WHAT IS A TEACHER'S 'EXPECTATION'?

'Expectation' – an expectancy or expectation set, according to Finn (1972) ' is a conscious or unconscious evaluation which one person forms of another, or of himself, which leads to evaluator to treat the person evaluated in such a manner as though the assessments were correct'. The basic hypothesis is simple: 'if teacher believed a child to be stupid, they will treat it differently, the child will internalize that judgement and behave accordingly' (Delamont, 1976). In other words, if the teacher expects the child to be bright, he will treat him differently and the child will 'bloom academically'. In Marburger's view (1963) the teacher who expects achievement, who has hope for the educability of his pupils indeed convey this through every nuance and subtlety of his behaviour. The teacher who conveys hopelessness for the educability of his pupil usually does so without ever really verbalizing such attitude – at least not in front of his pupils.

Psychologically speaking 'expectancy' as the probability held by the individual that a particular reinforcement will occur as a function of a specific behaviour on his part in a specific situation (Rotter, 1972). If discussed in its psychological sense,

expectancy refers 'to beliefs or anticipations about the outcome or consequences of behaviour, usually defined as a personal or idiographic dimension'. On the other hand, in the sociological literature, expectation is usually designed as role expectation or 'self-fulfilling prophecy'.

PITT'S EXPERIMENT 1956

The idea that expectation of teachers help determine their pupils' performance is not new. A study by Pitt (1956) in which a teacher of fifth grade boys were given, at the beginning of the school year, correct IQs for one third of their pupils, underestimates by 10 points for another third, and over estimates by 10 points for the remaining third, provides no conclusive results. Assessment and tests of achievement at the end of the school year showed no effects of the miss-information. In view of both the reliability and lack of validity of intelligent tests, Pitt's result is not altogether unexpected. There would seem to be a basic difficulty in attempting to provide experimental evidence of the expectancy effect operating with individual children, as Pitt tried to do. If comparisons are to be made within classrooms, the number of experimental children involved inevitably is very small, so that a viable research is not easy to set up. It must also be noted that experimental studies will always involve the teachers being given false information, and in the case of individual children, unless this information is grossly false, in which case probably will not be believed, there is not much chance that the study will produce statistically significant results. But at least there is already awareness that the expectation has an effect on pupils' school achievement.

VERNON'S EXPERIMENT (1957)

One of the factors that attribute to teacher's expectation of their pupils' achievement is streaming by ability which result in widening of performance gap between the bright and the duller children. Vernon's finding (1957) explicitly proved this. It is argued that expectancy of 'A' stream teachers for relatively high attainment help in itself to lead to this result being obtained, just as the expectancy of 'C' stream teachers for relatively low attainment helps to produce this result. Vernon has suggested low streaming might be responsible for the under achievement of some pupils:

> *"Children who are relegated to a lower stream to suit their present level of ability, are likely to be taught at a lower pace...These initial differences become exaggerated and the duller children who happen to improve later a too far below the higher streams in attainment is able to catch up"*

It is beyond reasonable doubt that streaming by ability psychologically influences the pupils and teacher's self-esteem. Naturally if a child knows that he is grouped in a lower class he

will be feeling hopeless and led to believe that he is capable of little, that is, has low expectations for himself, he will have little self-motivation and will in fact, achieve little. On the other hand if a teacher regards a particular class of pupils as 'low ability group' he will regard a particular process or concept as being beyond the capabilities of his pupils, he clearly does not teach it, and presumably his pupils will not learn it. These entire factors affect pupils learning achievement and influences teachers teaching styles and expectation. It is being suggested that the practice of streaming or dividing children into relatively homogenous ability groups provides an opportunity for teacher expatiations to influence whole class. The argument for this suggestion applies, of course, to whole school. Butcher (1968) suggested that when children are divided into different types of schools, it is a reasonable theory that lower expectations of teachers and others will result in lower performance.

THE EXPERIMENT OF RAVITZ (1963)

Ravitz (1963) make another notable study involving children from slum schools which also shows how teachers expectancy for their children really comes true. The teachers have low expectations on the disadvantage children as they come from "slum areas" and furthermore, as he observed, the children were not encouraged to learn very much. The teacher made little effort and energy on anything but maintaining order and bemoaning his lot. As a consequence, the children fulfilled the low expectation, which in turn reinforced the original assumption to prove the teachers' expectation was right. Trows (1968) calls this 'the culture of defeat'. Ravitz related this expectancy of a teacher directly to intelligence testing.

However, we have to be aware of the side effect of IQ tests as it has subtle influence upon the mind of the teachers. The real damage of the IQ test is that teachers often, unconsciously, expect the level of performance from the child that his IQ test indicated, a practice which taking into account the weakness and inadequacies of these tests, really doesn't give some children half the chance to succeed. Besides, the prejudice of the teachers upon the achievement of these slum children no

doubt already influences their expectation. On the contrary, we cannot completely deny Ravitz's finding despite the fact that his finding is only based on one slum area from one country. What more it involves only small number of children! Nor can we fully convinced that the teachers have indifferent attitude towards the disadvantaged children in this particular areas. But one fact is clear, there is evidence that a teacher's expectation has an effect in pupils' achievement.

THE FINDING OF FLOWERS (1966)

Another study which produced positive evidence on teacher's expectancy as the factor that affects pupil's different achievement was carried out by Flowers (1966). He selected two seventh grade classes in each of the two schools located in depressed areas of two separate cities. The classes were chosen so that the measured abilities and achievement of the pupils were approximately the same in each. The teacher of one class in each school however was told that it was one of the top groups in the school. After one year the children were retested. The result from the two schools differed. The 'experimental' classes had a barely significant higher average IQ compared with its 'control' and showed no differences in achievement. In the other school the 'experimental class showed significantly superior achievement but only the same intelligence as its control. Such evidence is far from conclusive. Of course, Flower's experiment has its own setback as the classes involved were small ranging from 19 to 24 children is each, and the range of ability and achievement is somewhat limited. It would not be claimed as reliable as it only involved 4 classes from 2 schools in two separate cities. Furthermore his finding is only part of a doctoral dissertation submitted and above all unpublished. Yet

the finding has clearly demonstrated that teacher's expectation is a factor which affects pupils' achievement.

ROSENTHAL AND JACOBSON (1968) 'PYGMATION IN THE CLASSROOM'

The most well-known study purporting to demonstrate the effects of teacher expectation is that by Rosenthal and Jacobson (1968). They carried out an experiment at the OAK school in California, U.S.A which apparently demonstrated that randomly selected pupils about whom their teacher had been told they would make 'intellectual spurts' in fact subsequently demonstrated significant IQ gains compared with their classmates. The result of the study had a widespread publicity and became a controversial issue. Many have condemned the finding as technically defective and used 'untrustworthy data' (Thorndike, 1968, snow, 1969). Rosenthal and Jacobson study has been attacked as being methodologically incorrect, over interpreted and not adequate in terms of identifying the teacher's behaviour which produced higher or lower achievement results in pupils perceived as bright or dull respectively (Elanshoff and Snow, 1971). In addition numerous researchers have attempted to replicate the major findings that teacher's knowledge of pupils' ability affects his treatment of the pupil and ultimately, the pupils further achievement. Among them are published studies of Jose and Cody (1971), Fleming and Anttonen (1971),

Claiborn (1969) and Rubovitz and Maehr (1971). The attempt of replication is well-summarized as thus: 'No significant differences were found in IQ achievements, student grades or behaviours and no differences were observed in teacher behaviour' (Finn, 1972).

However, Rosenthal and Jacobson's findings cannot be ignored boldly especially so when a few have already succeeded in supporting for expectation hypothesis. Among them are Beez (1968), Silberman (1969) Brophy and Good (1970) and Rohbart et al (1971). Of course, the validity and universality of their findings are questionable, especially when their data are regarded not sufficiently vigorous to warrant the kind of generalization they have made (Fleming and Anttonen, 1971). Even if the data and their interpretation are accepted, Rosenthal and Jacobson work remains only a demonstration of the existence of expectancy effects, their study did not address itself to any of the events intervening between the inducement of teacher's expectations and the administration of the criterion achievement test. In addition, one of the most important unanswered question in Rosenthal and Jacobson's research concern the mechanism by which the teacher's expectations affected the student. They rejected the hypothesis that the teacher spent more time with the spurters on the ground that teachers rated themselves as spending the same amount of time with both 'spurters' and 'non-spurters'. Since it is quite possible, however, those teachers would be reluctant to

admit to themselves or others, preferential treatment for better students, it is difficult to make self-rating at face value. They were prone to argue that the quality of interaction rather than the amount of interaction was responsible for the observed changes in students' performance. Presumably, the teacher's implicit and/or explicit encouragement accounted for the student's improvement (Rothbart, et al,1971).

Claiborn made a thorough analysis of Rosenthal and Jacobson finding. According to him only 1/3 of the randomly selected 6 grades of 18 classes under study showed 'intellectual blooming', which had gained more IQ points relative to the control children. This effect is largely attributable to substantial changes in one –first grade classroom in which the special children showed a relative advantage of 15.4 points. There was no significant IQ gain reported for Grades 3 – 6. Thus there was no teacher's expectancy effect in two-thirds of the grades examined. More importantly, only 2 of the 18 classes yielded any reliable IQ increase. One third grade showed a significant decrease. In addition, Claiborn argued that randomization failed to protect the selection of special children and resulted in non-interpretable effects. In a real sense, no expectancy effects can be claimed for the first grade.

It is undeniable that Rosenthal and Jacobson experiment has its drawback. One is that the testing carried out only by difference of eight months. And eight months is far too

short to consider the reliability of such an important study. As children are different in their growth and development, they are expected to achieve differently in school, what more in such a short period of the experiment. Furthermore, the test carried out only measured IQ gain and not the other aspects of children's progress. Unless it is proved that pupil with low IQ will achieve low in reading, writing and mathematics, then the finding is subject to criticism and post-mortem. One may be the teachers involved in the experiment are biased and prejudiced against the 'non-spurters' as they themselves suggested as thus:

> *'They may have treated the children in a more pleasant, friendly and encouraging fashion when they expected greater intellectual gains of them. Or teacher probably watched their special children more closely and this greater attention may have led to more rapid reinforcement of correct responses with a consequent increase in the pupils' learning. Such communication together with possible changes in teaching technique may have helped the child by his self-concept, his expectation of his own behaviour and his motivation as well as his cognitive styles and skills (Rosenthal & Jacobson, 1968 p.180).*

All these factors affect pupils' performance. Their study may be technically defective based on untrustworthy data

(Thorndike, 1968; Snow, 1969) or methodologically incorrect 'over interpreted and inadequacy'. It is criticized that their lack of data concerning the causal mechanism at work combined with the tendency in most secondary sources to over simplify or exaggerated their findings has cast an aura of magic or mystery around expectation effects. But the implication is clear: teachers' expectation as an explanation to different pupils' achievement in school is not without ground. Of course the reliability and the universality of the finding are questionable. It only involved pupils in a California school, it does not represent the whole of United States what more the whole world. Yet we cannot completely deny the fact that teachers' expectation has an effect on pupils' learning performance.

In 'Pygmation Reconsidered' Elashoff and Snow (1974) make further comments and criticisms on the published data which may further weakened and misled the already controversional report. According to them, the texts and tables published in the book 'Pgymation in the classrooms' are inconsistent, conclusion are over dramatised and variables are given prejudicial labels. The three concluding chapters, they commented, represent only superficial and frequently inaccurate attempts to deal with the study's flaws. Descriptions of design, basic data and analysis are incomplete. The sampling plan is not spelled out in detail. In addition, frequency is lacking for either raw or IQ scores. On the other hand, comparisons between text and appendixes tables are hampered by the case of different

sub groupings of the data and the absence of intermediate analysis of variances tables. Besides, many tables and graphs in their book are found to be inadequate as they show only differences between different scores, which is gain for the experimental group minus gain for the control group. These are technical inaccuracies: charts and graphs are frequently drawn in a misleading way and the 'p' value or significance level is incorrectly defined and used. Statistical discussions are frequently over simplified or completely incorrect. On Rosenthal and Jacobson's experiential design and sampling procedures, Elashoff and Snow criticised them as lack of clarity about the details of assignment to treatment groups what more many subjects are lost during the experiment and the lack of balance in the design. These difficulties are especially important in Rosenthal and Jacobson's study since the experimental group showed higher pre-test scores on the average. But one must take into consideration of difficulties in representing the information in tabular and graphic forms for publishing purpose and technicality. For those who already have a biased opinion against Rosenthal and Jacobson's finding would take advantage on the publishing inaccuracy to attack and criticise the validity of the finding by ignoring completely that teacher's expectancy hypothesis has effect, for good or ill, in children differences in school achievement.

Although this research has been fairly criticized (e.g. Jemsen, 1969: Thondike 1968) it is nonetheless reasonable to retain the

hypothesis that teacher's expectation can influence at least some aspects of students' performance (Beez, 1968). On the contrary, the way in which teacher's influences pupils' behaviour appear to be a for more subtle and complex phenomena than some have suggested. The body of knowledge and attitudes of teacher about testing, their personal characteristics and their ways of dealing with children seem to be far more critical for pupils' growth than external intervention per se.

PIDGEONS (1970) EVIDENCE

Pidgeons (1970) cites two of the foundation's research projects which provided massive support to the contention that the achievement and the aspirations - of pupils are more immediately and more strongly affected by the teachers' expectations. In the French project carried out NFER (National Foundations for Educational Research in England and Wales), the major aim was to evaluate the teaching of French in primary schools and the attitude of the teacher's to this innovation was investigated. A quarter of the teacher's surveyed agreed with the statement teaching French to the low ability children is a 'criminal waste of time'. After 2 years of the French programme, result on a listening comprehensive test showed that the schools with teachers holding these view had a significant concentration of low scoring pupils, while high scores occurred most frequently with teachers holding the view that all children should have the opportunity of learning French. It may be argued that in this project, the pupils who had high scores in French like French as a subject and the teachers like to teach it and vice-versa. Or we may deny the finding that it does not necessarily mean that if pupils can achieve high scores in French because of teachers'

expectations, they may be equally successful in other subjects. And that this study is only carried in a few primary schools in England and the reliability of the finding is open to criticism. Yet the message remains clear: teachers' expectation is a powerful force affecting pupils' progress. A second research, the Foundation study of Streaming by Chronological Age in the Primary School (Lunn, B. 1970), also shows very clearly that the teacher's are more important determinant in pupils' achievement than organizational structure.

CONCLUSION

Evidence shows that teacher's expectancy hypothesis as an explanation of differences in school achievement. For too long, we educators have tended to confine our attention and interests to the level of cognitive ability of pupils, seeing this as the major determinant of educational success, and wasting a good deal of time and energy on such operationally futile arguments as that about heredity and environment. We must come to grasp with certain that different levels of motivation can make nonsense predictions based on the result of cognitive tests and that the pupils' energy and drive, their ambitions and aspirations, their responses to difficulties and challenges can be profoundly affected-for good or ill – by the teacher's underlying philosophy and beliefs.

What is then required in an educational programme designed to give full opportunity for all? First and foremost, a positive, encouraging and hopeful attitude on the part of the teacher. Second, teaching methods that capitalize on the particular relative strengths of individual – which implies as full knowledge as possible by the teacher of what these strengths are. Third, an adequate and comprehensive system of educational

guidance and record keeping. Fourth, a content of teaching which is designed to stimulate and to meet the interest of the pupils: that is a curriculum of relevance. And lastly, an authority structure and ethos within the school that permits and encourages individual development, that offers opportunities of responsibilities to all pupils and that makes it clear to teachers, parents and pupils' alike that all individuals are equally values in their own right.

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