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ABSTRACT

Several beliefs about the teacher expectancy effect are false or half-truths. Current interest in the teacher expectation effect began with the publication in 1968 of Rosenthal and Jacobson's book, "Pygmalion in the Classroom". That book stated that a teacher's expectations for a pupil's achievement function as a self-fulfilling prophecy. Rosenthal and Jacobson also implied that this expectancy effect could be used to explain much of the variability among pupils in achievement, but they had no basis for that assertion. Their conclusion led to much research which produced very inconsistent results. Inconsistency came from two sources: serious methodological problems and a simplistic model of the expectancy effect. A more adequate model makes it clear that there is nothing inevitable about the teacher expectation effect. While I believe the formation of expectations is inevitable, sources and accuracy of teacher expectations should be investigated. Recent research indicates that teachers tend to base their expectations on aspects of the pupil's classroom behavior and generally are good judges of the potential and performance of their pupils. As teachers, though, we should be better educated in the use of information about pupils and should be continually critical of our judgments and be willing to change opinions and beliefs about school children. (Author/RH)

The Teacher Expectation Effect: An Attempt at Clarification

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Abstract

The paper begins with a review of some commonly held beliefs regarding the teacher expectancy effect. This is followed by a short discussion of the sources of the beliefs and a consideration of the beliefs in terms of recent research data. The latter discussion is used to raise questions about the validity of the beliefs.

The Teacher Expectation Effect: An Attempt at Clarification[1]

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My concern in this talk will be with some commonly held beliefs about the teacher expectancy effect. I'm going to talk a bit about the sources of these beliefs, and then I'm going to use some recent research data to support my view that these beliefs represent misconceptions about the expectation phenomenon.

I'll begin here by reviewing the types of beliefs that I am concerned with:

1. The level at which a pupil achieves is primarily determined by the teacher's expectations for that pupil's performance.
2. Teachers provide higher quality instruction for pupils for whom they have high expectations than pupils for whom they have low expectations.
3. Teachers tend to form their expectations of pupils on the basis of irrelevant characteristics such as social class or ethnic origin or physical appearance.
4. Information about pupils (e.g., their scores, their prior level of performance) should not be made available to teachers because the information will create an expectation which will bias the teacher.

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1. This paper is based on a talk given at the 5th Annual Conference of the Canadian Association of Young Children, Ottawa, Ontario. Oct. 25-27, 1979.

5. Teachers should actively avoid forming expectations for their pupils.

I believe that all of these statements are false (or, at best, they represent half-truths), and in a moment I'm going to use some recent theory and research to support my position. Before doing that, however, I want to go back to some of the earlier work on the expectancy phenomenon because it was from that earlier work that many of these misconceptions arose.

Current interest in the teacher expectation effect began with the publication in 1968 of Rosenthal and Jacobson's book Pygmalion in the Classroom. The hypothesis developed in that book was that a teacher's expectations for a pupil's achievement function as a self fulfilling prophecy. In other words, if a teacher expects high achievement from a pupil, the teacher will treat the pupil in such a way as to insure high achievement. If, on the other hand, the teacher thinks that a child has little potential for achievement, the teacher will interact with the child in such a way as to promote low achievement.

Rosenthal and Jacobson also reported in their book an experiment which was designed to test that hypothesis, and this is the famous Oak School experiment. That study was conducted in a group of elementary classrooms (grades one through six). Early in the school year the children in those classrooms were given an IQ test. Shortly after the test was administered (this is still early in the school year), the teachers in those

classrooms were told that certain pupils in the classroom had high potential, and that these children could be expected to show great achievement gains during the year. This constituted the independent manipulation of the study. In telling the teacher that certain children had high potential, Rosenthal was attempting to induce an expectation in the teacher. Actually the information given the teacher was false in the sense that the children identified as having high potential had been selected at random.

Having attempted to induce an expectation in the teacher (and I wish to stress the word attempt), the researchers went on to assess the effects of the expectation. What they did was to readminister the IQ test again at the end of the term. Their prediction, of course, was that children identified as high potential to the teacher would show greater gains on the test than children not so identified. In fact, the data tended to support the hypothesis. The effects were not particularly strong, and they tended to become weaker as grade level increased, but, in general, children identified as having high potential showed greater gains than those not so identified.

Rosenthal and Jacobson concluded that they had demonstrated the existence of a teacher expectation effect, and that conclusion seems justified (putting aside, for the moment, certain methodological problems). They also implied, however, that this expectancy effect can be used to explain much of the variability among pupils in achievement, but they really had no basis for that

assertion given the weakness of their results. Rosenthal further argued (and this point was extended even further by other people using Rosenthal's results) that much of the low achievement observed in minority group children or lower class children can be accounted for by this expectancy effect. In fact, they had no data on that point at all.

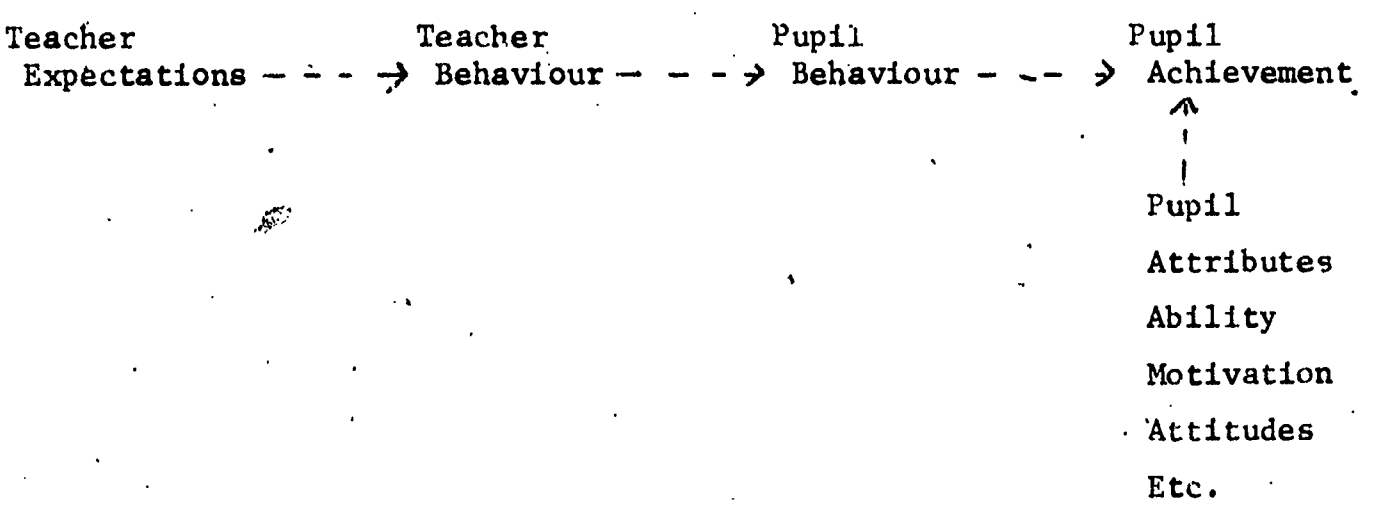
The point I wish to make here is that many of these beliefs which are prevalent regarding the teacher expectancy effect can be traced back to the early work of Rosenthal, and that, in fact, this early work did not provide very strong support for the assertions. Let me carry this historical outline a bit further. The appearance of the Rosenthal and Jacobson book led to a great deal of research activity, but that research activity produced very inconsistent results so far as the expectancy hypothesis was concerned. Some researchers were able to find support for the hypothesis, but other researchers failed to find any support. These inconsistent results should, in themselves, have been a basis for viewing the expectation hypothesis (and the associated beliefs) with some caution. There are, though, other reasons for viewing the beliefs with caution, as I will try to show you in a moment.

I think the inconsistent results obtained in the earlier research derive from two sources. First of all, there were serious methodological problems in the research, and there were differences among the studies in the types of methods employed.

These problems have been discussed rather thoroughly (e.g., Dusek, 1975; Thorndike, 1968), and I won't go into them here.

The second, and more important, reason for the failure of the earlier research relates, I think, to the fact that the research guiding that model was too simplistic. In effect, the model simply postulated a causal link between the teacher's expectations and level of pupil achievement. Recently (and by that I mean over the past five years or so) more adequate models of the expectancy effect have appeared, and I think those models are important because they have led to better research on the phenomenon and because they help to correct some of the misconceptions which have arisen about the expectancy effect.

I'm going to outline one of these alternative models here, a model similar to those discussed by Brophy and Good (1974) and Garner and Bing (1973). This is not the most complex of the models which has been presented, but it will serve my purpose. It looks like this:



What this model is saying is that, under some circumstances, a teacher's expectations for the pupil's performance has an effect on the teacher's behaviour toward the child. Further, under some circumstances, the teacher's behaviour has some impact on the pupil's behaviour which, again, under some circumstances, has an impact on the pupil's level of achievement.

I want to make two general points about this model, and then I will have something to say about a specific aspect of the model. My first point is that this model makes it clear that there is nothing inevitable about the teacher expectation effect. Whether or not the expectations have an impact on achievement depends on whether or not they have an impact on teacher and pupil behaviours, and whether or not the behaviours in turn have an effect on achievement. What are the conditions under which these links exist? Unfortunately, we do not yet have a great deal of information on the issue, but good research is beginning to appear (see Cooper, 1979 and Hoge and Luce, 1979 for recent reviews), and I'm convinced that in time the research will lead us to a better understanding of the expectancy phenomenon. What the research has shown us is that the effect is much more complex than formerly thought, and that should be a basis for being very cautious about any assertions respecting the effect.

My second point here relates to the pupil attribute variables which I have tacked on to the model. There are undoubtedly conditions under which teacher expectations do affect achievement,

but there are other factors affecting achievement, including such things as the intellectual ability of the pupil, the attitudes and motives of the pupil, etc. That seems like an elementary point, but it is a point which is sometimes lost sight of in this literature. There are people who have tried to promote the view that expectations constitute the only determinant of performance, and that view is clearly false.

I'll say again that this is not the most elaborate models of the expectancy effect, and I admit that the formulation as I have presented if begs a lot of questions. I think, though, that this view of the expectancy effect has led to better research on the issue, and that it does help to correct some of the misconceptions which have arisen about the effect.

I want to look more closely now at one element within the model, the expectancy variable, and I have two reasons for doing this. First of all, I can use some observations about that variable to comment on some of the beliefs I had reviewed earlier, and, secondly, our research happens to focus on that variable.

I'll begin here with the statement that the formation of expectations is inevitable. I don't know of any data that can be cited to support that statement, but I believe it to be true, and I believe that the advice you sometimes hear to the effect that teachers should attempt to avoid forming expectations for their pupils is very silly advice.

Having said that, we can move to two questions that can be raised about these expectations. The first question concerns the sources of the expectations, and the second question concerns the accuracy of the expectations. These questions are related to one another, and, as I will try to show you, they are closely related to the issue of an expectancy effect.

Let's begin with that first question which has to do with the sources for the expectations. There are those who feel that teachers are heavily influenced in forming their expectations by such factors as social class or race or ethnic origin or physical attractiveness. I'll call these irrelevant factors because I don't think there is any direct connection between these kinds of factors and the intellectual potential or academic ability of the pupil. To what extent are teachers influenced by these types of factors? We are just beginning to get some research on the issue, and I think that research is showing that, yes, some teachers are influenced by the irrelevant factors, but the majority of teachers form their expectations on the basis of what I would consider relevant consideration. For example, some data which we have recently collected indicate that teachers tend to base their expectations on aspects of the pupil's classroom behaviour, on the level of performance displayed within the classroom, etc. In other words, they use relevant information in forming their judgments.

The second question raised above concerns the accuracy of the

expectations, and here we are asking to what extent does a teacher's judgment about the potential of a pupil reflect the actual potential of the pupil. It should be clear that this question is related to the first one raised. To the extent that teachers do depend on relevant information in forming their judgments, generally accurate judgments should emerge. Also, the question of accuracy is of critical importance so far as the expectancy effect itself is concerned. I would suggest that the effect operates much differently where the expectations accurately reflect the potential of the pupil than is the case where they do not accurately reflect potential.

Here, too, we are just beginning to get some research, but I think a tentative conclusion can be reached on the basis of the data available. Some of our data, and data available in other research (e.g., Perry, Guidubaldi, & Kehle, 1979; Willis, 1972) appear to be pointing to the conclusion that, in general, teachers are good judges of the levels of potential and performance of their pupils. There are, to be sure, individual differences in the data, some teachers are more accurate than others, but the generally high levels of accuracy which I see in these data are very impressive.

Let me go back now to some of the beliefs which I had described at the beginning of the talk. I have already suggested that there is little basis for the notion that teachers should avoid forming expectations for their pupils. I also think

that there is little foundation for the belief that teachers are heavily influenced in forming their judgments by external considerations such as social class or physical attractiveness. I'm sure there are cases where those types of factors are involved, but I think the data show that most teachers assign little weight to such factors. Finally, I think there is little basis for the belief that information about pupils should be withheld from teachers. To the extent that it can be demonstrated that teachers can make intelligent use of information in forming their judgments (and I believe this to be generally the case), an argument can be made for providing teachers with as much information as possible about pupils. (I do think, however, that the ideal procedure here involves the teacher interacting with the pupils for the first few weeks of school and attempting to form some independent judgment. That independent judgment can then be checked against any information which might be available).

I have spent some time here raising questions about the teacher expectation hypothesis and some of the beliefs associated with that hypothesis. Before I bring this to a close I want to state two cautions with respect to this phenomenon about which I am so skeptical. My first point is that I think there should be more efforts at educating teachers in the use of information about pupils. There are strengths and limitations associated with all of the sources of information we have for pupils, whether

psychological tests or prior levels of performance or whatever, and if we were more familiar with those strengths and limitations, we would be in a better position to form accurate judgments.

My second caution here relates to the issue of flexibility. I think where problems arise with respect to expectations, they generally arise because of an unwillingness to change opinions or beliefs about the child. Sometimes our judgments are wrong, and sometimes children do change, and, for these and other reasons, it is important that we be continually critical of our judgments and continually prepared to change the judgments.

I wish I had more time to examine these issues which I have raised and to describe in more detail some of the research going on in this area, but I think I'll bring the talk to a close at this point and invite your comments on these issues.

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