

ACADEMICALLY TALENTED CHILDREN AS TEENAGERS

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ABSTRACT

Children identified as academically talented in primary school, either through selection to an Opportunity C (OC) class or teacher nomination in Years 5 and 6, were invited to take part in a longitudinal study at the end of Year 6. The second group of 45 pupils, now in Year 9, have just been interviewed with their families and their progress discussed with their respective high school principals. Findings considered in this paper focus on sex differences apparent in Year 9 and the attitudes of pupils to the OC experience two-and-a-half years later.

It was Piaget who alerted educators to the developmental nature of cognition. Corraine Kass (1977) noted that problems with learning could also be traced to stages of development. A pupil who had mastered reading, writing and mathematics at primary school might strike problems when required to synthesize materials for the essay writing of a secondary school. Similarly, pupils identified as academically talented in primary school might have difficulties when required to synthesize and evaluate materials at higher levels.

Luby (1980) reported that pupils selected for gifted programmes in Years 3 and 4 on the basis of scores obtained on the Stanford Binet form L-M test, when retested in Years 9 to 12, dropped an average of ten I.Q. points for the more successful and 18 I.Q. points for the less successful pupils. But then the Stanford-Binet test at older age levels emphasizes abstract verbal reasoning while at the younger levels the reasoning is at a concrete level. Luby's results further suggest that even in special classes for the academically able, teachers face problems in extending the reasoning abilities of bright pupils.

Too much time, Renzulli and associates (1983) stress, is spent on repeating skills that have been already mastered. The once curious and alive pupils learn to switch off and lose their powers of concentrating. Even when talented Year 8 pupils say that they listen to the teacher or to other pupils speaking in class only 52% were found to be relating the new ideas they were hearing to things within their experience. In fact less than two thirds of the group regularly thought about the ideas which they read or heard (Boyd 1982).

With the above points in mind it was decided to make an intensive study of pupils in Year 9 who had been identified as talented in their primary schools. The Year 9 group was chosen because they had experienced over two years in a secondary school, yet were still far enough away from the Higher School Certificate examinations to be free from their pressures.

The aims of the research were to (i) gain an understanding of each pupil's views of academic study; (ii) observe the family relationships to note aspects that might hinder or enhance the pupil's school achievements; and (iii) to consult principals of high schools the pupils attended to obtain insights into the general attitude of the teaching staff to academic talent and the views of teachers about the particular pupil(s) in the study.

The Sample

The talented pupils had been selected by two methods.

- 1) 32 had been in the Woollahra School's Opportunity C (OC) classes for able pupils. At the end of Year 6 their parents had given written consent to their son or daughter taking part in the investigator's longitudinal study.
- 2) 15 pupils were identified as academically able by the principals and teachers at primary schools within approximately a mile radius of the University of New South Wales. The pupils in this second group had each been given the WISC-R test. All but two obtained scores among the top 10% of their age group in either the verbal or full scale of the WISC-R. The two girls whose intelligence quotients were below the top 10% were performing adequately in Year 9, in keeping with their assessed intelligence. As they could not be regarded as academically talented their responses are not included in this study. Thus the teacher selected group was reduced to 13: 8 boys and 5 girls. The OC group of 32 included 11 girls and 21 boys.

Procedures

The questionnaire developed by Luby (1980) was used as the basis for constructing a

structured interview. It covered aspects relating to the family, study, school achievements, extra curricular activities, attitudes to school and study and their feelings about the last two years before going to high school. The final section of the interview form was set aside for the interviewer's comments.

A married woman who had taught for a number of years in New South Wales high schools undertook the interviews with the pupils and their families. The investigator meanwhile visited the schools and spoke with the respective principals.

Because of the need to be selective the results presented in this paper examine (a) statistical differences that were apparent between the girls and boys in the sample; and (b) the attitudes of Year 9 pupils who had attended Woollahra OC class in Years 5 and 6.

Results

In Table 1 the nationalities of the parents of the pupils in the sample are set out.

Table 1

Nationality of Parents of the Year 9 Group

	Girls		Boys			
Australian	13	81%	10	34%	23	51%
English Speaking Countries	1	6%	6	21%	7	16%
North European	1	6%	4	14%	5	11%
South European			3	10%	3	7%
South Africa			2	7%	2	4%
India			2	7%	2	4%
Asia	1	6%	2	7%	3	7%
Total	16		29			

Australian parents vs Foreign born parents

	Girls	Boys
Australian	13	10
Foreign	3	19

$$x^2 = 8.94 = <.01$$

With the exception of two boys from South Africa, all the participants had been born in Australia or in another English speaking country. It is surprising to find that significantly more boys had parents who migrated to Australia. Perhaps migrant parents are more anxious for their boys to be involved in a University run research than they are for their girls. It was certainly an unexpected finding and one that should be verified.

When the occupations of parents are studied it is disappointing to find only white collar and trade vocations represented.

Table 2

Occupations of the Parents of the Talented Girls

Occupation	Father	Mother
Careers requiring a degree	9 56%	6 37%
Careers requiring a diploma	1 6%	3 18%
) 60% ^x
Clerical or sales work	0	2 12%
Trade or Supervisor	3 19%	1 6%
Home Duties		4 25%
Unknown	3 19%	0

Occupations of the Parents of the Talented Boys

Occupation	Father	Mother
Careers requiring a degree	13 45%	5 17%)
Careers requiring a diploma	5 17%	3 10%)
		28%
Clerical or sales work	7 24%	9 31%
Trade or Supervisor	4 14%	0
Home Duties	0	12 41%

x Difference between the mothers of the talented girls and the mothers of the talented boys significant at the .05 level (t=2.13)

No parent in unskilled or semi-skilled jobs had young people identified as talented by their teachers, or agreed to their child taking part in the study if they had been selected for the OC class. However, in examining sex differences it is interesting to note that more mothers of the girls were in careers requiring either a degree or a diploma from a tertiary institution. The model of the mother would appear to be a significant stimulus to the daughter to develop her academic talent.

Table 3

Position of the Year 9 Pupil in the Family and Whether Siblings were of the Same Sex or the Opposite Sex

	Girls	Boys	Total
Only Child	3 19%	4 14%	7 16%
Eldest	6 38%	13 45%	19 42%
Middle	4 25%	6 21%	10 22%
Youngest	3 19%	6 21%	9 2%
<u>Siblings</u>			
Brothers only	4 25%	13 45%	17 38%
Sisters only	2 13%	6 21%	8 18%
Brothers and Sisters	7 44%	6 21%	13 29%

No significant differences were observed as far as position in the family or sex of siblings were concerned. But, as expected from the literature (Jones 1966:669) more of the talented pupils were the eldest in the family. While most pupils were living with both their parents, 4 girls and 5 boys were living with one parent and one girl was in foster care. On the whole these pupils seemed to be coping as well as, and in some instances better than, their peers living in the nuclear family setting.

As judged by their teachers, the pupils were succeeding with the academic requirements of Year 9. An inspection of Table 4 shows 69% were classified as academically very good or excellent. Yet three boys were judged as achieving at an ordinary level.

Table 4

Performance of the Year 9 Pupils as Viewed by the Principal and Staff at the Respective Schools They Attended

Academic Rating	Girls	Boys	Total
Very good to excellent	11 69%	20 69%	31 69%
Good	5 31%	6 21%	11 24%
Ordinary	0	3 10%	3 7%
<u>Personal Qualities</u>			
Fine, Very Good	10 63%	16 55%	26 58%
Adequate	5 31%	10 35%	15 33%
Anxious	1 6%	1 3%	2 4%
Has Problems	0	2 7%	2 4%

These boys were attending high schools where considerable emphasis was placed on position in class. It was apparent from home interviews that two of the boys faced pressures from their fathers to achieve which in one case resulted in open hostility. The third lad seemed very contented with life, viewing friendships at school as more important than striving for high achievement.

Of the 13 pupils who had been selected by their primary school teachers as academically able, only one boy was not judged as performing at the very good to excellent level in Year 9. This lad was working only at an average level. His vocabulary had been outstanding in Year 6 but in Year 9 he received a B grade in English, D in mathematics and C in Science. Although Ray would like to enter the police force there is pressure from the parents for him to go on to University and enter a profession. Ray has a very pleasant manner and is accepting of parental pressure but his present poor performance suggests he needs counselling to free him from emotional tensions so that his academic work will not suffer further.

One of the 5 girls performing at the "good" level is likewise in need of help. At present she doubts whether she still has any academic talent. This self-doubt is probably due to the competition faced in a selective high school. Only one of the five girls at the "good" level was not at a highly academic school. Mary has won prizes in some subjects, but she has had great difficulty settling into the high school away from all her friends. Now in Year 9 Mary appears to have found herself and is settling down to work well at her poorer subjects.

When the personal qualities of the pupils were discussed most pupils in the sample were viewed very positively. However four pupils appear to have personality problems. One girl, performing well in school, tended to be rather anxious. The principal felt this might result from the Mother being on the teaching staff. The anxious boy was the only person in the sample from a one parent home that suffered stress. Unfortunately this was affecting his academic work, so that though judged a bright boy his overall academic performance was at a good level. Of the two boys having personality problems one was performing at an ordinary level, while the other boy's academic record was excellent. This second boy seemed to have no activities outside school work. Being a poor sportsman, he had great difficulty in relating to his peers. These cases underline the need for wise counselling of academically able pupils who show signs of stress (Colangelo and Zaffran 1979).

Although the number of girls and boys in the sample was small, responses to the question "How important is study in relation to other activities?" indicated that significantly more boys than girls considered it "most important" (20 boys (67%) versus 6 girls (35%), $t = 2.05 < 0.05$ level). A similar result was obtained in response to the question "How does the pupil feel about competing academically with other pupils?" While 67% of boys stated that they enjoyed the challenge only 35% of girls revelled in competition. Such results probably reflect the general ethos of the schools they were attending.

Table 5

Type of High Schools Attended by the Year 9 Pupils

Type of School	Boys		Girls		Total	
State Comprehensive	2	7%	1	6%	3	7%
State Selective	15	52%	8	50%	23	51%
Religious	5	17%	6	37%	11	24%
Independent	7	24%	1	6%	8	18%
Totals	29		16		45	

An inspection of Table 5 shows that more boys went to independent schools where the emphasis was on academic achievement. Even in the single sex selective state high schools more emphasis was placed on academic competition among the boys.

Although girls are regarded as being more verbal than boys, it is the boys who in Year 9 are taking the opportunity of studying three languages. (See Table 6)

Table 6

Foreign Languages Being Elected for Study in Year 9

	Girls	Boys	Total
No foreign languages	5 31%	7 24% ^x	12 27%
1 foreign language	4 25%	9 31%	13 29%
2 foreign languages	7 44%	9 31%	16 36%
3 foreign languages	0	4 13%	4 9%
Totals	16	29	45

^x 3 boys attend a school where no opportunity to learn a foreign language is given.

While three boys attend a church school where no foreign language is taught, the five girls taking no foreign language have chosen other options in preference to the languages. Perhaps if the girls had been given an opportunity to study a foreign language in the primary school, after mastering the basic reading skills, they would have more enthusiasm about continuing a language in the high school.

Attitude to the Opportunity C Experience

From a study of Table 7 it is apparent that most of the 21 boys and 11 girls who attended the OC classes at Woollahra primary school still regard that time very favourably.

Table 7

Attitude to Spending Years 5 and 6 in the Opportunity C Class in Woollahra School

	Girls	Boys	Total
Positive about its value	9 82%	17 81%	26 81%
Preferred to be at a high school	0	3 14%	3 9%
Other views	2 18%	1 5%	3 9%
Totals	11	21	32

Two girls whose comments are placed in the "other" category enjoyed the OC years very much but Mary, who had to leave her OC friends and go to a state comprehensive high school where she knew no one, wondered whether it had been worth the effort. The other girl enjoyed the creative opportunities in the OC class yet felt that from the distance of Year 9 she had missed out on some of the basic skills. Three girls still very positive about their OC experience, commented on the difficulties they faced adjusting to high school. But other comments reveal a genuine enthusiasm: "a great adventure", "not academically important but it broadened my creative horizon", or "exciting excursions".

The boys were also very favourable in their comments about the time they spent in the OC class. But three boys would have preferred to have gone to a high school in order to start some of the subjects. An early start on a foreign language would have been particularly beneficial. For this reason the OC classes at Chatswood include both French and Japanese. They also felt that having different subject teachers they would have gained a better spread of subjects which is not possible when one teacher is responsible for all areas of knowledge. One boy's comment is placed in the "other" category because he would have gone to Woollahra primary school whether he had been accepted for the OC or not. It was the Woollahra experience he considered important without the "elitist overtones" of a special class.

Discussion

Results from the study are based on a sex ratio of 1.8 boys to 1 girl. The girls who did participate tended to have mothers who were working in professions. These women provided models for their daughters of career women who could also be good parents. Perhaps one reason more daughters of parents who migrated to Australia are not included is that many migrant groups are

not used to shared home responsibilities for both husband and wife which is essential if the mother is to have a career outside the home.

The less importance placed on study and academic competition by the Year 9 girls would appear to be in part a result of less external pressure being placed on the girls to perform well in school. (3 girls, 19%, versus 16 boys, 55%, stated they felt pressure to study from one or other of their parents, $t = 2.36 < .05$). The greater emphasis on Year 9 boys in the sample to achieve indicates that the view of the male as the bread winner is still quite dominant in our society. Perhaps teachers should counteract this idea by deliberately encouraging girls to achieve more highly. The able girls also need to have personal contact with women who are using their learning in careers not normally considered by school girls.

There is also evidence to suggest that pupils whose parents work in unskilled and semi-skilled jobs are not being identified by teachers or encouraged by parents to participate in studies of academically able pupils. One gifted boy in the study whose father worked in a trade was becoming impatient with academic study. Although the parents were anxious that he get a good education they did not see the need for books in the home or for going with their son to concerts or to the art gallery. Obviously able children and teenagers from such families do require some positive discrimination if they are to gain a rounded education, compatible with their high abilities.

It was disappointing to find that 31% of girls had elected not to study a foreign language. But the introduction of a foreign language should commence in the primary school. Jakobovits (1970) has pointed out that bilingual children have an advantage over their monolingual peers when they wish to learn another language. Surely the able pupils in primary school should be encouraged to become bilingual so that if they wish to study another language they will have acquired the basic skills of foreign language learning.

The pupils who had experienced Opportunity C classes in the sample appeared to have more confidence in expressing their views than those who had remained in their primary schools. There were however, problems in adjusting from the stimulating OC environment to high school. Probably the worst effect was on the pupils who had to leave the friends they made in the OC class and go to their local high schools because they lived outside the selective high school zone. Freeman (1979) describes what happens in school playgrounds to pupils who are different. They get into their minority groups. For the academically talented pupil entering a high school where he or she knows no other like minded person, life can be hard. The fact that at present there is no ongoing programme for OC pupils in secondary schools needs to be made very clear to parents. Furthermore guidance should be given to the pupils who will not have the support of OC mates when they enter their secondary schools.

Conclusions

From interviewing the Year 9 pupils in their homes it has been possible to see the subtle influences of the home environment on these identified academically able young people. While most of them, faced with problems in the high school setting, seemed able to resolve the difficulties over time (even though their grades might suffer to some extent) tensions in the home seem to be more debilitating. Then there is a need for a counsellor to help the pupil work through the problem and if possible give counsel to the family. Another group of academically able pupils coming from homes lacking books and other cultural stimuli are in need of positive discrimination if they are to acquire an all round education in keeping with their academic abilities. Such positive discrimination should ideally begin as soon as the child enters the school system.

REFERENCES

- Boyd, R. "Academically talented pupils' views of junior high school." Unpublished report to the School of Education, University of N.S.W., 1982.
- Colangelo, N. and Zaffran, R.T. "Introduction to Counselling." In N. Colangelo and R.T. Zaffran (Eds) New Voices in Counselling the Gifted, Kendall/Hunt Co., Iowa, 1979.
- Freeman, J. Gifted Children M.T.P. Press, Lancaster, 1979.
- Jakobovits, L.A. Foreign Language Learning Newbury House, Mass., 1970.

- Jones, H.E. "The Environment and mental development." In L. Carmichael (Ed) Manual of Child Psychology, 2nd ed. John Wiley, N.Y., 1966, 631-696.
- Kass, C.E. "Identification of Learning Disability (Dyssymbolia)" Journal of Learning Disabilities 1977, 10(7), 36-43.
- Luby, L.W. A Longitudinal Comparison of I.Q. in Academically Successful and Unsuccessful Mentally Gifted High School Students and an analysis of personality, family and school differences. Unpublished PhD dissertation, University of South Carolina, 1980.
- Renzulli, J.S., Smith, L.H. and Reis, S.M. "Curriculum compacting: an essential strategy for working with gifted students" Gifted Education International 1(2), 1983, 97-102.

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