

# Changing patterns of offending behaviour among young adults

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**CHANGING PATTERNS OF OFFENDING BEHAVIOUR  
AMONG YOUNG ADULTS**

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## **ABSTRACT**

This paper focuses on the offending behaviour of different generations. It considers the convictions of six cohorts involving 57,000 young adults aged 16-20 in the early 1970s, the late 1970s, the early 1980s, the late 1980s, the early 1990s and the late 1990s. Using latent class analysis, 16 offence clusters for males and 5 offence clusters for females were identified.

For both males and females, the proportions of the population convicted in the 16-20 age group have declined. Among the males, 'versatile' clusters are increasing and 'specialist' clusters, with some exceptions, are rapidly declining. Among females, the proportions in the versatile cluster have increased appreciably, while the two specialist clusters – relating to violence and shoplifting – have moved in opposite directions.

**Keywords:** Offending typologies; juvenile crime; conviction data; criminal careers; birth cohorts

## **Introduction**

The behaviour of young adults over the ages has been notoriously controversial. In fact, every era has nostalgia for a golden past when young adults knew their place and were not any trouble. Certainly those living in each era seem to have been concerned about the contemporary behaviour of their young people. However the evidence has been sparse and, where it is available, there has been difficulty in comparing one generation with another. This present article attempts a methodological advance and some substantive results which enable us to compare the offending behaviour of different generations. Our stance is that we now have opportunities to focus more systematically on apparent changes in behaviour over the past thirty years, so that we can carry out stricter comparisons than hitherto.

Our question is a quite straightforward one. Does the offending behaviour of young adults – and we define ‘young adults’ as aged between 16 and 20 years (inclusive) – change in the early 1970s, the late 1970s, the early 1980s, the late 1980s, the early 1990s and the late 1990s? While there is the obvious answer that it does – after all, more widespread illegal drug use has been an obvious motor for change – we want our answer to be more complex and to pinpoint the scope of the changes more accurately. The task is both to provide a methodological tool to probe the conundrum of change and to show the outcome of our analysis.

While there are hints of a breakthrough, the provisos must also be clear. We are considering ‘official’ offending behaviour, that is, behaviour that is sanctioned by a criminal conviction. The debate which started with Kitsuse and Cicourel’s (1963) concern about ‘A Note on the Use of Official Statistics’ must be confronted.

Nevertheless, official sanctions do provide a measure of the offending behaviour that the authorities are taking seriously and, if there are changes from generation to generation, these changes must be understood. We hold our powder dry to the 'Discussion' section when we will consider whether any changes identified reflect a behavioural change (that is, offenders are actually changing their behaviour) or a system change (that is, the authorities are simply responding to different offences while the underlying pattern of offending behaviour remains much the same).

The pivot of this paper is on official offending within the age group of 16-20 years. We chose this age group for two reasons. Firstly, it represents the peak of offending activity for both males and females in terms of the age-crime curve (Farrington, 1986). Secondly, the major system changes that occurred over our period of study (with increasing use of cautions etc. to divert young offenders away from the courts) was directed primarily at the 10-15 age group. In contrast, while these diversionary procedures will also affect the 16-20 age group, these system changes have been less profound.

After a brief discussion of previous work and a focus on the 'participation rates' in official offending by these young adults, the main aim of this paper is to consider patterns of official offending behaviour, analysed separately for males and females. Are they changing or are they constant? Is offending becoming more specialised or more versatile? Is there evidence of violent behaviour becoming more pervasive in offending?

## Previous work

There has been a vast amount of literature on young people's offending. However, something of a consensus has perhaps been emerging. Farrington summarises that "offending is predominantly versatile rather than specialised, particularly at younger ages" (Farrington, 1999). Indeed, in broad terms, the age group has been increasingly characterised as exhibiting general anti-social behaviour, whereby the differentiation of offences is disregarded. In fact, Farrington (1999) also declares that "Most prior criminal career research treats offenders as homogeneous, but different types of people may have different types of careers. For example, Moffitt (1993) distinguished between 'adolescence-limited' and 'life-course-persistent' offenders. Research is needed on what are the most useful typologies of offenders, and on their different developmental pathways to criminal careers" (1999:156). However, before considering typologies of offenders, it is useful to consider in more depth *typologies of offences* which reflect more accurately the vast array of offending behaviour. In brief, what are the types of offences that seem to go together in offenders' repertoires.

This approach seems to have been neglected for, instead of probing the rich array of offending behaviour, there has been a tendency to minimise differences. A new criminological approach has developed where the only differentiation has been into violence and non-violence offences (e.g. Brame, Bushway, Paternoster and Thornberry, 2005). While Occam's razor, that is, the methodological principle dictating a bias towards simplicity in theory construction, is usually laudable, the simple focus on frequency of offending and a minimal differentiation between *types* of offending may mask important differences in the range of offending behaviour

among young adults. We hope to rectify this in the present paper. Also we aim to overcome Farrington's concern that "more research is needed on female criminal careers: existing studies focus primarily on males" (1999: 156).

Even more seriously, there has been a lack in considering changing patterns of offending over time. With notable exceptions such as the Philadelphia (Tracy, Wolfgang and Figlio, 1990) and Racine (D'Unger, Lund, McCall and Nagin, 1998) birth cohorts work, most longitudinal research has focused on one cohort – the prospective Cambridge Study in Delinquent Development of around 400 males born in the early 1950s is a prime example (Farrington, 2002). More recently, there has been a focus on the next generation of these males which tells of inter-generational offending behaviour within families (Farrington, Lambert and West, 1998), but this work is not a source to compare crime between generations at a national level.

Recognising that "a major problem with long-term prospective longitudinal surveys is that results may be long delayed" (Farrington, 1999: 161), Farrington points to the possibility of more complex research designs, such as the accelerated longitudinal design, with four cohorts, for example, being followed up simultaneously: the youngest from, say, birth to age 6, the next from 6 to age 12, the next from age 12 to age 18, and the oldest from age 18 to age 24 (Farrington, Ohlin and Wilson, 1986). This approach has had some impact on the planning of longitudinal follow-ups (e.g. the Pittsburgh Youth Study (Loeber, Farrington, Stouthamer-Loeber, Moffitt and Caspi, 1998)), but it needs to be recognised that the design matches the imperatives of developmental psychologists in probing

psychological changes and risk factors but cannot identify changes of patterns of offending over time within a society.

The classic article by Gottfredson and Hirschi (1987) challenging the value of longitudinal research has had the unfortunate effect of polarising the discussion between the vices and virtues of prospective longitudinal research and cross-sectional designs. There is a mid-way point of using retrospective longitudinal designs whereby existing databases can be used to construct such cohorts. Available databases tend to be based on official records of arrests or convictions. The strengths and weaknesses of using official data of this kind need to be recognised, but our own recent work has shown how one can usefully interrogate very large datasets. Our first paper in this specific area (Francis, Soothill and Fligelstone, 2004) considered patterns in a single cohort and focused on transitions rather than changes between different cohorts. However, in terms of recruitment (Soothill, Ackerley and Francis, 2004), persistence (Soothill, Ackerley and Francis, 2003) and criminal career length (Francis, Soothill and Piquero, 2007), we have considered the effect of different cohorts, as well as focusing on statistical models for age, period and cohort effects (Francis, Soothill and Ackerley, 2004).

Elsewhere (Soothill, Ackerley and Francis, 2006) we have focused on the participation rates, in terms of conviction data, among children and young people (aged 10 to 25 years) and have revealed considerable changes in court activity over the 36-year period (1963-1998). Nevertheless, that analysis told nothing of the nature of the criminal behaviour that came to the notice of the courts during this period. It is that task that is the primary focus of the present paper.



## Methods

Our data sources have been described in earlier papers (Soothill, Ackerley and Francis, 2004; Francis, Soothill and Fligelstone, 2004). Essentially, the main database used is the Offenders Index, a court-based database of all ‘standard list’ criminal convictions in England and Wales from 1963 to the present day. Standard list convictions include all offences triable at crown court and the more serious offences which are triable at magistrates’ courts only or in either court system. Criminal convictions are recorded for all offenders aged 10 or over, which is the age of criminal responsibility in England and Wales. A linking scheme carried out by the Home Office links court convictions together to construct criminal histories for individual offenders. There is no information on arrests or on cautions or warnings issued by the police – it is purely a database of court convictions. Moreover, we have no dates of offending; only court sentencing dates are present.

In this study, we are concerned with the Offenders Index *cohort* data. This is a subset of the Index consisting of six ‘birth cohorts’ – a sample of all offenders born in four specified weeks (one in each of March, June, September and December) in 1953, 1958, 1963, 1968, 1973 and 1978, with conviction histories recorded until the end of 1999<sup>1</sup>. In total, there are over 47,000 male offenders and 10,000 female offenders in the six cohorts<sup>2</sup>.

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<sup>1</sup> A public version of the dataset with a shorter follow-up time is available from the ESRC Data Archive (<http://www.data-archive.ac.uk/>)

<sup>2</sup> In terms of consistency, we follow Soothill, Ackerley and Francis (2004) who excluded two offences – ‘drink driving’ and ‘driving whilst disqualified’ – that were classed as standard list offences only from 1996. Around 3,200 males and 500 females were therefore discarded from the data.

As the age range under consideration spans five years and the birth cohorts also are separated by five years, the ‘periods’ for each cohort (that is, the years the offenders were in the 16-20 age range) are mutually exclusive. Those born in 1953 are aged 16-20 in 1969-1973; for the 1958 cohort, the period is 1974-1978; for the 1963 cohort, 1979-1983; for the 1968 cohort, 1984-1988; for the 1973 cohort, 1989-1993; for the 1978 cohort, 1994-1998<sup>3</sup>.

In order to summarise the criminal participation of offenders aged 16-20, 38 categories of offences were produced. These categories consisted of either single standard list offences (e.g. Robbery), or a combination of similar standard list offences (e.g. ‘Sexual 16+’ which combines – among others – offences of rape and indecent assault against both males and females). In forming the 38 categories, both the nature of each offence and its similarity with any others, *and* the frequency of the offence were taken into account. Sparse offences which were deemed too different from existing categories to be combined with them necessitated the formation of a catch-all ‘other’ category. The full list of the 38 offence categories can be seen in the Appendix.

For each offender, an indicator (0,1) variable was formed for each of the 38 offence categories; in each, it was simply recorded whether or not he or she had been convicted of any of the offences forming that group when aged 16-20. The number of times that a conviction for a category appeared in that age period was *not* recorded – we propose to focus not on *volume* of offending, but on *breadth* of offending.

Choosing this restricted summarisation of the 16-20 group allows the investigation of

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<sup>3</sup> It should be recognised that these years are those in which the cohort members *become* the age – that is, when they have their birthday. The years are referred to as a convenience only; it is the *age* at the convictions we focus on.

any versatile or specialist offender types, without the confounding factor of frequency of offending.

Following the methodology used by Francis, Soothill and Fligelstone (2004), we use latent class analysis to identify classes or patterns of official criminal activity as defined by the 38 indicator variables, analysing males and females separately. Latent class analysis is a probabilistic cluster analysis technique, which identifies clusters that group together (in this instance) offenders who share similar conviction characteristics when aged 16-20. The technique is different from most other clustering algorithms, which assign a case absolutely to one cluster or another. Latent class analysis, in contrast, gives the *probability* of a case belonging to each group or cluster, and while it therefore *can* be used to assign cases to clusters on the basis of the highest probability, further information is available to the analyst investigating the groups. In addition, latent class analysis is model based; there is a statistical model underlying the clustering algorithm. McCutcheon (1987) provides an introduction to this method.

One purpose of the analysis is to estimate the *number* (K) of statistically different types of offender (clusters) which exist in the 16-20 year old age group over the 30 year period. The BIC, or Bayesian Information Criterion, provides a convenient method of choosing between models where the assumptions of the likelihood ratio test break down (Kass and Raftery, 1995; D'Unger et al., 1998). We proceeded by fitting a latent class model for each value of K from K=2 to K=20. For each value of K we chose 1000 random start sets and took the solution with the lowest

value of BIC. We then chose the value of K which minimised the BIC over the range of values of K.

In order to identify the characteristics of the clusters, we look at two types of probabilities. The first (the cluster profiles) looks at the probability of each offence within a cluster and is our primary source for identifying the nature of each cluster. For any cluster, this identifies offence categories which are very likely to occur within it. However, we will on occasion also look at the probability of cluster membership within an offence category (the offence probabilities). Francis, Soothill and Fligelstone (2004) gives further details. Finally, we will estimate the proportions of offenders falling in each of the clusters when the six cohorts are taken separately. For example, a particular cluster may encompass a large proportion of the 1953 cohort, but then decrease in importance over the later cohorts (or *vice versa*). Alternatively, the proportion of a cohort falling within a cluster may stay approximately stable throughout the cohorts, indicating an unchanging pattern of criminal behaviour over time. To do this, we assign each offender to the cluster with the highest probability of membership.

## **Results**

Developing a latent class analysis on the combined dataset (that is, using the data from all six cohorts) provides a consistent definition of the latent classes across time against which the individual cohorts can be compared.

(Figure 1 about here)

We first determined the evidence for the number of distinct clusters for males and females. Figure 1 shows the values of BIC for K=2 to K=20 clusters for male offenders and K=2 to K=10 for female offenders (it was found to be unnecessary to consider higher values of K for the females). For the males, with 26,797 offenders having a conviction aged 16-20, the minimum value of BIC showed that a 16-cluster solution was the most appropriate. In contrast, for females, with 4,659 offenders, five clusters were identified as optimal. It might seem that the number of classes is large for the males; however, we maintain that 16 clusters reflects both the size of the sample (more clusters can be detected as statistically separate entities) and also reflects a greater diversity of offending behaviour among males.

### *Males*

For the male offenders, we examine each of the 16 clusters in turn, and identify those offence categories with sizeable probabilities of occurring within each cluster. We identify and present the cluster profile probabilities in Table 1 that are greater than 0.2; all other probabilities are left blank. One exceptional cluster – the ‘residual’ cluster – has no probability above 0.2, and we instead present the three highest probabilities within this cluster. This means that 18 out of the 38 offence categories contribute to Table 1. In addition, we use (though do not present) the offence profile probabilities to interpret this ‘residual’ cluster.

(Table 1 around here)

The 16 clusters vary in their composition. Some consist of a variety of criminal behaviour, having large probabilities for a number of offence categories;

others appear to be quite ‘pure’ in the sense that only one offence category is evident. We identify four major groups of the clusters for the males: the *specialists*, where only one offence category is strongly evident; the *dual offence* clusters, with two offence categories present, being a main ‘defining’ offence and a secondary ‘contributory’ offence; the *versatile* group where there are no clear defining offences; and a *residual* cluster with no large probabilities. Table 1 is displayed in this order with the size of each cluster shown.

A description of each of the 16 clusters for the males in terms of the 38 offence categories, and grouped into the four types of cluster follows.

## **1. Specialist clusters**

These nine clusters can be regarded as specialist as they each have one *defining* offence which is strongly evident.

### *(1a) Criminal damage*

This cluster consists of the *defining* offence of criminal damage. Offenders of this type are specialised in their behaviour, with very low probabilities of any other offence.

### *(1b) Theft*

Offenders who belong to this cluster focus on theft in their criminal behaviour. While a large proportion of all offenders have a conviction for theft at some point in their career, this cluster contains those who have very few other types of conviction (if, indeed, any). Offenders with other types of conviction as well as those for theft

will be assigned to a different cluster where theft can be considered as a contributory addition to other offences.

*(1c) Burglary (other)*

The behaviour here involves burglary in places other than dwellings (such as shops, businesses, etc.). While there is a small probability that such offenders will also have convictions for theft and criminal damage, this remains primarily a specialised cluster in terms of offence categories.

*(1d) Theft from vehicles*

This cluster is dominated by ‘theft from vehicles’, although there are small probabilities for theft, other burglary, going equipped, and criminal damage – these latter two may well be associated with committing theft from vehicles, emphasising the specialist nature of these offenders.

*(1e) Shoplifting*

The offence of shoplifting is the only offence which is of any note in this cluster – these acquisitive offenders are highly focused in their offending.

*(1f) Receiving and handling*

Of the 38 offence categories, the *defining* one here is that of receiving and handling stolen goods. Those offenders in this cluster specialise in receiving and handling, and the cluster appears to separate these individuals from those also involved in wider property offences.

*(1g) Drugs (possession etc. only)*

The category of drugs (possession etc. only) is dominant in this cluster, reflecting a drugs lifestyle with little other criminal activity. The more serious drugs related offences of supply (including possession with intent to supply), and import/export/production offences are not *common* among the offenders in this cluster (both with probabilities less than 0.1).

*(1h) Possession of offensive weapons*

The offenders assigned to this cluster have been convicted of possession of an offensive weapon with low probabilities of other types of offending; possibly this indicates a group of individuals *carrying* but not *using* knives.

*(1i) Resisting arrest etc.*

This cluster, the smallest identified, is defined by those offenders having a conviction for ‘resisting arrest etc.’ with negligible probabilities of other offences. One explanation is that these offenders may also be convicted of non standard list offences (such as drunkenness) which are not included on the Offenders Index.

## **2. Dual offence clusters**

These three clusters are considered as *dual offence* as they have two significant offence categories present.

*(2a) General violence*

The dominant offence that stands out here is violence against the person, with offenders of this type all having at least one conviction between the ages of 16 and 20



of such an offence. However, just under a quarter will also have been convicted for criminal damage, which relates to another kind of violence, that against property. The focus, in short, remains one of violence.

#### *(2b) General Burglary*

The behaviour of offenders in this cluster principally includes burglary (dwelling). However, the offence of burglary (other) will be present in the criminal records of one in four of these 16-20 year old males. Hence, these offenders are less specialised than those in cluster 1c who seem to avoid dwellings.

#### *(2c) Fraud & forgery with some theft*

While one in three of offenders assigned to this category will have been convicted for theft when aged 16-20, it is fraud and forgery which primarily defines the offender here.

### **3. Versatile**

These three clusters can be considered as versatile by dint of the fact that the offenders exhibit a range of offences with no one offence dominant.

#### *(3a) Versatile acquisitive*

This cluster typifies the behaviour of the type of offender for whom crime is a means of gaining money and property (*acquisitive*), and where the offence can be one of a number, such as theft and burglary of various types (*versatile*). In addition, there is a reasonable probability that such an offender will also be involved in violent

behaviour either against the person (a one in three chance), or against property (criminal damage) (nearly a one in two chance).

*(3b) Disorganised versatile*

As for the previous cluster, offenders belonging to this cluster are likely to have convictions for a range of offences, primarily property, but also sometimes involving violence and criminal damage. What characterises this cluster is the higher probability for non-compliance with the criminal justice system (for instance, absconding and bail offences). Closer analysis (not shown in Table 1) suggests that cluster 3a contains more active predators (sexual offending, house burglary), whereas members of this cluster appear to be more opportunistic and more likely to be convicted of drug possession.

*(3c) Very versatile / frequent*

This cluster demonstrates the characteristics of the other two versatile clusters writ large. A very wide range of offences are usually present in the convictions of offenders assigned to this cluster. Of particular note are burglary (both in a dwelling or 'other'), theft, theft of vehicles, receiving and handling, criminal damage, and absconding / bail / breach offences – sizeable numbers of offenders here will have these types of convictions. A high proportion will have convictions for violence, going equipped, theft from vehicles, attempted theft of/from vehicles, and shoplifting. For this cluster, no offender had convictions for fewer than five *types* of offence category, with a mean of nearly nine different types. This cluster highlights the persistent offender who is the focus of much governmental concern.

#### **4. The residual offenders**

As can be clearly seen from Table 1, offenders who belong to this cluster have no strong probabilities of having convictions of any of the 38 types. While this cluster appears at first glance to be a motley collection of offences one can soon recognise that the cluster captures some specific offence groups (e.g. theft by an employee) not captured elsewhere.

In addition, some of the offence behaviour involved here is of an unusual nature – it is not very probable that an offender assigned here will have a conviction for lethal violence, a sexual offence, theft by employee, or immigration, but an offender who *does* have a conviction of one of these types has the highest probability of being assigned to this cluster.

#### ***Females***

As well there being fewer females in our sample having at least one standard list conviction aged 16-20 than the males (4,659 offenders for females compared to 26,797 for males), just five clusters were identified as the most appropriate solution. The fewer clusters than for the males will be partly a function of the lower numbers of females but, perhaps also a reflection of the narrower repertoire of offending behaviour among females during this time-period. Table 2 presents the cluster profiles with the clusters ordered in terms of the cluster groups – specialist (two clusters), dual offence (one cluster), versatile (one cluster) and residual (one cluster). Following an identical procedure to the males, only the eight most important of the 38 offences are shown.

(Table 2 around here)

## **1. Specialist clusters**

### *(1a) Shoplifting*

This is both the largest cluster for the females and a very focused one – only the offence of shoplifting stands out in Table 2. In addition the offence probabilities show that over three quarters of those convicted for shoplifting are assigned to this cluster.

### *(1b) Violence*

While violence convictions appear in the other clusters (especially the versatile / frequent cluster), female offenders assigned to this cluster are concentrated in violent behaviour. The offence probabilities show that around four in five of the females convicted of violence aged 16-20 are assigned to this cluster.

## **2. Dual offence**

### *(2a) Theft / some Fraud & Forgery*

The vast majority of offenders here will have a theft conviction, with around one in four also having a conviction for fraud & forgery.

## **3. Versatile**

### *(3a) Versatile / frequent*

The behaviour in this cluster is defined by a range of criminal activity – many of the females will have convictions for theft, shoplifting, fraud & forgery or absconding / bail / breach offences, with a reasonable number having convictions for

violence, receiving and handling, or criminal damage. None of the females assigned to this group has fewer than three different offence types among their convictions aged 16-20, with the mean being 4.37, and some having as many as 13 different types (the maximum number of different offence types for any case assigned to the other clusters was no more than six).

#### **4. Residual offenders**

As Table 2 shows, females assigned to this cluster do not have any strong probabilities of having convictions for any offence, but the convictions they do have tend to be those that are relatively uncommon (among females). To interpret this cluster, it is necessary to examine the offence probabilities in detail. Table 3 summarises these probabilities, highlighting those offence categories with a probability greater than or equal to 0.5 in one of the five clusters<sup>4</sup>; this identifies offence categories with a strong likelihood of being assigned to one cluster.

(Table 3 about here)

Table 3 shows that for the residual cluster, the majority of females with convictions for immigration offences, theft by employee, public order offences, child cruelty, and import / export / production of drugs when aged 16-20 will be assigned to this cluster rather than one of the other four.

#### **Changing proportions over time**

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<sup>4</sup> Three offences – sexual 16+, sexual consensual and aggravated burglary – have been omitted from the table, as just one or two offenders were convicted of each of these offences.

Having described the clusters for the combined cohorts, we now wish to observe the percentage assigned to each cluster when the six cohorts are taken separately. Table 4 shows this for the males, and Table 5 for the females.

(Tables 4 and 5 around here)

The tables are presented in terms of population rates so that one can more readily assess actual changes over time. So, to take the first line of Table 4 as an example, we can see that, using figures from the 1953 cohort and population estimates from the Office of National Statistics, 1.43% of the male population of England and Wales aged 16-20 were assigned to the 'criminal damage' cluster. This rises to 2.08% of the population which relates to the 1958 cohort and further rises to 2.27% of the population for the 1963 cohort; subsequently the proportions decline so that only 1.02% of the population relating to the 1978 cohort would be assigned to the 'criminal damage' cluster. Each of the 16 male clusters and the five female clusters can be considered in this way, but it is more meaningful to consider first the overall totals (the penultimate line on Tables 4 and 5) and then focus on the totals for the four major cluster groups – 'specialist', 'dual offence', 'versatile' and 'residual'.

The overall totals indicate the proportions of the 16-20 population that are convicted – these figures are calculated from the individual cohorts and population estimates. Hence, it is estimated that for *males* 14.40% of those aged 16-20 in the period 1969-1973 were convicted of a standard list offence while in this age-band. The figures for those aged 16-20 in the late 1970s, early 1980s, late 1980s, early 1990s, and late 1990s are 16.69%, 19.00%, 17.28%, 13.97%, and 12.88%

respectively. In short, therefore, the 1963 cohort (aged 16-20 between 1979 and 1983) had the highest participation rate in crime measured by convictions. In contrast, the 1978 cohort, which is the latest cohort, had the lowest participation rate of 12.88% . Whatever else, we can say that the proportions of males reaching the courts and being convicted are falling and not rising.

The pattern of the results for *females* is almost identical although the participation rates overall are much lower. Hence, it is estimated that for females 2.40% of those aged 16-20 in the period 1969-1973 were convicted of a standard list offence while in this age-band. The figures for those aged 16-20 in the late 1970s, early 1980s, late 1980s, early 1990s, and late 1990s are 3.34%, 3.80%, 2.90%, 2.32%, and 2.38% respectively. In brief, therefore, again the 1963 cohort (aged 16-20 between 1979 and 1983) had the highest participation rate in crime measured by convictions. However, it is the 1973 cohort (closely matched by the 1978 cohort) which had the lowest participation rate of 12.88%. As with the males, the female court conviction participation rates are falling.

The reasons for these shifts in participation rates are various and are discussed more fully elsewhere (Soothill, Ackerley and Francis, 2006). However, in this paper the focus is on the *type* of changes that seem to be emerging and the overall participation rates should simply be seen as a backdrop.

Moving on to the patterns which emerge for the four major groupings of clusters– ‘specialist’, ‘dual offence’, ‘versatile’ and ‘residual’, the evidence is fairly clear-cut.

We first consider the 'specialist' totals. For the males, the estimated population proportions assigned to the 'specialist' clusters decline dramatically in the last two cohorts who were aged 16-20 in the years 1989-1998. For the first four cohorts around 10 per cent of the 16-20 population were assigned to 'specialist' clusters but this is halved to around 5 per cent for the last two clusters. For the females, the picture is quite different. Around 1 per cent of the female 16-20 population are consistently assigned to 'specialist' clusters for each of the cohorts.

For the 'versatile' cluster total, Tables 4 and 5 demonstrate an increasing pattern which is similar for males and females. For the males the proportion of the 16-20 population involved in versatile offending doubles from around two per cent for the 1953 cohort to around four per cent for the last four cohorts. From a very low base the rise in versatile female offending is even more dramatic – from 0.05 per cent for the 1953 cohort to 0.37% for the last two cohorts. However, even by the 1978 cohort the proportion of females in the population involved in versatile type offending behaviour is still only a tenth that of their male counterparts.

The dual offence category for the males remains fairly steady over the period with around three per cent of the male 16-20 population convicted for such behaviour. For the females, the story is different with an appreciable decline in such behaviour in relation to the 1973 and 1978 cohorts.

Finally, for the residual category, around one per cent of the population in each cohort is assigned to this cluster for both males and females. While it contains



some important and serious offences for both males and females, this cluster can be disregarded for the purposes of examining changes over time.

This broad analysis portrays the headline story, namely, that ‘specialist’ clusters are declining for males but not for females, while ‘versatile’ clusters are definitely increasing for both. But such a stark statement masks variations within the ‘specialist’ and ‘versatile’ clusters.

Among the males, the proportions in the 16-20 population involved in the ‘specialist’ clusters of criminal damage, theft, burglary (other), theft from vehicles, shoplifting, receiving and handling have all lessened. However, there are some ‘specialist’ clusters among the males that increase quite significantly over the 30-year period of interest. These relate to drugs, possession of offensive weapons and resisting arrest. All these could be expected and help to give face validity to the findings.

Among the males, the ‘versatile’ category also shows some variation within its constituent clusters. Essentially the shift appears to be either towards more opportunistic offending with less compliance with the criminal justice system, or towards a greater range of offending behaviour involving drugs offences.

Among the females it is only the ‘specialist’ category that has two constituent clusters – shoplifting and violence respectively. Among the females convicted and assigned to these clusters over the 30-year period, shoplifting is halved from around one per cent to a half per cent among the later cohorts. In contrast, violence has

increased from 0.1% to 0.5% – a four-fold rise. This, of course, does not necessarily mean, for instance, that there are fewer convictions for shoplifting in the later periods, for shoplifting may still be a component of the increased versatile behaviour that we have earlier stressed is on the rise among both females and males. However, it does mean that fewer females who seem to be specialising in shoplifting are coming before the courts in the later periods. Indeed, what the results powerfully indicate is that the profiles coming before the courts and being convicted have changed markedly over the years. Thus, there are very real differences in conviction patterns emerging over time, but we contend that, perhaps more importantly, the differences contribute to a perception of crime which may be distorted.

## **Discussion and Conclusions**

From the perspective of the courts, whose currency is convictions, there have been some quite remarkable shifts in conviction patterns emerging over time. We assert that the implications of these changes have not been fully recognised. Indeed, the conceptual framework needs to be modified so that the distinction between reality and perceptions is fully appreciated. First, however, we need to set out our claims and caveats.

Our claims are that this paper heralds methodological and substantive advances. The methodological advance which we have used elsewhere (Francis, Soothill and Fligelstone, 2004) is to argue that clustering – produced as the outcome of latent class analysis – more closely represents the reality of criminal activity when one tries to measure the activity of an individual over a defined period, say, five years. In brief, the various clusters capture the varying repertoire of criminal activity rather

more than focusing on particular crimes. By including all the individuals in the birth cohorts convicted of crime while 16-20 years over the 30-year period, the analysis can provide an overall benchmark by which changes in the nature of criminal behaviour over the period can be measured.

The paper has demonstrated quite substantial substantive changes over the period. Again put briefly, there has been an overall shift from what we term as more ‘specialist’ criminal behaviour to more ‘generalist’ behaviour. However, within the ‘specialist’ clusters there are some differences. So, for example, among the males, those clusters relating to drugs, possession of offensive weapons and resisting arrest have increased and, among the females, the two specialist clusters have moved in opposite directions – the cluster relating to shoplifting has halved over the 30-year period while the violence cluster has increased four-fold. Further, in terms of declining participation rates, the stories are similar for both males and females. We claim that there has been no previous attempt to consider numerically the extent of these shifts. However, whether such changes are the outcome of system or behavioural changes (or both) may be a moot point, but some speculation is justified.

In quantifying the changing proportions of the young adult male and female population coming before the courts, the picture that emerges is fascinating. Thus, we can estimate that the proportion of the young adult male population who are involved in highly versatile offending – which is characterised by at least four separate court convictions in the five year period – has dramatically changed. This proportion has doubled from around one in fifty of the male 16-20 population in the early 1970s to one in twenty-five in the late 1990s. For the female 16-20 age group, we observe an

even more spectacular increase in versatile offending from one in 2000 in the early 1970s to one in 300 in the late 1990s – nearly seven times the original proportion. While the gap is narrowing, the difference between male and female versatile offending nevertheless remains large.

There are caveats which need to be confronted. Firstly, the term, ‘specialist’, may be misleading. Those in the ‘specialist’ clusters will include those convicted of just one offence on just one occasion in the 16-20 age group; hence, there is not much scope to judge the scale of their specialisation. Secondly, we are only investigating conviction data within the court system of England and Wales, and the court system is just *one* part of the criminal justice system. Nevertheless, the court system is pivotal in the sense of being the forum where opinion formers, such as judges and magistrates, officiate and it is also the most notable *public* forum within the criminal justice system. Our final caveat relates to the nature of the cohort data presented. The non-overlap of periods across the birth cohort generations means that we are unable to separate the generational or cohort effects from year or period effects in this analysis. Hence the nature of the change cannot be pinpointed in this study.

The primary focus of this paper is to provide a new perspective on the offending behaviour of young adults, by disentangling their patterns of court convictions over a thirty year period, and presenting such patterns in the form of underlying participation rates. By this approach one can avoid the current confusion of where the problem lies in relation to young adult offenders.

Over the years one might have expected the court system to be lauding the significant decline in the numbers and proportions of young adults aged 16-20 years coming before the courts and, as a consequence, the substantial numbers of young people who are avoiding the stigma of a criminal conviction – certainly the present study indicates this. However, instead, we have had a recital of increasing concern about the crime of young people. Why is this? The conventional reply would be that all this simply indicates the politicisation of crime and the media's contribution to ratcheting up the concern about crime (Downes and Morgan, 2002; Reiner, 2002). Again, there may be some truth in this, but the picture is actually more complex. In fact, this present study – by focusing on the changing nature of criminal highlights the interplay of reality and perception.

The reality is that a lower proportion of the 16-20 age group is being convicted by the courts, but the general perception is that the situation is deteriorating. We have identified that the truth is more complex. While a smaller proportion of the 16-20 population is brought before the courts, the case mix has markedly changed over the 30 years of our study. Specifically, higher proportions of the male and female populations who are convicted have a far wider repertoire of criminal behaviour in recent years. Further, the nature of the criminal behaviour which the magistracy and judiciary are trying in their courts is changing. So, for instance, the rarity of a drug offence has been replaced by the pervasiveness of drug offences. Also, the meaning of offences in terms of seriousness may be changing. Domestic violence, for example, which was too readily countenanced by the police and others at the start of the period will certainly be reaching court calendars by the end of the period. Similarly, there are other offences, such as theft from vehicles and burglary which are

less featured in courts in recent times. Nevertheless, by observing the quality of the offending which comes before the courts, it now seems so much worse because those committing 'lesser' offences began to be dealt with by other means. However, the counter argument is that the quantity of young people coming before the courts (that is, the participation rate) has declined. The problem is that higher *proportions* of those young people who come before the courts in recent years exhibit greater versatility and more violence. These are still the minority of offenders but, nowadays, they seem to make a greater impact. Bad news usually does, but we still need to remember that, somehow or other, more are avoiding the stigma of a criminal conviction.

This study has demonstrated that one can, indeed, measure changes in patterns of offending over time. It is hazardous, for meanings and practices change. Nevertheless, one can identify the patterns by which perceptions are formed, whilst also recognising that the underlying reality – which may provide better news – is sometimes masked. Court convictions provide scope for helping to understand the court perspective, but one also needs to recognise that it is only a partial view of the criminal justice system.

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**Table 1: Males – Cluster profiles for offenders aged 16-20. 16 cluster solution.**

| Cluster name                   | Specialist      |       |                  |                     |             |                        |                              |                                 |                       | Dual offence     |                  |                          | Versatile             |                        |                           | Residual |
|--------------------------------|-----------------|-------|------------------|---------------------|-------------|------------------------|------------------------------|---------------------------------|-----------------------|------------------|------------------|--------------------------|-----------------------|------------------------|---------------------------|----------|
|                                | Criminal damage | Theft | Burglary (other) | Theft from vehicles | Shoplifting | Receiving and handling | Drugs (possession etc. only) | Possession of offensive weapons | Resisting arrest etc. | General Violence | General Burglary | Fraud and forgery/ theft | Versatile acquisitive | Disorganised Versatile | Very versatile / frequent |          |
| <i>No. assigned to cluster</i> | 2930            | 2422  | 2018             | 1733                | 1279        | 1405                   | 1105                         | 339                             | 331                   | 3504             | 1181             | 1069                     | 3342                  | 1459                   | 771                       | 1809     |
| <i>Offence</i>                 |                 |       |                  |                     |             |                        |                              |                                 |                       |                  |                  |                          |                       |                        |                           |          |
| Violence                       |                 |       |                  |                     |             |                        |                              |                                 |                       | 1.00             |                  |                          | 0.35                  | 0.29                   | 0.44                      |          |
| Firearms/offensive weapon.     |                 |       |                  |                     |             |                        |                              | 1.00                            |                       |                  |                  |                          |                       |                        |                           |          |
| Resisting arrest etc           |                 |       |                  |                     |             |                        |                              |                                 | 1.00                  |                  |                  |                          |                       |                        | 0.20                      |          |
| Burglary (dwelling)            |                 |       |                  |                     |             |                        |                              |                                 |                       |                  | 1.00             |                          | 0.47                  |                        | 0.61                      |          |
| Burglary (other)               |                 |       | 1.00             |                     |             |                        |                              |                                 |                       |                  | 0.26             |                          | 0.66                  | 0.23                   | 0.68                      |          |
| Going equipped                 |                 |       |                  |                     |             |                        |                              |                                 |                       |                  |                  |                          |                       |                        | 0.36                      | 0.11     |
| Vehicle taking (aggravated)    |                 |       |                  |                     |             |                        |                              |                                 |                       |                  |                  |                          |                       |                        | 0.22                      |          |
| Theft                          |                 | 1.00  |                  |                     |             |                        |                              |                                 |                       |                  |                  | 0.33                     | 0.67                  | 0.35                   | 0.75                      |          |
| Theft by employee              |                 |       |                  |                     |             |                        |                              |                                 |                       |                  |                  |                          |                       |                        |                           | 0.18     |
| Theft from vehicles            |                 |       |                  | 1.00                |             |                        |                              |                                 |                       |                  |                  |                          | 0.22                  |                        | 0.42                      |          |
| Theft of vehicles              |                 |       |                  |                     |             |                        |                              |                                 |                       |                  |                  |                          |                       |                        | 0.62                      | 0.12     |
| Att. theft of/from vehicle     |                 |       |                  |                     |             |                        |                              |                                 |                       |                  |                  |                          |                       |                        | 0.36                      |          |
| Shoplifting                    |                 |       |                  |                     | 1.00        |                        |                              |                                 |                       |                  |                  |                          | 0.27                  | 0.28                   | 0.46                      |          |
| Fraud and forgery              |                 |       |                  |                     |             |                        |                              |                                 |                       |                  |                  | 1.00                     | 0.24                  |                        | 0.27                      |          |
| Receiving and handling         |                 |       |                  |                     |             | 1.00                   |                              |                                 |                       |                  |                  |                          | 0.30                  | 0.21                   | 0.55                      |          |
| Criminal damage                | 1.00            |       |                  |                     |             |                        |                              |                                 |                       | 0.22             |                  |                          | 0.45                  | 0.31                   | 0.56                      |          |
| Drugs (poss. etc only)         |                 |       |                  |                     |             |                        | 1.00                         |                                 |                       |                  |                  |                          |                       |                        | 0.26                      |          |
| Absc./bail/breach              |                 |       |                  |                     |             |                        |                              |                                 |                       |                  |                  |                          |                       | 0.40                   | 0.70                      |          |

Note: due to rounding, very high probabilities are shown as '1.00'.

**Table 2: Females – Cluster profiles for offenders aged 16-20. 5 cluster solution**

|                                | Specialist  |          | Dual offence                   | Versatile            | Residual |
|--------------------------------|-------------|----------|--------------------------------|----------------------|----------|
| <i>Cluster name</i>            | Shoplifting | Violence | Theft / some Fraud and forgery | Versatile / frequent | Residual |
| <i>No. assigned to cluster</i> | 1558        | 464      | 752                            | 405                  | 1480     |
| <i>Offence</i>                 |             |          |                                |                      |          |
| Violence                       |             | 1.00     |                                | 0.27                 |          |
| Theft                          |             |          | 1.00                           | 0.50                 |          |
| Theft by employee              |             |          |                                |                      | 0.13     |
| Shoplifting                    | 1.00        |          |                                | 0.68                 |          |
| Fraud and forgery              |             |          | 0.25                           | 0.41                 | 0.26     |
| Receiving and handling         |             |          |                                | 0.33                 | 0.19     |
| Criminal damage                |             |          |                                | 0.24                 |          |
| Absconding/bail/breach         |             |          |                                | 0.41                 |          |

Note: due to rounding, very high probabilities are shown as '1.00'.

**Table 3: Females – Offence probabilities of belonging to each of the five clusters**

|                                  | Specialist  |          | Dual offence                   | Versatile            | Residual |
|----------------------------------|-------------|----------|--------------------------------|----------------------|----------|
| <i>Cluster name</i>              | Shoplifting | Violence | Theft / some Fraud and forgery | Versatile / frequent | Residual |
| <i>Offence</i>                   |             |          |                                |                      |          |
| Lethal violence (incl attempts)  |             |          |                                | 0.69                 |          |
| Violence                         |             | 0.78     |                                |                      |          |
| Resisting arrest etc             |             |          |                                |                      | 0.61     |
| Going equipped                   |             |          |                                | 0.73                 |          |
| Blackmail                        |             |          |                                |                      | 0.59     |
| Vehicle taking (aggravated)      |             |          |                                |                      | 0.59     |
| Theft                            |             |          | 0.71                           |                      |          |
| Theft by employee                |             |          |                                |                      | 0.89     |
| Theft (in a dwelling)            |             |          |                                |                      | 0.62     |
| Theft (machines/meters/electric) |             |          |                                |                      | 0.59     |
| Theft from vehicles              |             |          |                                |                      | 0.52     |
| Theft of vehicles                |             |          |                                | 0.50                 |          |
| Attempted theft of/from vehicle  |             |          |                                | 0.61                 |          |
| Shoplifting                      | 0.77        |          |                                |                      |          |
| Receiving and handling           |             |          |                                |                      | 0.53     |
| Drugs (poss. etc only)           |             |          |                                |                      | 0.58     |
| Drugs (supply)                   |             |          |                                |                      | 0.62     |
| Drugs (import/export/production) |             |          |                                |                      | 0.71     |
| Absc./bail/breach                |             |          |                                | 0.57                 |          |
| Public order                     |             |          |                                |                      | 0.80     |
| Dangerous Driving                |             |          |                                | 0.50                 |          |
| Immigration                      |             |          |                                |                      | 1.00     |
| Child cruelty etc                |             |          |                                |                      | 0.73     |
| Other                            |             |          |                                |                      | 0.54     |

Note: only offences with a probability equal to or greater than 0.5 in one of the clusters are listed. Blank cells indicate probabilities of less than 0.5.

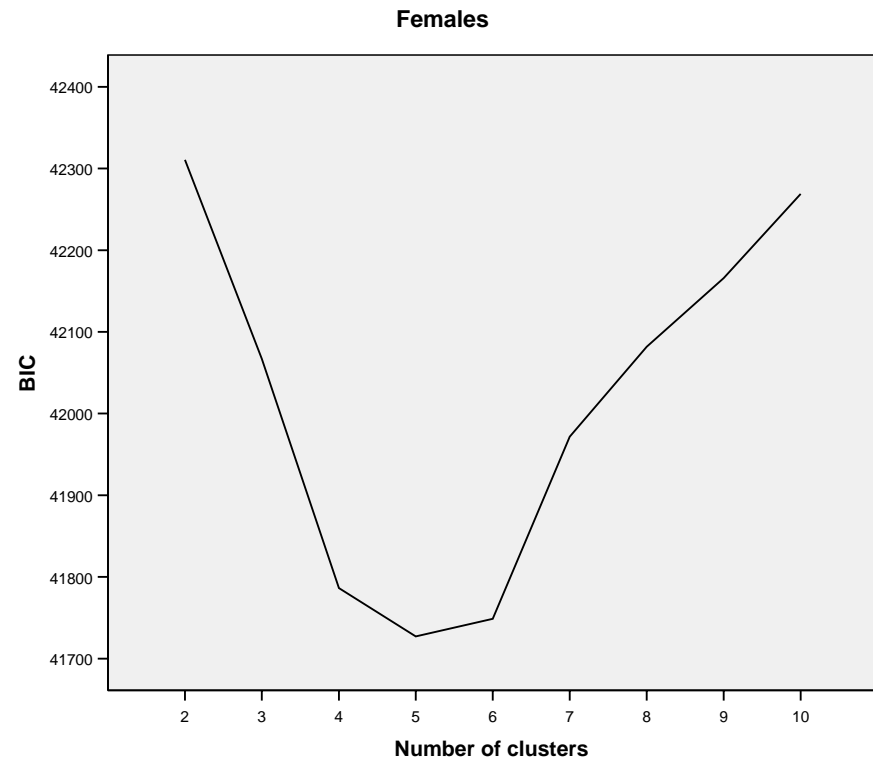
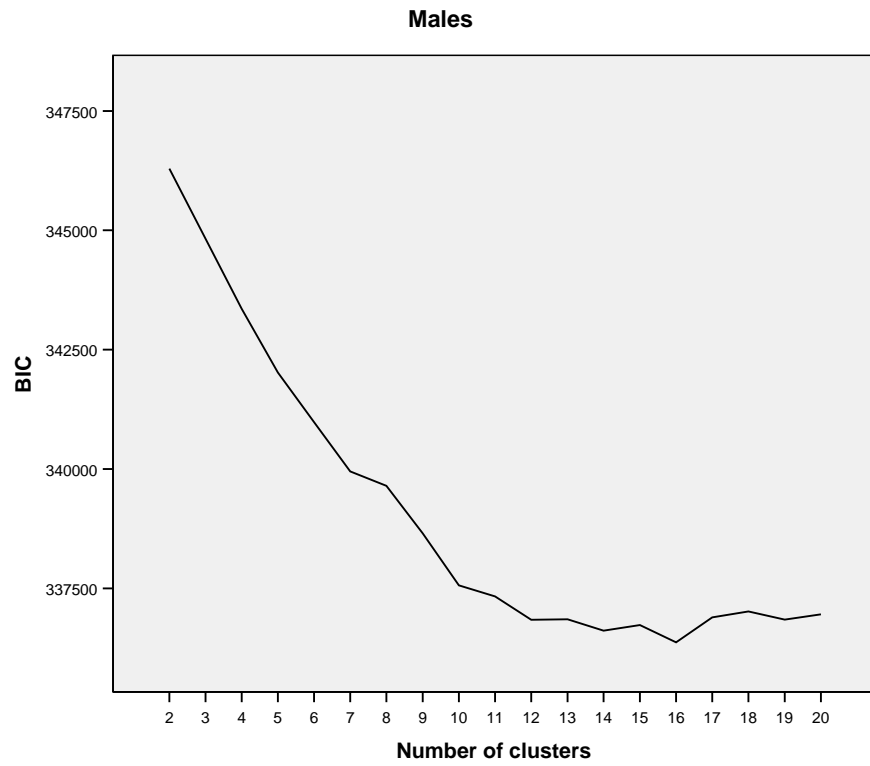
**Table 4: Males – percentage of 16-20 population assigned to each cluster**

|                                 | Period in which aged 16-20<br>Cluster name | Birth Cohort   |                |                |                |                |                |                    |
|---------------------------------|--------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------|
|                                 |                                            | <u>1953</u>    | <u>1958</u>    | <u>1963</u>    | <u>1968</u>    | <u>1973</u>    | <u>1978</u>    | <u>All cohorts</u> |
|                                 |                                            | 1969-73        | 1974-78        | 1979-83        | 1984-88        | 1989-93        | 1994-98        | 1969-98            |
| Specialist                      | Criminal damage                            | 1.43%          | 2.08%          | 2.27%          | 2.24%          | 1.10%          | 1.02%          | 1.74%              |
|                                 | Theft                                      | 2.28%          | 1.90%          | 1.62%          | 1.50%          | 0.74%          | 0.40%          | 1.44%              |
|                                 | Burglary (other)                           | 1.63%          | 1.55%          | 1.45%          | 1.35%          | 0.70%          | 0.30%          | 1.20%              |
|                                 | Theft from vehicles                        | 1.18%          | 1.15%          | 1.53%          | 1.12%          | 0.70%          | 0.27%          | 1.03%              |
|                                 | Shoplifting                                | 0.73%          | 0.90%          | 1.11%          | 0.98%          | 0.55%          | 0.51%          | 0.82%              |
|                                 | Receiving and handling                     | 0.94%          | 0.85%          | 1.07%          | 0.92%          | 0.73%          | 0.36%          | 0.83%              |
|                                 | Drugs (possession etc only)                | 0.22%          | 0.51%          | 0.71%          | 0.53%          | 0.77%          | 1.30%          | 0.66%              |
|                                 | Possession of offensive weapons            | 0.01%          | 0.06%          | 0.39%          | 0.27%          | 0.15%          | 0.29%          | 0.20%              |
|                                 | Resisting arrest etc                       | 0.05%          | 0.22%          | 0.19%          | 0.26%          | 0.19%          | 0.27%          | 0.20%              |
|                                 | Specialist total                           | 8.48%          | 9.22%          | 10.34%         | 9.18%          | 5.63%          | 4.73%          | 8.12%              |
| Dual offence                    | General violence                           | 1.68%          | 2.36%          | 2.18%          | 2.27%          | 1.78%          | 2.18%          | 2.08%              |
|                                 | General burglary                           | 0.80%          | 0.83%          | 0.88%          | 0.69%          | 0.53%          | 0.41%          | 0.70%              |
|                                 | Fraud & forgery / theft                    | 0.62%          | 0.68%          | 0.91%          | 0.71%          | 0.39%          | 0.40%          | 0.64%              |
|                                 | Dual offence total                         | 3.09%          | 3.86%          | 3.96%          | 3.67%          | 2.70%          | 3.00%          | 3.42%              |
| Versatile                       | Versatile acquisitive                      | 1.75%          | 2.42%          | 2.99%          | 2.46%          | 1.23%          | 0.56%          | 1.99%              |
|                                 | Disorganised versatile                     | 0.06%          | 0.19%          | 0.64%          | 0.85%          | 1.69%          | 2.00%          | 0.87%              |
|                                 | Very versatile / frequent                  | 0.01%          | 0.01%          | 0.15%          | 0.28%          | 1.35%          | 1.14%          | 0.46%              |
|                                 | Versatile total                            | 1.82%          | 2.62%          | 3.78%          | 3.59%          | 4.27%          | 3.70%          | 3.31%              |
|                                 | Residual                                   | 1.00%          | 0.99%          | 0.92%          | 0.84%          | 1.36%          | 1.46%          | 1.07%              |
|                                 | Overall total                              | 14.40%         | 16.69%         | 19.00%         | 17.28%         | 13.97%         | 12.88%         | 15.92%             |
| Estimated male 16-20 population |                                            | <b>342,800</b> | <b>366,720</b> | <b>419,913</b> | <b>405,907</b> | <b>353,446</b> | <b>299,297</b> | <b>2,188,083</b>   |

**Table 5: Females – percentage of 16-20 population assigned to each cluster**

|                                   |                                            | Birth Cohort   |                |                |                |                |                |                    |
|-----------------------------------|--------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------|
|                                   |                                            | <u>1953</u>    | <u>1958</u>    | <u>1963</u>    | <u>1968</u>    | <u>1973</u>    | <u>1978</u>    | <u>All cohorts</u> |
|                                   | Period in which aged 16-20<br>Cluster name | 1969-73        | 1974-78        | 1979-83        | 1984-88        | 1989-93        | 1994-98        | 1969-98            |
| Specialist                        | Shoplifting                                | 0.94%          | 1.24%          | 1.40%          | 0.93%          | 0.61%          | 0.54%          | 0.97%              |
|                                   | Violence                                   | 0.10%          | 0.27%          | 0.28%          | 0.28%          | 0.34%          | 0.50%          | 0.29%              |
|                                   | Specialist total                           | 1.05%          | 1.51%          | 1.69%          | 1.20%          | 0.96%          | 1.04%          | 1.26%              |
| Dual offence                      | Theft / some Fraud & Forgery               | 0.56%          | 0.61%          | 0.63%          | 0.55%          | 0.20%          | 0.17%          | 0.47%              |
| Versatile                         | Versatile / frequent                       | 0.05%          | 0.17%          | 0.33%          | 0.23%          | 0.37%          | 0.37%          | 0.25%              |
| Residual                          | Residual                                   | 0.74%          | 1.05%          | 1.15%          | 0.93%          | 0.79%          | 0.80%          | 0.92%              |
|                                   | Overall total                              | 2.40%          | 3.34%          | 3.80%          | 2.90%          | 2.32%          | 2.38%          | 2.91%              |
| Estimated female 16-20 population |                                            | <b>327,700</b> | <b>351,240</b> | <b>402,540</b> | <b>386,278</b> | <b>332,819</b> | <b>282,541</b> | <b>2,083,118</b>   |

**Figure 1: BIC values for various numbers of clusters**



## **Appendix: The 38 offence categories formed from all standard-list offences**

- 1 Lethal violence (including attempts)
- 2 Violence
- 3 Firearms/dangerous weapon (possession etc)
- 4 Resisting arrest etc
- 5 Kidnapping and false imprisonment
- 6 Sexual 16+
- 7 Sexual under 16
- 8 Sexual consensual
- 9 Prostitution
- 10 Burglary (dwelling)
- 11 Aggravated burglary (dwelling, other)
- 12 Burglary (other)
- 13 Going equipped
- 14 Robbery
- 15 Blackmail
- 16 Vehicle taking (aggravated etc)
- 17 Theft
- 18 Theft from person
- 19 Theft by employee
- 20 Theft (in a dwelling)
- 21 Theft (machines/meters/electricity)
- 22 Theft from vehicles
- 23 Theft of vehicles
- 24 Attempted theft of/from vehicle
- 25 Shoplifting
- 26 Fraud and forgery
- 27 Receiving and handling
- 28 Criminal damage
- 29 Drugs (possession etc only)
- 30 Drugs (supply, including possession with intent)
- 31 Drugs (import/export/production)
- 32 Absconding/bail/breach offences
- 33 Public order
- 34 Perjury/attempting to pervert course of justice
- 35 Dangerous Driving
- 36 Immigration
- 37 Child cruelty etc
- 38 Other



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