *high anxious psychopathic* type. Of the native Dutch adolescents 85% was identified as a *low anxious psychopathic* type and 15% was identified as a *high anxious psychopathic* type.

Table 2 Low psychopathic group, psychopathic subtypes and differences in self-reported (mental health) problems, controlled for age, socio-economic status and ethnicity (N = 299)

|                         | Low psychopathic (N = 209) | Low anxious psychopathic (N = 77) | High anxious psychopathic (N = 13) | F value | df | p value |
|-------------------------|----------------------------|-----------------------------------|------------------------------------|---------|----|---------|
| Withdrawn               | 2.870a                     | 3.220a                            | 5.960b                             | 10.655  | 2  | 0.00    |
| Somatic Complaints      | 2.505a                     | 2.111a                            | 3.692a                             | 2.155   | 2  | 0.12    |
| Anxious/Depressed       | 4.845a                     | 3.781a                            | 15.459b                            | 39.382  | 2  | 0.00    |
| Attention Problems      | 4.627a                     | 4.918a                            | 10.000b                            | 15.812  | 2  | 0.00    |
| Thought Problems        | 1.599a                     | 1.847a                            | 4.327b                             | 10.905  | 2  | 0.00    |
| Social Problems         | 2.185a                     | 2.226a                            | 4.770b                             | 9.335   | 2  | 0.00    |
| Delinquent Behavior     | 5.155a                     | 7.834b                            | 10.258c                            | 33.193  | 2  | 0.00    |
| Aggressive Behavior     | 6.481a                     | 10.503b                           | 14.174c                            | 28.453  | 2  | 0.00    |
| Self-control            | 43.883a                    | 38.735b                           | 35.147b                            | 14.067  | 2  | 0.00    |
| Number of deviant peers | 3.086a                     | 4.663b                            | 5.001b                             | 16.343  | 2  | 0.00    |
| Alcohol use*            | 1.934a                     | 2.824a                            | 5.743b                             | 10.153  | 2  | 0.00    |
| Cannabis use*           | 2.297a                     | 3.375a                            | 7.303b                             | 11.982  | 2  | 0.00    |

Note. a,b,c Different subscripts refer to significant differences ( $p < 0.05$ ) between the groups (within rows).

\*One month prior to incarceration.

## Discussion

The purpose of this study was to identify groups of incarcerated boys with similar patterns of psychopathic traits, and to explore the relationship of these patterns with various (mental health) problems. Initially, a low psychopathic group characterized by low scores on the three factors of psychopathy, and a high psychopathic group characterized by high scores on the three factors, was identified. Second, two subtypes of psychopathy were identified within the high psychopathic subsample of incarcerated boys: a low anxious and high anxious psychopathic type. Both subgroups showed high

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scores on psychopathic traits, but high anxious psychopathic boys were characterized by lower scores on the affective factor of psychopathy and substantially higher scores on anxious/ depressed symptoms than low anxious psychopathic boys. In line with former descriptions of psychopathic subtypes, high anxious psychopathic boys appeared to reflect a group of secondary psychopathic individuals.

In accordance with former research, it was found that high anxious psychopathic boys reported more mental health problems, in particular externalizing problems, withdrawn behavior, attention problems, thought problems and social problems than low psychopathic boys. Both high psychopathic subtypes reported less self-control and to have more deviant peers than low psychopathic boys. In addition, compared to low anxious psychopathic boys, high anxious psychopathic boys reported more externalizing problems. As expected, this group also reported more substance use than low anxious psychopathic boys.

These results are in line with Karpman's (1941) suggestion that the delinquent and psychopathic behavior of secondary psychopaths would be the result of underlying emotional problems. Moreover, the characteristics of low anxious psychopathic boys in the present study are similar to earlier descriptions of primary psychopathic individuals. These boys showed high scores on the three factors of psychopathy, and less mental health problems and substance use than high anxious psychopathic boys. According to Karpman, the behavior and problems of this type of psychopathic individual would be the result of a constitutional affective deficit, as reflected by high scores on the affective factor of psychopathy in the present study.

As outlined in the introduction, research on variants of psychopathy in youth offender populations is scarce. Knowledge on this subject is needed, since a psychopathic personality disorder is a strong predictor of poor treatment outcomes and responsivity to treatment may vary with variants of psychopathy. Since high anxious psychopathic individuals are capable to experience emotional problems such as anxiety and depression, they may be amenable to common forms of treatment which focus on altering problem behaviors and emotional problems. Indeed, Skeem et al. (2007) found some support for treatment responsivity in adult secondary psychopathic inmates with high levels of trait anxiety. In contrast, low anxious psychopathic individuals are less affected by negative emotionality (e.g., anxiety, depression) and feelings of guilt. Therefore, some authors suggest that treatment of low anxious psychopathic individuals should not focus on changing their personality traits, but rather on providing them with legal alternatives for their risk-taking behavior (Skeem et al., 2003). Possibly, this suggestion may also account for treatment forms for low anxious psychopathic individuals in youth offender populations.

Furthermore, we found ethnic differences in the representation of native Dutch and Moroccan boys between the high and the low psychopathic group. Compared to native Dutch boys, Moroccan boys were underrepresented in the high psychopathic group. This finding is in line with previous studies, which showed that a considerable amount of Moroccan boys were often incarcerated for relatively less serious offences than their native Dutch peers in pre-trial detention (Veen et al., in press) and that these Moroccan boys showed lower levels of mental health problems than native Dutch incarcerated boys (Veen et al., 2010). Thus, Moroccan adolescent offenders in the Netherlands seem to be characterized by a less problematic profile in general, which explains their underrepresentation in the high psychopathic group in the present study. Next, no ethnic differences were found in the representation of Moroccan and native Dutch boys in the psychopathic subtypes. This might be explained by the fact that these subtypes were extracted from the high psychopathic subsample which only comprised the more problematic individuals, hence excluding a large number of less problematic Moroccan boys.

The current study is the first to examine psychopathic subtypes in a sample of incarcerated youth and exploring the associations between these subtypes and (mental health) problems. Various factors strengthen the findings in this study. First, a relatively large and homogeneous sample of high-risk (i.e., incarcerated) male adolescents was examined. Second, a person-oriented, typological approach was used to identify groups of psychopathic individuals and psychopathic subtypes. Therefore, it was possible to consider patterns of psychopathic traits and to relate these patterns to various (mental health) problems. Third, as recommended by Skeem et al. (2007), we first identified boys with high scores on psychopathic traits who showed high scores on various self-reported problems, and then examined subtypes within this problematic group. As such, it was possible to explore psychopathic subtypes in a relatively homogeneous sample of incarcerated psychopathic boys.

Some limitations of this study should also be noted. First, due to practical considerations we did not include diagnostic interviews in the present study. The level of psychopathic traits and various (mental health) problems measured by self-report instruments may to some extent be subject to social desirability. However, the YPI was designed to minimize social desirable response bias by using items that indirectly tap the core psychopathic traits and present these traits as abilities. Second, in order to identify psychopathic subtypes we used the Anxious/ Depressed subscale of the YSR. In contrast to former studies in which direct measures of anxiety (i.e., trait anxiety) were used, the Anxious/ Depressed subscale captures a combination of anxiety and mood disorder symptoms. Yet, it has been suggested that the anxiety dimension may be considered

more broadly containing symptoms of, for instance, depression and withdrawal (Skeem et al., 2003). Third, the sample of incarcerated boys consisted of two equally large groups with a different ethnic background, which might have affected findings due to ethnic differences in the manifestation of psychopathic traits. Yet, in a previous study, it was found that the three-factor structure of psychopathy measured by the YPI was comparable across native Dutch and Moroccan incarcerated adolescents (Veen et al., in press). In addition, the associations between the three factors of psychopathy and mental health problems in this study were found to be similar for both ethnic groups. Moreover, we controlled for ethnicity in all analyses in the present study.

Despite these limitations, the present study clearly shows that psychopathic individuals experience high levels of various problems as indicated by self-reports. Moreover, we provide further support for the presence of psychopathic subtypes in a sample of incarcerated boys. The characteristics of these two subtypes are generally in line with former descriptions of primary and secondary psychopathy (e.g., Karpman, 1941; Skeem et al., 2003) and the associations between the subtypes and various related problems show clear similarities with former findings and descriptions of psychopathic types. Future research is needed to further examine the existence of psychopathic subtypes in various youth (offender) populations. Since the etiology of psychopathic subtypes may be different, it is of importance to unravel the mechanisms underlying the development of psychopathic traits by using longitudinal designs. Finally, research examining variants of psychopathy and their developmental pathways is needed as this may have clinical implications.

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### General discussion

## **Main findings**

This thesis aimed at a) identifying the risk profile of Moroccan youth offenders in pre-trial detention, b) comparing this risk profile with that of native Dutch adolescent offenders in pre-trial detention, and c) drawing intra-ethnic comparisons of various risk factors by using comparison samples from the respective general populations. Overall, a less problematic profile was found for Moroccan adolescents in pre-trial detention than for native Dutch adolescents in pre-trial detention. First, analysis of police record data showed that the offending behavior of Moroccan adolescents in pre-trial detention was characterized by relatively less serious delinquent acts (i.e., property-based offences) compared to native Dutch. Second, the level of orientation towards Dutch society was higher for Moroccan adolescents in pre-trial detention than for Moroccan adolescents from the general population. Third, less control and less affection expression characterized the mother-son relationship in Moroccan families in general. Finally, individual risk factors such as mental health problems and psychopathic traits, were found to be less prevalent among Moroccan adolescents in pre-trial detention than among native Dutch in pre-trial detention. In sum, the individual risk profile of Moroccan youths in pre-trial detention was found to be less problematic compared to the risk profile of native Dutch youths in pre-trial detention, and incarcerated Moroccans were found to be more orientated towards the Dutch society than their Moroccan peers in the general population.

## **Explaining Moroccan youth crime**

### *Socio-economic and socio-cultural disadvantages*

In this thesis, it was found that compared to native Dutch, Moroccan adolescent boys in the incarcerated as well as in the general population were raised in neighborhoods of low socio-economic status (SES). However, in line with former findings, straightforward differences in SES did not explain the less severe offending behavior and the lower level of mental health problems of incarcerated Moroccan adolescents compared to native Dutch (Stevens & Vollebergh, 2008). Furthermore, it was found that incarcerated boys from Moroccan families were less often raised in a neighborhood of low SES than Moroccan adolescents from the general population. Being raised in a neighborhood of higher SES may trigger striving for goals of successful socio-economic and social participation. Since these pursued goals may not always be realistic, this may enhance feelings of frustration regarding an unfavorable position in society (i.e., feeling relatively deprived), and subsequently increase the risk of engaging in crime. Indeed, our results

clearly indicated that Moroccan immigrants deal with unfavorable conditions as it was for instance found that in both the incarcerated and general population only one third of the fathers had a paid job in the last two years. In addition, since Moroccans belong to the least privileged immigrant groups in the Netherlands (Gijsberts, 2005; Van Praag, 2003) they may also perceive it as impossible to become fully part of Dutch society, and this may in turn result into feelings of frustration.

Especially immigrants who are strongly oriented towards the host society are likely to feel relatively deprived and as a result to be more likely to engage in criminal behavior. Indeed, we found that compared to Moroccan immigrant boys from the general population, incarcerated Moroccans and their parents were more strongly oriented towards Dutch society. Roughly two thirds of the incarcerated adolescents and their parents reported a considerable attachment and sense of belonging towards Dutch and Moroccan culture and people, whereas this was only true for about one third of the general population. Moreover, parents with an incarcerated son were twice as likely to have Dutch friends and more often used Dutch language with important others. Thus, following theories on socio-economic and socio-cultural disadvantages, it seems likely that Moroccan immigrant youths who pursue participation in Dutch society and a prosperous future in this society, are more sensitive to their disadvantaged position. In sum, our findings on the orientation of Moroccan immigrant adolescent boys towards Dutch society and their socio-economic position provide some indication for the hypothesis that feelings of relative deprivation play a role in the involvement of Moroccan youth in crime. Though, the findings in the present thesis also point to the importance of other factors which are relevant to Moroccan youth crime.

#### *Discriminatory practices: the bias model*

In line with recent studies (Blokland et al., 2010; Jennissen, 2009), our analysis of police records showed that adolescents of Moroccan origin were placed in pre-trial detention more often, were incarcerated for more offences, and were younger when they were incarcerated for the first time than native Dutch adolescents. In addition, Moroccan adolescents were clearly more often incarcerated for property-based<sup>7</sup> offences (e.g., burglary, theft) than native Dutch adolescents, and less often incarcerated for violent

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<sup>7</sup> It is worth noting that the violence used in property-based offences involving violence, often is relatively light (Van der Vinne, 1999). In a former analysis of criminal record data, Van der Vinne (1999) found that in about 50% of the cases, the violence used in property offences involving violence, consisted of threats in order to obtain property, and in many other cases light violence was used in order to escape from the crime scene or to flee from the police.

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offences, sexual offences and arson than native Dutch adolescents. Thus, Moroccan adolescents in the present study can be characterized as early starting offenders who are repeatedly incarcerated for relatively less serious types of crime (i.e., property-based offences).

Following former international findings which showed that minority youths are more likely to be referred to juvenile court, to be detained and to go to jail than the ethnic majority youth (Rodney & Tachia, 2004), our results on the offender profiles may to some extent be the result of a more repressive approach towards Moroccan youth. For instance, it has been suggested that boys with a Moroccan background might be arrested more often by the police than native Dutch (Bovenkerk, De Haan, & Yesilgoz, 1991). This could be reflected by their incarceration for relatively less serious offending behavior.

### *Social factors: social bonds and the social control theory*

As a result of unfavorable living conditions, a lack of social control exerted by for instance school and parents in Moroccan families, is thought to contribute to Moroccan youth crime. Indeed, we found that incarcerated Moroccan boys more often dropped out of school than non-incarcerated Moroccan boys. Furthermore, in line with former findings from previous small-scale, qualitative research (e.g., Pels & De Haan, 2003; Pels & Nijsten, 2003) a neglectful mother-son relationship, which indicated a low awareness in parents of their child's affairs and little affection, was found in one-seventh of Moroccan families in general. However, no differences in the prevalence of this mother-son relationship were found between incarcerated and non-incarcerated Moroccans, whereas a neglectful mother-son relationship was clearly related to delinquency in native Dutch youths. For Moroccans this type of mother-son relationship was found to be related to problem behavior of Moroccan adolescent boys in general. Thus, it seems likely that boys brought up in these families are at an increased risk of a problematic development in general, but not at an increased risk of delinquent behavior in particular.

Furthermore, it has been suggested that due to acculturation conflicts between immigrant adolescents and their parents, the development of bonds with parents would be at risk (Albrecht, 1995). As children commonly become involved in the host society faster than adults, an 'acculturation gap' between generations is thought to negatively affect social bonding between parents and adolescents and this may in turn enhance adolescent delinquency (Szapocznik & Williams, 2000). Our results reject this explanation, since it was found that Moroccan incarcerated boys as often encountered an acculturation gap with their parents as Moroccan boys from the general population.

Finally, Moroccan adolescents may also be at increased risk of engaging in crime, since a lack of social bonds would make them feel less committed to the values of Dutch society and the culture of their origin (Gottfredson & Hirschi, 1990; Hirschi, 1969). In this thesis, incarcerated boys and their parents were more strongly oriented towards Dutch society than those from the general population and hardly any differences in the orientation towards the Moroccan culture were found for both groups of boys and their parents. Therefore, our results do not support the notion that criminal involvement of Moroccan adolescents must be explained by a lack of social bonds as reflected by a lack of commitment to the values of Moroccan culture or Dutch society.

In sum, our results indicate that the controlling influence of social institutions such as school and family (in this case as reflected by the mother-son relationship) may – to some extent – be less effective in restraining Moroccan youths in the Netherlands. No evidence was found for the role of an acculturation gap or a lack of social bonds in terms of commitment to societal values.

#### *Individual factors: the stress-vulnerability model*

In the present thesis, a clear difference between incarcerated and general population youths was found in the level of mental health: incarcerated youths were at increased risk of almost all self- and parent-reported mental health problems. However, differences between general population and incarcerated youths were much larger for native Dutch than for Moroccan immigrant youths. Regarding psychopathic traits, it was found that these traits manifest similarly in Moroccan and native Dutch adolescent offenders, and that psychopathic traits are similarly associated with various mental health problems (i.e., externalizing and internalizing problems) for both ethnic groups. Then, a low psychopathic group and a high psychopathic group was identified: compared to native Dutch boys, Moroccan immigrant boys were underrepresented in the high psychopathic group. Finally, two subtypes of psychopathy were identified within the highly psychopathic subsample of incarcerated boys: a low anxious and a high anxious psychopathic type. Both subtypes showed high scores on psychopathic traits, but high anxious psychopathic boys were characterized by high scores on anxious/depressed symptoms. No ethnic differences were found in the representation of Moroccan and native Dutch boys in these psychopathic subtypes. This is explained by the fact that these subtypes were extracted from the high psychopathic subsample which comprised only the most problematic individuals, hence excluding Moroccan boys who already showed a less problematic profile in terms of psychopathic traits and mental health problems.

Although Moroccan adolescents are strongly overrepresented in youth crime, we found that these adolescents in pre-trial detention show only slightly higher levels of

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mental health problems than their Moroccan peers in the general population. Therefore, a lower prevalence of mental health problems among incarcerated Moroccans compared to incarcerated native Dutch may be expected, which was also found in this study. This is in line with former research in which similar levels of psychiatric disorders in Moroccan immigrant and native Dutch children in low SES neighborhoods were found (Zwirs et al., 2007). Based on our results on offending behavior, mental health problems and psychopathic personality characteristics, it can be concluded that compared to native Dutch, the prevalence of individual risk factors was relatively low for Moroccan youth offenders in pre-trial detention.

Finally, it was suggested that youths with a psychological predisposition (e.g., mental health problems, psychopathic personality traits) may be more vulnerable to environmental stressors such as a low socio-economic status, and therefore be more likely to engage in delinquent behavior (Gillespie et al., 2009; Palermo, 2010). We did not find evidence for a psychological predisposition to be highly prevalent among Moroccan adolescents in pre-trial detention. Moreover, it was found that compared to native Dutch, Moroccan adolescent boys in the incarcerated as well as in the general population were from low SES. In sum, a psychological predisposition was found to be less prevalent among Moroccan incarcerated than among native Dutch boys in this study, and this finding was not related to differences in SES.

### **Limitations**

#### *Social desirability*

Various self- and parent-report instruments were used in order to examine the level of mental health, psychopathic traits, parenting practices and acculturation orientations. The use of these instrument may entail a limitation. It has been suggested that both adolescents and parents with an ethnic minority background possibly underreport problems (Stevens et al., 2003). Since they would be aware of their low status in society, they might not want to confirm the negative perception about their children or themselves. Therefore, the relatively lower scores with respect to mental health, psychopathic traits, parenting practices and higher scores on acculturation reported by incarcerated Moroccan adolescents, could have been the result of this so-called *social desirability bias*. However, in the present thesis, ethnic differences between incarcerated Moroccan and native Dutch youths remained significant after correcting for social desirability bias. This is an indication against the influence of a social desirable answering tendency on the findings in the present studies. Moreover, as we compared differences between the incarcerated and general population for both the Moroccans

and the Dutch whenever this was possible, we were able to control for a general ethnic tendency of answering in a social desirable way. Furthermore, the findings based on both self- and parent-reported problems were in line with the findings based on data that were not subject to social desirability: police record data showed a less problematic profile of Moroccan adolescents in pre-trial detention as well. Concluding, even if underreporting of problems due to a social desirable bias may – to some extent – have been present, it is highly unlikely that the extent of the differences that we found on various problems between Dutch and Moroccan adolescents in pre-trial detention would be fully explained by this bias.

### *Cross-sectional design*

The use of cross-sectional data makes it difficult to examine a causal relationship between our findings and explanatory variables such as socio-economic status. Yet, the strength of this study consists of using a four-group design comprising incarcerated Moroccan adolescents, incarcerated native Dutch adolescents and their Moroccan and native Dutch peers in the general Dutch population. Thus, the level of various problems (e.g., mental health and parenting) of Moroccans and Dutch from the general population could be used as a benchmark. The essence of the present thesis therefore, consists of the identification of risk profiles for both Moroccan and native Dutch offenders in pre-trial detention, and the use of comparison or ‘norm’ data of these ethnic groups in the general population.

### *Generalizability*

In order to examine the characteristics of Moroccan and native Dutch offenders, we included adolescent boys who were placed in pre-trial detention in a juvenile justice institution (nationwide). These boys were suspect of all types of offences and were awaiting trial. Participants represented the most heterogeneous subpopulation in juvenile justice institutions, since the population of pre-trial detainees comprises all types of offenders (e.g., first offenders, repeated offenders, serious and less serious offenders), hence providing us a broad overview of all incarcerated youth in the Netherlands with a Dutch and Moroccan ethnic background. Thus, the use of the incarcerated sample in the present thesis gives us insight into the characteristics of all adolescent boys incarcerated in a juvenile justice institution within a given period.

It is worth noting that our findings and conclusions may only apply to boys who are placed in pre-trial detention. The findings in the present thesis may not be replicated in samples of delinquent boys with long prison sentences or delinquent boys sentenced to compulsory treatment in a juvenile justice institution. In the latter groups, the risk profiles

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of Moroccan and native Dutch offenders would possibly show more similarities since these groups are more homogeneous than the population in pre-trial detention. For instance, a sentence to compulsory treatment is given based on certain characteristics of the offender (e.g., mental health problems). Finally, in the present studies no girls were included. Since girls are much less often incarcerated, it would have been infeasible to include enough girls for statistical analyses. This means that our findings do not apply to incarcerated girls from both native Dutch and Moroccan origin.

### **Conclusions**

The current studies were the first to examine the characteristics of Moroccan adolescent offenders in the Netherlands in relation to various environmental and individual risk factors, using quantitative data from both an offender population and from the general population. Therefore, this thesis represents a vital step towards understanding Moroccan youth crime in the Netherlands. Overall, it can be concluded that Moroccan immigrant boys in pre-trial detention in the Netherlands show a less problematic risk profile than native Dutch boys in pre-trial detention. Although the crime rates of Moroccan youths are generally high, the characteristics of their delinquent acts may be considered as less problematic and the same applies to the prevalence of their individual risk factors such as mental health problems and psychopathic traits. Furthermore, their characteristics concerning offending behavior, individual risk factors, socio-economic status, mother-adolescent relationship and orientation towards Dutch society reflect the possible influence of various explanatory factors on their overrepresentation in crime. That is, there may be feelings of relative deprivation as well as a lack of social control exerted by for instance school and the mothers in Moroccan families in general. Furthermore, discriminatory processes in the juvenile justice system may to some extent account for the less problematic profile of Moroccan adolescents in pre-trial detention. In sum, our findings show that the risk profiles of native Dutch and Moroccan offenders are highly distinctive: the nature of their criminal behavior and the risk factors associated with this behavior are incomparable and suggest that the mechanisms responsible for engaging in crime differ for these ethnic groups. Individual risk factors may more often account for the criminal behavior of native Dutch adolescent offenders, whereas an immigrant background and a minority position play an important role in the criminal behavior of Moroccan adolescents.

### *Implications*

The findings are not only of scientific interest, but of societal importance as well. First, for the public opinion on crime in immigrant groups, it is important to make known that

although Moroccan adolescents are substantially overrepresented in crime, their risk profile overall can be perceived of as less severe. A less problematic risk profile may to some extent reflect a more repressive approach towards Moroccan youth. Since Moroccan youths might be arrested more often, this could be reflected by their incarceration for relatively less serious offending behavior. Next, since being detained before trial (pre-trial detention) increases the probability that a prison sentence will be imposed after trial (Hagan & Palloni, 1999), possible ethnic disparities in sentencing could also lead to higher conviction rates and prison sentences for Moroccan youth in the Netherlands. This would be in line with recent studies which show that adolescents with an ethnic minority background are convicted to longer prison sentences than native Dutch adolescents for the same type of offences (Komen & Van Schooten, 2006; Weenink, 2007). Incarceration and imprisonment periods may interfere with school careers and may lead to dropping out of school. Thus, incarcerating youths more rapidly and detaining them for a longer term, does not enhance their educational level and subsequently their chances on the labor market.

Second, it is highly questionable whether the Dutch juvenile justice system is adequately equipped to handle Moroccan boys who are characterized as early starting offenders repeatedly committing many property crimes. Since these youths show high rates of recidivism, they are at increased risk of being placed in pre-trial detention and being sentenced. Furthermore, some ambulatory interventions (such as HALT) may be less effective for Moroccans than for native Dutch boys (Kromhout & San, 2003). It has been found that youths who show high rates of recidivism, benefit less from this type of intervention (Boom, Ferwerda & Leiden, 2007). In the past decades, various intervention programs have been developed as an alternative solution to incarceration and imprisonment (e.g., Functional Family Therapy, Multisystemic Therapy; Breuk et al., 2006). Especially youth offenders who commit less serious forms of crime and do not directly form a threat to the community, could benefit from such ambulatory interventions.

Third, the results suggest that a strong orientation towards Dutch society does not hold a protective effect against crime for Moroccan immigrant youth. This remarkable finding might reflect their desire to become fully part of Dutch society, and the inability to pursue successful socio-economic and social participation. Thus, our findings on orientation towards Dutch society point to the importance of improving the position of Moroccan immigrants in the Netherlands, by for instance offering them more educational opportunities and better chances on the labor market.

Fourth, some Moroccan immigrant children may profit from the early detection of problem behavior and participation in intervention programs, as this may to some extent prevent them from engaging in crime. For instance, family based intervention

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programs which are culturally sensitive and focus on working intensively with parents (e.g., to improve the parent-adolescent relationship and school compliance) may be of value to Moroccan families (e.g., Breuk et al., 2006). There are indications that Moroccan immigrant youths are underrepresented in mental health care and that they often drop out of care programs (Vollebergh, 2002). It is likely that Moroccan parents and their children are relatively less capable of seeking mental health care or that they have less confidence in such care. Additionally, former research suggested that Moroccan parents fail to recognize mental health problems in their children in an early stage (e.g., Zwirs et al., 2006). Thus, providing easier access to mental health care services may improve the situation of Moroccan immigrant youth in the Netherlands.

In short, Dutch society should be aware of the long term effects of a repressive and punitive approach towards Moroccan youth. The findings from the present studies imply that support is warranted for Moroccan immigrant boys, by offering them more intensive educational training, by creating better opportunities on the labor market and by helping them accessing mental health services.

### *Recommendations for further research*

Future research is needed to further unravel the mechanisms underlying the overrepresentation of Moroccan immigrant youth in crime. In the present thesis, indications were found for the influence of various explanatory factors. However, as causal relationships could not be investigated due to the cross-sectional design, future research should include a longitudinal design allowing the study of Moroccan youth crime from childhood into adulthood and by comparing the characteristics of the Moroccan immigrant group to other ethnic groups in Dutch society. Additionally, further research on juvenile justice procedures regarding Moroccan immigrant youth is highly recommended.

## References

## References

### References

- Abram, K. M., Teplin, L. A., McClelland, G. M., & Dulcan, M. K. (2003). Comorbid psychiatric disorders in youth in juvenile detention. *Archives of General Psychiatry, 60*(11), 1097-108.
- Achenbach, T. M. (1991a). *Manual for the youth self-report and 1991 profile*. Burlington: University of Vermont, Department of Psychiatry.
- Achenbach, T. M., & Rescorla, L. A. (2001b). *Manual for the ASEBA school-age forms & profiles*. Burlington: University of Vermont: Research Center for Children, Youth & Families.
- Agnew, R. (2001). Building on the foundation of general strain theory: Specifying the types of strain most likely to lead to crime and delinquency. *Journal of Research in Crime and Delinquency, 38*(4), 319-361.
- Agnew, R., Cullen, F. T., Burton, V. S., Evans, T. D., & Dunaway, R. G. (1996). A new test of classic strain theory. *Justice Quarterly, 13*(4), 649-702.
- Albrecht, H. J. (1995). Ethnic minorities, culture conflicts and crime. *Crime, Law and Social Change, 24*, 19-36.
- Andershed, H. (2010). Stability and change of psychopathic traits: What do we know? In D. Lynam, & R. Salekin (Eds.), *Handbook of child and adolescent psychopathy*. New York: Guilford.
- Andershed, H., Hodgins, S., & Tengstrom, A. (2007). Convergent validity of the youth psychopathic traits inventory (YPI): Association with the psychopathy checklist: Youth version (PCL:YV). *Assessment, 14*(2), 144-154.
- Andershed, H., Kerr, M., Stattin, H., & Levander, S. (2002). Psychopathic traits in non-referred youths: Initial test of a new assessment tool. In E. Blaauw, J. M. Philippa, K. C. M. P. Ferenschild & B. Van Lodesteijn (Eds.), *Psychopaths: Current international perspectives* (pp. 131-158). The Hague: Elsevier.
- Andrews, P., & Meyer, R. G. (2003). Marlowe-crowne social desirability scale and short form C: Forensic norms. *Journal of Clinical Psychology, 59*(4), 483-492.
- Bankston, C. L., & Zhou, M. (1997). Valedictorians and delinquents: The bifurcation of vietnamese american youth. *Deviant Behavior, 18*, 343-364.
- Barnett, M. A. (2008). Economic disadvantage in complex family systems: Expansion of family stress models. *Clinical Child and Family Psychology Review, 11*(3), 145-161.
- Baron, S. W. (2004). General strain, street youth and crime: A test of Agnew's revised theory. *Criminology, 42*(2), 457-483.
- Beaver, K. M., Ratchford, M., & Ferguson, C. J. (2009). Evidence of genetic and environmental effects on the development of low self-control. *Criminal Justice and Behavior 2009 36: 1158, 36, 1158-1172*.

- Berry, J. W. (2006). Stress perspectives on acculturation. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology* (pp. 43-57). Cambridge: Cambridge University Press.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review*, *46*, 5-34.
- Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant youth: Acculturation, identity and adaptation. *Applied Psychology: An International Review*, *55*, 303-332.
- Bird, H. R., Canino, G. J., Davies, M., Zhang, H. Y., Ramirez, R., & Lahey, B. B. (2001). Prevalence and correlates of antisocial behaviors among three ethnic groups. *Journal of Abnormal Child Psychology*, *29*(6), 465-478.
- Blokland, A., Grimbergen, K., Bernasco, W., & Nieuwebeerta, P. (2010). Criminaliteit en etniciteit: Criminele carrières van autochtone en allochtone jongeren uit het geboortecohort 1984. *Tijdschrift Voor Criminologie*, *52*(2), 122-152.
- Blom, M., Oudhof, J., Bijl, R. V., & Bakker, B. F. M. (2005). Verdacht van criminaliteit: Allochtonen en autochtonen nader bekeken [Crime suspect: A closer look on ethnic minorities and native Dutch]. The Hague: Wetenschappelijk Onderzoek- en Documentatiecentrum.
- Blom, M., & Van der Laan, A. M. (2006). *Monitor jeugd terecht 2006 [Monitor youth crime 2006]*. The Hague: Wetenschappelijk Onderzoek- en Documentatiecentrum.
- Blom, M., & Van der Laan, A. M. (2007). *Monitor jeugd terecht 2007 [Monitor youth crime 2007]*. The Hague: Wetenschappelijk Onderzoek- en Documentatiecentrum.
- Boendermaker, L. (1995). Jongeren in justitiële behandelinstellingen [Youths in juvenile justice treatment institutions]. The Hague: Wetenschappelijk Onderzoek- en Documentatiecentrum.
- Boone, M., & Moerings, M. (2007). De cellenexplosie: Voorlopig gehechten, veroordeelden, vreemdelingen, jeugdigen en tbs [The prison cell explosion: Pre-trial arrests, convicted offenders, foreigners, youths and preventive detention]. *Justitiële Verkenningen*, *33*(4), 9-30.
- Bovenkerk, F. (2009). *Etniciteit, criminaliteit en het strafrecht*. Den Haag: Willem Pompe Instituut voor Strafrechtswetenschappen/ Boom Juridische uitgevers.
- Bovenkerk, F., De Haan, W., & Yesilgoz, Y. (1991). Over selectiviteit gesproken! *Tijdschrift Voor Criminologie*, *32*, 309-312.
- Breuk, R. E., Sexton, T. L., van Dam, A., Disse, C., Doreleijers, T. A. H., Slot, W. N., et al. (2006). The implementation and the cultural adjustment of functional family therapy in a dutch psychiatric day-treatment center. *Journal of Marital and Family Therapy*, *32*(4), 515-529.

## References

- Brown, B. B., Mounts, N., Lamborn, S. D., & Steinberg, L. (1993). Parenting practices and peer group affiliation in adolescence. *Child Development, 64*, 467-482.
- Bui, H. (2009). Parent-child conflicts, school troubles, and differences in delinquency across immigration generations. *Crime & Delinquency, 55*, 412-441.
- Bui, H., & Thongniramol, O. (2005). Immigration and self-reported delinquency: The interplay of immigration, generations, gender, race, and ethnicity. *Journal of Criminal Justice, 28*(2), 71-80.
- Burke, J. D., Loeber, R., & Lahey, B. B. (2007). Adolescent conduct disorder and interpersonal callousness as predictors of psychopathy in young adults. *Journal of Clinical Child and Adolescent Psychology : The Official Journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53, 36*(3), 334-346.
- Cauffman, E. (2004). A statewide screening of mental health symptoms among juvenile offenders in detention. *Journal of the American Academy of Child and Adolescent Psychiatry, 43*(4), 430-9.
- CBS Statline. (2010). Bevolking, geslacht, leeftijd, herkomstgroepering en generatie, 1 januari 2010.
- Cernkovich, S. A., & Giordano, P. C. (1987). Family relationships and delinquency. *Criminology, 25*(2), 295-321.
- Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling, 14*(3), 464-504.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale (NJ): Lawrence Erlbaum.
- Cooke, D. J., & Michie, C. (2001). Refining the construct of psychopathy: Towards a hierarchical model. *Psychological Assessment, 13*(2), 171-188.
- Cooke, D. J., Michie, C., Hart, S. D., & Clark, D. (2005). Assessing psychopathy in the UK: Concerns about cross-cultural generalisability. *The British Journal of Psychiatry : The Journal of Mental Science, 186*, 335-341.
- Correll, J., & Park, B. (2005). A model of the ingroup as a social resource. *Personality & Social Psychology Review, 9*, 341-359.
- Dagevos, J. (2006). Hoge (jeugd)werkloosheid onder etnische minderheden: Nieuwe bevindingen uit het LAS-onderzoek [High (youth) unemployment in ethnic minority groups: New findings from the LAS-research]. The Hague: Sociaal Cultureel Planbureau.
- Dagevos, J., Gijsberts, M., & Van Praag, C. (2003). Rapportage minderheden 2003: Onderwijs, arbeid en sociaal-culturele integratie [Report on minorities 2003:

- Education, labour and socio-cultural integration]. The Hague: Sociaal Cultureel Planbureau.
- De Jong, J. D. (2007). *Kapot moeilijk: Een etnografisch onderzoek naar opvallend delinquent groepsgegedrag van 'Marokkaanse' jongens*. Amsterdam: Uitgeverij Aksant.
- Deater-Deckard, K., Dodge, K. A., Bates, J. E., & Pettit, G. S. (1996). Physical discipline among African American and European American mothers: Links to children's externalizing behaviors. *Developmental Psychology, 32*(6), 1065-1072.
- Deković, M. (1999). Parent-adolescent conflict: Possible determinants and consequences. *International Journal of Behavioral Development, 23*(4), 977-1000.
- Deković, M., Wissink, I. B., & Meijer, A. M. (2004). The role of family and peer relations in adolescent antisocial behaviour: Comparison of four ethnic groups. *Journal of Adolescence, 27*(5), 497-514.
- DiLulio, J. J. (2005). My black crime problem, and ours. In S. L. Gabbidon, & H. T. Greene (Eds.), *Race, crime, and justice: A reader*. New York: Taylor & Francis Group.
- Dolan, M. C., & Rennie, C. E. (2007). The relationship between psychopathic traits measured by the youth psychopathic trait inventory and psychopathology in a UK sample of conduct disordered boys. *Journal of Adolescence, 30*(4), 601-611.
- Doreleijers, T. A. H. (2005). Van justitialisering tot onderzoek naar de effectiviteit van probleemgestuurde jeugdzorg. *Tijdschrift Voor Criminologie, 47*(1).
- Driessen, F. M. H. M., Volker, H. M., Op den Kamp, H. M., Roest, A. M. C., & Moolenaar, R. J. M. (2002). *Zeg me wie je vrienden zijn: Allochtone jongeren en criminaliteit [Tell me who your friends are: Ethnic minority youths and crime]*. Zeist.
- Edens, J. F., Campbell, J. S., & Weir, J. M. (2007). Youth psychopathy and criminal recidivism: A meta-analysis of the psychopathy checklist measures. *Law and Human Behavior, 31*(1), 53-75.
- Engen, R. L., Steen, S., & Bridges, G. S. (2002). Racial disparities in the punishment of youth: A theoretical and empirical assessment of the literature. *Social Problems, 49*(2), 194-220.
- Eyou, M. L., Adair, V., & Dixon, R. (2000). Cultural identity and psychological adjustment of adolescent chinese immigrants in new zealand. *Journal of Adolescence, 23*, 531-543.
- Farrington, D. P. (2005). The importance of child and adolescent psychopathy. *Journal of Abnormal Child Psychology, 33*(4), 489-497.
- Farver, J. A. M., Bhadha, B. R., & Narang, S. K. (2002). Acculturation and psychological functioning in asian indian adolescents. *Social Development, 11*, 11-29.

## References

- Fazel, S., Doll, H., & Langstrom, N. (2008). Mental disorders among adolescents in juvenile detention and correctional facilities: A systematic review and meta-regression analysis of 25 surveys. *Journal of the American Academy of Child and Adolescent Psychiatry, 47*(9), 1010-9.
- Forth, A. E., & Burke, H. C. (1998). Psychopathy in adolescence: Assessment, violence and developmental precursors. In D. J. Cooke, A. E. Forth & R. D. Hare (Eds.), *Psychopathy: Theory, research and implications for society* (pp. 205-229). Boston: Kluwer Academic.
- Forum Monitor. (2010). *Allochtonen op de arbeidsmarkt*. Utrecht: Forum Instituut voor Multiculturele Vraagstukken.
- Fridrich, A. H., & Flannery, D. J. (1995). The effects of ethnicity and acculturation on early adolescent delinquency. *Journal of Child and Family Studies, 4*, 69-87.
- Froggio, G., & Agnew, R. (2007). The relationship between crime and "objective" versus "subjective" strains. *Journal of Criminal Justice, 35*(1), 81-87.
- Gabbidon, S. L., & Greene, H. T. (2005). *Race and crime*. Thousand Oaks, CA: Sage Publications, Inc.
- Gerris, J. R. M., Boxtel, D. A. A. M., Verhulst, A. A., Janssens, J. M. A. M., van Zutphen, R. A. H., & Felling, A. J. A. (1993). *Parenting in Dutch families*. Nijmegen, the Netherlands: University of Nijmegen, Institute of Family Studies.
- Gijsberts, M. (2005). Opvattingen van allochtonen en autochtonen over de multi-etnische samenleving [Beliefs of immigrants and native dutch on the multi-ethnic society]. In W. SCP CBS (Ed.), *Jaarrapport integratie 2005 [Year report integration 2005]* (pp. 189-206). Den Haag:
- Gillespie, C. F., Phifer, J., Bradley, B., & Ressler, K. J. (2009). Risk and resilience: Genetic and environmental influences on development of the stress response. *Depression and Anxiety, 26*(11), 984-992.
- Go, C. G., & Le, T. N. (2005). Gender differences in cambodian delinquency: The role of ethnic identity, parental discipline, and peer delinquency. *Crime & Delinquency, 51*, 220-237.
- Gorman-Smith, D., Tolan, P. H., & Henry, D. B. (2000). A developmental-ecological model of the relation of family functioning to patterns of delinquency. *Journal of Quantitative Criminology, 16*(2), 169-198.
- Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford, California: Stanford University Press.
- Gowricharn, R. (2002). Integration and social cohesion: The case of the netherlands. *Journal of Ethnic and Migration Studies, 28*(2), 259-273.

- Gretton, H. M., Hare, R. D., & Catchpole, R. E. (2004). Psychopathy and offending from adolescence to adulthood: A 10-year follow-up. *Journal of Consulting and Clinical Psychology, 72*(4), 636-645.
- Haapasalo, J., & Pulkkinen, L. (1992). The psychopathy checklist and non-violent offender groups. *Criminal Behaviour and Mental Health, 2*, 315-328.
- Hagan, J., & Palloni, A. (1999). Sociological criminology and the mythology of hispanic immigration and crime. *Social Problems, 46*(4), 617-632.
- Hagendoorn, L., & Sniderman, P. (2001). Experimenting with a national sample: A dutch survey of prejudice. *Patterns of Prejudice, 35*(4), 19-31.
- Hamerlynck, S. (2008). *Girls in juvenile justice institutions: Psychopathology and sexual risk behavior*. Amsterdam, The Netherlands: Symfora Groep, VU University.
- Harchaoui, S. (2001). Hedendaags kwaad revisited: Kanttekeningen bij de marokkaanse criminaliteit in nederland. ["Evil nowadays" revisited: Remarks on moroccan criminality in the Netherlands]. *Justitiële Verkenningen, 27*(5), 99-114.
- Hare, R. D. (1998). The hare PCL-R: Some issues concerning its use and misuse. *Legal and Criminological Psychology, 3*, 101-119.
- Hirschi, T. (1969). *Causes of delinquency*. Berkeley: University of California Press.
- Hishinuma, E. S., Johnson, R. C., Kim, S. P., Nishimura, S. T., Makini, G. K., Jr, Andrade, N. N., et al. (2005). Prevalence and correlates of misconduct among ethnically diverse adolescents of native hawaiian/ part-hawaiian and non-hawaiian ancestry. *The International Journal of Social Psychiatry, 51*(3), 242-258.
- Ingoldsby, E. M., & Shaw, D. S. (2002). Neighborhood contextual factors and early-starting antisocial pathways. *Clinical Child and Family Psychology Review, 5*(1), 21-55.
- Jaarrapport Integratie. (2005). *Jaarrapport integratie 2005*. The Hague: Sociaal en Cultureel Planbureau/ Wetenschappelijk Onderzoek- en Documentatiecentrum/ Centraal Bureau voor de Statistiek.
- Jaarrapport Integratie. (2008). *Jaarrapport integratie 2008*. The Hague: Centraal Bureau voor de Statistiek.
- Jennissen, R. P. W. (2009). *Criminaliteit, leeftijd en etniciteit: Over de afwijkende leeftijdsspecifieke criminaliteitscijfers van in nederland verblijvende antillianen en marokkanen*. The Hague: Wetenschappelijk Onderzoek- en Documentatiecentrum / Boom Juridische uitgevers.
- Jennissen, R. P. W., & Blom, M. (2007). *Allochtone en autochtone verdachten van verschillende delicttypen nader bekeken [A closer look on suspects of native dutch origin and other ethnic groups on various types of offences]*. The Hague: Wetenschappelijk Onderzoek- en Documentatiecentrum.

## References

- Juang, L. P., & Nguyen, H. H. (2009). Misconduct among chinese american adolescents. the role of acculturation, family obligation, and autonomy expectations. *Journal of Cross-Cultural Psychology, 40*, 649-666.
- Junger, M. (1990). *Delinquency and ethnicity: An investigation on social factors relating to delinquency among moroccan, turkish, surinamese and dutch boys*. Amsterdam: Kluwer Law and Taxation Publishers.
- Junger, M., & Polder, W. (1992). Some explanations of crime among four ethnic groups in the netherlands. *Journal of Quantitative Criminology, 8*, 51-78.
- Junger-Tas, J. (1998). Recent trends in sentencing policies in the Netherlands. *European Journal on Criminal Policy and Research, 6*, 479-505.
- Junger-Tas, J. (2001). Ethnic minorities, social integration and crime. *European Journal on Criminal Policy and Research, 9*, 5-29.
- Karnik, N. S., Jones, P. A., Campanaro, A. E., Haapanen, R., & Steiner, H. (2006). Ethnic variation of self-reported psychopathology among incarcerated youth. *Community Mental Health Journal, 42*(5), 477-86.
- Karpman, B. (1941). On the need of separating psychopathy into two distinct clinical types: The symptomatic and the idiopathic. *Journal of Criminal Psychopathology, 3*, 112-137.
- Knight, G. P., Vargas-Chanes, D., Losoya, S. H., Cota-Robles, S., Chassin, L., & Lee, J. M. (2009). Acculturation and enculturation trajectories among mexican-american adolescent offenders. *Journal of Research on Adolescence: The Official Journal of the Society for Research on Adolescence, 19*(4), 625-653.
- Knol, F. A. (1998). *Van hoog naar laag, van laag naar hoog: De sociaalruimtelijke ontwikkeling van wijken [From high to low, from low to high: The social and environmental development of neighbourhoods]*. The Hague: Sociaal Cultureel Planbureau.
- Komen, M. (2002). Dangerous children: Juvenile delinquency and judicial intervention in the netherlands, 1960-1995. *Crime Law and Social Change, 37*(4), 379-401.
- Komen, M., & Van Schooten, E. (2006). Allochtone jongere gemiddeld langer vast [Youths with an ethnic minority background longer in prison]. In M. Komen (Ed.), *Straatkwad en jeugdcriminaliteit. naar een algemene of een etnisch-specifieke aanpak?* (pp. 24-48). Amsterdam, Apeldoorn, Antwerpen: Het Spinhuis.
- Koneru, V. K., Weisman de Mamani, A. G., Flynn, P. M., & Betancourt, H. (2007). Acculturation and mental health: Current findings and recommendations for future research. *Applied and Preventive Psychology, 12*, 76-96.
- Kosson, D. S., Cyterski, T. D., Steuerwald, B. L., Neumann, C. S., & Walker-Matthews, S. (2002). The reliability and validity of the psychopathy checklist: Youth version

- (PCL:YV) in nonincarcerated adolescent males. *Psychological Assessment*, 14(1), 97-109.
- Kvermo, S., & Heyerdahl, S. (2003). Acculturation strategies and ethnic identity as predictors of behavior problems in arctic minority adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 42(1), 57-65.
- Kwong Wong, S. (1997). Delinquency of chinese-canadian youth. *Youth & Society*, 29, 112-133.
- Lahey, B. B., Van Hulle, C. A., D'Onofrio, B. M., Rodgers, J. L., & Waldman, I. D. (2008). Is parental knowledge of their adolescent offspring's whereabouts and peer associations spuriously associated with offspring delinquency? *Journal of Abnormal Child Psychology*, 36(6), 807-823.
- Lau, A. S., McCabe, K. M., Yeh, M., Garland, A. F., Wood, P. A., & Hough, R. L. (2005). The acculturation gap-distress hypothesis among high-risk mexican american families. *Journal of Family Psychology: Journal of the Division of Family Psychology of the American Psychological Association (Division 43)*, 19(3), 367-375.
- Le, T. N., & Stockdale, G. (2008). Acculturative dissonance, ethnic identity, and youth violence. *Cultural Diversity and Ethnic Minority Psychology*, 14(1), 1-9.
- Liu, L. L., Lau, A. S., Chen, A. C., Dinh, K. T., & Kim, S. Y. (2009). The influence of maternal acculturation, neighborhood disadvantage, and parenting on chinese american adolescents' conduct problems: Testing the segmented assimilation hypothesis. *Journal of Youth and Adolescence*, 38(5), 691-702.
- Lodewijks, H. P., Doreleijers, T. A., de Ruiter, C., & Borum, R. (2008). Predictive validity of the structured assessment of violence risk in youth (SAVRY) during residential treatment. *International Journal of Law and Psychiatry*, 31(3), 263-271.
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, 4, 84-99.
- Mandara, J. (2003). The typological approach in child and family psychology: A review of theory, methods, and research. *Clinical Child and Family Psychology Review*, 6(2), 129-146.
- McCarter, S. A. (2009). Legal and extralegal factors affecting minority overrepresentation in virginia's juvenile justice system: A mixed-method study. *Child and Adolescent Social Work*, 26, 533-544.
- McCutcheon, A. L. (1987). *Latent class analysis*. Newbury Park, CA: Sage.
- McNulty, T. L., & Bellair, P. E. (2003). Explaining racial and ethnic differences in serious adolescent violent behavior. *Criminology*, 41(3), 709-748.
- Merton, R. (1956). *Social theory and social structure*. Glencoe, IL: Free Press.

## References

- Morenoff, J. D., & Astor, A. (2006). Immigration assimilation and crime: Generational differences in youth violence in Chicago. In R. Martinez, & A. Valenzuela (Eds.), *Immigration and crime: Race, ethnicity, and violence*. New York: New York University Press.
- Mustard, D. B. (2001). Racial, ethnic, and gender disparities in sentencing: Evidence from the U.S. federal courts. *Journal of Law and Economics*, *44*, 285-315.
- Nagasawa, R., Qian, Z., & Wong, P. (2001). Theory of segmented assimilation and the adoption of marijuana use and delinquent behavior by Asian Pacific youth. *The Sociological Quarterly*, *42*, 351-372.
- Nguyen, H. H., Messe, L. A., & Stollak, G. E. (1999). Toward a more complex understanding of acculturation and adjustment: Cultural involvements and psychosocial functioning in Vietnamese youth. *Journal of Cross-Cultural Psychology*, *30*, 5-31.
- Noom, M. J., & Dekovic, M. (1998). Family interaction as a context for the development of adolescent autonomy. In M. Hofer, J. Youniss & P. Noack (Eds.), *Verbal interaction and development in families with adolescents* (pp. 109-125). Stamford, CT: Ablex.
- Ousey, G. C., & Kubrin, C. E. (2009). Exploring the connection between immigration and violent crime rates in U.S. cities, 1980-2000. *Social Problems*, *56*, 447-473.
- Palermo, G. B. (2010). Biological and environmental correlates of aggressive behavior. *Journal of Forensic Psychology Practice*, *10*, 300-324.
- Pasch, L. A., Deardorff, J., Tschann, J. M., Flores, E., Penilla, C., & Pantoja, P. (2006). Acculturation, parent-adolescent conflict, and adolescent adjustment in Mexican American families. *Family Process*, *45*(1), 75-86.
- Patterson, G. R., & Stouthamer-Loeber, M. (1984). The correlation of family management practices and delinquency. *Child Development*, *55*, 1299-1307.
- Pels, T., & De Haan, M. (2003). Continuity and change in Moroccan socialization: A review of the literature on socialization in Morocco and among Moroccan families in the Netherlands. Utrecht, The Netherlands: University of Utrecht/Verwey-Jonker Institute.
- Pels, T., Distelbrink, M., & Postma, L. (2009). *Opvoeding in de migratiecontext: Review van onderzoek naar de opvoeding in gezinnen van nieuwe Nederlanders*. Utrecht: Verwey-Jonker Instituut.
- Pels, T., & Nijsten, C. (2003). Myths and realities of diversity in child rearing and parent-child relations: Non-indigenous compared to indigenous families in the Netherlands. In Hagendoorn (Ed.), *Structural integration and cultural orientations in indigenous and non-indigenous Dutch citizens*. Aldershot: Ashgate.

- Pérez, D. M., Jennings, W. G., & Gover, A. R. (2008). Specifying general strain theory: An ethnically relevant approach. *Deviant Behavior, 29*, 544-578.
- Pfeiffer, C. (2000). The impoverishment of the lower classes is increasing juvenile aggressivity. *European Education, 32*(1), 95.
- Piquero, A. R., Brame, R., Mazerolle, P., & Haapanen, R. (2002). Crime in emerging adulthood. *Criminology, 40*(1), 137-169.
- Piquero, A. R., MacDonald, J. M., & Parker, K. F. (2002). Race, local life circumstances, and criminal activity. *Social Science Quarterly, 83*(3), 654-670.
- Piquero, A. R., MacIntosh, R., & Hickman, M. (2002). The validity of a self-reported delinquency scale - comparisons across gender, age, race, and place of residence. *Sociological Methods & Research, 30*(4), 492-529.
- Portes, A., & Zhou, M. (1993). The new second generation: Segmented assimilation and its variants. *Annals of the American Academy of Political and Social Sciences, 530*, 74-95.
- Poythress, N. G., Dembo, R., Wareham, J., & Greenbaum, P. E. (2006). Construct validity of the youth psychopathic traits inventory (YPI) and the antisocial process screening device (APSD) with justice-involved adolescents. *Criminal Justice and Behavior, 33*(1), 26-55.
- Raven, J., Raven, J. C., & Court, J. H. (2000, updated 2004). Manual for raven's progressive matrices and vocabulary scales. section 3: The standard progressive matrices. San Antonio, TX: Harcourt Assessment.
- Rodney, H. E., & Tachia, H. R. (2004). Over-representation of minorities in the juvenile justice system: Three counties in rural texas. *Federal Probation, 68*(3), 44-48.
- Rossiter, M. J., & Rossiter, K. R. (2009). Diamonds in the rough: Bridging gaps in supports for at-risk immigrant and refugee youth. *Journal of International Migration and Integration, 10*, 409-429.
- Rudmin, F. W. (2003). Critical history of the acculturation psychology of assimilation, separation, integration, and marginalization. *Review of General Psychology, 7*, 3-37.
- Rudy, D., & Grusec, J. E. (2001). Correlates of authoritarian parenting in individualist and collectivist cultures and implications for understanding the transmission of values. *Journal of Cross-Cultural Psychology, 32*(2), 202-212.
- Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *Journal of Personality and Social Psychology, 79*(1), 49-65.

## References

- Samaniego, R. Y., & Gonzales, N. A. (1999). Multiple mediators of the effects of acculturation status on delinquency for Mexican American adolescents. *American Journal of Community Psychology, 27*(2), 189-210.
- Sampson, R. J., & Laub, J. H. (1994). Urban poverty and the family context of delinquency - a new look at structure and process in a classic study. *Child Development, 65*(2), 523-540.
- Sampson, R. J., Morenoff, J. D., & Raudenbush, S. (2005). Social anatomy of racial and ethnic disparities in violence. *American Journal of Public Health, 95*(2), 224-232.
- Schofield, T. J., Parke, R. D., Kim, Y., & Coltrane, S. (2008). Bridging the acculturation gap: Parent-child relationship quality as a moderator in Mexican American families. *Developmental Psychology, 44*(4), 1190-1194.
- Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocznik, J. (2010). Rethinking the concept of acculturation: Implications for theory and research. *The American Psychologist, 65*(4), 237-251.
- Schwartz, S. J., & Zamboanga, B. L. (2008). Testing Berry's model of acculturation: A confirmatory latent class approach. *Cultural Diversity & Ethnic Minority Psychology, 14*(4), 275-285.
- Sevecke, K., Lehmkühl, G., & Krischer, M. K. (2009). Examining relations between psychopathology and psychopathy dimensions among adolescent female and male offenders. *European Child & Adolescent Psychiatry, 18*(2), 85-95.
- Sheidow, A. J., Strachan, M. K., Minden, J. A., Henry, D. B., Tolan, P. H., & Gorman-Smith, D. (2008). The relation of antisocial behavior patterns and changes in internalizing symptoms for a sample of inner-city youth: Comorbidity within a developmental framework. *Journal of Youth and Adolescence, 37*(7), 821-829.
- Sickmund, M., Sladky, T. J., & Kang, W. (2008). Census of juveniles in residential placement databook
- Skeem, J., & Cauffman, E. (2003). Views of the downward extension: Comparing the youth version of the psychopathy checklist with the youth psychopathic traits inventory. *Behavioral Sciences & the Law, 21*(6), 737-770.
- Skeem, J., Johansson, P., Andershed, H., Kerr, M., & Louden, J. E. (2007). Two subtypes of psychopathic violent offenders that parallel primary and secondary variants. *Journal of Abnormal Psychology, 116*(2), 395-409.
- Skeem, J., Poythress, N. G., Edens, J. F., Lilienfeld, S. O., & Cale, E. M. (2003). Psychopathic personality or personalities? Exploring potential variants of psychopathy and their implications for risk assessment. *Aggression and Violent Behavior, 8*, 513-546.

- Smith, C., & Krohn, M. D. (1995). Delinquency and family-life among male-adolescents - the role of ethnicity. *Journal of Youth and Adolescence*, 24(1), 69-93.
- Smokowski, P. R., & Bacallao, M. L. (2006). Acculturation and aggression in latino adolescents: A structural model focusing on cultural risk factors and assets. *Journal of Abnormal Child Psychology*, 34(5), 659-673.
- Smokowski, P. R., David-Ferdon, C., & Stroupe, N. (2009). Acculturation and violence in minority adolescents: A review of the empirical literature. *The Journal of Primary Prevention*, 30(3-4), 215-263.
- Smokowski, P. R., Rose, R. A., & Bacallao, M. (2009). Acculturation and aggression in latino adolescents: Modeling longitudinal trajectories from the latino acculturation and health project. *Child Psychiatry and Human Development*, 40(4), 589-608. '
- Snyder, H. N., & Sickmund, M. (1999). *Juvenile offenders and victims: 1999 national report*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.
- Stahl, A., Finnegan, T., & Kang, W. (2007). Easy access to juvenile court statistics: 1985-2004.
- Stevens, G. W. J. M., Pels, T., Bengi-Arslan, L., Verhulst, F. C., Vollebergh, W. A., & Crijnen, A. A. (2003). Parent, teacher and self-reported problem behavior in the netherlands: Comparing moroccan immigrant with dutch and with turkish immigrant children and adolescents. *Social Psychiatry and Psychiatric Epidemiology*, 38(10), 576-85.
- Stevens, G. W. J. M., Pels, T. V. M., Vollebergh, W. A. M., & Crijnen, A. A. M. (2004). Patterns of psychological acculturation in adult and adolescent moroccan immigrants living in the netherlands. *Journal of Cross-Cultural Psychology*, 35(6), 689-704.
- Stevens, G. W. J. M., Veen, V. C., & Vollebergh, W. A. M. (2008). Marokkaanse jeugddelinquenten: Een klasse apart? [Moroccan juvenile offenders: A class of their own?]. The Hague: Nicis Institute.
- Stevens, G. W. J. M., & Vollebergh, W. A. M. (2008). Mental health in migrant children. *Journal of Child Psychology and Psychiatry*, 49(3), 276-94.
- Stevens, G. W. J. M., Vollebergh, W. A. M., Pels, T. V. M., & Crijnen, A. A. M. (2007a). Parenting and internalizing and externalizing problems in moroccan immigrant youth in the netherlands. *Journal of Youth and Adolescence*, 36(5), 685-695.
- Stevens, G. W. J. M., Vollebergh, W. A. M., Pels, T. V. M., & Crijnen, A. A. M. (2007b). Problem behavior and acculturation in moroccan immigrant adolescents in the netherlands - effects of gender and parent-child conflict. *Journal of Cross-Cultural Psychology*, 38(3), 310-317.

## References

- Stowell, J. I., & Ramiro, M. (2007). Displaced, dispossessed, or lawless? examining the link between ethnicity, immigration, and violence. *Aggression and Violent Behavior, 12*(5), 564-581.
- Strahan, R., & Gerbasi, K. C. (1972). Short, homogeneous versions of the marlow-crowne social desirability scale. *Journal of Clinical Psychology, 28*(2), 191-193.
- Szapocznik, J., Kurtines, W. M., & Fernandez, T. (1980). Bicultural involvement and adjustment in hispanic-american youths. *International Journal of Intercultural Relations, 4*, 353-365.
- Szapocznik, J., & Williams, R. A. (2000). Brief strategic family therapy: Twenty-five years of interplay among theory, research and practice in adolescent behavior problems and drug abuse. *Clinical Child and Family Psychology Review, 3*(2), 117-134.
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality, 72*(2), 271-324.
- Taylor, J., & Lang, A. R. (2005). Psychopathy and substance use disorders. In C. J. Patrick (Ed.), *Handbook of psychopathy* (). New York: Guilford Publications Inc.
- Teplin, L. A., Abram, K. M., McClelland, G. M., Dulcan, M. K., & Mericle, A. A. (2002). Psychiatric disorders in youth in juvenile detention. *Archives of General Psychiatry, 59*(12), 1133-43.
- Tick, N. T., van der Ende, J., & Verhulst, F. C. (2007). Twenty-year trends in emotional and behavioral problems in dutch children in a changing society. *Acta Psychiatrica Scandinavica, 116*(6), 473-82.
- Tick, N. T., van der Ende, J., & Verhulst, F. C. (2008). Ten-year trends in self-reported emotional and behavioral problems of dutch adolescents. *Social Psychiatry and Psychiatric Epidemiology,*
- Tollenaar, N., Meijer, R. F., Huijbrechts, G. L. A. M., Blom, M., & El Harbachi, S. (2007). *Monitor veelplegers: Jeugdige en zeer actieve volwassen veelplegers in kaart gebracht*. The Hague: Wetenschappelijk Onderzoek- en Documentatiecentrum / Boom Juridische uitgevers.
- Tonry, M. (1997). Ethnicity, crime, and immigration. In M. Tonry (Ed.), *Ethnicity, crime, and immigration : Comparative and cross-national perspectives*. Chicago: The University of Chicago Press.
- Tropp, L. R., Erkut, S., Coll, C. G., Alarcon, O., & Garcia, H. A. V. (1999). Psychological acculturation: Development of a new measure for Puerto Ricans on the U.S. mainland. *Educational and Psychological Measurement, 59*, 351-367.

- Turjeman, H., Mesch, G., & Fishman, G. (2008). Social identity, identity formation, and delinquency. *International Journal of Comparative Sociology*, *49*, 111-126.
- United Nations. (2010). *World population policies 2009*. New York: United Nations Publication.
- Van Baardewijk, Y., Stegge, H., Andershed, H., Thomaes, S., Scholte, E., & Vermeiren, R. (2008). Measuring psychopathic traits in children through self-report. the development of the youth psychopathic traits inventory-child version. *International Journal of Law and Psychiatry*, *31*(3), 199-209.
- Van der Vinne, H. (1999). *Geweld in vermogensdelicten: Een dieptestudie op basis van de WODC-strafrechtmonitor [Violence in property offences: An in-depth study based on the WODC criminal law monitor]*. The Hague: Wetenschappelijk Onderzoek- en Documentatiecentrum.
- Van Gemert, F. (1998). *Ieder voor zich: Kansen, cultuur en criminaliteit van marokkaanse jongens [Every man for himself: Chances, culture and criminality in moroccan boys]*. Amsterdam: Het Spinhuis.
- Van Kordelaar, W. F. J. M. (2002). *Beslissingsondersteuning onderzoek geestvermogens [Support in decision making in forensic psychiatric assessment]*. Deventer: Kluwer.
- Van Praag, C. S. (2003). Wederzijdse beeldvorming [Mutual conceptualization]. In J. Dagevos, M. Gijsberts, C. van Praag (Ed.), *Rapportage minderheden 2003: Onderwijs, arbeid en sociaal-culturele integratie [Minorities report 2003: Education, labour and socio-cultural integration]* (pp. 363-392). Den Haag: SCP.
- Vassileva, J., Kosson, D. S., Abramovitz, C., & Conrod, P. (2005). Psychopathy versus psychopathies in classifying criminal offenders. *Legal and Criminological Psychology*, *10*, 27-43.
- Vasta, E. (2007). From ethnic minorities to ethnic majority policy: Multiculturalism and the shift to assimilationism in the netherlands. *Ethnic and Racial Studies*, *30*, 713-740.
- Vaughn, M. G., M., W. J., Jr, Davis, L. E., Fernandes, G. T., & Howard, M. O. (2008). Variations in mental health problems, substance use, and delinquency between african american and caucasian juvenile offenders: Implications for reentry services. *International Journal of Offender Therapy and Comparative Criminology*, *52*(3), 311-29.
- Vazsonyi, A. T., & Pickering, L. E. (2003). The importance of family and school domains in adolescent deviance: African american and caucasian youth. *Journal of Youth and Adolescence*, *32*(2), 115-128.
- Veen, V. C., Stevens, G. W. J. M., Andershed, H., Raaijmakers, Q. A. W., Doreleijers, T. A. H., & Vollebergh, W. A. M. (in press). Cross-ethnic generalizability of the three-factor model of psychopathy: The youth psychopathic traits inventory in an

## References

- incarcerated sample of native dutch and moroccan immigrant boys. *International Journal of Law and Psychiatry*.
- Veen, V. C., Stevens, G. W. J. M., Doreleijers, T. A. H., van der Ende, J., & Vollebergh, W. A. M. (2010). Ethnic differences in mental health among incarcerated youths: Do moroccan immigrant boys show less psychopathology than native dutch boys? *European Child & Adolescent Psychiatry*, 19(5), 431-440.
- Veen, V. C., Stevens, G. W. J. M., Doreleijers, T. A. H., & Vollebergh, W. A. M. (in press). Moroccan adolescent suspect offenders in the netherlands: Ethnic differences in offender profiles. *Psychology, Crime and Law*.
- Verhulst, F. C., Van der Ende, J., & Koot, H. (1997b). *Handleiding voor de youth self-report (YSR) [Manual for the youth self-report]*. Rotterdam: Department of child and Adolescent Psychiatry, Erasmus Medical Centre/Sophia.
- Verhulst, F. C., Van der Ende, J., & Koot, H. M. (1996). *Handleiding voor de CBCL/ 4-18 [Manual for the CBCL/ 4-18]*. Rotterdam: Department of Child and Adolescent Psychiatry, Erasmus Medical Centre/Sophia.
- Verhulst, F. C., vanderEnde, J., & Rietbergen, A. (1997). Ten-year time trends of psychopathology in dutch children and adolescents: No evidence for strong trends. *Acta Psychiatrica Scandinavica*, 96(1), 7-13.
- Vincent, G. M., Grisso, T., Terry, A., & Banks, S. (2008). Sex and race differences in mental health symptoms in juvenile justice: The MAYSI-2 national meta-analysis. *Journal of the American Academy of Child and Adolescent Psychiatry*, 47(3), 282-90.
- Vollebergh, W. (2002). *Gemiste kansen: Culturele diversiteit en de jeugdzorg*. Nijmegen: Radboud Universiteit Nijmegen.
- Vreugdenhil, C., Doreleijers, T. A., Vermeiren, R., Wouters, L. F., & van den Brink, W. (2004). Psychiatric disorders in a representative sample of incarcerated boys in the netherlands. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43(1), 97-104.
- Wareham, J., Dembo, R., Poythress, N. G., Childs, K., & Schmeidler, J. (2009). A latent class factor approach to identifying subtypes of juvenile diversion youths based on psychopathic features. *Behavioral Sciences & the Law*, 27(1), 71-95.
- Wasserman, G. A., McReynolds, L. S., Lucas, C. P., Fisher, P., & Santos, L. (2002). The voice DISC-IV with incarcerated male youths: Prevalence of disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 41(3), 314-21.
- Weenink, D. (2007). De invloed van de etniciteit van jonge verdachten op beslissingen van het openbaar ministerie. *Sociologie*, 3(3), 291-322.
- Weijers, I., Hepping, K., & Kampijon, M. (2010). *Jeugdige veelplegers*. Amsterdam: SWP.

- Wiesner, M., & Capaldi, D. M. (2003). Relations of childhood and adolescent factors to offending trajectories of young man. *Journal of Research in Crime and Delinquency*, 40(3), 231-262.
- Willgerodt, M. A., & Thompson, E. A. (2006). Ethnic and generational influences on emotional distress and risk behaviors among Chinese and Filipino American adolescents. *Research in Nursing & Health*, 29(4), 311-324.
- Wissink, I. B., Deković, M., & Meijer, A. M. (2006). Parenting behavior, quality of the parent-adolescent relationship, and adolescent functioning in four ethnic groups. *Journal of Early Adolescence*, 26(2), 133-159.
- Wortley, S. (2009). Introduction. the immigrant-crime connection: Competing theoretical perspectives. *Journal of International Migration and Integration*, 10, 349-358.
- Ying, Y. W., & Han, M. (2007). The longitudinal effect of intergenerational gap in acculturation on conflict and mental health in southeast Asian American adolescents. *The American Journal of Orthopsychiatry*, 77(1), 61-66.
- Zwirs, B. W., Burger, H., Schulpen, T. W., Wiznitzer, M., Fedder, H., & Buitelaar, J. K. (2007). Prevalence of psychiatric disorders among children of different ethnic origin. *Journal of Abnormal Child Psychology*, 35(4), 556-66.



## Summary

## Summary

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Moroccan adolescents in the Netherlands are highly overrepresented in youth crime, compared to both native Dutch and other ethnic minority groups. To gain insight into those risk factors that contribute to delinquent behavior in Moroccan immigrant adolescents in the Netherlands, the risk profiles of Moroccan and native Dutch incarcerated boys are examined and compared to their respective peers in the general Dutch population. The objective of the present study is a) to identify the risk profile of Moroccan youth offenders in pre-trial detention, b) to compare this risk profile with that of native Dutch adolescent offenders in pre-trial detention, and c) to draw intra-ethnic comparisons of various risk factors by using comparison samples from the respective general populations.

Participants in this study were 299 boys aged 12-18 years, placed in pre-trial detention in 10 juvenile justice institutions in the Netherlands. Pre-trial detention is imposed when a person is suspected of a serious offence, having to be examined, awaiting trial, and if detention is thought to be necessary for the protection of others or the boy himself. From all incarcerated boys, 141 were of Moroccan origin and 158 were native Dutch (total response rate 66%, response rate native Dutch boys 73%, response rate Moroccan boys 62%). Of these participants, 168 parents participated in the study (total response rate 61%, response rate Dutch parents 50%, response rate Moroccan parents 70%). Incarcerated boys were visited by interviewers in the juvenile justice institutions, their parents were interviewed at home. Interviews consisted of various spoken and written interview topics. Comparison data consisted of parent and adolescent interview-pairs originating from larger studies conducted in the general Dutch population.

The first aim of this study is addressed in *Chapter 2*: to compare the nature of the crimes for which Moroccan and native Dutch boys were placed in pre-trial detention. Analysis of police records shows that boys of Moroccan origin were incarcerated more often, were incarcerated for more offences, and were younger when they were incarcerated for the first time than native Dutch adolescents. In addition, Moroccan adolescents were clearly more often incarcerated for property-based offences than native Dutch adolescents, and less often incarcerated for violent offences, sexual offences and arson than native Dutch adolescents. Moroccan adolescents in the present study could thus be characterized as a specific type of offender: early starting offenders who are repetitively incarcerated for relatively less serious types of crime (i.e., property-based offences).

In *Chapter 3*, the aim is to compare distinct acculturation orientation patterns of Moroccan immigrant incarcerated boys and their peers in the general Dutch population,

as well as acculturation orientation patterns of their parents. Using latent class analysis, it was convincingly shown that incarcerated boys and their parents were more strongly oriented towards Dutch society than non-incarcerated boys and their parents. About two thirds of the Moroccan incarcerated adolescents and their parents reported a considerable attachment and sense of belonging towards Dutch and Moroccan culture and people, whereas this was only the case for about one third of the general population. Moreover, Moroccan parents with an incarcerated son were twice as likely to have Dutch friends and more often used Dutch language. Furthermore, in spite of their orientation towards Dutch culture and people, our results indicated that Moroccan immigrants deal with a low socio-economic status as it was for instance found that in both the incarcerated and general population only one third of the fathers had a paid job in the last two years.

Patterns of parenting in families of incarcerated and non-incarcerated boys are examined across ethnic groups in *Chapter 4*, using latent class analysis. Overall, our findings indicate that the mother-son relationship of incarcerated Moroccan adolescents and non-incarcerated Moroccan adolescents was rather comparable, no differences emerged in the prevalence of various types of mother-son relationships between incarcerated and non-incarcerated Moroccan boys. However, a neglectful mother-son relationship, which indicated a low awareness in parents of their child's affairs and little affection, was found to be associated with a Moroccan background in general: in one-seventh of the Moroccan families of both incarcerated and non-incarcerated boys a neglectful mother-son relationship was reported. A neglectful mother-son relationship was not related to the incarceration of Moroccan adolescent boys, however, this type of mother-son relationship was related to problem behavior of Moroccan adolescent boys in general.

Three chapters in this study are dedicated to individual risk factors for delinquent behavior. In *Chapter 5*, the aim is to examine the level of mental health of Moroccan adolescent offenders and to make comparisons with a) the level of mental health of native Dutch adolescent offenders, and b) the level of mental health of both ethnic groups in the general Dutch population. A clear difference between incarcerated and general population youths was found: incarcerated youths were at increased risk of virtually all self- and parent-reported emotional and behavioral problems. However, whereas native Dutch adolescent offenders showed much higher levels of emotional and behavioral problems than their peers in the general population, these differences were small for Moroccan youths.

*Chapter 6* turns to the subject of psychopathic personality traits since these are predictive of (severe) delinquent behavior. Using multiple group confirmatory factor

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analysis, it was found that psychopathic traits manifest similarly in Moroccan and native Dutch adolescent offenders. Moreover, psychopathic traits were similarly associated with various mental health problems for both incarcerated ethnic groups. Then, using latent class analysis, in *Chapter 7* a low psychopathic group and a high psychopathic group was identified in the incarcerated population: compared to native Dutch boys, Moroccan boys were underrepresented in the high psychopathic group. Finally, two subtypes of psychopathy were identified within the highly psychopathic subsample of incarcerated boys: a low anxious and a high anxious psychopathic type. No ethnic differences were found in the representation of Moroccan and native Dutch boys in these psychopathic subtypes. This finding might be explained by the fact that the psychopathic subtypes were extracted from the highly psychopathic subsample, and Moroccan boys were already underrepresented in this subgroup.

The current studies have been the first to examine the characteristics of Moroccan adolescent offenders in the Netherlands in relation to various environmental and individual risk factors, using quantitative data from both an offender population and from the general population. In *Chapter 8*, it is concluded that incarcerated Moroccan immigrant boys in the Netherlands show a less problematic risk profile overall than native Dutch incarcerated boys. Although the crime rates of Moroccan youths are generally high, their offending behavior may be considered as less problematic and this also accounts for the prevalence of individual risk factors such as mental health problems and psychopathic traits.

Furthermore, we concluded that the characteristics of Moroccan boys regarding offending behavior, individual risk factors, socio-economic status, mother-adolescent relationship and orientation towards Dutch society, are indicative of various theoretical explanations for their overrepresentation in crime. First, being strongly oriented towards the Dutch society may make Moroccan youths more likely to use natives as a basis of social comparison, and therefore may make them more prone to experience frustration regarding their unfavorable socio-economic and socio-cultural position in the Netherlands. As a result of this mechanism, Moroccan immigrant youths may be more likely to engage in criminal activities. Second, a lack of social control exerted by for instance school and mothers in Moroccan families, is thought to contribute to problem behavior in Moroccan boys. Third, there are indications that discriminatory processes in the juvenile justice system may to some extent account for their overrepresentation in youth crime, and our findings on the relatively less problematic risk profiles of Moroccan boys are in line with these indications. In sum, individual risk factors may more often account for the criminal behavior of native Dutch adolescent offenders, whereas an

immigrant background and a minority position play an important role in the criminal behavior of Moroccan adolescents.

Finally, various implications of the findings for the public opinion on Moroccan immigrant youths in the Netherlands, implications for mental health services and recommendations for further research are discussed in Chapter 8. Summarizing, Dutch society should be aware of the effects of a repressive and punitive approach towards Moroccan immigrant youth. Support is warranted for these boys, for example by creating more educational opportunities and better chances on the labor market and by helping Moroccan families accessing mental health services.

### **Samenvatting (summary in Dutch)**

Marokkaanse jongeren zijn zowel in vergelijking met Nederlandse jongeren als met jongeren uit andere etnische minderheidsgroepen in Nederland, oververtegenwoordigd in de jeugdcriminaliteit. Om meer inzicht te verkrijgen in de risicofactoren die bijdragen aan het criminele gedrag van adolescente jongens met een Marokkaanse achtergrond, worden in dit onderzoek de risicoprofielen van Marokkaanse en Nederlandse jongens in hechtenis onderzocht en vergeleken met de risicoprofielen van hun leeftijdsgenoten in de algemene Nederlandse bevolking. Het doel van dit onderzoek is om a) het risicoprofiel van Marokkaanse jongens in detentie te identificeren, b) dit risicoprofiel te vergelijken met het risicoprofiel van Nederlandse jongens in detentie en c) data van Marokkaanse en Nederlandse leeftijdsgenoten uit de algemene bevolking te gebruiken als benchmark of vergelijkingsmateriaal.

Deelnemers aan dit onderzoek waren 299 jongens van 12 tot 18 jaar, die in voorlopige hechtenis waren geplaatst in 10 Justitiële Jeugdinrichtingen in Nederland. Voorlopige hechtenis wordt opgelegd indien een persoon verdacht is van een ernstig delict, deze persoon dient te worden onderzocht, deze persoon wacht op het strafproces, of wanneer hechtenis noodzakelijk wordt geacht voor de bescherming van anderen of de persoon zelf. Van de in hechtenis geplaatste jeugdigen waren 141 jongens van Marokkaanse komaf en 158 jongens waren Nederlands (totale respons 66%, respons Nederlandse jongens 73%, respons Marokkaanse jongens 62%). Van deze deelnemers werden ook 168 ouders geïnterviewd (totale respons 61%, respons Nederlandse ouders 50%, respons Marokkaanse ouders 70%). Jongens in voorlopige hechtenis werden geïnterviewd binnen de Justitiële Jeugdinrichting waar zij verbleven, de deelnemende ouders werden thuis geïnterviewd. Interviews bestonden uit een mondeling en een schriftelijk gedeelte waarin diverse onderwerpen aan bod kwamen. Vergelijkingsmateriaal bestond uit interviewgegevens van ouder-kind paren uit voorgaand onderzoek in de algemene bevolking.

Het eerste doel van dit onderzoek wordt in *Hoofdstuk 2* in kaart gebracht: het vergelijken van de aard van het delictgedrag waarvoor Marokkaanse en Nederlandse jongens in voorlopige hechtenis zijn geplaatst. Door middel van strafblad analyses wordt aangetoond dat de Marokkaanse jongens in dit onderzoek vaker in voorlopige hechtenis zijn genomen, dat er meer delicten op hun strafblad zijn geregistreerd en dat zij jonger waren tijdens de eerste keer dat zij in voorlopige hechtenis werden geplaatst dan Nederlandse deelnemers. Daarnaast blijkt dat Marokkaanse jongens vaker voor vermogensdelicten en minder vaak voor gewelddadige delicten, seksuele delicten en brandstichting in voorlopige hechtenis werden geplaatst dan Nederlandse jongens. Uit dit onderzoek kan geconcludeerd worden dat Marokkaanse jongens een specifieke

dadergroep vormen die zich kenmerken door het herhaaldelijk plegen van relatief lichte delicten (vermogensdelicten) vanaf jonge leeftijd.

In *Hoofdstuk 3* is het doel om verschillende patronen in de oriëntatie op de Nederlandse en Marokkaanse cultuur van Marokkaanse jongens in voorlopige hechtenis en in de algemene bevolking met elkaar te vergelijken, als ook de verschillende patronen in die oriëntatie van hun ouders. Door middel van latente klassen analyse, is aangetoond dat jongens in voorlopige hechtenis en hun ouders sterker georiënteerd op Nederland zijn dan hun leeftijdsgenoten en ouders en in de algemene bevolking. Grofweg tweederde van de Marokkaanse jongens in voorlopige hechtenis en hun ouders, rapporteerden een aanzienlijke band en een gevoel van verbondenheid met de Nederlandse en Marokkaanse cultuur en bevolking, terwijl dit slechts voor een derde in de algemene bevolking gold. Bovendien was de kans voor ouders van Marokkaanse jongens in voorlopige hechtenis twee keer zo groot om Nederlandse vrienden te hebben en zij spraken vaker Nederlands dan de ouders van Marokkaanse jongens in de algemene bevolking. Vervolgens laten onze resultaten zien dat Marokkaanse gezinnen, ondanks hun oriëntatie op de Nederlandse cultuur en bevolking, te maken hebben met een lage sociaal-economische status. Slechts een derde van de vaders in Marokkaanse gezinnen had bijvoorbeeld een betaalde baan in de afgelopen twee jaar.

Opvoedingspatronen in Marokkaanse en Nederlandse gezinnen van jongens in voorlopige hechtenis en in de algemene bevolking, worden met behulp van latente klassen analyse onderzocht in *Hoofdstuk 4*. Over het algemeen laten onze bevindingen zien dat de moeder-kind relatie van Marokkaanse jongens in voorlopige hechtenis en de moeder-kind relatie van Marokkaanse jongens in de algemene bevolking ongeveer vergelijkbaar is. Er kwamen geen verschillen naar voren in het voorkomen van verschillende typen moeder-kind relatie tussen deze groepen. Echter, een 'weinig aandacht' patroon, gekenmerkt door weinig toezicht en affectie expressie van de moeder, was gerelateerd aan een Marokkaanse achtergrond in het algemeen. In 15% van de Marokkaanse gezinnen van zowel jongens in voorlopige hechtenis als van jongens in de algemene bevolking, werd een dergelijke moeder-kind relatie gerapporteerd. Dit type moeder-kind relatie was niet gerelateerd aan de in hechtenis name van Marokkaanse jongens, maar wel aan probleemgedrag van Marokkaanse jongens in het algemeen.

Drie hoofdstukken in dit proefschrift zijn gewijd aan de individuele risicofactoren voor delinquent gedrag. In *Hoofdstuk 5* wordt de mate van emotionele en gedragsproblematiek onder Marokkaanse jongens in voorlopige hechtenis onderzocht en deze wordt vergeleken met a) de mate van emotionele en gedragsproblematiek onder Nederlandse jongens in voorlopige hechtenis en b) de mate van emotionele en

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gedragsproblematiek in beide etnische groepen in de algemene bevolking. Een duidelijk verschil werd gevonden tussen jongens in voorlopige hechtenis en jongens in de algemene bevolking: jongens in voorlopige hechtenis hadden een verhoogd risico op vrijwel alle zelf- en door ouders gerapporteerde emotionele en gedragsproblemen. Echter, terwijl Nederlandse jongens in voorlopige hechtenis een veel hogere mate van emotionele en gedragsproblematiek lieten zien dan hun leeftijdsgenoten in de algemene bevolking, was dit verschil klein voor Marokkaanse jongens.

*Hoofdstuk 6* is gericht op psychopathische persoonlijkheidstrekken omdat deze een voorspellende waarde hebben voor (ernstig) delinquent gedrag. Met behulp van confirmerende factor analyse is gevonden dat psychopathische trekken zich op dezelfde wijze manifesteren in Marokkaanse en Nederlandse jongens in voorlopige hechtenis. Bovendien zijn deze persoonlijkheidstrekken op dezelfde manier gerelateerd aan verscheidene emotionele en gedragsproblemen in beide etnische groepen die in voorlopige hechtenis waren geplaatst. Vervolgens is in *Hoofdstuk 7* door middel van latente klassen analyse een groep met sterke psychopathische kenmerken en een groep met zwakke psychopathische kenmerken gevonden in de voorlopige gehechte populatie: in vergelijking met Nederlandse jongens was er sprake van een onderrepresentatie van Marokkaanse jongens in de groep met sterke psychopathische kenmerken. Ten slotte werden twee subtypes van psychopathie geïdentificeerd in de groep met sterke psychopathische kenmerken: een subtype gekarakteriseerd door een lage mate van angst en een subtype dat zich kenmerkt door een hoge mate van angst. Er werden geen etnische verschillen gevonden in de representatie van Marokkaanse en Nederlandse jongens tussen deze twee subtypen. Dit zou verklaard kunnen worden door het feit dat de psychopathische subtypen afgeleid werden uit de groep met sterke psychopathische kenmerken waarin Marokkaanse jongens al ondervertegenwoordigd waren.

Dit onderzoek is het eerste waarin de kenmerken van Marokkaanse jeugdige daders in Nederland zijn onderzocht, in relatie tot verscheidene omgevings- en individuele factoren, met behulp van kwantitatieve data uit zowel een in hechtenis geplaatste populatie als uit de algemene bevolking. In *Hoofdstuk 8* wordt geconcludeerd dat bij Marokkaanse jongens die in voorlopige hechtenis zijn geplaatst sprake is van een minder problematisch risicoprofiel dan bij Nederlandse jongens in voorlopige hechtenis. Alhoewel crimineel gedrag van Marokkaanse jongens over het algemeen een hoge frequentie laat zien, kan hun delictgedrag als minder ernstig beschouwd worden. Ook op het gebied van individuele risicofactoren zoals emotionele en gedragsproblematiek en psychopathische persoonlijkheidskenmerken laten Marokkaanse jongens een minder problematisch profiel zien.

Vervolgens concluderen wij dat de kenmerken van Marokkaanse jongens voor wat betreft hun delictgedrag, individuele risicofactoren, sociaal-economische status, moeder-kind relatie en oriëntatie op de Nederlandse cultuur en bevolking, wijzen op verschillende verklaringen voor hun oververtegenwoordiging in de criminaliteit. Ten eerste, een sterke oriëntatie op de Nederlandse samenleving zou voor Marokkaanse jeugdigen een verhoogd risico kunnen inhouden op het ervaren van frustraties over hun ongunstige sociaal-economische en sociaal-culturele positie in Nederland, omdat zij zichzelf eerder zouden vergelijken met de Nederlandse bevolking. Dit mechanisme zou ervoor kunnen zorgen dat jongens met een Marokkaanse achtergrond eerder geneigd zijn om crimineel gedrag te vertonen. Ten tweede zou een gebrek aan sociale controle door bijvoorbeeld school en moeders in Marokkaanse gezinnen kunnen bijdragen aan probleemgedrag van Marokkaanse jongens. Ten derde zijn er aanwijzingen dat een zekere mate van discriminatie in het jeugdstrafrechtstelsel een aandeel heeft in de oververtegenwoordiging van Marokkaanse jongeren in de criminaliteit. Onze bevinding dat bij Marokkaanse jongens sprake is van een minder problematisch risicoprofiel sluiten hierbij aan. Kort gezegd zijn individuele risicofactoren in hogere mate gerelateerd aan het criminele gedrag van Nederlandse jongeren, terwijl een immigranten achtergrond en een minderheidspositie een belangrijke rol spelen in het criminele gedrag van Marokkaanse jongeren in Nederland.

Tot slot worden verscheidene implicaties van onze bevindingen voor de geestelijke gezondheidszorg, aanbevelingen voor verder onderzoek en implicaties voor de publieke opinie over jongeren met een Marokkaanse achtergrond in Nederland, besproken in Hoofdstuk 8. Samenvattend kan gesteld worden dat er in de Nederlandse samenleving bedachtzaam omgegaan zou moeten worden met een repressieve en bestraffende aanpak van jongeren met een Marokkaanse achtergrond. Deze jongeren dienen ondersteund te worden, bijvoorbeeld door het scheppen van meer mogelijkheden in het onderwijs, betere kansen op de arbeidsmarkt en door de toegang tot de geestelijke gezondheidszorg te vergemakkelijken voor Marokkaanse gezinnen.



Dankwoord

Dankwoord

## **Dankwoord**

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Violaine

# Curriculum Vitae

## **Curriculum Vitae**

Violaine Veen (1978) rondde cum laude haar studie klinische psychologie af aan de Universiteit van Amsterdam in 2003. Tijdens haar studie richtte zij zich voornamelijk op forensisch psychologische onderwerpen en deed zij onder andere praktijkervaring op in een TBS-kliniek waar zij de Basisaantekening Psychodiagnostiek behaalde. Na haar studie is Violaine werkzaam geweest als junior onderzoeker bij het Trimbos-instituut en heeft zij onder meer onderzoek gedaan naar therapeutische interventies voor volwassen delinquenten. Van 2005 tot 2010 was Violaine als promovenda verbonden aan de Universiteit Utrecht en onderzocht zij de risicoprofielen van delinquente jongens met een Nederlandse en Marokkaanse achtergrond. Vanaf februari 2011 is Violaine als universitair docent verbonden aan de vakgroep Orthopedagogiek van de Universiteit Leiden.



