

Summary

Juvenile delinquency: risks and protective factors. Findings of the WODC Youth Delinquency Survey, 2005

Introduction

At the start of 2005, there were approximately 1.6 million youngsters in the Netherlands between the ages of ten and seventeen. The development of these youngsters at this stage of their lives, covering early and mid adolescence, is characterised by the exploration of the boundaries of various social domains, such as the family, friends, local neighbourhoods and schools. For most youngsters, this development proceeds without any significant problems, although the exploration of the limits of various domains can lead to risk behaviour, including truancy, alcohol use and gambling. This study covers one of the most widely investigated forms of risk behaviour displayed amongst adolescents, namely juvenile delinquency.

The following research questions are at the core of this study:

- 1 What is the prevalence and frequency of self-reported delinquency amongst a representative sample of youngsters aged ten to seventeen in the Netherlands? And what differences are there amongst various subgroups (gender, ethnic origin and age)?
- 2 What trends can be detected within self-reported delinquency for the period from 1996 to 2005?
- 3 What differences are there amongst the subgroups in the occurrence of risk and protective factors for delinquency?
- 4 What risk and protective factors are related to delinquency in a representative sample of youngsters aged ten to seventeen in the Netherlands?

To answer these questions, we used information from the most recent measurement of the WODC Youth Delinquency Survey (WODC YDS). This is a cross-sectional study, conducted every three years amongst a representative group of Dutch youngsters between the ages of ten and seventeen. The relationship between delinquency and risk factors has been investigated many times, albeit primarily in risk groups or specific sub-populations (such as school pupils or youngsters in one particular part of the country). So far as we are aware, no other study has been carried out in the Netherlands into the four research issues mentioned above, amongst a nationally representative sample of youngsters.

The [Dutch] Ministry of Justice's safety programme 'Towards a safer society' contains some clues for the policy relevance of this study. The way in which juvenile delinquency is taken care of is elaborated in the

programme 'Justice to young people' (*Jeugd terecht*). In addition to a national overview of trends in juvenile delinquency in recent years, this policy programme also focuses on risk and protective factors. An understanding of these factors is important in assisting in the development of effective behavioural programmes for (potential) young offenders.

This summary presents the most important results of the study. The full text of the report should be consulted for an extensive methodological account, a detailed description of the results and also for literature references, tables and figures.

Method

The WODC Survey is a cross-sectional survey that has been carried out every two or three years by the Research and Documentation Centre (WODC) of the Dutch Ministry of Justice. For the most recent assessment the sample was selected on the basis of the General Municipal Personal Records Database (GBA). 2,161 youngsters were then approached, between January and April, 2005, to ask whether they would be willing to participate in the study. In the end, 1,460 youngsters were interviewed. There was a 68% response rate. The data in this study were weighted according to six background characteristics (gender, age, ethnic background, education level, degree of urbanisation of the place of residence and part in the country of the residence). This enabled analyses on a representative sample of the Dutch population between the ages of ten and seventeen.

All of the youngsters who took part were visited at home by an interviewer, who went through the list of questions, using a laptop, in a one-to-one scenario (a so called Computer Assisted Personal Interviewing method). Delinquent behaviour by the youngsters was measured using questions covering 33 offenses (by using a so called Computer Assisted Self Interviewing method). The questions related to minor and frequently occurring offenses, e.g. 'fare dodging in public transport', 'vandalism' or 'shoplifting', and also to serious and less frequent ones, e.g. 'burglary', 'robbery' or 'hurting someone with a weapon'. The offenses included property offenses, vandalism and violent offenses. New to this version of the WODC YDS were questions relating to Internet offenses and drug offenses. For each offense, the youngster was asked whether he/she had 'ever' committed it and, if so, 'how often in the previous twelve months'.

Questions were also asked about the youngsters' background characteristics, and factors ('risk factors'), which are shown in the literature to be related to delinquency in adolescence, were also measured.

These factors were measured in five domains, namely the individual (psychosocial functioning, alcohol consumption and drug use and leisure time activities); the family (the relationship with mother and father, parenting practices of mother and father and the family's background factors, such as the family structure, residential mobility and socio-economic situation); the school (performance at school, attachment to the school and conduct problems at school such as truancy or suspension); friends (delinquency amongst friends and the amount of time the youngsters spent with friends); and the living environment (the extent of physical disorder in the streets where the youngsters lived). Poor scores on these factors, such as for example drug use, weak parenting practices or delinquency amongst friends, are called '*long-term* risk factors' for delinquency. 42 long-term risk factors were measured in total. For a limited amount of offenses, questions were also asked about varying situational characteristics of the offenses committed, such as the presence or absence of supervision, and timing and location of the offense. Furthermore questions were also asked about the presence of co-offenders or alcohol consumption or drugs use prior to the commission of the offense. These factors are called '*short-term* risk factors'.

Delinquency: prevalence, frequency and comparison with earlier years

Prevalence

More than half (55.7%) of all youngsters stated that they had committed one of the 33 offenses at least once in the previous 12 months. 'Fare dodging' and 'setting off fireworks outside permitted times' were mentioned most often. If these infringements are excluded, then 40.0% of youngsters stated that they had committed an offense at least once in the previous 12 months. The three most frequently occurring offenses were 'striking someone without causing an injury' (14.9%), 'theft from school or work' (12.0%) and 'discrimination because of race' (11.2%).

Variations according to gender, age, ethnic origin, educational level, degree of urbanisation and part of the country

There are significant differences between some subgroups with regard to their involvement in delinquency. A difference in the prevalence is apparent between boys and girls. Almost one and a half times more boys than girls had committed an offense in the previous 12 months.

There are also differences between age groups. Delinquency in the younger age groups (particularly in the 10/11 but also in the 12/13 age group) was significantly less prevalent than in the older age groups (14/15 and 16/17). In the youngest group the primary offenses are minor ones such as 'setting off fireworks', 'striking someone (without causing injury)' or 'discrimination'. We have also found differences according to educational level. The

prevalence of delinquency is lowest amongst youngsters at primary school, followed by those in senior general secondary education or higher (*HAVO* or higher), and then followed by those in pre-vocational secondary education or lower (*VMBO* or lower – as in vocational / trade schools). Educational level was missing for some of the youngsters, because they were either working or looking for work. Relatively speaking, most offenders were found to be in this category.

There was no difference in prevalence of self-reported offenses between youngsters of Dutch origin and those of non Dutch origin (ethnic minority groups), between degrees of urbanisation or between different parts of the country. If we leave out the infringements however, there *are* differences according to the degree of urbanisation. More offenders live in urbanised areas than in rural areas.

The majority of the relations with delinquency found in this study were also found in other studies. The finding that there is no difference in the prevalence of delinquency between youngsters of Dutch origin and those of ethnic minority groups is at odds with the results of other recently conducted self-reported delinquency studies amongst ethnic minority groups, but is not new. This matter will be explored further in the discussion.

Frequency

Those youngsters who had committed an offense within the previous 12 months were also asked how often they committed that offense. This was only reported with respect to offenses committed by 100 or more of the youngsters. The five offenses committed most frequently – i.e. 11 or more times – in the previous 12 months were 'fare dodging', 'discrimination because of race', 'setting off fireworks outside the permitted period', 'assault with no injury' and 'graffiti'.

The most important findings are collated in Box s1.

Comparison: 1996, 1998, 2001 and 2005

The study also covered trends in self-reported youth delinquency in the period from 1996 to 2005. There were four waves of data collection by using the WODC YDS during that period. Since selection methods have varied and the questionnaire has been modified, the comparison between the waves only covers youngsters of Dutch origin between the ages of twelve and seventeen, and only with respect to comparable offenses. Accordingly, the prevalence figures are lower in the years than those described above. The most important findings are collated in Box s2.

The prevalence of delinquency within the previous 12 months fluctuates around the 31% mark in the four waves. The most prevalent offense in all four years was 'fare dodging'. The prevalence for delinquency of girls and boys was virtually the same in all of the waves. These findings

Box s1 Prevalence and frequency of offenses in the previous 12 months; total, and prevalence according to subgroup

<i>Total</i>	
Prevalence	About half (55.75%) of all youngsters stated that they had committed one of the 33 offenses in the previous 12 months.
Prevalence ^a	Excluding infringements such as 'fare dodging' or 'setting off fireworks outside the permitted period', 40.0% of the youngsters stated that they had committed one of the 31 offenses in the previous 12 months.
Frequency	The most frequently occurring offenses (11 times or more) were 'fare dodging', 'setting off fireworks', 'discrimination because of race', 'assault with no injury' and graffiti.
<i>According to subgroups</i>	
Gender	One and a half times more boys than girls committed an offense in the previous 12 months.
Ethnic origin	There are no differences in the offending rates between youngsters of Dutch origin and others.
Age	The percentage of offenders increases with age.
Educational level	The percentage of offenders is higher in pre-vocational secondary education than in senior general secondary education.
Level of urbanisation	If the infringements are included, there are no differences in the rates of offending according to different degrees of urbanisation. If the infringements are excluded from the analyses, then more offenders live in urbanised areas than in rural areas.
Part of the country	There are no differences in percentages of offenders according to the parts of the country.

a Excl. infringement.

provide a perspective on the idea that youth delinquency has increased considerably in recent years - an idea based primarily on the information recorded by the police. While the use of self-reported delinquency can be challenged on the basis of possible over or under reporting, recorded information is also dependent of the investigation activities of the police, and these in turn are dependent on policy targets around this theme: if the importance of youth delinquency policy increases, then there will also be an increase in the recording of youth crime. One should, of course, note as an aside that these trends only include information from youngsters of Dutch origin, and that the sample was limited. If the revisited WODC YDS is repeated several times, it will be easier to draw conclusions as to trends in youth delinquency at a national level, and also to subdivide the information into subgroups.

Box s2 Prevalence of delinquency: 1996, 1998, 2001 and 2005

– The prevalence of delinquency has remained relatively stable in each wave. In all of the waves, one in three youngsters of Dutch origin between the ages of 12 and 17 reports committing an offense in the past 12 months.

Factors related to delinquency

To answer the third research question, we studied the presence of the 42 long-term factors in various subgroups. The initial exploration considered boys and girls, youngsters of Dutch origin and those of non Dutch origin, and youngsters in four different age categories (10/11, 12/13, 14/15 and 16/17). We then explored the prevalence amongst various types of delinquents and non-delinquents.

The primary finding was that the youngsters in general had relatively favourable scores on all factors. In other words, the percentage of youngsters with high risk scores was relatively small. Based on these findings, we concluded that things are generally going well for youngsters in this representative sample of Dutch ten to seventeen year olds. Most of the variations occurred between youngsters in the four age categories, with older adolescents having predominantly more unfavourable scores (or higher risk scores). There were differences between youngsters of Dutch origin and those of non Dutch origin, but on balance we cannot state that one group has less favourable scores than the other. The smallest number of differences was found between boys and girls. Where there were differences, the boys had higher risk scores than the girls.

Differences between non-delinquents, 'rule-breakers', and minor and serious delinquents

Next, we investigated the extent to which the factors occurred amongst non-delinquents and amongst various types of delinquents. The group of delinquents was divided into three: 'rule-breakers', minor delinquents and serious delinquents. Rule-breakers only committed minor rule breaking ('fare dodging' and 'setting of fireworks') in the previous 12 months. The minor and serious delinquents are distinguished from each other on the basis of the seriousness and the frequency of the offenses committed in the previous 12 months. Approximately four youngster in ten belonged to the group of non-delinquents (44.3%); one in seven to the group of rule-breakers (15.8%); one in three to the group of minor delinquents (29.1%); and one in ten to the group of serious delinquents (10.9%).

Boys are more delinquent than girls (i.e., they reported more, and more serious, offenses) and the percentage of boys increased in line with the seriousness and frequency of delinquency. Furthermore, the seriousness and frequency of delinquency increased with age. There were no differences between youngsters of Dutch origin and those of non Dutch origin.

Out of the 42 long-term factors that were measured, 35 appear from this study to be related to delinquency or, in other words, differences were found between delinquents and non-delinquents in 35 of the 42 factors.

Box s3 Factors related to delinquency and range of delinquents and non-delinquents, according to age, ethnic origin and gender

Factors related to delinquency

General	Generally, the youngsters have favourable scores, i.e. low risk scores, on all factors. There are, however, differences between subgroups.
Gender	The fewest differences are between boys and girls. The variations are not concentrated on any one particular domain. Where there are differences, the boys appeared to have higher risk scores.
Ethnic origin	Youngsters of Dutch origin have higher risk scores particularly in the individual domain (substance use); youngsters of non Dutch origin have higher risk scores in the family domain (structural family background characteristics).
Age	Most of the differences arise between age groups. Youngsters in mid adolescence (14-17) have higher risk scores on all factors than youngsters in early adolescence (10-13).

Delinquents and non-delinquents

General	Approximately four youngster in ten belonged to the group of non-delinquents (44.3%); one in seven to the group of rule-breakers (15.8%); one in three to the group of minor delinquents (29.1%); and one in ten to the group of serious delinquents (10.9%).
Gender	Boys are more delinquent than girls.
Ethnic origin	There are no differences in the extent of delinquency between youngsters of Dutch origin and others.
Age	Youngsters in mid adolescence are more delinquent than those in early adolescence.

Comparison between non-delinquents and delinquents

–	Non-delinquents have predominantly more favourable scores than delinquents.
–	Rule-breakers display the fewest differences from non-delinquents. Compared with non-delinquents, rule-breakers only have higher risk scores in relation to school and friends.

Comparison within the group of delinquents

–	Serious delinquent youngsters have the highest risk scores on the factors in all five of the domains that were investigated.
–	With regard to structural family background characteristics, the relationship with parents and parenting practices (primarily of the father), there were no differences within the group of delinquents.

Generally speaking, non-delinquents had more favourable scores than delinquents (rule-breakers, minor and serious delinquents). Also, within the group of delinquents, there were significant variations in the extent to which the factors appeared, with seriously delinquent youngsters having the least favourable scores, or the highest risk scores. Also, the fewest differences were found between non-delinquents and rule-breakers. To put it another way, many of the factors coincide for non-delinquents and rule-breakers. Rule-breakers mostly have less favourable scores for factors concerning school and friends than non-delinquents.

The most important findings are collated in box s3.

The relationship of risk and protective elements with delinquency

The fourth research question concerns the relationship of risk and protective elements with delinquency. Following on from an American study, this study proceeded on the basis that factors could have risk and protective elements at the same time (we use the term 'elements' to distinguish them from factors). For this, the long-term factors were divided into three parts: a risk element, a neutral element and a protective element. It was expected that the risk element of a factor is associated with a larger likelihood of delinquency and that the protective element is associated with a smaller likelihood of delinquency. The fourth research question was divided into three sub-questions.

Risk and protective elements

First of all, we looked into which of the 35 factors relating to delinquency contained a risk and/or a protective element. In the analyses gender, ethnic origin and age are taken into account. In the end, one factor appeared not to associate with delinquency. Of the remaining 34, most of them (23) contained both risk and protective elements. Examples of this include prosocial behaviour, hyperactive behaviour and attention problems, disclosure towards parents concerning leisure activities, relationship with the school and the amount of leisure time spent with friends. E.g., a relatively high amount of prosocial behaviour is therefore a protective element, while relatively little prosocial behaviour is a risk element for delinquency. Four factors have purely protective elements: a relatively high level of emotional support from the father, control over leisure activities by the father, control over leisure activities by the mother, and passive supervision of leisure activities by the mother. These are elements that are only associated with a lesser likelihood of delinquency. Because of the distribution of the scores on one factor, that factor did not allow for a division including a risk element (passive supervision by the mother). For the three other factors no (significant) association was found at all on the risk component with delinquency.

Seven factors only had risk elements for delinquency. These included, among others, problems with peers, regular alcohol consumption and use of soft drugs, single-parent families and suspension from school. These findings show that it is not just the risk elements, but also the protective elements, that are important for the occurrence of delinquency. The most important findings are collated in box s4.

Risk and protective elements according to gender, ethnic origin and age

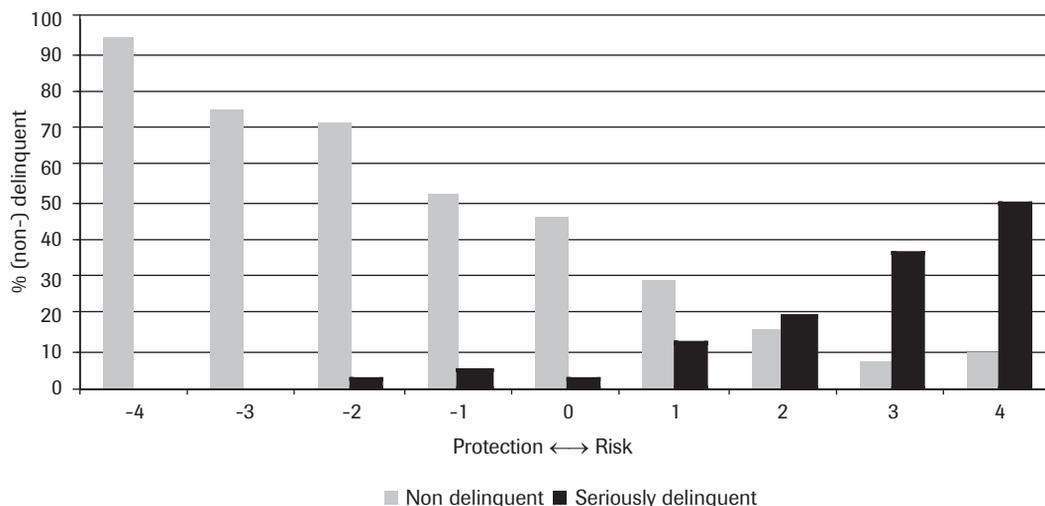
Secondly, we investigated the extent to which the relationship between risk and protective elements and delinquency is specific to gender, ethnic origin or age (see also box s4). In doing so, we concentrated on the relationship between the elements and minor and serious delinquency.

Risk elements relating to alcohol consumption and the use of drugs, weak relationships with parents, inadequate parenting practices, risk behaviour at school and delinquency amongst friends, are only associated to a larger likelihood of delinquency in specific subgroups. Also, protective elements relating to use of leisure time, a strong relationship with the school, good performance at school and less time spent with friends are only associated to a smaller likelihood of delinquency in specific subgroups.

We can conclude, albeit with some caution, that risk and protective elements are in general predominantly specific to age, not to gender and ethnic origin. Most elements related to delinquency amongst boys are also related to delinquency amongst girls. This is consistent with the findings in other studies, although in the literature is some ambiguity on this point. Between youngsters of Dutch and non Dutch origin more differences were found, as most elements only related to delinquency amongst youngsters of Dutch origin. There were, however, more shared risk and protective elements than there were differences. The results do not yet offer sufficient information to specify culture-specific risk or protective elements. In contrast with gender and ethnic origin, our findings clearly point towards a dynamic fluctuation of risk and protective elements in different age ranges or developmental phases. Some elements are not related to delinquency amongst younger adolescents, because they are rare in occurrence (for example alcohol consumption or drug use), while they are certainly related to delinquency amongst older adolescents. For other elements, the effects change in line with the age ranges, so that what is purely a protective element for the young group turns into a protective element *and* a risk element for the older group (for example child disclosure towards the mother about leisure time activities and the extent of delinquency amongst friends).

Those risk elements for which a relationship with delinquency was found in most of the subgroups primarily concern inadequate psychosocial functioning, poor school performances, weak bonds with school, spending much time with friends and less disclosure to parents about leisure time activities. This is partly to do with the absence of social and cognitive skills, which expresses itself in psychosocial problems, problems at school and in the family. Similar results were found in the relationship between protective elements and the absence of delinquency. Factors where the protective elements were associated to delinquency in the majority of the subgroups concerned adequate psychosocial functioning, absence of alcohol consumption, awareness of parental supervision over leisure time activities and absence of delinquent friends. To put it briefly, the data suggest that the presence of (social and cognitive) skills in the majority of the subgroups of youngsters distinguished here is associated with the absence of delinquent behaviour, while the lack of such skills is associated

Figure s1 Total score of domains with protective and/or risk elements^{a,b}, for non-delinquent and seriously delinquent



a This total score indicates the balance between the number of domains with a predominance of risk elements and the number of domains with a predominance of protective elements. Protection and risk are two poles of a dimension where -4 means 4 domains with predominantly protective elements and +4 means 4 domains with a predominance of risk elements.

with the presence of delinquency. These findings are consistent with those of other studies.

Accumulation of risk and protective elements

Thirdly, we investigated the relationship between an accumulation of risk and protective elements in several domains, and delinquency. In accordance with American research, the current study indicates that there is an accumulation of risk elements with regard to seriously delinquent behaviour. The percentage of seriously delinquent youngsters increases (see figure s1) if, on balance, the number of domains with protective elements decreases and those with risk elements increases. This increasing line is independent of gender, ethnic origin or age and is also found if risk behaviour such as alcohol consumption and drug use, truancy and school suspensions are left out of the analysis.

The balancing effect is most readily visible amongst seriously delinquent youngsters. Whilst an increase in percentage can be discerned for minor delinquent youngsters if the number of domains with risk elements increases (not shown in figure s1), the increase does not continue as it does with serious delinquents. The literature tells us that if more domains

are investigated than those available in this study (for example attitude and neighbourhood), it can be expected that an increase in the number of risk domains will go hand in hand with an increase in the rate of seriously delinquent youngsters, while this is not the case with minor delinquents. On the other hand, it appears that as the number of domains with protective elements increases, and the number of those with risk elements decreases, there is a linear increase in the percentage of non-delinquents. This linear relationship is also independent of gender, ethnic origin and age.

Box s4 Factors related to delinquency: risks and protections according to gender, origin and age

General

- 34 of the 42 factors are related to delinquency.
- For a majority of the factors (23) there is both a risk element (associated with a greater chance of delinquency) and a protective element (associated with a smaller chance of delinquency).
- Seven factors only had a risk element.
- Four factors only had a protective element.

According to gender, origin and age

- Risk and protective elements are hardly gender-specific. There were some differences between youngsters of Dutch origin and those of non Dutch origin.
- There were fewer risk and protective elements for delinquency for youngsters in early adolescence than for those in mid adolescence.
- Irrespective of gender, ethnic origin or age, the presence of (social and cognitive) skills is related to the absence of delinquency, and the absence of these skills relates to the presence of delinquency.

Accumulation of risk and protective elements

- As the seriousness of delinquency increases, the percentage of youngsters experiencing protection in fewer domains and risk in more domains also increases.
 - The percentage of seriously delinquent youngsters increases when, on balance, the number of domains with protective elements decreases and those with risk elements increases.
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Delinquency and short-term risk factors

There has been little exploration of short-term risk factors in the risk factor approach, although the literature shows that characteristics of the situation, such as the lack of supervision, and the time of the day, are indeed related to delinquent conduct. Furthermore, co-offenders and alcohol consumption or drug use prior to commission of the offense can also be called short term risk factors to delinquency. This study also explored some of these short-term risk factors. We also explored whether there is a relationship between short-term risk factors and individual characteristics such as gender, ethnic origin or age, and also whether

Box s5 Delinquency and short-term risk factors

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- Most offenses were committed during the week and in the afternoon.
 - The majority of the youngsters considered that when they were committing offenses, it was when they had experienced no supervision.
 - The majority of offenses were committed in the company of others.
 - There was little evidence of alcohol and drug use prior to the commission of offenses.
 - Short-term risk factors are related to individual characteristics such as age and the number of domains with long-term risk factors.
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short-term risk factors are related to the accumulation of long-term risk factors. We drew a distinction here between youngsters with few long-term risks (see figure 1: scores -4 to +1) and youngsters with many long-term risks (scores +2 to +4).

The results relate to a limited number of offenses (15). A total of 527 offenses were committed by 301 out of the 1,460 youngsters.

Most of the offenses were committed on weekdays and in the afternoon; this applies to all types of offenses (violence, vandalism and property).

Those who committed offenses on weekday afternoons were predominantly younger adolescents (10-13 years of age) and youngsters with few long-term risks. Offenses were spread more throughout the day for older adolescents and youngsters with a lot of long-term risks. In line with the literature, the majority of the youngsters indicated that when they committed offenses, it was when they experienced no supervision. There were no differences here with regard to the youngsters' background characteristics.

The majority of offenses were committed in the company of others. Girls committed offenses in the company of others more often than boys did.

Youngsters of Dutch origin and those of non Dutch origin showed no differences with regard to the commission of offenses alone or with others, nor did they differ in the size of the group of co-offenders. Co-offending was also more predominant amongst youngsters with a lot of long-term risks than amongst those with few long-term risks. There were no differences in relation to the number of co-offenders.

Alcohol consumption and/or drug use before the commission of an offense is found to occur rarely in a representative sample of Dutch adolescents. If substances were used, then alcohol was the most common. Use of substances occurred more often in connection with offenses committed by groups than in connection with solo offenses, and more often for offenses committed at the weekends than for those occurring during the week. Use of substances before commission of an offense was also more frequent with 14-17 year olds than 10-13 year olds, more frequent with youngsters of Dutch origin than those of non Dutch origin and more frequent amongst youngsters with a lot of long-term risks than amongst those with few long-term risks.

The most important findings are collated in box s5.

Conclusion

Barely any difference between youngsters of Dutch origin and those of non Dutch origin

The percentages of young offenders of Dutch origin and those of non Dutch origin were virtually the same in this nationally representative sample that was studied. It is possible that the under-representation of youngsters of non Dutch origin in junior secondary education and of youngsters in urbanised areas led to an under-representation of offenders, but the same applies, perhaps to a limited extent, to youngsters of Dutch origin.

Because of the relatively small numbers, various ethnic minority groups were collated. A more detailed subdivision according to ethnic origin might possibly have shown some differences. On the other hand, it appears from a Dutch study that, if we take other risk factors for delinquency into account, such as problematic family situations, inadequate parenting practices and behavioural problems at school, the ethnic origins of the youngsters adds little to the explanation of delinquency. In other words, variations amongst ethnic groups diminish or even disappear, when (several) risk factors for delinquency are taken into account. These results coincide with those of the present study. Youngsters of Dutch origin are similar to those of non Dutch origin when it comes to the accumulation of risks in several domains, and in accordance to that finding both groups have very similar levels of delinquency. It is likely that differences between ethnic groups are determined more by the relevant risk profile rather than by ethnic origin.

Risk and protective elements

Most factors contain both risk and protective elements with regard to delinquency. One pole of the factor is then a risk (e.g. little prosocial conduct), with the other pole being a protection (e.g. a lot of prosocial conduct). A risk or a protective element depends on the individual's personal score on the factor. So far as we are aware, these findings are new in the Dutch context. Dutch research into factors relating to delinquency and causes of delinquency is mainly concentrated on risk factors. In those studies that consider protective elements, these are primarily regarded as unique factors. Little is known about risk and protective elements of the same factors, about the differences between subgroups or about the way in which risk and protective factors operate. Further research is needed, because we are convinced that prevention and treatment of delinquency will benefit from further knowledge.

Age dynamics of risk and protective elements

The findings from this study indicate that, with regard to risk and protective elements, there are dynamic factors at play, whose effect on

delinquency changes in relation to the youngster's age. Although we have pointed out the change that was observed between the youngsters in early adolescence (10-13 year olds) and those in mid adolescence (14-17 year olds), the precise point of change and the reasons for it are unclear. One might think that the change from primary to secondary education might cause a change in the effect of specific factors. At secondary school, there are changes in environment that youngsters have to cope with and their social ties also change. Thus, for example, parents' impact on conduct diminishes and the influence of friends (with the wrong ideas/behaviour) increases. In any event, the findings make clear the importance of research into age-specific models for the relationship between delinquency on the one hand and risk and protective factors on the other hand.

Delinquency: exposure or vulnerability to risks?

Are boys more delinquent than girls because they are more exposed to risk factors or because they are more vulnerable to these risk factors? The results of our study do not yet offer any support for the idea that boys are more vulnerable to risk factors than girls. There is more support for the exposure argument. Boys have, on average, less favourable scores than girls in all domains in most factors. These findings are consistent with those of other studies.

With regard to the differences between the age groups, the current results can support either explanation. Youngsters in mid adolescence have less favourable scores on most factors than youngsters in early adolescence. Our study also shows that more risk elements are related to delinquency for the older age group than for the younger adolescents. When risks materialise with older adolescents, there is a greater chance than with younger adolescents that these will also be related to delinquency. This has also been found in other studies. In other words, the findings suggest that older adolescents are more vulnerable than younger ones. It is interesting that these results were established not only for the risk elements, but also for the protective elements. With regard to the risks, one explanation proposed in the literature is that, amongst those youngsters with the risks, the older adolescents have already been exposed to the risk factors for a longer period of time. For some of the risk factors, for example a poor relationship with the parents, it has been found that there are barely any changes over a relatively lengthy period in time. Similar reasoning may apply to protective factors. For adolescents exposed to protection, the older they are, the longer they are exposed to protective factors, and this may make them less vulnerable for being tempted to delinquency. If indeed this is the case, it would be an argument for prevention and intervention being applied over a longer period of time. The long-term effects of risk and protective factors can only, however, be investigated in longitudinal studies.

The results do not justify the notion that youngsters of non Dutch origin differ from those of Dutch origin because they are exposed to more risk factors. This is firstly because there are very few variations in levels of delinquency between the ethnic groups. Secondly, although there are differences between youngsters of Dutch origin and those of non Dutch origin in the extent to which they are exposed to various risk scores, some risks are concentrated amongst youngsters of Dutch origin (this accounts for those factors at an individual level) and others are concentrated more amongst those of non Dutch origin (this accounts for factors concerning the structural family characteristics). It is possible that the effect of unfavourable scores within one domain might have been countered by more favourable scores within a different domain, so that variations in delinquency do not show up.

It is less clear as to what degree the vulnerability to risk factors in delinquency might vary between youngsters of Dutch origin and those of non Dutch origin. The finding that more risk and protective elements relate to delinquency for those youngsters of Dutch origin may offer support for the idea that there are culture-specific factors, but this is negated by the finding that there are also many shared risk and protective elements.

Serious delinquency: balance between risk and protection

In the risk factors approach, researchers refer to the accumulation of risk factors as an explanation of serious delinquency. Some consider that risk and protective factors operate like a balance in this context. We have found some support for this idea of a balance in our study amongst seriously delinquent youngsters: the percentage of serious delinquents increase when, on balance, the number of domains with predominantly protective elements decreases and those with predominantly risk elements increases. This phenomenon is not apparent amongst rule-breakers and minor delinquents. As also reported in an American study, the findings do not seem to depend on subgroups, in our case gender, ethnic origin and age. Because this phenomenon occurs in groups with varying background characteristics, the results in our study support the premise that there is a general underlying mechanism at work in relation to serious delinquency.

Relevance for policy

Several findings from this study have relevance for policy considerations:

- *Barely any difference between youngsters of Dutch origin and those of non Dutch origin.* There are scarcely any differences in delinquency between youngsters of Dutch origin and those of non Dutch origin. Because of the relatively small numbers, several ethnic minority groups were collated; it is conceivable that more differences would become

apparent if a division is made according to a diversity of ethnic minority groups. It is possible that the under-representation of youngsters in junior secondary education and of youngsters in urbanised areas led to an under-representation of offenders of non Dutch origin, but the same also applies, perhaps to a lesser extent, for young offenders of Dutch origin. Another possible explanation is that the youngsters of Dutch origin are comparable with those of non Dutch origin with regard to the accumulation of risk factors in several domains, and in accordance with that both groups do have the same level of offending. It is likely that differences between ethnic origin groups are determined more by the relevant risk profiles rather than by ethnic origin.

- *Self-reported juvenile delinquency provides a stable picture.* Self-reported juvenile delinquency shows a stable picture across several waves of data collection in the percentage of offenders. However the impact of the selection of the samples is not clear. This finding put into perspective the view that juvenile delinquency has increased considerably in recent years - an idea based primarily on the information recorded by the police.
- *Risk and protective factors.* Risk factors are not the only ones significant to juvenile delinquency: protective factors can also contribute. It can be anticipated that prevention of, and intervention into delinquency aimed only at changing risk factors will have less of an effect than those preventions and interventions that also designed to promote protective factors. This applies to minor and more serious delinquency.
- *Accumulation of risk and protective factors.* There is an accumulation of risk and an absence of protective factors amongst seriously delinquent youngsters. It can be expected that, for seriously delinquent youngsters, measures aimed at a single domain will have less of an effect than those aimed at several domains.
- The findings support the criteria used by the [Dutch] Accreditation Panel for Behavioural Programmes for offenders. In our opinion, the results of our study, along with those from international longitudinal research, offer justification to add that an approach aimed at several domains is desirable for prevention and intervention targeting at seriously delinquent youngsters, because of the found the accumulation of problems.
- An accumulation of risks and the absence of protection are associated with seriously delinquent behaviour in all subgroups (gender, ethnic origin and age). As far as policy is concerned, it would be wise to opt for an approach based on the presence of risks and the absence of protection, and *not* on ethnic origins.

- *Age-related risk and protective factors.* It also appears that there are variations between the two age groups in the factors related to delinquency. In younger adolescents (10-13 year olds) fewer risks are relevant, and some risks are *different* from those affecting youngsters in mid adolescence (14-17 year olds). The same applies to protective elements. The effects of some factors also change according to age: first only protective, and later risk as well as protection. These findings suggest the importance of prevention and intervention adapted to the particular age of a young offender.
- *(Social and cognitive) skills.* The results from our study also suggest that, with regard to changing social and cognitive skills, a more general approach (i.e. irrespective of gender, ethnic origin or age) may be sufficient. The support for this in our study is admittedly limited, because we did not take into account the various (risk and protective) factors at the same time. Furthermore, we lack longitudinal information. We do, however, think that we can draw this conclusion, because the associations between elements relating to these skills and delinquency were found in most of the subgroups, and because similar relationships are evident in other studies.

Finally

This study investigated the relationship between delinquency on the one hand and risk and protective factors on the other hand. We also studied the differences that occur depending on gender, ethnic origin and age. In addition, we looked into the relationship between long-term and short-term risk factors. This was done using a nationally representative sample of Dutch youngsters between the ages of ten and seventeen. The research included not only school pupils, but also youngsters not attending schools. So far as we are aware, this was the first time that these relationships with delinquency had been investigated in a representative sample of Dutch adolescents.