The Unit's latest survey shows that half the Year 10 girl smokers worry 'quite a lot' or 'a lot' about at least five things

John Balding David Regis Anne Wise

Who worries? Young smokers certainly do!

"We all worry. It is what we worry about and how it affects us that is of interest... Anxiety is an inescapable element of life. It is also an essential ingredient, but only if one has the right

amount in the right context."

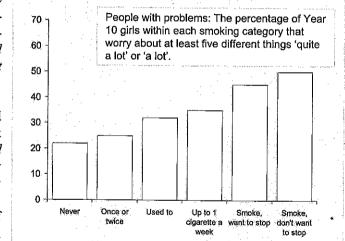
This comment, taken from Ted Wragg's Foreword to our latest report, No Worries? Young people and mental health, matches our own view that it is normal to worry, and typically it need not be a bad thing. The 'right' amount of concern promotes a sense of responsibility. However, too little can lead to reckless and selfish behaviour.

and too much can be inhibiting.

'Worrying types'

When we researched the 1997 data, which form the basis of this report, we came up with several interesting findings. Girls tend to worry more than boys do, and within each gender we found a wide range from those young people who worry a lot about a lot of things through to those who do not worry very much at all.

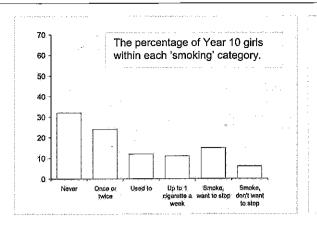
The very broad spectrum of behaviours recorded by the Health Related Behaviour



Questionnaire meant that 'worry levels' could be linked statistically with other lifestyle features, including smoking. For example...

- Smokers often claim that they smoke to 'calm their nerves'. But smokers worry more, as shown in the chart.
- ■Is smoking one of the things they worry about? Would they worry more or less if they didn't smoke?

In any event, if there are healthier ways of easing tension, health educators should be thinking of ways of promoting them.



The percentage of Year 10 girls that worry quite a lot or a lot about smoking, according to their 'smoking status'. The percentage of Year 10 girls that worry quite a lot or a lot about smoking, according to their 'smoking status'. Smoke, Smoke, don't want to stop don't want to stop

Only 6% of this group of Year 10 girls are 'committed' smokers.

The young smokers

We have, for many years, asked young people about smoking cigarettes. We have information about the number smoked per week, their 'smoking history', and whether current smokers would like to give it up. Typically we find the majority of current smokers saying that they do want to stop, so this is an immediate measure of concern about their own smoking habit, whether from a financial or health point of view. These data for 3849 Year 10 girls in 1997 are presented in the histogram above — we refer to this group because they contain the greatest percentage of current smokers in our 1997 sample:

Dividing the group into non-smoking and smoking categories gives the following breakdown (percentages are of the whole sample).

Of the non-smokers (68%): 32% have never tried 24% have tried once or twice 12% have started but given up

Of the smokers (32%):
11% smoke occasionally (up to one cigarette a week)
15% smoke regularly and would like to stop

This means that only 6% of this group of Year 10 girls are 'committed' smokers.

6% smoke regularly and don't want to stop

show that a large number of young non-smokers are living in 'smoky' households.

Our data also

Do smokers worry more about smoking?

Our 'worry' question records how much the young people worry about a range of topics, including smoking, on a scale of *Never* to *A lot*.

It is possible to relate their worries about smoking to their 'smoking status', and the

diagram above shows the percentage within these smoking categories that worry quite a lot or a lot about smoking. Two things stand out.

- The ones that have tried once or twice and have given up include the fewest worriers.
- The ones that smoke and want to give up include the most worriers, which is readily interpreted..

We also note that the 'committed' smokers are the second most worried group.

The 'fewest worriers' group may include those whose smoking experiments have reassured them that they can get along without cigarettes.

Why are any non-smokers worried about smoking? They could be thinking about the risks faced by smokers known to them, or even smokers in general. However, our data also show that a large number of young non-smokers are living in 'smoky' households, and so the personal effects of passive smoking could also be in their minds.

Do smokers worry more about everything?

Yes. As well as tending to worry more about smoking, smokers are likely to have more than the average burden of concern about all our 'worry' items.

In order to measure levels of worry, we ask the respondents how much they worry about each of a list of 13 topics, one of which is smoking. These topics are shown in the box, and it can be seen that the declared levels of worry range from 0 (Never) to 4 (A lot).

Data published in *No Worries?*, in which people's worry scores were derived by adding together their individual 'topic' scores, show that smokers tend to be greater general worriers

The more committed smokers worry more.

than non-smokers. However, to sharpen up the picture, we have now looked at the number of topics that the Year 10 girls record worrying about at levels 3 or 4.

The histogram on the front page shows the percentage within each 'smoking' group that worry quite a lot or a lot about at least five different problems. The increase in percentage of these people within the more 'committed' smoking groups is clear and consistent.

We speculated that smokers' worries may include smoking. Having seen that the dissonant smokers worry most about smoking, this cannot explain why the committed smokers worry most about the whole range of problems.

How much do you worry about the problems listed below?

0 = Never 1 = Hardly ever 2 = A little3 = Quite a lot 4 = A lot

School The way you look

Money HIV/AIDS
Health Gambling
Career Smoking
Unemployment Drinking
Friends Drugs

Family

The 'worry' question

Trends in worry levels

It was in 1991 that the Health Related Behaviour Questionnaire first asked young people the question *How much do you worry about these problems?* It has done so ever since, gradually extending the associated checklist of 'problem' items.

We have now compiled a 6-year data set (1991-96) containing the responses of many thousands of young people to this question. To enable a comparison to be made between successive annual samples, we are examining the

responses of the Year 8 and Year 10 males and females in each calendar year, taking as our criterion the proportion that report worrying 'quite a lot' or 'a lot' about a particular item.

The histograms present the average 'Top 3' worries over the 1991-96 period for each group in visual form, with the bars in each cluster representing consecutive calendar years. The fourth cluster indicates the percentage that did not worry 'quite a lot' or 'a lot' about any of the listed problems, and therefore gives a key to general levels of worry.

The Year 8 males

Averaged over the number of years for which data were available, the Top 3 worries were as follows:

- 1. THE WAY YOU LOOK
- 2. FAMILY
- 3. DRUGS

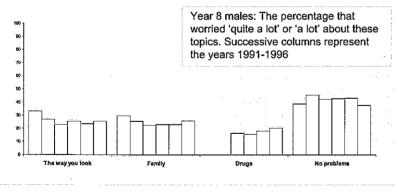
Note that drugs were not added to the checklist until 1993, and did not reach third place until 1995. In 1996 they were not much higher than a number of other worries.

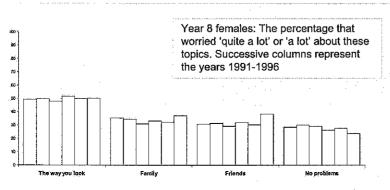
The Year 8 females

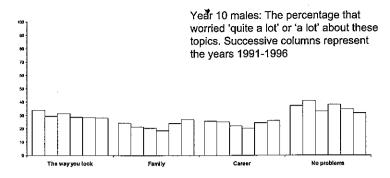
Averaged over the number of years for which data were available, the Top 3 worries were as follows:

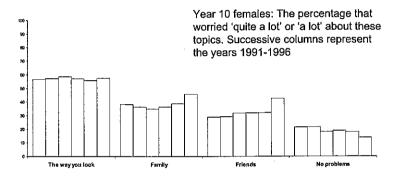
- 1. THE WAY YOU LOOK
- 2. FAMILY
- 3. FRIENDS

These levels are generally higher than the same age group of males.









The Year 10 males

Averaged over the number of years for which data were available, the Top 3 worries were as follows:

- 1. THE WAY YOU LOOK
- 2. FAMILY
- 3. CAREER

The levels for these worries are more even than in the other year/gender groups.

The Year 10 females

Averaged over the number of years for which data were available, the Top 3 worries were as follows:

- 1. THE WAY YOU LOOK
- 2. FAMILY
- 3. FRIENDS

The detailed data reveal that these topics are clearly ahead of the rest, and in this respect the results for the Year 10 females are more similar to the Year 8 females than the Year 10 males.

School, money and career worries seem to have been climbing since 1993, while worry about HIV/AIDS by all groups has declined.

The small percentage of these older girls with no problems implies a large percentage with at least one worrying problem.

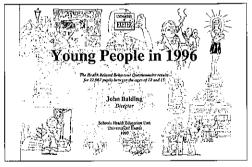
'No problems'

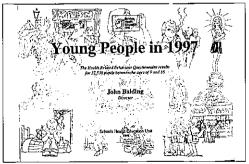
The fourth cluster of columns in each of these charts represents the percentage of young people that did not worry 'quite a lot' or 'a lot' about any of the listed items. In this case, then, high percentages indicate less general concern.

It is immediately obvious that there are more girls than boys with high levels of worry, and that the Year 10 girls are the most worried group.

In 1991 there were only seven worries in the list, but in 1996 there were 13. With almost twice as many to choose from, it might be expected that far fewer of these recent respondents would have found nothing to worry about. The girls show a more marked decline than the boys, but the trend certainly does not reflect the length of the list. This supports our impression that worrying a lot about one thing tends to mean worrying about other things as well.

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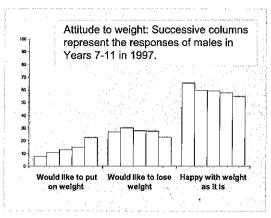




400 pages, 60,000 pupils (9-16), based on 25 million facts.

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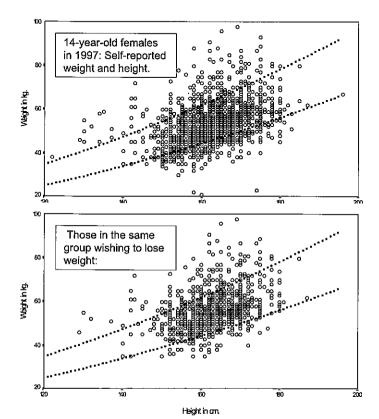
The percentage of all gender/year groups worrying about AIDS has fallen since 1993.

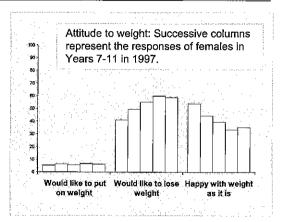


Worry, eating disorders, and weight-watching

The accompanying histograms show that as pupils get older, their level of satisfaction with their weight falls, particularly for the girls. A growing percentage of boys want to gain weight (over 20% of the oldest boys). A much larger, and growing, percentage of girls want to lose weight, rising to 60% of those in Year 10.

We can link this dissatisfaction with worrying about looks, reported in the previous section. To look at all groups produces more detail than is useful, so we will look at the association in the group which scores highest on each





question, the older girls. The following table divides the Year 10 girls into three groups, and discovers the percentage within each group that worry 'quite a lot' or 'a lot' about the way they look.

Worry about looks

Would like to put on weight 50.4%
Would like to lose weight 63.0%
Happy with weight 36.4%

It comes as no surprise to discover that there are far fewer girls who worry about the way they look in the group that are happy with their weight (36.4%). The greatest proportion that are unhappy with their looks is found among those who want to lose weight (63.0%).

This suggests that the desire to lose weight is as much if not more a cosmetic issue than a health one. We have other evidence for this, based on the height and weight supplied by 2217 14-year-old girls in this Year 10 group. The two scattergrams show a weight/height analysis of these girls, and the two dotted lines show the upper and lower limits of clinically 'acceptable' weight. Further details about these extremely revealing diagrams appeared in the previous issue of *Education and Health* (16.2).

The upper plot shows all the girls, while the lower one plots only those girls recording that they wish to lose weight. It is clear that the great majority have no medical 'weight problem' at all, and some are already under-weight.

These two pictures indicate more vividly than any number of words the extent to which 'body image' alone causes worries for these young people. At the end of the report we make a plea for the acceptance of a diversity of body shapes and appearances, but this can happen only when the print and broadcast media themselves accept this as a worthwhile aim.

The girls' desire to lose weight is driven more by fashion than by health.

The proportion of pupils who live with both mother and father have the smallest percentage of worriers.

Towards a 'worry index'

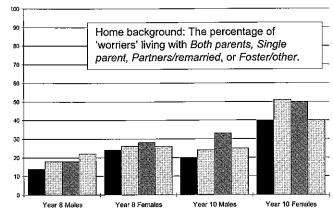
The current list of 13 'worry' items, each of which can cause concern on a scale of 0-4, offers a way of grading young people's worry level. The maximum total, 52, would be scored by a respondent who worried a lot about all the problems.

It is reassuring to report that only 4% score more than 35 on the worry scale, and a typical score is in the region of about 11-15. This is, for example, equivalent to worrying about two issues *quite a lot* and another two *a lot*. However, some young people are worrying about five or six items quite a lot, which is a cause for concern.

To make analysis easier, we divided the sample into two groups: those with a total worry score of 21 or less, and those with more than 21. For simplicity, if not accuracy, we shall call this second group the 'worriers'.

Worrying and family characteristics

One in every 3 or 4 marriages ends in divorce. In about two-thirds of these there are children under 16 in the family, and we can certainly suggest that family trauma affects children's mental well-being. Over 70% of pupils live with both parents, but this proportion varies between groups of pupils with different levels of worry.



The histogram shows the percentage of 'worriers' (worry index >21) found in each family type. There is a small association here, where the proportion of pupils who live with both mother and father have the smallest percentage of worriers. Single parenthood or changes in family composition may be a source of anxiety in themselves, but we also know that they may expose children and adults to economic hardship. We looked for the following connections.

Social class

What is behind this association? Are there background social factors which may explain this association with family type?

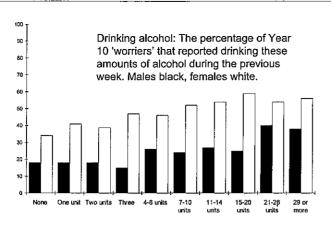
In other reports we have found newspaper readership groups to be associated with social class, and therefore a frequent significant correlate of health-related behaviours and a rich source of speculation and insight. However, here there were no significant links between levels of worry and newspaper readership groups.

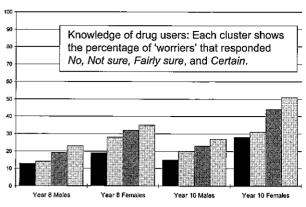
Finances

We went on to explore other items in the questionnaire that might reveal a link between low income status and worries, including:

- central heating at home no link found;
- ratio of number of bedrooms to family size
 no link found;
- number of cars at home very small link found with lower worry score (that is, an association which is statistically significant but of small magnitude).

Our investigations found no statistical link with economic factors, but this does not mean that the play no role in young people's mental health. It may just be that the factors as expressed in our measures of, for example, housing, are poor predictors, and we have no direct means of assessing family income.





Worrying and drinking alcohol

So many adults enjoy alcoholic drink that we should not be too surprised to find that young people enjoy it too!

From the questionnaire responses we can derive the number of units of alcohol drunk during the previous week. A unit is 8g or 10ml of alcohol—approximately the quantity of alcohol found in a pub measure of wine, sherry or spirits, or in half a pint of normal strength beer or lager. It is easier to think and count in terms of units; government recommendations suggest that adult women should drink no more than 2-3 units a day, and men no more than 3-4 units a day, compared with earlier weekly maximum guidelines of 14 units a week for women and 21 for men.

No such guidelines have ever been suggested for adolescents, although 14 units a week might be a useful criterion. The data presented here show the percentage of pupils with a worry score exceeding 21 that are found within the different 'alcohol intake' groups.

We see that the percentage of 'worrying' pupils increases with higher alcohol consumption within each gender/year group. The proportion of pupils who drink at high levels is not large, but there is a notable association with worry score.

It is occasionally suggested that some of these young people who report high levels of consumption are exaggerating — even boasting, if only anonymously. While we cannot exclude this possibility, it seems at odds with the higher levels of anxiety also reported by the same group — are they boasting about how much they worry? (In any event, in post-completion interviews we have nearly always been satisfied by young people's accounts of their consumption; they are, typically, able to supply details in a convincing manner.)

Worrying and illegal drugs

There are several questions we ask about illegal drugs: here we will look at their own use, and knowledge of other users.

Personal experience of drugs

The link between drug use and worry about drugs emerged in our data a long time ago. Perhaps not surprisingly, there is also a link between drug use and overall worry score, the young people with drug experience including a much greater percentage of 'worriers'.

The data for the Year 10 girls reveal twice as many 'worriers' among those with experience of drugs, but the differences for the other age/gender groups approach this value.

Knowledge of drug users

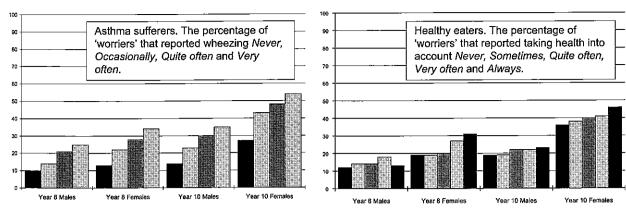
We are often interested in the 'indirect' contact young people may have with illegal drugs, as well as any personal experimentation. So we also ask if they know a drug user.

The histogram above presents the percentage of 'worriers' within the different categories of knowledge of drug users. Although not evident from these data, the Year 10 females are the group most likely to know a drug user.

There is an extremely clear link with worrying. The percentage of 'worriers' is more than half as much again among those who are certain they know a drug user, compared with those who say they do not know one, and the intermediate categories show consistent steps.

Is this associated with being 'out and about' socially, and so knowing more people? We like to think of young people being encouraged (not just allowed) to have an active social life, but it may bring with it a number of new challenges.

The percentage of 'worrying' pupils increases with higher alcohol consumption, experience of drugs, and knowledge of drug users.



Wheezing and worrying go

together.

Worrying and asthma

'Wheezing' noises on exertion are a symptom of asthma, and this question was suggested to us for inclusion in the questionnaire (with others) by pædiatrician Dr Trevor Matthews in 1989.

Asthma is a concern in itself, but there is often a strong psychological component in maintaining, if not initiating, an attack of asthma. So it is interesting that 'wheezing' turned up as a strong correlate of worry index in our initial trawl of correlations.

The data presented above, showing an increasing percentage of 'worriers' with increased frequency of wheezing during physical exertion, confirms our initial observed correlation.

Asthma can be a worrying condition to experience for the individual and family members, but remember that the 'worriers' score used here (worry index >21) is compiled from all the items in the list, of which health is just one, and may not even contribute to their score. Perhaps worriers are more likely to recall episodes of wheezing, or it may be that worriers are more likely to experience wheezing.

We are not suggesting that asthma is essentially a psychological condition. This was an interpretation that had some currency at one time, but current understanding sees it as a physical condition. Pollen, dust and air pollution may play a large part in the development of asthma and triggering an attack, although anxiety may well play a role in predisposing to and maintaining an episode of asthma.

Controlled asthma will produce fewer wheezing episodes, so it is possible that the right-hand columns include individuals with a minor condition that has not been diagnosed, or is not being looked after properly.

Worrying and diet

Diet is an important but complex area, and one which furthermore is difficult to research through survey methods. Although we collect a lot of data about diet, we recognise that we cannot do as much with it as we would like. The problem lies not just in the variety of foods, but also the mixtures we use in meals (a breakfast cereal may have an impressive contents list), the variation of meals from day to day, and our lack of precision when estimating how much of a given food we ate (e.g. a 'bowlful') and the quality of it.

Considering health

One attitudinal question which is more simple to approach is to what extent health issues influence young people's choice of foods.

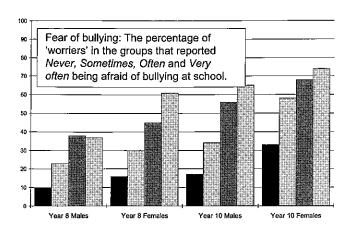
The data show a general trend for the more health-conscious eaters to include more 'worriers', although the female results show this effect more clearly.

Food choices

We offer respondents a long list and ask them to estimate how often they consume them or food items made from them. It might have been expected that the 'worriers' would tend to show a positive correlation with 'healthy' foods and a negative correlation with 'unhealthy' ones. However, although the list of significant food contains a mix of 'good' (low fat/high fibre) and 'bad' (high fat/low fibre) items, they are almost all *positively correlated* with worrying.

This seems to reveal two possible kinds of relationship. The young people that worry about their health may try to adopt a healthy diet; while those who worry about other problems may use food as a 'comforter'.

The more health-conscious eaters tend to include more 'worriers'.



Worrying and fear of bullying

The question we ask about bullying at school is not about whether they have ever been bullied, for we find that the definition of 'bullying' poses problems, but rather whether they have ever feared being bullied at school — in other words, describing bullying in terms of the anxiety it generates.

The results show an increasing proportion of high worriers within the increasingly 'fearful' groups of males and females.

Note that the slope generated by the bars in each gender/year group is in the opposite direction to the data previously examined, because the scale is in increasing order of 'fearfulness'.

The simple interpretation is that bullying may lead to an increased level of worry for the bullied, but the association may work the other way around — that pupils with high levels of anxiety are more susceptible to being bullied, and more affected by it (or the fear of it).

Conclusion

This article has examined some of the issues raised in our report *No Worries?*

Among the other matters looked at are the way worrying is related to trusting adults, general lifestyle, self esteem and locus of health control, satisfaction with life, confidence with doctors, drinking alcohol, and seeking help with the worries themselves.

We have to face the fact that although worrying is a natural thing, some people manage their worries better than others. Should we be teaching young people ways of managing their worries better?

Linked to this is the difficulty some young people have in sharing their problems. They need to be reassured that worrying is normal, and that no shame is attached to seeking help.

We also point to the central role of the family in determining young people's levels of worry, and ask how we can provide help there.

A copy of *No Worries?* can be ordered from the Unit. The price is £15.00, including postage; please send cheque with order.

Should we be teaching young people ways of managing their worries better?