

# Match or mismatch?

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The level of involvement of pupils in sports and energetic pastimes is a reflection of motivation and provision. To what extent should a school seek to complement existing enthusiasms, and to what extent should it try to promote new ones? How far should its range of sporting activities take into account the facilities in the community? A study of the match or mismatch between in-school and outside-school activities throws light on these questions.

The Health Related Behaviour Questionnaire, now in its 10th version, has been used by some 65,000 pupils in 380 secondary schools. The belief which inspired its development in the late 1970s, which is that teachers often have the most distorted conception of their pupils' lifestyles, is as strong in me as ever. The background to its development has already been described (1).

Among the many aspects of young people's life at home, at school, and with their friends which are explored by the 66 questions in the Questionnaire, active sports and recreations are documented in Question 20 (overleaf). It will be seen that the sports and activities are divided into three groups – *team activities* and *individual activities* (the borderline between these being sometimes unclear), and *other sports*. The degree of participation *In school* and *Out of school* is recorded using two levels of activity, *At least once a week* and *At least once a month*. There are, therefore, several different dimensions to the resultant measure of 'physical activity'.

## Refining the 'physical activity' data

Recently there has been much interest in levels of physical activity in children,

and the relationship between aerobic activity and health. The Coronary Prevention Project, a new initiative supported by the University of Exeter and the Exeter District Health Authority, is seeking to relate blood cholesterol with young people's lifestyle – in particular, their physical activity and stress levels. These and other parameters are to be measured by new questionnaires in course of development in conjunction with the HEC Schools Health Education Unit. It will be most exciting if substantial links can be demonstrated; and if they can, then schools may wish us to differentiate between the typical energy demands made by the different activities in Question 20, perhaps using the well-known analysis by Bar-Or (2). Our aim is to offer just such an analysis in our new Questionnaire Version 11, due to appear in 1987.

Another innovation planned for Version 11 is to identify the different sports and activities that play a part in the pupils' lives both inside and outside school. This article presents a selection of trial coding results from a small sample of pupils in two secondary schools (one urban, one rural) from each of the five year-groups, and records the percentage who are involved 'at least once a week'

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Please do NOT write in the boxes

20. DURING THE PAST YEAR, which of the following sports did you play when they were in season, and how often?

(Please tick the appropriate boxes. If you play the same sport IN SCHOOL and OUT OF SCHOOL, you will need to tick two boxes.)

	IN SCHOOL (including school clubs)		OUT OF SCHOOL	
	At least once a week	At least once a month	At least once a week	At least once a month
<b>TEAM ACTIVITIES</b>				
Baseball				
Basketball				
Cricket				
Football				
Hockey				
Netball				
Rounders				
Rugby				
Volleyball				
Other (please state)				
<b>INDIVIDUAL ACTIVITIES</b>				
Aerobics				
Track/field events				
Badminton				
Canoeing				
Cross-country				
Cycling				
Dancing				
Gymnastics				
Horse riding				
Jogging				
Fitness exercises				
Motorcycling				
Roller or ice skating				
Rowing				
Sailing				
Scrambling				
Skiing				
Squash				
Swimming				
Table tennis				
Tennis				
Walking				
Water-skiing				
Weight-training				
Wind-surfing				
Other (please state)				
<b>OTHER SPORTS</b>				
Billiards				
Darts				
Fishing				
Pool				
Shooting				
Snooker				
Other (please state)				

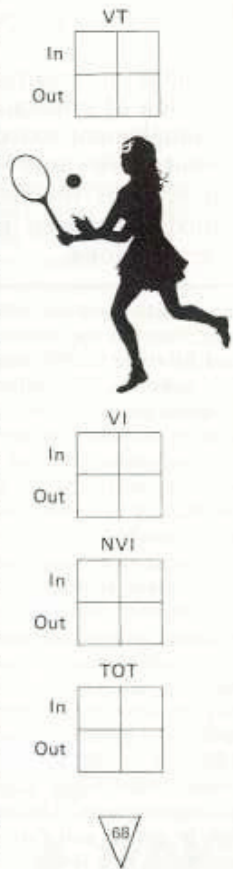


Fig. 1. The 'physical activity' enquiry, which is Question 20 in the current Version 10 Health Related Behaviour Questionnaire.

Table 1. Percentage involvement in basketball and netball, at least once a week.

Activity	Year group:	1	2	3	4	5
BASKETBALL	Boys	In school: 60 Outside school: 10	32 10	60 5	39 4	19 3
	Girls	In school: 25 Outside school: 2	1 1	38 1	9 0	18 0
NETBALL	Boys	In school: 4 Outside school: 3	1 2	2 1	2 0	0 0
	Girls	In school: 81 Outside school: 16	76 16	76 4	74 2	33 3
Sample size:	Boys . . . . .	104	109	97	114	99
	Girls . . . . .	96	109	106	87	101

in the various pursuits. As we know that different schools and communities will be characterised by different levels of involvement, it is necessary to remember that these results do not constitute national data. The situation is exactly the same for a school studying its own Questionnaire results.

**Basketball and netball (Table 1)**

**Basketball** These results present a rather uneven picture, perhaps not surprisingly since the results from two mixed schools are combined together within each year group. If a single school was involved throughout, the trend through the year groups might be expected to be consist-

ent; the results shown here suggest variations in practice for basketball. However, the general involvement of the boys is higher than that of the girls, and outside-school levels are low.

**Netball** The high level of girls' overall activity, even in the schools whose 1st year is represented, comes as no surprise, particularly as so many primary schools promote this activity. The lack of outlets for so much expertise outside school is cause for comment and reflection. Even in the schools whose 5th year is represented, when broadening of options often allows other activities to be selected, at least a third of the girls are nonetheless playing netball at least once a week when

Activity	Year group:	1	2	3	4	5
GYMNASTICS	Boys	In school: 23 Outside school: 3	28 4	13 0	11 0	0 0
	Girls	In school: 21 Outside school: 14	51 13	38 8	41 5	0 2
HORSE RIDING	Boys	In school: 2 Outside school: 4	1 4	0 1	0 2	0 1
	Girls	In school: 2 Outside school: 13	3 16	1 17	2 16	0 13
SWIMMING	Boys	In school: 14 Outside school: 32	12 35	19 22	27 23	6 14
	Girls	In school: 5 Outside school: 35	16 29	14 27	55 26	9 26
Sample size:	Boys . . . . .	104	109	97	114	99
	Girls . . . . .	96	109	106	87	101

Table 2. Percentage involvement in gymnastics, horse-riding, and swimming, at least once a week.

it is in season, suggesting particular attachment to this activity. The boys' involvement seems very low, as is the girls' outside school.

**Gymnastics, horse-riding, and swimming (Table 2)**

**Gymnastics** Here is a sport that children perhaps 'grow out of', unlike a game such as rugby. Girls are more involved than boys, both inside and outside school; in general there is better provision of coaching in clubs for girls than for boys.

**Horse-riding** A significant number of the girls of all ages in the sample (about 15%) find an outlet for this activity at least once a week outside school time. Few boys are involved in the same way, and only a few pupils find access to the activity in school time.

**Swimming** In most instances in the table (eight out of the ten schools), more pupils of both sexes are involved outside school than in school, and the level of involvement is substantial.

**Soccer, rugby, hockey (Table 3)**

**Soccer** For the boys, high levels of involvement are recorded both inside and outside all schools - higher than for any other sport or pastime in the list. The high percentage for the 5th-year girls is accounted for as an optional activity.

**Rugby** Percentages for the boys, whilst substantial, are less than for soccer, and there is markedly less involvement outside school. The girls' level of participation is, not surprisingly, extremely low. The amount of provision for rugby outside school for this age range is far less than for soccer, and boys will, generally, be better equipped physically for rugby when they are somewhat older. This is not the case to quite the same extent for soccer.

**Hockey** The figures for the girls are consistently high, dropping to 35% in the 5th-year schools. The boys' figures are substantial in the 3rd, 4th, and 5th-year samples, but for both sexes the level of participation outside school is almost negligible. In the past, hockey has had a female emphasis in schools, and a similar bias is portrayed in these results; but the lack of involvement outside school is cause for further comment. Does it reflect lack of interest or lack of provision of facilities, or both? To what extent should schools provide experience of physical education and recreation that is not reflected by the communities they serve?

**Badminton and tennis (Table 4)**

**Badminton** Something of the unevenness of the results across the different schools and year groups described for basketball

Activity		Year group:	1	2	3	4	5
SOCCER	Boys	In school:	72	75	72	59	60
		Outside school:	49	52	49	38	28
	Girls	In school:	3	4	4	1	31
		Outside school:	18	18	5	4	3
RUGBY	Boys	In school:	39	58	54	37	19
		Outside school:	12	19	10	4	8
	Girls	In school:	0	2	0	2	4
		Outside school:	3	2	0	2	0
HOCKEY	Boys	In school:	7	2	39	25	21
		Outside school:	4	2	2	1	1
	Girls	In school:	66	64	70	51	35
		Outside school:	3	3	4	0	5
Sample size:		Boys	104	109	97	114	99
		Girls	96	109	106	87	101

Table 3. Percentage involvement in soccer, rugby, and hockey, at least once a week.

Table 4. Percentage involvement in badminton and tennis, at least once a week.

Activity		Year group:	1	2	3	4	5
BADMINTON	Boys	In school:	6	4	26	32	34
		Outside school:	11	10	8	10	8
	Girls	In school:	24	9	27	55	28
		Outside school:	14	10	8	4	2
TENNIS	Boys	In school:	4	13	3	21	13
		Outside school:	15	25	14	15	12
	Girls	In school:	3	54	6	41	23
		Outside school:	10	33	14	15	16
Sample size:		Boys	104	109	97	114	99
		Girls	96	109	106	87	101

appears here for badminton and tennis. The level of involvement of boys increases with age in the schools represented, and outside school it remains substantial and consistent at about 10%. Perhaps 10% continue to play in adult life. The figures for the girls playing in school time are also high, but few play out of school. The sport is demanding of space, but does also allow participation with enjoyment at low ability levels, and also may have a 'grown-up' ethos about it.

**Tennis** The substantial percentages involved outside school are similar for boys and girls. More provision for girls than for boys may be made in schools, and the figures seem to lend support to this statement.

**Billiards, snooker and pool (Table 5)**

One might not expect schools to make any provision for the development of the skills connected with these sports, which television has in recent years made so interesting and exciting, and even the small amount of in-school time indicated in the tables will come as a surprise. The levels of participation for both sexes playing at least once a week outside school is remarkable. Not many girls are occupied with billiards, but more than 10% appear to participate either in snooker or pool or both, and at least 33% of the boys do so. The social element attached to these sports may well enhance the attraction to them, so that sporting

Activity		Year group:	1	2	3	4	5
BILLIARDS	Boys	In school:	2	6	2	3	3
		Outside school:	15	28	26	11	17
	Girls	In school:	1	1	0	0	0
		Outside school:	2	2	2	5	1
SNOOKER	Boys	In school:	7	7	5	8	2
		Outside school:	43	53	52	35	37
	Girls	In school:	1	3	1	0	1
		Outside school:	16	13	13	15	8
POOL	Boys	In school:	3	7	4	6	2
		Outside school:	46	42	44	22	33
	Girls	In school:	1	4	1	1	0
		Outside school:	14	10	10	6	12
Sample size:		Boys	104	109	97	114	99
		Girls	96	109	106	87	101

Table 5. Percentage involvement in billiards, snooker, and pool, at least once a week.

skills and social skills may be developed simultaneously.

### Summary

This component of the Health Related Behaviour Questionnaire aims to provide details of involvement in physical activity, so that PE staff, particularly, may address some or all of these questions:

1. What levels of participation do pupils see us as providing? (The staff may have a different view!)
2. What levels of participation in sports and physical pastimes do pupils achieve outside school?
3. To what extent do we prepare pupils to profit from the sporting facilities available in the community?
4. How do we reconcile a mismatch between substantial school-time activity in certain pursuits, and minimal involvement outside school?
5. To what extent should we attempt to promote particular sporting activities outside school?

### References

1. Balding, J.W., Developing the Health Related Behaviour Questionnaire. *Education and Health*, 1, 1, 17, 1983.
2. Bar-Or, O., *Pediatric sports medicine for the practitioner*. Springer Verlag, 1983.