

The Definition and Measurement of Teacher Expectations: Problems and Prospects

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According to the teacher expectation hypothesis, teacher expectations of pupils determine, in part, the pupil's actual level of performance. There continues to be great interest in this hypothesis as reflected in the numerous theoretical and empirical developments which have appeared in the literature. The thesis of this paper, however, is that there are weaknesses associated with conceptualizing the teacher expectation variable and with treatments of the variable in research. This thesis is supported through a review of efforts to develop a teacher expectancy construct and an examination of treatments of the expectancy variable in past research. The article concludes with a set of recommendations regarding the treatment of the expectation variable in future research on the teacher expectancy hypothesis.

Selon l'hypothèse, les attentes tenues par l'enseignant envers l'élève déterminent en partie le niveau concret du rendement de l'élève. Les nombreux développements théoriques et empiriques qu'on peut trouver dans les recherches publiées portent témoin du grand intérêt continu à cette hypothèse. Cependant, le thème de cet article est qu'il y a des faiblesses associées à la conceptualisation de la variable de l'attente des professeurs et à la façon dont on fait des recherches sur cette variable. On peut démontrer l'appui de ce thème par un examen premièrement des efforts pour développer un modèle des attentes des professeurs et deuxièmement des recherches faites auparavant ayant trait à la variable de l'attente. L'article se termine par une série de recommandations à l'égard du traitement de la variable de l'attente dans de futures recherches sur l'hypothèse des attentes des professeurs.

According to the teacher expectation hypothesis, teacher expectations of pupils' academic performance determine, in part, the pupil's actual level of performance. Current interest in that hypothesis was stimulated by Rosenthal and Jacobson's (1968) publication of their book *Pygmalion in the Classroom: Teacher Expectations and Pupils' Intellectual Development*. The book contains a statement of the expectancy hypothesis and a report of an experiment, the results of which were interpreted as supporting the hypothesis.

Considerable theoretical and empirical activity followed publication of the Rosenthal and Jacobson (1968) book, and this activity has led to more complex models of the expectancy phenomenon and more elaborate research paradigms. The basic thesis of this article, however, is that there

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have been, and continue to be, inadequacies in the treatment of the teacher expectation variable itself, inadequacies in the conceptualization of the variable and in treatments of the variable in research studies. It is also argued that a better understanding of the teacher expectation phenomenon will result when these inadequacies are resolved.

The article is divided into four sections. First, there is a brief overview theoretical and empirical developments respecting the teacher expectancy hypothesis. The second section contains a discussion of the literature's conceptualizations of the teacher expectancy variable, and the third section presents a detailed analysis of treatments of the expectancy variable in research on the teacher expectancy hypothesis. The fourth section presents a set of recommendations regarding the expectancy variable and future research.

OVERVIEW OF THEORETICAL AND EMPIRICAL DEVELOPMENTS

Several reviews of theoretical and empirical developments in the area are available (Braun, 1976; Brophy and Good, 1974; Cooper, 1979a; Dusek, 1975; Good, 1980; Good and Brophy, 1978, 1980), and there is no need for a detailed review of these efforts here. However, a general overview of the earlier work is here presented by way of background to the issues raised in this review.

The earliest research on the expectation phenomenon was guided by the Rosenthal and Jacobson (1968) hypothesis which simply postulated a link between teacher expectations and the level of pupil performance. Soon, however, more elaborate theoretical models appeared, and the most influential were those in which mediating links were postulated within the expectancy-performance relation (Brophy and Good, 1970; Garner and Bing, 1973; Good and Brophy, 1973). These models represented expansions of the original models to the extent that they attempted to specify teacher and pupil behaviours which might serve to link the expectancy variable and the performance variable. This is the type of model which has guided most research on the expectancy phenomenon until very recently.

The research itself has generally followed one of two paradigms. The first is that introduced in the original study (Rosenthal and Jacobson, 1968). It involved an experimental design in which there was an effort to manipulate a teacher's expectation of the pupil by providing the teacher with information about the pupil. For various practical and ethical reasons, this paradigm was largely abandoned by the mid-1970s and supplanted by a second. The second paradigm involved the use of naturalistic teacher expectancies in a correlational design. Thus, a measure of the teacher's existing expectancies for the pupil were

collected, and these were related to measures of classroom behaviour and/or pupil performance.

Both of these paradigms have been used by researchers to establish links between the teacher expectation variable and pupil performance measures (e.g., Crano and Mellon, 1978; Dusek and O'Connell, 1973). Significant relations have also been established between the expectancy variable and indices of teacher classroom behaviour (e.g., Brophy and Good, 1970; Good, Cooper, and Blakey, 1980; Luce and Hoge, 1978), and there is, in fact, a set of teacher behaviours which have been identified with some consistency as associated with the expectancy variable (cf. Good, 1980). There are, however, some problems. First, there have been cases reported of failures to establish relations among the expectancy, behaviour, and performance variables (e.g., José and Cody, 1971; Schwarz and Cook, 1972). Second, even in studies where significant effects are noted, the magnitude of the relationship is often small suggesting some unidentified and uncontrolled sources of variability. Third, and this relates to the second point, some researchers have noted considerable variability among teachers in the strength of the expectancy effect (e.g., Good et al., 1980; Evertson, Brophy, and Good, 1972).

This variability in outcomes has led to a search for additional variables which might be involved in the expectancy effect. For example, there is a search underway for cognitive, attitudinal, and personality variables that differentiate teachers (e.g., Babad and Inbar, 1981; Babad, Inbar, and Rosenthal, 1982; Carew and Lightfoot, 1979; Cooper, 1978) and pupils (e.g., Ebemeir and Good, 1979; Weinstein and Middlestadt, 1979; King, 1980) and which might be involved in the expectancy process. Also to be noted in this connection are expanded models of the expectancy effect recently proposed by Cooper (1979a, 1983) and Weinstein (1982).

The increasing complexity of the teacher expectation model represented in these theoretical and empirical developments is encouraging and promises to lead to a further clarification of the dynamics of the expectancy effect. However, research on the teacher expectancy effect has been impeded by an inadequate treatment of the expectancy variable itself; a complete understanding of the phenomenon will not be achieved until that variable has been better defined operationally. The two sections which follow include an examination of the treatment of the expectancy variable in this literature, one which seeks to document the existence of (a) inadequacies in the conceptualization of the teacher expectancy variable and (b) inadequacies in operationalizations of the variable in research.

CONCEPTUALIZATION OF THE EXPECTANCY VARIABLE

Teacher expectancy was the key variable in the Rosenthal and Jacobson (1968) hypothesis, and in their experiment. It is curious, then, that the

authors provided no direct discussion of that variable; there was no direct attempt to elucidate the conceptual properties of the variable. There was a definition of the variable implicit within statements of the hypothesis: "... the proposition that within a given classroom those children for whom the teacher expected greater intellectual growth would show greater growth" (Rosenthal and Jacobson, 1968, p. 61). Their operationalization of the variable involved an implicit definition that provided the teacher with names of children for whom, on the basis of test scores, extraordinary intellectual growth could be expected during the course of the year. We can infer from this that Rosenthal and Jacobson (1968) conceived of teacher expectations in terms of expected future performance based on current knowledge of the child, or, as West and Anderson (1976) put it, as "... assumed teachers' attitudes about students which are a function of some information supplied by the investigator" (p. 616).

There have been other efforts since 1968 to deal with the expectancy variable on a conceptual level. For example, Brophy and Good (1974) offered the following definitions: "By 'teacher expectations' we mean inferences that teachers make about the present and future academic achievement and general classroom behavior of their students" (p. 32). They wrote further: "Expectations are primarily cognitive phenomena, inferential judgments about probable future achievement and behaviour based upon the student's past record and his present achievement and behavior" (p. 129). West and Anderson (1976) have offered a similar definition: "We have defined [expectancy] as a teacher's attitude (behavioral predisposition) about a specific student" (p. 616). These definitions represent useful beginnings toward a conceptualization of the teacher expectation variable, but they are not sufficiently specific in the focus of the inferences or attitudes in question. For example, we can ask whether the expectations concern general intellectual capacity, or performance in specific achievement areas, or whether these are somehow equated in the minds of teachers. What are the relations between teachers' perceptions of current attributes of pupils and their expectations for the future performance of the pupil? These are the kinds of questions which remain unanswered (Cooper, Findley and Good, 1982; Ross, 1977) in the conceptualization of expectancy, and it is this vagueness which has contributed to such diverse use of the concept in empirical research.

TREATMENT OF THE EXPECTANCY VARIABLE IN RESEARCH

Treatments of the expectancy variable are discussed here in terms of two general categories, those involving attempts to induce expectations and those involving naturalistic expectations, although it will be shown that there is actually considerable variability within these categories. It should be noted that this review is confined to investigations that test the teacher

expectation hypothesis in naturalistic classroom settings. Simulation or analogue studies are not considered here.

Studies Using Induction Procedures

The Rosenthal and Jacobson (1968) study included an effort to manipulate the expectancy variable by informing teachers that some pupils had obtained exceptionally high IQ scores and could be expected to show extraordinary intellectual gains during the course of the year. In fact, the pupils, designated as "intellectual bloomers," had been selected randomly from within the classrooms. Attempts to replicate this study have used similar induction procedures. These studies have been dealt with in several critical reviews (e.g., Baker and Crist, 1971; Brophy & Good, 1974; Dusek, 1975; Snow, 1969; West & Anderson, 1976), and the reviews show that these experiments have generally disconfirmed the expectancy hypothesis. The studies need not be reviewed in detail here, but some observations will be offered on their treatment of the expectancy variable.

First, the expectancy manipulation has varied among these induction studies. One point of difference relates to the focus of the attempted induction. Rosenthal and Jacobson (1968) provided teachers with the names of pupils "expected" to show extraordinary *intellectual growth* during the course of the year. Other researchers, however, have employed different foci for the expectations, including projected gains in specific achievement areas (e.g., Dusek and O'Connell, 1973) and projected gains in creativity (e.g., Rosenthal, Baratz, and Hall, 1974). A second point of difference has been the procedure used in conveying the expectancy. Some researchers have followed the Rosenthal and Jacobson (1968) procedure of presenting teachers with names of pupils expected to do well or poorly, while others have presented teachers with test scores and allowed them to make their own inferences about expected performance (e.g., Fleming and Anttonen, 1971). A third difference relates to what Baker and Crist (1971) refer to as the "strength of the manipulation." Most studies followed the original procedure and presented the induction information on a single occasion. Other studies, however, used a stronger manipulation in the sense that the teacher was given frequent reminders of the material contained in the information (e.g., Goldsmith and Fry, 1971). One final variation in procedure relates to the timing of the induction attempt. Rosenthal and Jacobson (1968) presented the information to the teacher at the beginning of the school year when, presumably, expectations were just being formed. Other researchers presented the information later in the school term.

There is no direct evidence that these variations in the operationalization of the expectancy variable make any real difference in the actual

induction of an expectation in the teacher; in fact, there is little direct evidence of *any* sort bearing on the expectancy inductions. On purely intuitive grounds, however, we might expect these variations to affect the strength of the induction. We would expect, for example, that an induction involving frequent reminders to the teacher would have more impact than one involving a single presentation.

A lack of consistency in operational definition creates but one problem in this set of studies. A second problem relates to the lack of direct evidence of the validity of the expectancy manipulation. What is required is evidence that the information supplied to the teacher actually affected the teacher's perceptions or attitudes regarding the pupil. Most of the studies using an induction procedure provide no information on this point. Further, the few cases where relevant data are supplied present little evidence in support of the validity of the manipulation. José and Cody (1971), Fleming and Anttonen (1971), and Mendels and Flanders (1973) all collected interview data from teachers at the end of their investigations. Those interview data seemed to indicate that the induction attempt had no real effect on the teacher; most teachers simply indicated that, for one reason or another, they had discounted the information. A more direct test of the validity of an induction attempt was provided by Zanna et al. (1975) who asked teachers to rate pupils twice during the school year with regard to potential and performance. Ratings collected three weeks after the induction attempt indicated a weak but significant effect that supported the induction, but a second set of ratings collected seven weeks after the induction attempt showed no significant differences in the ratings of pupils for whom high and low expectations had been induced. There is, in short, no convincing evidence in this literature that the inductions actually affected teachers' judgments.

Two other problems with this induction procedure merit brief mention. The first is a practical one and this is the fact that most teachers are now conscious of studies of this kind and are likely to be suspicious of any information provided by psychologists under these conditions. It is unlikely that the deception basic to the procedure would work today. The second problem is an ethical one and relates to the deception used in this procedure. There are those who argue that there can be no justification for providing teachers with false or misleading information about pupils.

The various considerations raised here lead to serious doubts about expectancy manipulation as represented in these studies. They may also lead to the conclusion that the teacher expectancy hypothesis has not, in fact, received an adequate test in this set of studies. The procedure used in the studies represents, of course, the most direct route for assessing the causal link implicit in the hypothesis, but various considerations seem to support the earlier advice of Brophy and Good (1974) and Dusek (1975), namely, that this induction procedure has outlived its usefulness and should be abandoned.

Studies Using Naturalistic Measures

The second set of studies includes those employing naturalistic expectations in tests of the expectancy hypothesis. Most of these investigations entail relating measures of existing teacher expectations to indices of classroom behaviour and/or performance within correlational designs. These studies, too, have been reviewed (e.g., Brophy and Good, 1974; Cooper, 1979a; Dusek, 1975; Good and Brophy, 1980), and generally speaking these naturalistic studies have been somewhat more successful than those based on induction attempts. Under some circumstances, significant relations have been established among the expectancy, classroom behaviour, and performance variables. However, the expectancy measure itself again has not received close scrutiny in this literature.

Types of measures

Just as there has been considerable variability across the induction studies of teacher expectancy so naturalistic studies of the expectancy and its measurement have varied considerably. However, the measures can be divided into three broad categories for purposes of discussion.

The first type of measure involves a global estimate of the pupil's academic potential. There is some variation in the form this measure takes in different studies. Thus, some researchers have asked for a direct estimate of the pupil's academic potential (Babad, Inbar and Rosenthal, 1983; Doyle, Hancock and Kifer, 1972; Sutherland and Golschmid, 1974). Other researchers have asked the teacher to provide estimates of expected academic achievement (Cooper and Burger, 1980; Cornbleth, Davis and Button, 1974; Dusek and O'Connell, 1973; Good, Sikes and Brophy, 1973; Haigh, 1974; Parsons, Kaczala and Meece, 1982; Schwarz and Cook, 1972; Evertson et al., 1972; Brophy, Evertson, Harris and Good, 1973). Still a third variation has involved ratings of current levels of achievement (Brophy and Good, 1970; Good, 1970).

A second general type of expectancy measure in this research has involved global ratings of expected task performance. Here, too, there is some variability in the wording of the measure: (a) Rank pupils in terms of "... how likely the student is, when given an academic task, to succeed at it" (Cooper 1977). (b) Indicate "... when you give this student an academic task to perform, with what probability do you expect the student to arrive at a correct solution?" (Cooper and Baron, 1977). (c) Rank pupils in terms of (a) "... probability of success at verbal academic tasks" and (b) "... general academic potential"¹ (Cooper, Hinkel and Good, 1980; Good et al., 1980).

These two categories of naturalistic measure entail efforts to capture a teacher's perceptions of the pupil in terms of global or unidimensional index. The third general category of measure involves multivariate

indices of expectancy where researchers attempt to capture the teacher's perceptions of the pupil in terms of multidimensional rather than unidimensional indices. Numerous studies with this type of measure have been reported (Clifton, 1981a, 1981b; Crano and Mellon, 1978; Garner and Bing, 1973; Luce and Hoge, 1978; Williams, 1975, 1976). While all of these researchers have employed multidimensional rather than unidimensional measures, the studies still varied considerably in the exact type of measure employed. For example, Clifton (1981b) used data obtained from the Carnegie Human Resources Data Bank. That source yielded two composite expectancy measures, one based on the perceived likelihood that the pupil would successfully complete the final year of high school (Cognitive Expectation) and the other based on an averaging across teacher ratings of pupil reliability, cooperativeness, and industry (Normative Expectation). To take another example, Luce and Hoge (1978) based their expectancy measure on four separate rankings provided by the classroom teacher. These ranking dimensions included: (a) basic intellectual ability; (b) motivation to do school work; (c) reading achievement; and (d) mathematics achievement.

The various types of naturalistic measures have been discussed here in terms of three general categories. It is clear, however, that the categorization is rather crude, with considerable variability in this literature respecting the nature of the expectancy measure employed. The problem is that this variability has not been acknowledged in the past, and the tendency has been to treat the various types of measures as equivalent without any real evidence that they are, in fact, measuring the same thing. There are, however, some signs of an increasing recognition of this problem (Bognar, 1983; Cooper et al., 1982; Dusek and Joseph, 1983), and these represent encouraging developments.

An evaluation of the measures

These expectancy measures are crucial to the naturalistic tests of the teacher expectancy hypothesis, and it is important to raise questions about their adequacy. The two primary issues are, of course, the reliability and validity of the measures.

The issue of reliability is somewhat difficult to deal with because of problems with applying the standard reliability procedures. It is difficult to find agreement among those who rate the pupils; rarely, for example, are there two teachers equally familiar with the pupil. The problem with applying test/retest procedures is that we expect pupils to change over time, and we expect teachers' judgments of pupils to change as well. Despite these problems, the issue of reliability must be addressed, and it is a little surprising that relatively few uncontaminated tests of the indices' reliability have been reported.

One such test is provided by Willis (1972), who reported test/retest

coefficients for a global measure of expected achievement for data collected early in the school term and also at the end of the term (a third rating collected during the first week of school cannot be used in the assessment of reliability since information was provided to the teacher subsequent to that rating). An average stability coefficient of $r = .83$ was reported. Good et al. (1980) indicated that their composite expectancy measure (predicted probability of task success and perceived academic potential) was collected at three points during the school year, September, January, and April. A detailed breakdown of the reliability coefficients was not provided, but they did indicate that all reliability coefficients exceeded $r = .75$. Finally, Clifton (1981a) reported long-term stability coefficients for the various components of his multidimensional measure ranging from .69 to .85.

These results relating to the reliability of the expectancy measures are encouraging to the extent that they indicate moderately strong stability coefficients. However, as suggested, relatively few tests of reliability have been reported, and it is difficult to know the extent to which similar reliability coefficients can be expected for different kinds of measures, pupils, teachers, etc.

The other question to be raised about the measures concerns their construct validity. This question is: To what extent do these expectancy measures represent meaningful indices of teachers' perceptions of pupils? The issue of construct validity is always difficult to deal with in the case of psychological measures (cf. Cronbach, 1971; Cronbach and Meehl, 1955; Messick, 1975; 1981), and it is particularly difficult to deal with in this instance because there has been no explicit definition of the teacher expectancy construct. Nevertheless, it remains important to address the question.

An initial question relates to the extent to which the operationalizations in the measures are consistent with theoretical conceptions of the teacher expectancy variable. Here we run into some difficulty because, as stated earlier, a precise definition of the expectancy variable does not really exist. Nevertheless, it would seem that the operational definitions represented in the various measures are consistent with the broad construct defined by Brophy and Good (1974) and West and Anderson (1976). If, however, we define the teacher expectancy variable more narrowly as a *prediction* or projection regarding the future, then those measures based on ratings of *present* levels of achievement or potential are immediately one step removed from the expectancy construct. The practice in this literature has been to treat judgments of current levels of potential as equivalent to predictions of future performance, but data recently presented by Cooper et al. (1982) suggest that this practice may not be justified.

A second consideration concerns the extent to which relationships have been established between the expectancy measures and the outcome

measures. Some statistically significant relations have been reported between all of these measures and outcome measures, including pupil-teacher classroom behaviours and pupil achievement levels. These positive results may be cited as indirect support for the validity of the expectancy measures. If the measures had no meaning to teachers, then we would not expect systematic relations with the outcome variables. There is, however, need for caution here. First, the magnitude of relationship between the expectancy measures and the outcome measures varies widely. Second, many of these studies reveal that the strength of the expectancy effect varies considerably among teachers. There are a number of potential sources of this variability. Some may arise from problems associated with the expectancy measures: the measure may be more meaningful for some teachers than for others or different teachers may interpret the measures in different ways. Again, there is no basis for concluding that these measures are invalid, but there is some need for caution about the meaning of the measures.

Some data bear more or less directly on the issue of construct validity. It may be noted, first, that several researchers have been able to demonstrate significant correlations between global estimates of academic potential and standardized achievement test scores (Cooper et al., 1982; Dusek and O'Connell, 1973; Willis, 1972; Morine-Dershimer, 1979). Such data are often cited as supporting the validity of this type of measure, although there is perhaps some question about the extent to which the results actually reflect the influence of an expectancy effect. It may also be noted here that the Cooper et al. (1982) study actually included two types of global measures, only one of which was significantly related to achievement. Some data regarding the validity of the expected-task-performance type of measure have also been presented. Cooper and Baron (1977), for example, compared teachers' perceptions of probable task completion with the expectation judgments independent observers formed from interviews with the teachers. A nonsignificant relation was obtained between these two alternative measures. Our confidence in these expectancy measures would, of course, increase if it could be shown that these measures were related significantly to scores from alternative measures. Evidence of this sort, however, is rather meagre at present.

A fourth problem concerns the implicit assumption within the global measures that teachers' perceptions of pupils can be meaningfully measured by a single global or unidimensional index such as a ranking of pupils in terms of expected achievement or a rating of academic potential. A contrary assumption is that teachers' perceptions of pupils are far too complex to be captured in such a unidimensional index. Indeed, in support of the latter assumption, there is a growing literature that analyses teacher judgments and perceptions of pupils, and there seems to be an emerging consensus that teachers perceive pupils in multidimensional terms, and that, hence, global indices may not be meaningful (cf.,

Achenbach and Edelbrock, 1978; Hoge, forthcoming; Kohn, 1977; Lambert and Nicoll, 1977; Quay, 1979). Most of this research literature is not directly concerned with expectation judgments, but the conclusions are relevant to those judgments. Moreover, those studies employing multidimensional expectancy indices have, for the most part, shown different patterns of relations with outcome variables for the different expectancy dimensions. For example, Crano and Mellon (1978) reported that teacher ratings of social skills and of classroom conduct were more strongly related to their outcome variable of achievement than were ratings of academic potential. A third point derives from Dusek and Joseph's (1983) meta-analysis of research on the bases of teacher expectations. One of their conclusions was that different dimensions of expectations have different sources, and this led them to recommend that researchers adopt a more analytic approach to the expectancy variable. One final consideration connected with this issue of global vs multidimensional indices derives from Meyer's (1979) point that the global indices of expected task performance actually confound two factors, perceptions of pupil ability and judgments about task difficulty. Cooper and Baron (1979) have responded to the criticism, but the debate does underscore the fact that some ambiguity is attached to these global expectancy indices and that reasonable questions can be raised about how adequately they capture teachers' perceptions of pupils. To the extent that these problems persist, it can be argued that naturalistic studies have failed to provide conclusive tests of the teacher expectation hypothesis. These deficiencies in the conceptualization and measurement of teacher expectations are significant because they represent impediments to research on the teacher expectation hypothesis. There is also an ethical sense in which these issues are important. Our conceptualization and measurement of the teacher expectation variable, as well as our hypotheses regarding the effects of those expectations, convey a particular image of teachers and the teaching process, and we should be concerned with the accuracy and fairness of this image.

RECOMMENDATIONS

The first recommendation echoes one made earlier by Brophy and Good (1974) and Dusek (1975) to the effect that future efforts to test the expectancy hypothesis should employ naturalistic measures of existing expectations rather than the contrived induction attempts. There is by now sufficient doubt about both the effectiveness and ethics of the induction procedures to discourage future attempts in that direction.

Investigations of the expectancy hypothesis with naturalistic expectations, however, should continue, but with greater attention to the psychometric properties of the expectancy measure. Several suggestions can be made in this connection. First, whatever the type of expectancy

measure employed, some effort should be made to establish its reliability. It is difficult to interpret relationships among variables without information concerning stability of the measures. Second, while the global vs multidimensional controversy has by no means been resolved, researchers are advised to employ measures tapping specific aspects of teacher judgments as well as global aspects. Individual measures can always be combined into a composite, but the reverse is not true. Fortunately, examples of more sophisticated expectancy measures are beginning to appear (e.g., Beady and Hansell, 1981; Bognar, 1983; Cooper, 1979b; Kedar-Voivodas and Tannenbaum, 1979; Clifton, Perry, Parsonson, and Hruniuk, 1983), and, while these measures have not yet been used in naturalistic assessments of the expectation hypothesis, the researcher would be well advised to consider these more complex measures. Finally, researchers should, where possible, collect and report information regarding the validity of the measures employed; there is a clear need for more information of this sort.

The foregoing advice, however, is short-term. The third recommendation, and this representing the long view, is that greater efforts should be expended to develop a more definitive construct of the teacher expectation variable and better measures of the construct. There are undoubtedly several approaches which might be taken toward this objective, but the proposal here is that a more adequate conceptualization of the expectancy variable will emerge through a more complete understanding of the teacher judgment process of which these expectations form but one part.

There are, in fact, two very active areas of research on teacher judgment from which relevant information is available. First, there is a growing body of empirical research focusing on the dynamics of the teacher judgment process (for reviews see Brophy and Good, 1974; Shavelson and Stern, 1981; Clark and Yinger, 1978). This research considers information used by teachers to judge pupils, and how information is used in the judgment process. Considerable attention here is paid to the differences among teachers in the operation of these processes. Second, there is a rapidly expanding literature concerned with the analysis of teacher judgments and perceptions of pupils by means of factor analytic techniques. Several reviews of this literature are available (Achenbach and Edelbrock, 1978; Hoge, forthcoming; Kohn, 1977; Lambert and Nicoll, 1977), and they indicate progress in the clarification of these judgmental and perceptual constructs. There are, to be sure, problems and limitations associated with both these approaches, but they do offer promising avenues toward the discovery of the true nature of the expectancy construct.

NOTE

¹ These two rankings were averaged to obtain a composite index.

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Nach der Hypothese der Lehrererwartung bestimmt die Erwartung des Lehrers von dem Schüler zum Teil das tatsächliche Leistungsniveau des Schülers. Wie man an zahlreichen theoretischen und empirischen Entwicklungen, die in der Literatur erschienen sind, sieht, besteht weiterhin ein grosses Interesse an dieser Hypothese. Die These dieses Aufsatzes ist jedoch, daß viele Mängel im Zusammenhang mit der Konzipierung der Lehrererwartungsvariabel und der Behandlung der Variabel in der Forschung bestehen. Die These wird bestätigt durch die Nachprüfung der Bemühungen das Lehrererwartungskonstruktum zu entwickeln und durch eine Untersuchung der Behandlung der Erwartungsvariabel in früheren Forschungen. Der Aufsatz schließt mit einer Reihe von Empfehlungen für die Behandlung der Erwartungsvariabel in zukünftigen Forschung über die Lehrererwartungshypothese.

Según la hipótesis de las expectativas del maestro, las expectativas que el maestro tiene en relación al alumno deciden, en parte, el nivel real de rendimiento del alumno. Existe mucho interés en esta hipótesis, tal como lo reflejan numerosos desarrollos teóricos y empíricos que han aparecido en la literatura. Sin embargo, la tesis de esta investigación es que hay una falla asociada con la conceptualización de la variable expectativa del maestro y con el tratamiento de esa variable en la investigación. Esta tesis se respalda con un examen de los esfuerzos por desarrollar una proyección de la expectativa del maestro y un examen de los tratamientos de la variable expectativa en investigaciones anteriores. El artículo concluye con una serie de recomendaciones sobre el tratamiento de la variable expectativa en investigaciones futuras sobre la hipótesis de las expectativas de los maestros.

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