

One of the many questions in the Health Related Behaviour Questionnaire asks *Have you ever tried to lose weight?* Table 1 shows the distribution of all year 8 and year 10 pupils in schools that used the survey service who answered 'Yes' in 1990.

It is seen from this that about a half of all the girls report having done so on at least one occasion, compared with about a quarter of all the boys.

Is this typical? Health Related Behaviour data going back to 1985 contains the answers to a slightly different question — *Have you ever tried to lose weight or avoid putting on weight?* — and the results are presented in Table 2. This suggests that the 1990 results are in line with other data.

Gender difference

Age differences are apparent. Older girls report more weight-watching than younger girls, which is what one would expect since the question asks

	Boys	Girls
	%	%
Year 8	25	49
Year 10	21	58

Table 1. The percentage of those who have tried to lose weight. (1990 sample, 6321 year 8, 7431 year 10)

	1985	1986	1987	1988	1989
	%	%	%	%	%
BOYS					
Year 7	32	31	35	32	32
Year 8	31	30	33	31	31
Year 9	26	26	31	30	29
Year 10	24	23	27	27	26
Year 11	21	21	27	26	25
GIRLS					
Year 7	48	44	52	47	52
Year 8	50	49	52	53	53
Year 9	55	56	60	58	60
Year 10	58	58	59	64	65
Year 11	61	63	58	65	65

Table 2. The percentage of those who have tried to lose weight or to avoid putting on weight.

DAVID REGIS

Watch your weight, see your power grow

for previous and possibly remote occasions to be included. However, older boys report less weight-watching than younger boys. This may be because:

(a) *They cannot remember previous attempts at weight-watching. [But why should the girls manage to remember?]*

(b) *Perhaps they are embarrassed to recall and report the actions of their younger selves.*

(c) *They no longer see what they did as 'weight-watching'.*

The percentage of weight-watchers shows a generally upward trend in the period 1985–89, although naturally the percentage responding 'Yes' to this more inclusive question (which includes 'avoiding putting on weight' as well as losing weight) is higher than in the 1990 figures shown in Table 1. Is this trend real? If it is due to a bias in our data, it must be because of a bias which:

(a) *is in the same direction in each year from 1985–89,*

(b) *increases in effect, and*

(c) *does not affect most other behaviours. For example, alcohol use is steady across 1985–90.*

It is more plausible to suppose that weight-watching in

young people is generally slightly on the increase.

How have young people tried to lose weight or avoid putting it on? In 1985–89 the overwhelming majority (90% of girls) reported dieting as the way they tried, and generally this majority has increased. More boys than girls report exercise as an attempted method of weight control.

The large percentage of girls who report dieting is, perhaps, what we would expect. But it is hard to believe that they need to diet with this frequency for personal health reasons, and so it is plausible to look for wider social norms to explain this gender difference.

Self esteem

Are dieters significantly different to other young people? The only major difference in questionnaire responses that is consistent across the year groups in both boys and girls is in self-esteem, where we ask a series of questions about young people's feelings about themselves and their social relationships. From this, we derive a total self-esteem score (0–20). Boys and girls who diet score significantly lower in total self-esteem, as shown in Table 3.

Among girls, who diet more than boys, we find more differences between dieters and non-dieters. For example, they are more likely to be

earning money from a paid job in term-time (Table 4).

Girls who diet may also be more active than other girls in socialising with boys (Table 5).

These differences cannot be explained by differences in school ability set or in newspaper readership group, so there is some evidence that dieting is linked with other health-related behaviours; but the most significant factor seems to be young dieters' perceptions of themselves in terms of self-esteem.

We can explore these personality differences further, prompted by some recent work on the origins of anorexia nervosa.

In control?

Anorexia nervosa is the name given to a syndrome which appears chiefly in young women and which is characterised by gross dietary disorder and delusions about their bodies. Marilyn Lawrence has described people with this condition as almost desperately striving after control of their bodies, a control which is exercised in extraordinarily harsh ways (1).

Peter Slade and his colleagues (2) have since developed a model which suggests that the condition is more likely to arise in those people who, firstly, feel generally not in control of their lives, and secondly have a strong motivation to achieve and to attain high standards.

Striving for perfection

The escape from this double bind, which means that you must succeed but that achievement in a capricious world cannot be guaranteed, may be for some people to strive for perfection in the arena of their bodies, and diet like no one has ever dieted before. While dieting in these extreme ways is dangerous, it is at least safe from external interference.

The push towards body-building and towards alternative forms of health care which we have seen over the past few years may also in part be driven by the same emotional needs

	Self-esteem (0–20)	Tried to lose weight?	
		No %	Yes %
Year 8 girls	0–10	41	59
	17–20	62	38
Year 10 girls	0–10	33	67
	17–20	51	49
Year 8 boys	0–10	69	31
	17–20	84	16
Year 10 boys	0–10	69	31
	17–20	86	14

Table 3. The connection between weight control and self-esteem in 1990 (6321 year 8, 7431 year 10).

		Tried to lose weight?	
		No %	Yes %
Year 8 girls	Earners	43	57
	Non-earners	54	46
Year 10 girls	Earners	40	60
	Non-earners	46	54

Table 4. The connection between weight control and paid work, for girls in 1990 (6321 year 8, 7431 year 10.)

		Tried to lose weight?	
		No %	Yes %
Year 8 girls	More male friends	35	65
	More female friends	55	45
Year 10 girls	More male friends	34	66
	More female friends	48	52

Table 5. The connection between weight control and having more friends of the opposite sex, for girls in 1990 (6321 year 8, 7431 year 10).

as are eating disorders — a need for a controlled arena in which to succeed.

Slade has looked at perfectionism and locus of control in general samples of people and in people with eating disorders. He has found that people with anorexia do score higher on perfectionism and lower on perceived control than the rest of the population.

This model cannot explain all that we know about anorexia — for example, it cannot demonstrate why anorexia is so much more common in women than men. But it does seem to offer a promising approach.

Perfectionism and health locus of control both feature in Version 12 of the Health Related Behaviour Questionnaire, thanks to the prompting of Gerry Humphris, a colleague of Peter Slade, and with their permission (Table 6).

We looked for associations of these two dimensions of personality with self-reported attempts to lose weight, which are also in our questionnaire. Dieting is not anorexia, and someone with an external health locus of control may otherwise feel generally in control of their life, so we needed to moderate our expectations of successful prediction and also

need to take care over the interpretation of results. Nonetheless, we thought that the time spent on this data would be worth investing.

Perfectionism

Perfectionism scores were derived from questions 78a-78c of the Version 12 questionnaire. Subjects were assigned to a 'high' or 'low' score group depending on whether they scored above or below the median score. This is to some extent arbitrary, as the difference between the lowest high score and the highest low score is, of course, a single scale point.

Similarly, subjects were assigned to an 'internal' or 'external' group according to their health locus of control scores, calculated from questions 80a-80f.

Slade's approach suggests that anorexia is most likely to appear in young women who score high on perfectionism and who have an external locus of control. In our data, we looked for self-reported attempts at weight loss in young people with high perfectionism scores and with an external health locus of control.

Results for all pupils in years 7-11 in the 1990 data bank were examined. The percentage answering 'yes' to

Table 6. Examples of (1) perfectionism and (2) health locus of control questions taken from Version 12 of the Health Related Behaviour Questionnaire.

(1). Think of a person who tries to be perfect in their work. Is this person ...				
not at all like you	very little like you	a bit like you	quite like you	very much like you
(2). My health depends on how I take care of myself.				
strongly disagree	disagree	not sure	agree	strongly agree

the question *Have you ever tried to lose weight?* was calculated for individuals scoring 'high' and 'low' on perfectionism and 'internal' and 'external' on locus of control (Table 7).

In this table, the group reporting the highest frequency of dieting for a given row is indicated by an asterisk (*), and those reporting the lowest frequency by underlining.

Who's dieting anyway?

Boys report dieting much less often than do girls. While the cumulative percentage of those who report ever having dieted does increase as expected from years 7-10, in year 11

there is a fall-off in the percentage, especially for boys. It may be that these older boys have not been caught up in the general enthusiasm for diet and exercise in society, or the answers may be distorted for reasons discussed above.

It can be seen that for both boys and girls, the highest percentage (*) of attempts at dieting is nearly always for a group scoring 'high' for perfectionism, and the lowest frequencies (underline) tend to be amongst those scoring 'internal' for locus of control. This is consistent with the expectations of the theory.

The interaction between these two personality variables is interesting. Young people scoring 'high' for perfectionism and 'external' for locus of control are most likely to report dieting in the younger year groups, consistent with the theory, but the highest frequency of dieting amongst the older age groups is for those scoring 'high' for perfectionism but 'internal' for locus of control.

So, the theory as interpreted here does seem to hold for younger subjects, but the results shift in an interesting way for older pupils.

Dieting really does seem most common in young women (aged 11-13) with high drive to succeed but who also have poor perceived control over their health. It may well be that health locus of control is related to general locus of control closely enough for the same sort of process as described by Slade to operate amongst the younger subjects in our data.

Locus of control	External control		Internal control	
	Low	High	Low	High
<i>Perfectionism</i>				
<i>BOYS</i>	%	%	%	%
NC year 7 (n=603)	<u>21</u>	24	30*	27
NC year 8 (n=3152)	24	30*	<u>23</u>	24
NC year 9 (n=1335)	24	25*	<u>19</u>	22
NC year 10 (n=3948)	<u>20</u>	23*	<u>20</u>	23*
NC year 11 (n=338)	<u>11</u>	<u>11</u>	17	24*
<i>GIRLS</i>				
NC year 7 (n=621)	46	50*	<u>40</u>	48
NC year 8 (n=3231)	48	54*	<u>46</u>	51
NC year 9 (n=1549)	54	54	<u>52</u>	56*
NC year 10 (n=3822)	59	58	<u>54</u>	60*
NC year 11 (n=342)	55	56	<u>49</u>	61*

Table 7. The connection between locus of control and 'perfectionism' index in those who have tried to lose weight. (1990 sample.)

Under pressure

I would, obviously, caution against quick decisions on the basis of this data. The Slade model cannot be implemented directly in our data, and it is not firmly established itself. For example, high perfectionism in anorexia may have nothing to do with perfectionism in other people, or perhaps perfectionism is a symptom of anorexia and not a cause.

However, the data is interesting, and presses upon us the question of what people can do who are caught in the trap of 'must succeed' — but can't trust the world'. It seems that

teachers and their pupils are increasingly under pressure to perform well in schools, and this pressure may need careful management by both. (This last comment is, itself a further pressure on teachers!)

But the need to feel successful and valued, which is surely present in us all, is perhaps not well served by any demands placed on young people by home, school and government to perform within a wholly imposed — and therefore externally controlled — framework of goals.

The next databank (1991) using Version 15 of the Health Related Be-

haviour questionnaire will contain responses to further questions on body shape and weight.

Contact David Regis, Schools Health Education Unit, School of Education, University of Exeter, Exeter EX1 2LU.

References

1. Lawrence, M., *The Anorexic Experience*. London: Women's Press, 1984.
2. Slade, P., 'Towards a functional analysis of anorexia nervosa and bulimia nervosa'. *British Journal of Clinical Psychology*, 21(3), 167-179, 1982.