Identifying and exploring young people's experiences of risk, protective factors and resilience to drug use

Identifying and exploring young people's experiences of risk, protective factors and resilience to drug use

Summary

The Home Office commissioned research in 2004 to explore risk, protective factors and resilience to drug use in young people. This report highlights key findings from a literature review, analysis of the 2003 Offending Crime and Justice Survey (OCJS) and a qualitative study of the views and experiences of a sample of young people from the OCJS who could be considered resilient to drug use.

- There are relatively well established associations between several risk and protective factors and problematic drug use among young people but these associations are not necessarily causal. Problematic drug use and drug use risk factors may be symptomatic of the troubled lives experienced by some young people.
- These risk factors may be used to identify vulnerable groups so that drug prevention programmes can be targeted at these groups who are at increased risk of drug use.
- Some programmes, such as those targeting parental monitoring or aiming to enhance young peoples' social skills, have shown some evidence of benefit though no prevention programmes have so far shown substantial effects. However, Caulkins *et al.* (2002) demonstrated that only small effects are required for the benefits from relatively inexpensive universal prevention programmes, such as school-based drug prevention programmes, to outweigh their costs.
- Resilience results from a complex interplay of factors which can be conceptualised as three inter-related thinking styles and behaviours:
  - the view that 'drugs are not for me';
  - drugs are incompatible with personal goals; and
  - interpersonal skills and ability to resist.

Resilience may be context and time dependent; thus individuals may respond differently to the same situations and experience. As such, all of the factors facilitating resilience should be considered when working with individuals.

Introduction

The Government's Drugs Strategy has the overarching aim of 'reducing the harm that drugs cause to society, including communities, individuals and their families', Home Office (2002). Although a number of vulnerable groups of young people are identified in the strategy, such as young offenders and those that are homeless, there are some young people who are vulnerable to drug use that do not fall into these categories.

The needs of these young people are addressed in Every Child Matters: Change for Children, Young People and Drugs strategy guidance, a cross-Government approach to the development of services to prevent drug harm. This has been developed in support of the drugs strategy and to support the Be Healthy aim of the overall Every Child Matters: Change for Children programme. This strategic guidance sets out a comprehensive approach to young people and drugs including:

> 'Ensuring provision is built around the needs of vulnerable children and young people; more focus on prevention and early intervention with those most at risk…'

'Targeted interventions within children and young people's services for those most at risk from drugs.'
(Every Child Matters: Change for Children, Young People and Drugs, HM Government 2005: 2 (&7))

The Home Office commissioned two linked studies to explore methods of identifying groups and individuals 'at risk'. First, a literature review was carried out of studies that have explored predictive factors of drug use and common factors arising from these studies were identified. Following on from this, an investigation of resilience was conducted. This combined a quantitative analysis of the Offending Crime and Justice Survey to identify the risk factors for drug use evident in the survey, as well as a qualitative study which explored the views and experiences of a group of young people who had had the opportunity to use drugs, and as such might be considered 'at risk' of using them, but had chosen not to do so. This study explored both the risk and protective factors that might influence young people's decisions about using drugs, as well as the nature of resilience to drug use. The methodologies used are described at the end of the report.

This report summarises and pulls together findings from these two studies. It highlights the key points for practitioners in the field of drug prevention, and highlights the need to take into account the complex interaction between risk of using drugs and resilience to drug use for an individual as opposed to focusing on discreet elements within an individual's life. The report presents case studies to illustrate the complexities involved in being resilient and how different factors come into play at different stages and in different contexts for young people. To ensure that the anonymity of respondents is always preserved, specific details, which may identify individuals and/or people, have at times been omitted or changed. All names are fictitious.

Risk and protective factors

What are risk and protective factors?

There has been a large amount of research into factors that may predict drug use; these factors have been termed 'risk factors' although as yet no definitive list has been agreed by the research community. There is, however, general agreement that it is not the case that a single factor predisposes an individual to drug use; rather there are multiple risk factors which act together on any one individual and contribute to their decision to use drugs. There is also evidence that the number of risk factors that a person is exposed to is a predictor of drug use, regardless of what those particular risk factors are; the more risk factors there are, the greater the likelihood of drug use. Therefore, any predictive models of drug use should consider using the number of risk factors as a predictor.

In addition to risk factors, there are other factors influencing a young person's decision not to use drugs. These are termed protective factors and can be defined as a factor which protects an individual from deciding to use drugs. Protective factors can be viewed as the converse of risk factors. For example, good parenting would be a protective factor, bad parenting a risk factor. As with risk factors an individual may exhibit several protective factors. However, in both cases, exhibiting the factor does not mean an individual either will use or not use drugs. There are complex interactions between risk and protective factors, the individual and their decision to use drugs.

Understanding risk and protective factors

The evidence explored in the literature review points to associations between diverse groups of risk factors for drug use in young people. These factors include parental discipline, family cohesion, parental monitoring, peer drug use, drug availability, genetic profile, self-esteem, hedonistic attitudes, reasons for drug use and the ratio of risk/protective factors. There is less consistent evidence linking drug use to mental health, parental substance use, religious involvement, sport, health educator lead interventions, school performance, early onset of substance use and socio-economic status.

These risk factors are not static and have differential predictive values throughout childhood and adolescence. They can occur at different times and can be either transitory or persist for long periods of time. Different factors are associated with the initiation and continuation of drug use although this distinction is not always clear in the literature. Table 1 shows a framework for conceptualising the developmental nature of risk factors for illicit drug use among young people that was developed from the findings of the literature review.

It should be noted that risk factors are not discrete entities and their complex interactions are difficult to comprehend and analyse. The literature review indicated additive effects of risk factors, and the existence of complex interaction between risk factors and the individual.

Table 1:   Potential development framework for risk factors for illicit drug use among young people. (Dark shading indicates a relatively strong factor, light shading indicates a relatively weak factor)

Age	Categories of risk and protective factors for drug use among young people									
	Prenatal environment[1]	Genetic	Family experience[2]	School[3]	Friends[4]	Psychological traits[5]	Reasons for drug use[6]	Socio economic[7]	Early illicit use[8]	Protective factors
Minus 9 months	■	■								
Birth	■	■								
Infancy (0–2)		■								
Early childhood (3–8)			■							
Middle childhood (9–11)		■		■		■				
Adolescence (12–18)		■								■

1   Maternal smoking, maternal drug use.
2   Parental discipline, family cohesion, parental substance use, parental monitoring, sibling drug use, early life trauma.
3   Truancy, educational attainment, problems at school, school rules.
4   Friends' drug use, friends' anti-social behaviour.
5   Low self-esteem, hedonism, attention deficit hyperactivity disorder, phobias, depression, anxiety, aggressive behaviour to solve problems.
6   Get intoxicated, escape from negative moods.
7   Low household income, lack of neighbourhood amenities.
8   Early onset of smoking (age 11) and drinking (age 12).
9   As well as the inverse, there may be a range of additional protective factors such as negative consequences of drug taking, do not consider drugs as part of lifestyle, not being exposed to drugs, adherence to conventional values, involvement in religious or sporting activities, strategies for resisting pressures to use drugs, positive future plans.

Interventions to change risk and protective factors

The evidence indicates that risk and protective factors are context dependent and influence people for a variety of reasons. Some, such as gender and ethnicity, are fixed and cannot be changed. Others such as parental discipline can be altered. Within these limits improving the general social environment of children and supporting parents appear to be the most effective strategies for primary prevention of drug use. Evidence from studies of such interventions for parental monitoring and enhancement of social attachments and skills indicate that risk factors and resilience can be successfully altered. Studies exploring this type of intervention show promise but such interventions have been rarely implemented, or evaluated, within the UK.

Using risk factors to identify vulnerable groups

The risk factors identified by the literature review were used by Home Office researchers to identify a number of variables within the 2003 Offending Crime and Justice Survey data which could be associated with taking drugs. Logistic regression modelling was undertaken to determine which factors were significantly associated with drug taking. The model for the 10- to 16-year-olds showed that, of the factors under consideration, eight were

associated with taking any drug: serious anti-social behaviour, weak parental attitude towards bad behaviour, being in trouble at school (including truanting and exclusion), having friends in trouble, being unhelpful, early smoking, not getting school meals and minor anti-social behaviour. The key findings for the 17- to 24-year-olds showed that six variables were associated with taking any drug: anti-social behaviour, early smoking, being in trouble at school, being impulsive, being un-sensitive and belonging to few or no groups. It is important to note that the models for the 17- to 24-year-olds do not include parental variables as they were not asked the same questions about their parents as those aged 10 to 16.

The results from this supported the findings of many other studies and the literature review and identified groups vulnerable to drug use. These groups included truants and young people whose parents had a weak attitude to bad behaviour.

The remainder of this report presents the findings from qualitative interviews with young people identified from the OCJS as resilient to drug use.

Resilience

What is resilience?

Within the qualitative study, resilience is defined as those behaviours and methods that young people utilise in making their decisions not to use drugs, despite being exposed to drugs and other risk factors. Resilience is not a permanent feature or characteristic of a person; people may go through stages in which it fluctuates and they are more or less capable of being resilient. As can be seen in the following case, this is a complex process combining:

- the factors that put young people at risk of using drugs;
- the reasons why these young people have chosen not to use;
- the strategies they have used in making these refusals; and
- the factors that have influenced the way in which they have dealt with opportunities to use.

Ed is 17 and lives at home with his parents and two siblings. He is at college full time and has a part-time job in his local pub. He regularly goes out with his mates and enjoys having a few drinks but does not like to drink *'too much'*. Both friends and strangers have offered him *'spliff'* on a number of occasions but he has never used it or any other illegal drug. He thinks there is probably *'no harm with weed but the other [drugs], they can seriously damage you'*. He used to think all drugs *'messed with your head and sent you doolally'* but *'everyone* [he] *knows pretty much'* uses cannabis. He does not think it has done them any harm and had begun to think that it is not *'really that bad'*. Despite this, he still does not want to use it.

Ed's sister was a crack user. She started off using cannabis and moved on to crack. Ed worries that if he started to use cannabis he would follow a similar route. His sister's crack use caused a lot of rows and stress for his family. If his parents found out that Ed was using drugs they would go *'spare'* and he would hate for them to have the same worry again. While happy to work there part time, Ed does not want to work in the pub all his life. He wants to qualify from college and work with computers. He feels that if he uses drugs he will not do as well in college and this, in turn, will affect his chances of getting a good job.

Five years ago when Ed was initially offered a drag of a *'spliff'* by his friend he was a *'bit tempted'* to try it because he did not want to be *'the odd one out'*. He decided not to and just said *'no thanks mate'*, his friend asked *'are you sure?'* and he said *'yeah, honestly I'm fine'*. He has never felt any pressure from his friends to try *'spliff'*. The more he refused, the easier it was as his friends got to know that he was not interested. He likes the fact that it made him feel like *'the sensible one'* and feels *'proud'* that he is the one *'not messing with* [his] *head'* by using. He also thinks that his friends respect him for making the choice not to use and may even be envious of him. Refusing drugs from a stranger was even easier as he did not care what the stranger thought of him. When a stranger offered him *'pills'* on the way into a nightclub he said *'no thanks mate'* and thought *'what a loser'* for trying to sell drugs to random people and *'mess with other people's lives'*.

Resilient young people's exposure to and views about drugs

Exposure to drugs

In line with our definition, to be considered resilient the young people selected for the study needed to have had the opportunity to use drugs and to have almost always chosen not to use them. The young people who took part fell into one of three groups according to the nature of the opportunity and the decision they made.

There were young people who had:
- been directly offered drugs but had never used;
- been directly offered drugs and had used cannabis on one/two occasions; and
- avoided direct offers of drugs and had never used.

The group who had tried cannabis on one or two occasions illustrate how complex resilience can be, as can be seen in Jean's experience below. Despite having used cannabis once or twice, these young people were still 'resilient' to drug use. Other than on these rare occasions, they had frequently been presented with the opportunities to use drugs but decided not to. Their own experience of using drugs tended to have consolidated their resilience.

> Jean is 18 and has been offered *'weed'* and cocaine by friends. One group of friends use cocaine when they go to the pub and others smoke weed regularly, some on a daily basis. Sometimes when they are taking cocaine in the pub they keep it *'hush hush'* from Jean but she knows she could ask for it if she wanted to. Whenever she has been offered it she has always said *'no'*. When her other friends smoke *'weed'* they just pass it around the group and whoever wants it, takes it. She has been offered it regularly and has tried it once. She was drunk at the time and decided that *'you can't knock it until you've tried it'*. She *'only had a couple of puffs'* and it had no effect. She does not smoke tobacco and thinks she *'probably didn't do it properly anyway'*. Since that occasion she has always refused offers of both *'weed'* and cocaine.

Resilient young people's views of drugs

One aspect of resilience underlying a young person's decision not to use drugs was the views they had of drugs and the reasons why people used them.

The resilient young people's views varied according to drug types and the people who used them. There was a distinction between cannabis and 'other' drugs such as Ecstasy, cocaine and heroin. These views fell into four broad categories:
- 'Cannabis use is ok but other drug use is not';
- 'Cannabis use is ok and so is the use of ecstasy and cocaine in certain situations, but heroin use is not';
- 'Cannabis use is not really ok, but it is not as bad as other drug use'; and
- 'All drug use is bad'.

While these young people had chosen not to use drugs they were able to suggest why other young people might. They tended to identify a number of reasons and build a complex picture of why people would use drugs.

> Julie is 15 and has never used drugs. She thinks people take Ecstasy to feel *'happy'*, and that people may decide to try drugs in general because all of their friends are doing it and they do not want to be *'the odd one out'*. Also they may want *'to look hard'* in front of people they know.

Reasons given for why other people might used drugs included:
- to escape from problems;
- to alleviate boredom;
- for 'the buzz';
- to feel more confident;
- to ease physical pain;
- to look 'hard';

- to fit in;
- as a result of peer pressure;
- out of curiosity; and
- to follow the example of others.

Motivations for not using drugs

As with views of drugs and why people used them the young people interviewed identified a range of reasons as having influenced their decision not to use. These fell into four broad categories:
- Relating to their lifestyle aspirations and relationships:
  - other people's disapproval;
  - legal consequences;
  - role as parent;
  - career aspirations.
- Relating to the practicalities of being a user:
  - availability of time;
  - financial cost.
- Relating to the physical and psychological effects of drugs:
  - personal experiences with drugs;
  - current health conditions/difficulties;
  - fear of effect on health;
  - fear of addiction;
  - fear of losing control.
- Relating to some of the perceived benefits of using drugs:
  - sources of 'buzz';
  - sources of support/coping mechanisms.

The young people interviewed tended to report more than one reason why they chose not to use drugs and how these reasons interlinked, as illustrated below.

> Daniel is 12 and has never used drugs because he wants to be a footballer and if his football manager found any players smoking drugs he would kick them off the team. He does not want to become addicted to drugs, spend all his money on them or *'lose years of his life in prison'* because of them. His mum always tells him that he is not to take drugs and he listens to her because she has a friend who died from taking drugs.

Strategies for refusing drugs

The interviews with resilient young people explored their strategies for avoiding or refusing drugs. As outlined above, all the young people in the qualitative study had had the opportunity to use drugs. The strategies used fell into two types of refusal:
- active refusal strategies – saying no; and
- avoidance-based refusal strategies.

Although not used by any of the young people interviewed some suggested a third strategy, namely to 'fake' acceptance.

A young person refusing drugs tended to have used a variety of different strategies depending on the social context of the offer. The social context impacted on how easy or difficult young people found it to make a refusal and which strategy they used.

The key factors determining which strategy the young person interviewed used were:
- the person making the offers; and
- the people the young person was with when offers were made.

There were also a number of additional factors:
- how comfortable they were being the 'odd one out';

- their reputation as a tobacco smoker or alcohol drinker;
- their age;
- whether they were under the influence of alcohol; and
- the type of drug offered.

Nicola is 19 and has tried cannabis once by *'accident'*, she had thought the *'spliff'* was a roll up cigarette and had taken a drag. After that the same people offered it to her a few times. She kept *'point blank'* saying no over and over to make sure people knew she was not interested in using. She thinks her friends were *'surprised'* that she was being different to the rest of the crowd and that they had quite a bit of *'respect'* for her. If her friends had not respected her decision she thinks it would have been harder to say no. She thinks she still would not have given in to the pressure though and would have stuck with her decision. She would advise other young people who do not want to use, not to use just to be in with the crowd. They will be the *'bigger person'* for saying *'no'*.

In refusing offers of drugs young people wanted to minimise the risk of repercussions from their refusals. These were in terms of damaging friendships and causing arguments or fights. If possible they did not want to offend the person making the offer, at times emphasising that they respected other people's decisions to use drugs while hoping they in turn would respect their decision not to use. Where this was not the case more confrontational strategies were called into play.

Being confident about their decision not to use and the context in which the offer was made, supported by the people they were with, and not feeling threatened in terms of the consequences a refusal would have, all facilitated an easier refusal process.

Understanding and facilitating resilience

The findings from the interviews suggest three basic theories of resilience. These are considered briefly here in relation to their relevance to practice but are discussed in more detail within the on-line report by Dillon *et al* (2006).

There are a range of reasons why I have decided that drugs are not for me – Schema theory[1]

Schema theory suggests people have various rules or scripts that they use to organise their knowledge about a particular concept. Support for this theory may be found within interviews which showed that the young people had all had the opportunity to use drugs and, in some cases, displayed features which could suggest they were at further risk of using. Despite this they chose not to engage in using drugs. They were able to identify their motivations for not using drugs and explain the thought processes driving their decision. Their perception of the drug users' image and lifestyle was not how they saw themselves. Therefore the resilient young people appear to make their decisions about their own use based on a collection of thoughts, knowledge and ideas in which drugs tend to be perceived as having potentially harmful effects for them. This assimilation of knowledge is not a static process and will be changed and updated as time passes and contexts change.

The central role played by knowledge suggests that a strategy of providing accurate information, using relevant and appropriate language, could help provide young people with the facts necessary to begin to develop a resilience-to-drug-use schema and adapt to changes in their life.

There are things I need to do to get what I want to achieve my goals, using drugs is not one of these things – Self-regulation theory[2]

Self-regulation refers to internal and external processes that allow an individual to carry out goal-focused actions over time, and in different social contexts. As a key component of self-regulation theory, goals are desired states or situations that people strive to achieve or avoid. Goals can be approach focused (aquisitional) or avoidance focused (inhibitory). This research highlighted three forms of approach goals that the young people used in order

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1. For further description of the development of this theory see Bartlett (1932; 1958); Mandler, (1984) and Piaget (1970).
2. For further description of the development of this theory see Baumeister and Heatherton (1996); Karoly (1993); Thompson (1994) and Cochran and Tessor (1996).

to remain resilient. First, there were ways in which drug use was seen as incompatible with their career aspirations, for example by affecting their performance at school and qualifications. Second, there were those who actively used their spare time playing sport, pursuing hobbies or working so had little time to go to or be involved in situations where drug use may take place. Finally, the young people who were parents suggested that such a role was not compatible with using drugs, as in Jo's case below.

Jo is 18 and lives with her four-year-old daughter. She got into a lot of trouble when she was younger for fighting. Her mother is an alcoholic and Jo left home at 16 because of physical violence. Older friends took her in until she got her own flat and were like *'parents'* to her. Her boyfriend and friends smoke *'weed'* regularly. Mick, her best mate, was a *'heroin addict'* but has stopped using. Other friends from her area use crack and her younger brother uses *'everything'*.

In addition to a personal negative experience of *'pot'* Jo does not want to use drugs because she is scared that she will die. She also considers people who depend on drugs to get a kick out of life to be *'weak'* and to have *'lowered themselves'*. Being a mother, she is also concerned about the effect any drug use will have on her child. Her daughter is the most important thing in her life and she does not want to put her at risk.

This theory suggests that resilience could be supported by appropriate agencies helping young people develop their awareness of goals and showing the relevance of current behaviour to their future plans. Evidence suggests that young people benefit from 'owning' their own goal by taking an active role in their development. It is also important that goals are ultimately attainable and that they are appropriately matched to the young person's abilities and needs. This strategy will present particular challenges for those working with young people in areas of high unemployment and/or social deprivation, where the identification of some long-term goals may not always be immediately credible when set in their social context.

I can always do what I decide I want to do, so if I don't want to use drugs then I won't use them – Self-efficacy theory[3]

Self-efficacy can be described as a person's belief about their capability of putting their decisions about what to do into practice. This can be seen in a social context as effective self- management behaviours such as assertiveness and problem-solving skills. The young people in this study have demonstrated they have developed and used appropriate life skills to deal with drug-related situations in order to maintain their decision not to use drugs.

To help develop and maintain strong self-efficacy, life-skills training could be provided. However, the findings would suggest that any course material should be relevant to the reality and social world in which the individual young person exists. The young people in this research reported using their life-skills in a wide range of contexts; therefore it would appear that any life-skills training should be flexible and appropriate to a range of issues and situations that are not just focussed on drug use. To achieve this, it may be practical to base life-skills training within a citizenship education context. This may help promote and develop skills that are transferable to a number of contexts which may increase their likelihood of use, and, provide the young person with the confidence and opportunity to practise (in situations that may not be as challenging as refusing the offer of drugs). This in turn may reinforce the idea that such skills are indeed useful tools to own, maintain and use.
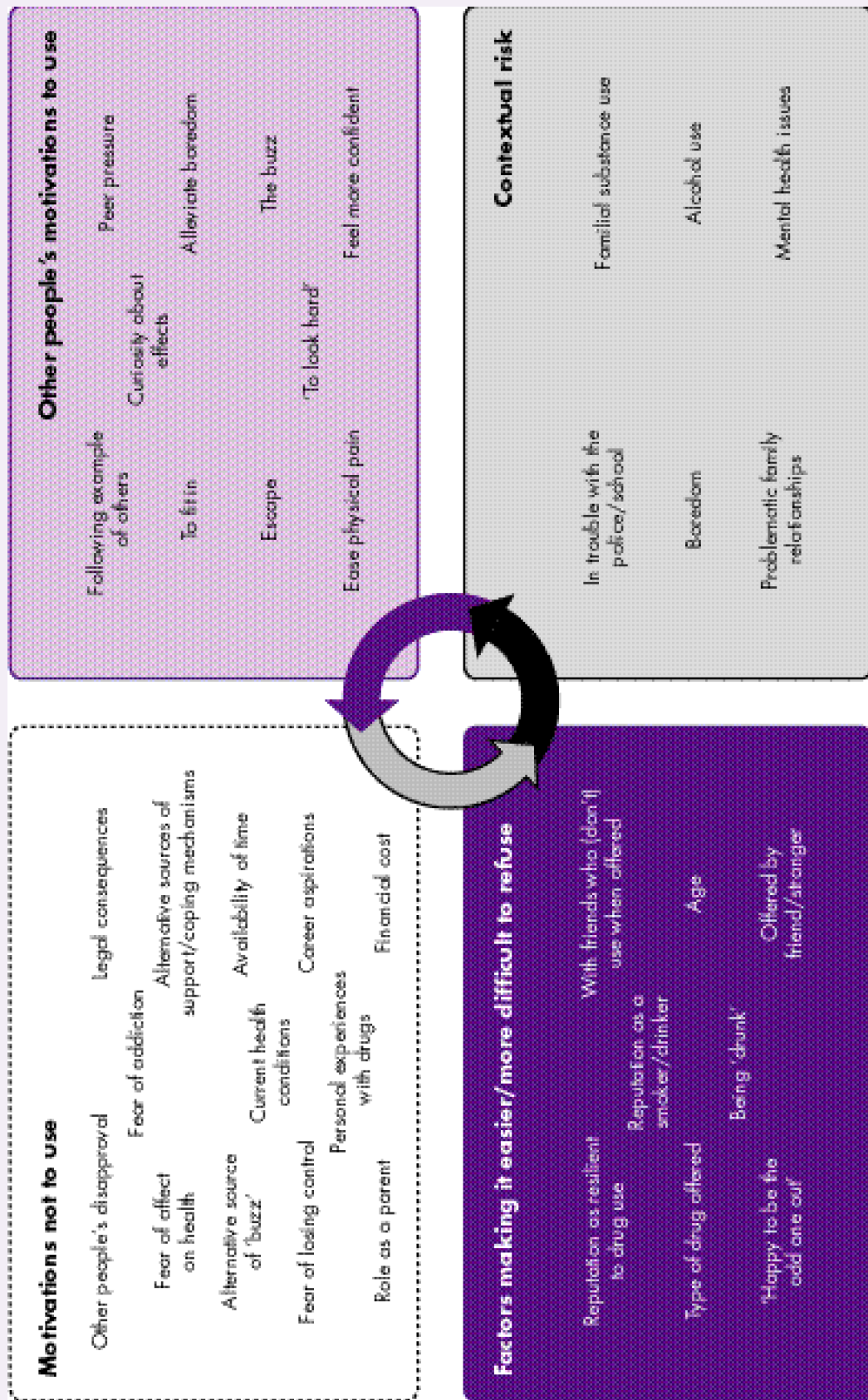
In practice, these three theories are not mutually exclusive but rather are inter-related. The findings suggest that where young people are resilient the three processes may run concurrently. The range of factors (Figure 1) outlined in this report demonstrates the complex interaction of issues facilitating (protective factors) or impeding (risk factors) resilience and illustrates how impacting on just one feature may have little effect on overall behaviour. For resilience to drug use to be developed and maintained, the concepts underpinning all three theories above need to be addressed. For example a young person can receive accurate, credible and accessible information in order to develop a resilience-to-drug-use schema. However, without the accompanying approach goals and functional life-skills necessary to develop a strong sense of self-efficacy, these schema may be redundant. This in turn may make long-term resilience a difficult state for young people to attain.

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3.   For further description of the development of this theory see Bandura (1977; 1986).

Key learning points

- There are relatively well established associations between several risk and protective factors and problematic drug use among young people but these associations are not necessarily causal. Problematic drug use and drug use risk factors may be symptomatic of the troubled lives experienced by some young people.
- These risk factors may be used to identify vulnerable groups so that drug prevention programmes can be targeted at these groups who are at increased risk of drug use.
- Some programmes, such as those targeting parental monitoring or aiming to enhance young peoples' social skills, have shown some evidence of benefit though no prevention programmes have so far shown substantial effects. However, Caulkins *et al.* (2002) demonstrated that only small effects are required for the benefits from relatively inexpensive universal prevention programmes, such as school-based drug prevention programmes, to outweigh their costs.
- Resilience results from a complex interplay of factors which can be conceptualised as three inter-related thinking styles and behaviours:
  - the view that 'drugs are not for me';
  - drugs are incompatible with personal goals; and
  - interpersonal skills and ability to resist.
- Resilience may be context and time dependent; thus individuals may respond differently to the same situations and experience. As such, all of the factors facilitating resilience, as illustrated in Figure 1, should be considered when working with individuals.

Figure 1: Summary of factors facilitating or impeding resilience to drug use

Other people's motivations to use

Following example of others

Curiosity about effects

Peer pressure

Alleviate boredom

To fit in

The buzz

Escape

To look hard

Ease physical pain

Feel more confident

Contextual risk

In trouble with the police/school

Familial substance use

Boredom

Alcohol use

Problematic family relationships

Mental health issues

Motivations not to use

Other people's disapproval

Legal consequences

Fear of addiction

Alternative sources of support/coping mechanisms

Fear of affect on health

Current health conditions

Availability of time

Alternative source of 'buzz'

Career aspirations

Fear of losing control

Personal experiences with drugs

Financial cost

Role as a parent

Factors making it easier/more difficult to refuse

Reputation as resilient to drug use

With friends who (don't) use when offered

Reputation as a smoker/drinker

Type of drug offered

Age

'Happy to be the odd one out'

Being 'drunk'

Offered by friend/stranger

Methodology

Literature review

A systematic search of electronic databases was undertaken which identified 251 relevant papers of adequate quality. Due to time constrains 78 of these were randomly selected for further analysis. Factors identified were classified into four main categories.

1. Personal factors – biological, psychological and demographic. These are factors that are either difficult or impossible to change.
2. Personal factors – behavioural or attitudinal. These are personal factors that are easier to change by policy or life changes than those in the previous group.
3. Interpersonal relationships. These include relationships with, and characteristics of, family, friends and peers.
4. Structural – environmental and economic. These issues are either totally or largely outside of the individual's control.

Papers were reviewed in terms of methodology, type and level of drug use, type of data analysis and magnitude of relationships between risk factors and drug use. The review process was modified for the qualitative studies included, taking into account the descriptive and theoretical nature of these studies.

Analysis of the 2003 OCJS data

Logistic regression modelling was carried out using the 2003 OCJS data in order to study the factors associated with taking drugs. Logistic regression modelling determines associations between variables but does not imply a causal relationship. Using the findings of the literature review independent variables were selected from the OCJS; these being the factors which may have an association with taking drugs but which were also amenable to change so excluded factors such as gender or ethnicity. The models were run to identify which of the factors identified within the survey had an association with the respondent reporting having used drugs. Due to different questions the data were split in to two age groups for analysis 10- to 16-year-olds and 17- to 24-year-olds.

Qualitative interviews with young people

By using the analysis of the OCJS a sample of young people who could be considered at risk but reported not using drugs were identified. They were determined to be at risk due to possessing the factors which were shown to be significantly associated with taking drugs. That is, young people who according to the model should have been taking drugs but were not. Fifty young people were interviewed. Of these three were not considered resilient as they had never had the opportunity to access drugs, nobody they knew used drugs and they did not know where they could access them. Two others had started using cannabis on a regular basis since the OCJS data were collected and so were no longer resilient. These five were excluded from the analysis. Those interviewed were aged between 10 and 18 at the time of the OCJS interview in 2003.

Face-to-face in-depth interviews were conducted with the young people using a topic guide.

The topic guide was designed to explore the 'why's' and 'how's' of resilience to drug use, taking account of the social context in which young people were based. The following topics were among those explored in the interviews:

Current circumstances/context in which young people were based, identifying possible risk and protective factors for drug use;
Young people's views and attitudes towards drugs and their users;
Young people's exposure to and experiences of drug-related situations;
Young people's decision making around drugs;
Strategies used to deal with drug-related situations.

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