CLASSROOM PERSPECTIVES STUDY: AN INVESTIGATION OF DIFFERENTIAL PERCEPTIONS OF CLASSROOM EVENTS

By

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ABSTRACT

CLASSROOM PERSPECTIVES STUDY:
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Eight elementary school teachers (four lower level vs. four upper level) who were judged outstanding in their ability to deal with difficult students and who differed in their socialization style (behavior modification vs. induction) nominated 18 students in their classrooms (nine boys and nine girls) who differed in their level of adjustment. These students included those who, for a variety of behaviors, were troublesome to teach and those who were instead easy and pleasurable to teach. In all, 144 students were interviewed about their predictions and understanding of their teacher's responses to three vignettes depicting inappropriate student behavior: underachievement, hyperactivity, and low achievement. Students were also asked a series of questions designed to explore their attributional understandings of the students described in the vignettes, and their own affective and behavioral reactions to them. Students ranked the fictional students by liking and by work preference, and their self comparisons to these fictional students were assessed. Finally, students role played as if they were a teacher and the three situations occurred in their classrooms. All interviews were tape recorded and transcribed. Student responses were analyzed with a series of codes designed to assess qualitative aspects of the students' social cognition and interpersonal behavior. Student responses were described

in terms of the general trends across all students and comparisons were made between students whose teachers differed in socialization style, and who differed in grade level, classroom adjustment, and sex. These comparisons revealed that grade level was the most powerful organizer of the data, followed by teacher socialization style. In general, older students' responses were more elaborate and differentiated, and students in behavior modification classrooms were more action oriented in their discussions relative to the students in inductive classrooms who were more analytic. Student level of classroom adjustment and sex differences were much less useful in organizing the data.

This work is dedicated to my mother,

Shirley Arlene McCaslin

and my grandmother,

Mary Magdelen Yauch

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This investigation is a study of children's social cognition from three perspectives: first, developmental differences; second, individual differences; and third, teacher effects. Specifically, students' perceptions of their peers' classroom conduct and of the nature and reasons for their teachers' responses to this conduct, are explored. Participating students differ in grade level and were nominated by their teachers because they differed in their classroom behavior. Teachers differed in their classroom socialization style.

Introduction

In recent years classroom research interests have begun to include the notion of "perspective." Researchers have become aware of limitations of classroom observation techniques and difficulties in interpreting data in ways that are psychologically meaningful to the participants. "Participants" has recently been expanded to include students, as well as teachers. Thus, interview studies now often involve interviews with both teachers and students in recognition of the multiple realities within classrooms given the differing roles and experiences of teachers and students (see Brophy and Rohrkemper, Note 1, Cooper and Good, in press; Good, Note 2).

Changes in how students have come to be viewed are also evident. Where initial research in this area attempted to define the student perspective (Walberg, 1976), recent research has been more mindful that students do not represent a monolithic block, but in fact are a diverse group, often thrown together only because of similarity in age. Thus, researchers have identified subgroups of students which appear relevant to the questions of interest, and explored the variation in student

perceptions (see Anderson, Note 3; Confrey and Good, Note 4; Weinstein and Middlestadt, 1979). Interest has shifted, then, from an interest in central tendency data typical of earlier investigations, to an interest in uniqueness.

This investigation reflects this interest in uniqueness as it explores students' social cognition in the classroom. Students' perceptions in the classroom -- of themselves, their classmates, and their teacher -- are particularly important given the socializing role of our educational system and its teachers. This is especially true of younger elementary school students who are most likely to value their teachers and to be particularly susceptible to teacher socialization effects. As noted by Hartrup (1979), our current lack of knowledge of the dynamics of our major social agency for socializing children is distressing.

The present investigation is a step toward lessening this gap in our knowledge of students' social understandings. To highlight the variation in students' perceptions, students who exhibited differing behavior patterns in the classroom were selected for the study. These include students who, for a variety of reasons, were seen by their teachers as "difficult," "worrisome," or "problem" students (defiant, distractible, failure syndrome, hostile aggressive, hyperactive, low achieving, shy, rejected by peers and underachieving students), as well as those who were easy and pleasurable to teach. These students, who differ in their classroom behavior and thus have different experiences, were thought to be likely sources of unique perceptions of their teachers, their classmates, and themselves. For instance, it was thought that students who experience relatively more negative interactions with their teacher would report more instances of teacher blame, criticism, and punishment, and

would evoke more external and unstable attributions when trying to understand the fictional students' inappropriate classroom behavior.

Interest in variation in student social cognition coexists with interest in how these perceptions could be affected. Consistent with these interests, classrooms selected for study were those whose teachers differed in socialization style in ways thought to have important effects on students' social perception and attribution. Thus, teachers selected for study differed in that they were either primarily inductive in their approach to socializing students, or relied primarily on behavior modification programs to manage their classrooms. Specifically, it was hypothesized that students exposed to these differing styles would differ in their ability to report overt behavior vs. covert motives. Thus, students in inductive classrooms were expected to have more to say about teacher (and student) cognition and intention.

A final distinction thought to be important in how students perceive and attributionally characterize classroom events concerned the students' level of cognitive development. In keeping with this, the selected classrooms spanned grades 1 through 5 to include students apt to be primarily preoperational and students apt to be primarily concrete operational in their thinking. It was expected that while all students make inferences about classroom behavior, concrete operational thinkers would be less likely than preoperational thinkers to name simplistic, global causes of behavior. Concrete operational thinkers were also expected to be more consistent within their discussions of fictional students than their preoperational peers would be.

The multiple realities in a classroom consist of more than those realities shared by students, however. In the tradition of the research

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mentioned earlier, this investigation explores three distinctive sources of information concerning teacher classroom behavior. In addition to students' predictions and interpretations of teacher behavior, this study also obtains teachers' points of view and neutral observers' perceptions of teachers' classroom behavior. Thus, while student understandings are pursued more thoroughly across a wider range of topics, their predictions concerning their teacher's responses to fictional students can be compared with their teacher's self-report and the observer's predictions. These multiple perspectives are gauged by individually presenting all participants with common stimuli, three vignettes depicting routine, but inappropriate student behavior, and analyzing, with identical coding systems, their predictions of the teacher's response to each situation, should it occur in the classroom. In this way, the extent of agreement and the nature of any disagreement can be assessed.

In brief, this investigation concerns how students perceive, interpret and respond to events which occur in their classrooms. Variation within students who differ in level of classroom adjustment are of interest, as are differences between classrooms that are associated with differing teacher socialization styles and differing grade levels. The extent of agreement among diverse sources of predictions about teacher classroom behavior are also assessed through comparison of teacher, observer, and student reports of teacher responses to three fictional classroom events.

LITERATURE REVIEW

Person Perception in Children

Research investigations of the development of children's social perceptions have used a variety of methods, materials, tasks, criteria, sample sizes and characteristics. Although the investigations display a wide range of design decisions, they typically have one of two goals: 1) to support Piaget's position that preoperational children do not attend to intentional cues and fixate on consequence or outcome when judging another's actions; or 2) to refute this stance with evidence that differences, if any, between adults' and children's social judgments are quantitative, not qualitative, in nature, or are the result of a gradual differentiation, as in a Werner (1948) approach.

Before discussing the designs of these investigations, their theoretical premise will be examined more closely. Piaget's theory appears to be a spring board for many studies. Piaget's claim that preoperational children are unable to perceive intention in others due to their egocentrism, which prohibits their taking of another's perspective, while upheld by Flavell (1968), is not accepted by all researchers. Researchers who do support this interpretation of Piaget, however, equate the acquisition of knowledge of causality in the physical realm with knowledge of others' motives, needs, and desires in the interpersonal realm. Thus, the child's ability to decenter in logical problem solving in the physical world is viewed as a landmark for interpersonal problem solving as well.

This interpretation of Piaget is typically accepted in the developmental research, with the task of the researchers then defined to either

support or refute it. Some investigators, however, notably Keasey (1977) (see also Karniol, 1978) maintain that this is an oversimplification of Piaget. According to Keasey, Piaget states that children as young as three and four years do in fact know about intentions, but that this information is often disregarded in the face of salient outcome. This fixation or "centering" on the outcome is seen as a result of the child's early socialization experiences. Further, Piaget distinguishes between the child's "active" as opposed to "theoretical" moral thought. Active moral thought concerns those dilemmas which are a part of the child's real life experiences. This active domain differs from the theoretical domain in level of specificity and concreteness. Theoretical moral thought, which is more generalized, abstract, and principle governed, is believed to lag behind active moral thought in development, and therefore in the use of intentional and contextual cues.

This distinction between the domains of moral thought -- active and theoretical -- is useful in organizing the research literature. From a theoretical perspective, the investigations, rather than "proving" or "disproving" Piaget, may in fact be providing ample evidence that the distinction between the types of moral thought is a real one. Practically, the distinction aids in making of sense of the conflicting findings of studies which differ in their concern with ecological validity. That is, significant developmental differences are typically found in fairly abstract experimental situations, especially if the stimulus materials involve adults (rather than children) in unusual situations (Eisenberg - Berg, 1979; Appel, 1977; Kurdek, 1977). In contrast, investigations which focus on ecological validity and on concreteness of stimulus materials -- both in form (rich descriptive stories, pictures,

or films) and content (children in typical conflict situations) typically do not find that young children (age 4 on) ignore intentions in evaluating others' behavior (Berndt, 1977; Chandler, Greenspan, and Barenboim, 1973; Dodge, 1980; Erwin and Kuhn, 1979; Greenberg, Marvin and Mossler, 1977; Heller and Berndt, in press; Imamoglu, 1975; Keasey, 1977; King, 1971; Kun, 1978; Nelson, 1980; Rotenberg, 1980; Rule, Nesdale and McAra, 1974; Shantz, 1975; Shultz and Butkowsky, 1977; Tagiuri, 1969).

Selman and Byrne (1974) also found developmental differences in children's (age 6 on) abilities to understand primary and secondary story characters' thoughts and feelings. They posited that these differences can be characterized by four stages. The first of these stages, with onset between six and eight years (somewhat later onset than that found by others reported here) consists of the child's understanding of others' social interpretations and understanding that s/he and others can distinguish between intentional and unintentional actions. Thus, while the exact age of onset varies slightly across these investigations, all have found that by six years of age, children do use intentional information in interpreting others' behavior. Some research, in fact, indicates that children (age 4 on) attend to intention more than adults (Maselli and Altrocchi, 1969; Sedlak, 1979; Shaw and Sulzer, 1964; Smith, 1978). Children also appear to understand intentional causes earlier than noncontrollable causes (Lerner and Miller, 1978; Weiner, Kun, and Benesh-Weiner, 1979). Other data point to similar use of intention/outcome information by children and adults in their decisions about degree of praise or blame appropriate for a given incident (Darley, Klosson, and Zanna, 1978; Maselli and Altrocchi, 1969; and Weiner, et. al., 1979).

Finally, some investigations have attempted to distinguish between

interpersonal sophistication in positive or negative outcome situations. Costanzo (1973) found no change with age in use of intentions for positive consequences, but did find developmental differences in assessments of negative situations. Similarly, Eisenberg (1977) found differences in sophistication, with children's prosocial moral reasoning being more advanced than their moral constraint rationales. Taken together, these data suggest that social competence is most likely a complex set of abilities that do not suddenly emerge and function as a trait. The sophistication of social perception is, at least in part, due to experience within a given situation and the nature of the personal investment in the outcome of that encounter.

There are exceptions to this general relationship between ecological validity and developmental trends, however (notably Calveric, 1979; Karniol and Ross, 1976; Livesley and Bromley, 1973; Smith, 1975; Whiteman, 1967; and Whiteman, Brook, and Gordon, 1977). These researchers' findings of developmental trends may in fact be the result of the difficult tasks required of the child in responding to nonetheless realistic problem situations. Thus, Calveric's (1979) subjects were required to engage in a series of difficult and fairly sophisticated concept learning tasks to reach the "correct" criterion; Whiteman's (1967) investigation required the free response of a defense mechanism (projection, denial, etc.) in explaining behavior portrayed as atypical for the story character; Chandler, Paget and Koch (1978) required discussion of inverse and reciprocal transformations in children's discussion of story characters' defense mechanisms; Livesley and Bromley (1973) required written descriptions in one hour segments over a total of ten hours, thus allowing ability and motivational confounding with their data; and Karniol and Ross

(1976) and Smith (1975) have been criticized for the strain their procedures put on their subjects' memory capacities (Berndt, 1977). Similarly, other investigators have linked developmental differences data to children's use of simplifying strategies to counteract memory overload (Berg-Cross, 1975); to ordering effects (Austin, Ruble, and Trabasso, 1977), and to a recency effect (Feldman, Klosson, Parsons, Rholes, and Ruble, 1976; Kurdek, 1978). Stage theorists in general have been chastized for a myopic commitment to a particular perspective (Landry, Lyons and Ruth, 1980).

Karniol (1978) and especially Sedlak (1979) have addressed the problem of gauging the degree of inference required of the subject in using the stimulus materials. Sedlak discusses the crucial need to distinguish story interpretation from actor evaluation, particularly in investigations which purport to describe developmental growth and sophistication in social perception. Surprisingly often, care is not taken to ensure either that subjects across the age span under consideration interpret the stimulus in similar ways or that the nature and degree of differences in interpretation are accounted for. This issue is pertinent to the Whiteman, et. al. (1977) investigation where developmental differences were obtained with stimulus materials, which, while concerning situations that were fairly realistic, consisted of a single sentence portraying intention and behavioral incongruity. It is possible that Whiteman's results are due to a confounding of subjects' inferences in interpreting the stimulus materials, i.e., in understanding the situation presented, with their attributions regarding the actors' motives. Thus, while Whiteman did not tax his subjects' memory capacity, he may not have provided enough information to reduce the likelihood of

differing task interpretations. Clearly there is an "optimal" amount of information in stimulus materials, so that contextual information is provided without assault to memory load. This issue of the balance between ecological validity and parsimony of information will be returned to.

While this literature review is by no means exhaustive, it does seem to have made sense of some of the inconsistencies that abound in the person perception literature. A critical dimension appears to be on the ecological validity continuum. Studies using materials and/or methods that are naturalistic are more likely to find children as young as four years using intentional information in fairly sophisticated ways. This supports the Piagetian "active" moral reasoning as discussed by Keasey. In contrast, studies further removed from the child's experience are more likely to show developmental differences with significant changes occurring about the onset of concrete operations, thus supporting the notion of "theoretical" moral thought.

A second dimension which orders the data is tied to the behavior criteria imposed on the subject. As indicated previously, the more difficult the cognitive strain inherent in the response criteria, the more likely is the investigator to find developmental differences. These differences do not appear to be tied to social perception per se, as much as they are to cognitive limitations. This issue of cognitive limitations will resurface in the discussion of free description procedures with children.

The goal of the present investigation is to uncover how children make sense of their classroom experiences. As such, this study is concerned more with children's "active" than "theoretical" thought and

therefore incorporates these concerns. Attempts have been made to maximize the ecological validity of the context, if not the medium, of the vignettes, and task demands have been designed to minimize cognitive strain through systematic probes and reminders as a part of the interview procedures. Thus, the stimulus materials (written vignettes) concern typical classroom events which children witness and/or participate in on a daily basis. These vignettes are brief but richly descriptive and provide a strong contextual background to enhance interpretation of depicted events within the classroom setting. Vignettes are read to the students and followed by probes and recall cues to minimize the effects of cognitive ability and facilitate assessment of social perception. These precautions in the design of both the stimulus materials and the interview procedures will enhance the match between the students' real-life experiences and the research setting, and as such, should capture the students' typical perception.

Free Description Approaches

The free description method of assessing children's person perception differs from that used in the previously discussed research, in that the subject is typically asked to describe individuals s/he knows. Responses are unstructured and analyzed for spontaneously occurring constructs, organization, and complexity. (For a complete discussion of this method and analysis strategies, see Yarrow, 1960, and Beach and Wertheimer, 1961). Because of the minimal role of the researcher, there is less chance of biasing the data. There are trade-offs, however. One consideration not to be overlooked is that what a child does in fact report when describing another is not necessarily the equivalent of what

s/he can or would do on another occasion. Thus, free description allows confidence that the constructs are the child's own, but does not probe the child, poking his sensibilities about others. Because the reliance is on children's spontaneous reports, the likelihood that performance, what the child actually reports, will be equated with capacity, what the child is capable of reporting, is increased.

Another shortcoming of this technique, especially relevant for the investigation proposed here, is the lack of causal ascriptions in free description research. In the three studies using this method to be reviewed here (Yarrow and Campbell, 1963; Scarlett, Press, and Crockett, 1971; and Livesley and Bromley, 1973) no motivational constructs were used by the subjects. This is probably due to the lack of a situational referrent in each of these investigations. That is, children described liked and disliked, same and opposite sex adults and peers but did so without a contextual frame. The lack of an incident or situational backdrop within which to describe the person behaving is most likely the reason for this omission and does not signal the absence of motivational, or causal, constructs in the children's understanding of interpersonal behavior or social perception. Rather, the issue appears to be the distinction between describing persons and describing events.

The study by Yarrow and Campbell (1963) is especially interesting and pertinent to the present investigation. The study took place in a children's (8-13 yrs.) summer camp over a two-week session where children were systematically assigned to cabins so that the investigators could analyze race, age, sex, and SES factors in the children's reports. Data collection consisted of interviews with the children about their cabinmates at the beginning and end of the two-week session.

Observational data allowed a check on the accuracy of children's accounts of others' behavior and also allowed the investigators to analyze the interview data by four subgroups of children: withdrawn, friendly, aggressive, and active.

Of the many interesting results, these findings are especially pertinent: The two general tendencies in the data, which did not reflect developmental differences, were children's use of broad positive or negative judgments and the restriction of their remarks to social interactions. While the children's descriptions were stable across both interviews, the complexity level of the descriptions showed an increase, indicating the availability and use of more information at the closing interview. This stability of categories held up, whether or not the subject was describing the same individual. The child apparently develops a perceptual framework that has general applicability. This perceptual framework appears to color the child's selective attention and interpretation of peers' behavior, in that Yarrow and Campbell found no correspondence between children's reports of their peers' type and frequency of behavior, and their own observational data. The children's distortions were explained by their liking and disliking of the described peer. In addition to type and frequency behavior, children described disliked peers more systematically (i.e., with more detail and organization) than liked peers, and liked peers more systematically than neutral peers.

Of particular interest here is the investigation's analysis of free descriptions by subgroups of children. This attention to subgroups certainly foreshadows the Walberg (1976) arguments for analysis of student classroom perceptions. Yarrow and Campbell found similar use of

categories across the four types of students, but significant differences in the complexity of those descriptions. The active and friendly children gave more complex descriptions than the withdrawn and hostile children. From this, Yarrow and Campbell conclude that the active participant brings awareness of others into sharper focus, and thus has more finely developed social perceptions. This use of meaningful subgroups is reflected in the present investigation in which student perceptions are analysed by level of student classroom adjustment.

The Yarrow and Campbell study, in summary, involved children's perceptions of other group members. These groups were formed without the children's input, yet they were expected to function within these groups under the direction of an adult. These points are made to highlight the similarities in group formation and functioning between the camp session and the classroom, which is the context of the present investigation.

The Scarlett, et. al. (1971) investigation combined free description of liked or disliked peers with taped stories. Scarlett used a Wernerian analysis (i.e., development as the result of gradual differentiation) and found that the number of constructs used to describe peers increased monotonically with age and shifted from egocentric and concrete constructs to nonegocentric and abstract concepts. Within this, children talked more about liked than disliked peers.

Finally, the Livesley and Bromley (1973) investigation sought to analyze children's free descriptions of others for fluency and content (level and variety of constructs) differences both between subjects and across stimulus persons (matched for age (7.4 - 15.9), sex, and IQ (2 levels)). Children in pilot studies were found to give only physical appearance information when asked to describe others, so the final design

involved explicitly telling children not to give physical information (establishing a "negative set") but to instead "tell what sort of person they are." With usual precautions that subjects understood directions, (and frequent reminders) subjects then described nine persons (including themselves) in writing. Sessions lasted for one hour each for approximately ten sessions.

The limitations of the response requirements, the written format and sheer amount of work were discussed earlier. Within these possible limitations, which seem to ensure developmental differences, Livesley and Bromley's results include the following: 1) the differences in the statement fluency measures were better ordered by the situational variables than the subject group; 2) the number and proportion of psychological statements increased significantly only between 7-1/2 and 8-1/2 years of age; and 3) the differences between seven and eight-year-olds were greater on many measures than the differences between the eight and 15-year-olds. In addition to these age differences, other findings concern differences in descriptions as a function of sex and IQ of writer and sex and age of stimulus person. For a full account of the data and a complete discussion of design and analysis decisions, see Livesley and Bromley (1973). Of interest here, however, is their finding that descriptions of males and children are characterized by central (vs. peripheral) constructs. ("He is a funny boy." (central construct) vs. "The lady wears a hat." (peripheral construct)). The authors posited this to be due to the perceptions of males' lives as more interesting and varied than females, and their higher frequency of interaction with peers. Finally, descriptions of liked and disliked peers differed in that descriptions of disliked peers were characterized by justification constructs

("He's not nice because he takes your stuff." vs. "He's a nice guy.").

These three studies, taken together, suggest that children's spontaneous constructs are an important source of information of how children perceive persons known to them. As discussed earlier, however, these data do not reflect what children can or would do on a different occasion, nor do they speak to children's understanding of events (as opposed to persons). The problem discussed earlier regarding the confounding of social perception and cognitive ability data when too strenuous a response criteria is required is also relevant (Livesley and Bromley, 1973).

In light of these concerns, the current investigation examines children's spontaneous free descriptions of their school experience and their classroom teacher. These free descriptions are treated as one source of information about the child's school experience. They are collected at the beginning of the student interview, which funnels from these initial free description questions to specific questions about specific incidents. By merging these techniques, the differences in type and organization of constructs spontaneously used in understanding persons vs. those which the child is capable of using in understanding situations can be examined.

Also indicated by these investigations is the usefulness of data on liking of the stimulus person. Each investigation found differences in descriptions of liked and disliked persons. Yarrow and Campbell also found convincing evidence of a social perceptual "set" where liking affected attention to and interpretation of others' behavior and organization of thinking about them. Given these findings, the current investigation obtains rank order data of the subject's liking and preference to work with the stimulus person.

Children's Perceptions of Deviance

In addition to these investigations which attempt to capture children's perspective taking in general, there are some studies that specifically address how children make sense of their disordered peers. This literature is especially pertinent to this investigation which explores children's understanding of inappropriate student classroom behavior, the understanding of which rests on correct attributions of cause and intent, and anticipation of others' reactions.

Marsden and Kalter (1976) examined lower middle class children's (grades 4-6, matched on sex and IQ) understanding of their emotionally disturbed peers to determine the areas, if any, of agreement between children and mental health professionals in their assessment of symptomatic and distressing behavior. Investigations prior to this had primarily focused on children's emotional attitudes toward disturbance, finding that children viewed disturbed peers negatively (Bower, 1960) and wanted to maintain a distance from them (Novak, 1974). The Marsden and Kalter work, however, was more interested in the development and use of concepts children employ to explain disturbed behavior than their attitudes toward it.

Stimulus materials consisted of five vignettes depicting four emotionally disturbed and one normal peer. All vignettes used the school context for the backdrop, focused on a boy as the central figure, and described only observable behavior. No information pertaining to his thoughts/feelings or those of his classmates or teacher was introduced in the vignettes. Types of behavior described were school phobia, antisocial disorder, passive-aggressive character disorder, a psychotic or borderline psychotic, and a normal peer undergoing a transitional adjustment

problem. Vignettes were read and rated by type of problems and degree of severity by seven clinical child psychologists to ensure accurate categorization.

Children were presented the vignettes and after each were asked questions intended to reveal their descriptive language, their reactions to the character, their understanding of his current status, the cause of his current problems, and his prospects for the future.

The results indicate that children do discriminate the behavior of normal children from emotionally disturbed children in terms similar to those used by adults. Further, their distinctions in degree of severity parallel clinicians'. These perceptions of disturbance were separate from their liking or disliking of the characters and were not related to perceiver IQ. Differences that did occur among the subjects varied by grade and sex and were indicative of a differentialfocus on specific behaviors, not global perceptions.

The clearest sex differences were in response to the borderline psychotic, Fred. Most girls saw Fred as disturbed, but the 33% who did not feel Fred was disturbed saw him as highly intelligent and merely pre-occupied with stars and planets. On the other hand, all the boys (as opposed to 66% of the girls) saw him as minimally to severely disturbed ("weird" through "cuckoo") because he could not separate fantasy from reality. Age differences paralleled the sex differences. Sixth graders saw more emotional disturbance in the five vignettes than the fourth graders.

As these data indicate, children, when responding to hypothetical disturbed behavior, understand that behavior in ways that parallel adults'. This finding was not upheld by Coie and Pennington (1976), however. In

an attempt to gauge children's understanding of disordered behavior, these researchers presented middle class first, fourth, seventh, and eleventh grade boys and girls two stories depicting disturbance (loss of control/aggression and distorted/paranoid reality perception) and asked the children to describe peers who seemed to be markedly different from others. These free descriptions were followed with standardized probes to assess children's notions of why the described peer acts as s/he does.

Children's responses to the vignettes, which followed free description, consisted of a rating of how different they were than most peers and their notions of why this was so. Results indicated that first graders did not make deviance attributions in that they did not put the described behavior into a normative framework to allow deviance assessment. In fact, they reconstructed the story to normalize behavior. (Perhaps use of norm comparison would have been facilitated by vignettes which utilized context information, particularly the school or playground, to provide backdrop for behavior, as in Marsden and Kalter (1976), and thus encourage comparison of depicted with typical behavior). Coie and Pennington discuss their results with first graders within a Piagetian frame evoking preoperational children's centration on consequences. Coie and Pennington found children in fourth and seventh grades to only make normative comparisons on the basis of "grossly observable behaviors." It was not until the eleventh grade that children were found to make deviance evaluations based on truly social definitions. Perhaps these extreme developmental differences are a function of the stimulus materials and the response criterion more than the subject's perception of deviance per se. To "get credit" a subject had to evaluate the stimulus person as deviant compared to social norms. Given that the vignette did not

indicate a context which would evoke norms, nor did the interview probes structure the subject's thinking toward such comparison, it seems that Coie and Pennington's data captures cognitive structure and organizational differences from preoperational through formal operational thought rather than children's understanding of deviance.

The notion that too specific and rigorous response criteria and non-contextualized vignettes may have accounted for the Coie and Pennington results is bolstered by the Maas, Marecek and Travers (1978) investigation. These researchers presented second, fourth, and sixth grade middle class children with very realistic and descriptive vignettes depicting three behavior disorders: social withdrawal, antisocial behavior and self-punitive behavior. Following each vignette, children were asked forced-choice and open-ended questions about the reasons for the character's behavior, the character's desires and intentions, and the character's ability to change. (Some of these questions have been included in the present investigation; see Appendix G.) They were also presented with a list of traits and asked which traits would best describe the character.

Results indicated that younger children were likely to attribute the disordered behavior to a lack of effort to change (internal causation). Older children were more likely to believe that undesired behavior would be most effectively changed by changing the social environment, and these older children also saw the social environment as a "powerful barrier to personal change."

Children's responses differed across the vignettes. The antisocial character was typically viewed by all ages as wanting to act that way, with lack of personal effort the reason for persistence. Although

children saw this type as the least desirable, they felt he was the happiest and healthiest of the three.

The self-punitive character was rarely seen as acting out of desire. His behavior was seen as very difficult to change, and he was judged the least happy and healthy.

Finally, the social withdrawn character was most often believed to have been born that way, especially by the first graders. Most children did not believe the shy/withdrawn wanted to be like that, and most thought the behavior could be changed, although it would be difficult to do so. This character was perceived as the most socially desirable, having the most social assets, while being the least assertive.

These results, specifically the finding that the younger children did not focus on immediate situations, are contrary to the typical findings in the moral development research (and the Coie and Pennington investigation described above). The authors believe that both the first graders' use of immediate situational information and their postulating of enduring states in their explanations of the portrayed character were due to the structuring of the vignettes to portray the patterns of behavior as persistent, and not as isolated or specific incidents.

This structuring and provision of a rich context for the depicted behavior also characterizes the vignettes used in the present investigation, which shares much with the Maas, et. al. study in that it is also concerned with children's causal attributions rather than evaluations of depicted problem behavior. Unlike the Maas study and the research discussed throughout this review, however, the vignettes in the proposed investigation all depict the same situational outcome -- a student not doing his work. While the outcome is held constant, the contextual information is

systematically varied to maximize examination of children's use of attributional information in understanding others, and predicting appropriate responses to them.

Two final investigations will be mentioned briefly. First is the Novak and Lerner (1968) finding that, at least among undergraduates, people who believe others to be normal (i.e., psychologically healthy) will prefer to interact with a similar more than a dissimilar peer. If others are believed to be disturbed, however, preference changes to interaction with a dissimilar rather than similar peer. Second, from the literature on fate interdependence, Chaikin and Darley (1973) have found that identification with a victim's fate, not the perceived personal similarity to him, is an important determinant of whether a person responds to a victim with compassion or rejection.

These studies are mentioned because they provide some basis for interpretation of results which may be obtained from analyses of subjects' self-comparison with the hypothetical students, their ranking of liking of these hypothetical students, and their own student group membership (target problem students, matched problem students, or non-problem students).

Children's Reports of Their Life Concerns

While the previously discussed research has attempted to capture and characterize the development of both level and organization of constructs children use in ordering their social perceptions, the specific content of those perceptions has not been of primary interest. The studies that follow focus on the child's point of view, as revealed in children's reports of key figures and events in their lives.

Perhaps most research of this type has been concerned with children's reports of their parents and family life. Goldin (1969), in a review of children's reports of parents' behavior using an analysis model which combined those of Schaefer (1965) and Siegelman (1965), found that in general, children's accounts of their parents' behavior were ordered by three factors: loving (acceptance-rejection), demanding (psychological control) and punishment. (In an investigation using a modified Bronfenbrenner questionnaire assessing children's perceptions of their teacher's behaviors, Koopman and Schroeder (1977) found that children's responses paralleled these parental reports reviewed by Goldin. That is, the three factors of loving, demanding, and punishing accounted for the reported teacher behavior). Children's reports were found to differ, however, by mother-report and father-report, and to be related to sex, social class and the behavior of the children (delinquents, child guidance patients, maladjusted normals, and normals). These findings of differences in reports by subgroups of children, along with the Yarrow and Campbell (1963) data of social perceptual differences by subgroups in their study (withdrawn, active, friendly, and hostile-aggressive children), and recent work by Dodge (1980) examining how children who differ in levels of aggression use intention attributions in understanding others' behavior, lend strong support to Walberg's (1976) discussion regarding appropriate analysis of student perception data through formation of meaningful subgroups of children for comparison. Currently, there are several ongoing classroom investigations (Block, Note 5; Confrey and Good, Note 4; Cooper and Good, in press; Good, Note 2; Stipek, Note 6; Weinstein, Note 7) which further validate the identification of relevant groups of students when examining student perceptions.

These concerns are reflected in the present investigation's clustering of children by presence and type of problem behavior. There are three student types under study. The first type exhibits the specific problems under scrutiny (underachiever, hyperactive, and low achiever). The second type exhibits problem behaviors other than those specifically examined in the vignettes, and are matched by pattern of intention and control (for instance, defiant, shy/withdrawn, failure syndrome). The third group not only are not troublesome in the classroom, but are students who are a pleasure to teach. The responses of these groups will be examined for the nature and degree of differences.

In addition to the concerns for the uniqueness of differing groups of children, there is also evidence that there are important distinctions in the effects of differing situations on interpersonal perception and behavior. Work by Stollak, Scholom, Kallman, and Saturansky (1973) and by Kallman and Stollak (1974) has supported the position that behavior varies as a function of the situation. These investigators have found that both children's reports of their parents' behavior, and parent's self-report of their responses to their children vary as a function of "problem ownership" (Gordon, 1970). That is, systematic differences in reported (both self and child) parental behavior were found in situations characterized by differing need frustrations. These levels of problem ownership (parent-owned, child-owned, and parent-child shared) were also postulated by Gordon (1974) to be useful in examining teacher-student interactions. Specifically, Gordon suggests that problems, or conflicts, in teacher-student interaction can be divided into three types: 1) teacher owned problems, which occur when the student behavior interferes with the teacher's meeting his/her own needs or causes the teacher to feel

frustrated, upset, irritated or angry; 2) teacher-student shared problems, which occur when the teacher and student interfere with each others' need satisfaction; and 3) student owned problems, which exist separately from the teacher and do not tangibly and concretely affect him/her.

This notion of problem ownership in the classroom was examined by Brophy and Rohrkemper (1981). They found that level of problem ownership was associated both with differing patterns of teacher perceptions and attributional inferences about students depicted in the vignettes, and with teachers' assessments of their own ability to influence those students. These findings are reflected in the present investigation's choice of vignettes (and student subgroups, which represent the three levels of problem ownership and teachers attributional patterns). Student problem behaviors included in the vignettes are: underachiever (teacher-owned problem, perceived by teachers as controllable and intentional student behavior); hyperactive (teacher-student shared problem, seen as controllable but unintentional student behavior); and low achiever (student-owned problem, judged by teachers as uncontrollable and unintentional student behavior). The nature and degree of differences in students' reports will be examined both by type of student and by type of problem situation.

That children are a rich source of information about themselves is amply documented in Knapp and Knapp's (1976) account of the "secret education of American children," their presentation of children's folklore. Their work demonstrates the intensity of experiences, norms, feelings, and attitudes that childhood is made of. Children's ritualized coping strategies for dealing with the uncertain and the unknown reveal the depth and pivotal place these concerns have in children's lives. This

investigation focuses on the coping strategies children have for dealing with both the unexpected and the common places in the classroom.

Survey and interview data of children's concerns indicate that children both reflect on their experiences and hold attitudes, feelings, and opinions somewhat at odds with what adults commonly believe. Yamamoto (1979) gathered children's assessments of the degree of stress involved in different childhood experiences. Fourth, fifth, and sixth grade students rated 20 life events on a seven-point scale. No differences were found by grade, sex, or actual personal experiences, but children's assessments varied from clinicians' judgments in some respects. Most surprising was children's rating of the birth of a sibling as least stressful of the 20 listed events, while clinicians typically view a new sibling as a critical stress point in a child's life. Briefly, the ten most stressful events for children, in order of severity, were: losing a parent, going blind, academic retainment, wetting in class, parental fights, caught in theft, suspected of lying, a poor report card, sent to the principal, and having an operation. School-related events comprise nearly half of the "top 10". School, then, enters heavily into children's life assessments.

A national survey of children, directed by Nicholas Zill, involving interviews with over 2,200 children and over 1,700 parents and teachers about topics concerning children -- their family lives, friends, schools, health, feelings, and neighborhoods, is scheduled for release sometime in 1981. Zill's proposed title is a provocative one: Happy, Healthy, and Insecure . . . Especially pertinent here are the attitudes Zill reports that children expressed toward school: More than 75% of the children interviewed were positive about school, nearly two-thirds said they

were interested in schoolwork most of the time, and more than 95% said they liked their teachers and most of their classmates. All is not rosy, however. Children also reported that schoolwork is a source of anxiety and frustration, more than two-thirds said they worry about tests, and nearly two-thirds reported feeling ashamed when they made mistakes. Half of the children agreed with the statement "I sometimes feel I just can't learn," and nearly half have experienced anger when they have difficulty learning (Woyshner, 1979).

Children's perceptions of teacher discipline are also of interest. While just over half the students said that the students in their class fooled around a lot, all but 7% excluding themselves from this group, nearly 80% reported that their teachers enforced rules (43% "all of the time", 37% "most of the time"). (This compares to 74% and 70% for mothers and fathers, respectively). Twenty percent also claimed to have gotten in trouble for fighting "last week," and the major reason provided by children who said they would like to change schools was the amount of fighting and fooling around in the present school.

Unfortunately, the Zill data do not really probe students' perceptions of teacher behavior and classroom norms, nor look for differences within students. His findings do suggest, however, that students judge school to be a generally positive, yet (like Yamamoto's subjects) an emotionally-laden experience. Students like their teachers and usually perceive them as consistent in enforcement of rules. The present investigation probes, in depth, students' perceptions of their classroom experiences involving both their teachers and classmates. Included in this are students' reports and interpretations of their teacher's discipline strategies and students' perceptions of and interactions with specific

types of classmates.

Socialization and Person Perception

The development of social perception and findings of differing levels of sophistication in understanding social interaction among different types of children (Goldin, 1969; Yarrow and Campbell, 1963) has led to much speculation -- and little research -- as to what kinds of factors facilitate social competence (Shantz, 1975). Piaget (1965; 1970), while stressing the primary importance of peer interaction in the child's emergence from egocentricism and the acquisition of the ability to take on the perspective of others, also includes the role of the parent in this process. He states that socialization based on authority and control promote egocentricism, while socialization which emphasizes social relations and reciprocity facilitate role taking in children.

Hoffman (1979) has discussed the role of parental socialization in the development of children's moral thought, feelings, and behavior. In earlier research and reviews (1970, 1975) of the literature, Hoffman found that moral development was fostered by "inductive" parenting as opposed to techniques which rely on power assertion, love withdrawal, or affection. Inductive parenting, as defined by Hoffman, consists of providing reasons for the required behavior change, and identifying consequences (both physical and psychological) of those actions on others.

This notion of inductive socialization has been discussed by others (Brophy, 1977; Mussen and Eisenberg-Berg, 1977) and was the focus of Baumrind's (1971) research on parenting effects on children. Baumrind classified parents into three categories: authoritarian, authoritative, and laissez-faire. These groupings were based on the ways that parents

treat their children. Authoritarian and authoritative styles are of special interest here. Baumrind found that authoritarian parents place a premium on control with little, if any, emphasis on rationales for their demands. In contrast, authoritative parents regularly explained the reasons for their demands and constraints. In other words, they engaged in inductive parenting. In contrast to children raised in authoritarian homes who typically do not develop a conceptual understanding of control, children of authoritative parents, i.e., inductive socializers tend to develop a more generalized understanding of themselves and their effects on others. This relationship between the style of socialization and the self-control sophistication of the child is of primary interest to this investigation.

While the above cited theory and research all point to the importance of parental socialization style for children's perspective taking, moral development and self-reliance (Piaget, 1970; Hoffman, 1970; Baumrind, 1971; respectively) there is little investigation of the effect of socialization practices in other social systems of which the child is a member. Hartup (1979) discusses this in his essay on children's social worlds. He states that while the school is recognized to have a major significance in the child's world, ". . . the school as a social system has not been well described in relation to the growth of social competence in the individual child. Given the extent to which the school is used as a socialization agency, our lack of knowledge concerning its social dynamics is shocking." (1979, p. 946).

Two studies which are especially pertinent to this investigation are notable exceptions to this dilemma. The first, an interview study by Kounin and Gump (1961), examined the reports of aggression in first

grade students whose teachers differed in punitive style. They found that students whose teachers had been identified as punitive were more aggressive in their discussion of misbehavior, and less interested in learning, than peers in classrooms of teachers identified as nonpunitive.

The second study was conducted by Halperin (1976) as a doctoral dissertation. Halperin employed a longitudinal design to examine how first grade teachers' role beliefs and classroom style influenced students' perceptions of the classroom. Teachers were first identified, through interviews, on two factors: teacher goals for students (academic vs. social development); and the degree of structure in teacher classroom style (strict vs. permissive). Students were then interviewed about their expectations for school prior to entering first grade and again in February of their first year. The data from these interviews and from an observation component indicated that teachers' beliefs not only influenced the activities in their classrooms, but also their students' behavior, perceptions of school and <u>self</u> perceptions. Halperin found that prior to first grade, students' interviews were similar, but became quite varied after six months in school. Of special relevance to the current discussion, Halperin found that students in strict classrooms perceived the <u>teacher</u> as the person in control of their school behavior. In contrast, students in permissive classrooms felt a <u>personal</u> responsibility for their own behavior. These results clearly echo the parenting literature and underscore our need to know more about the socialization effects of schooling.

The range of effects of teacher socialization style on students' social and personal understandings (expected to vary by type of student and type of situation) is precisely the concern which motivates the

current investigation. Specifically, this study seeks to discover the relationships between differing teacher socialization styles and how children interpret and are affected by common classroom conflicts between teachers and students. Socialization styles typically used by teachers fall into two main types: behavior modification, which focuses on the material consequences of actions; and induction, which stresses the consequences and causality of action through extended language rationales and Golden Rule morality. These two socialization approaches form the basic units of this investigation. The nature and degree of the differences in students' social competence in the classroom will be examined as a function of teacher socialization style.

Literature from a variety of fields and methodologies suggests that these different approaches to socialization will have differing effects on students' social perception and sophistication. Vygotsky (1962) several decades ago discussed the crucial role of the interiorization of the child's language environment in the acquisition of self-control. This functional linkage between eventual inner-directed self-control independent of environmental props and the child's language environment has recently received renewed support, both directly by Flavell (1978), Michenbaum (1979; 1977; 1976) Kopp (1979), Mischel and Mischel (1979), and Wertsch (1979) and less directly through the functional language and SES research of the last decade (Bee, VanEgeren, Streissguth, Nyman, and Leckie, 1969; Bearison and Cassel, 1975; Bernstein, 1964; Glucksberg, Krauss and Higgins, 1975; Hess, Shipman, Brophy, and Bear, 1968; and Spivack and Shure, 1975).

These researchers, then, would likely predict differences in the nature and degree of social perception between students exposed to the

differing teacher styles. Specifically, students in behavior modification classrooms are expected to evoke external control factors more often in explaining both the cause and the remediation of classroom behavior. In contrast, the students in inductive classrooms are expected to discuss internal causality in explaining classroom behavior. These predicted differences would be a function of the differing uses of language in the classroom, where behavior modification teachers primarily use language to link behavior to concrete outcomes, and inductive teachers use language to provide a psychological context for events, demands, and limits.

One could also argue, as Hoffman has (1979), that the differences which result from exposure to these differing language environments are a function of semantic vs. episodic encoding. Using Tulving's (1972) distinction between episodic and semantic encoding in long term memory, Hoffman theorizes that inductive socialization results in semantic encoding that eventually becomes independent of an external referrent, and is seen to have originated in the self ("internalization"). In contrast, socialization that does not involve rationales which provide a meaningful psychological context to allow semantic encoding is retained in episodic memory, directly tied to external referrents, and as such, is never experienced as self-originated, but always as other-imposed ("compliance").

Recent research examining the detrimental effects of reward on intrinsic motivation (Cohen, Gelfund, Hartman, Partlow, Montemayor, and Shigetomi, 1979; Condry and Chambers, 1978; Deci, 1976, 1978; Kruglanski, 1978; Lepper and Greene, 1978; Loveland and Olley, 1979; McGraw, 1978; Mischel, 1978; Ross, 1976; Ruble, Boggiano, and Pittman, 1979; and Smith,

Gelfand, Hartmann and Partlow, 1979) appears to support this point. When individuals' perceptions of or memory for their motives is changed from innerdirected to externally controlled, their motivation for the activity, as indicated by attitude, performance, and degree of learning, decreases. It could be argued that the tying of activity to an external referrent (reward, etc.) places its processing in episodic LTM, thus separating it from its original source and motivational context in semantic LTM.

Taken together, the research on parenting styles, functional language, and memory storage lead to the following expectations in this study: The students exposed to the differing styles of socialization in the classroom are expected to differ in their understanding of classroom events. Specifically, it is expected that students in classrooms using behavior modification systems will be more congruent with their peers, their teacher, and the classroom observer in their predictions of their teacher's behavioral responses to the character in the vignette than will the students in inductive classrooms. Thus, it is expected that behavior modification teachers are more systematic and predictable in their classroom behavior and that their students focus on that behavior almost exclusively. In contrast, it is hypothesized that inductive teachers are not as likely to always act in the same manner, in that these teachers stress consistency in intention rather than behavior. Thus, their students are expected to be more aware of the rationale for their teacher's behavior, than they are of the actual behavior. Thus, greater variation in predictions of teacher behavior is expected with these students. In addition, students in inductive environments are expected to exhibit a greater sophisication, in terms of both more ideas

and more complex attributions, in their perceptions of others' (both their teacher's and the fictional students') intentions, motives and feelings than will their peers in behavior modification classrooms. Thus, it is hypothesized that behavior modification systems promote prediction of behavior while inductive systems facilitate competence at interpretation of that behavior.

In summary, the literature reviewed for this investigation indicates that the question typical of developmental research (concerning the onset of children's use of intention in perceiving others) is limited. It seems that it is more useful to ask under what conditions do children's social perceptions differ, and to explore these differences as a function of the specific situation, the individual child, and the larger context. These concerns are reflected in this investigation which examines children's understanding of and reactions to hypothetical classmates and their prediction and interpretation of their teacher's response to them. These perceptions of fictional students who differ by level of problem ownership are examined from three perspectives: developmental differences, individual differences, and socialization effects.

METHOD

Sample and Rationale

The subjects consisted of eight elementary teachers and selected students in their classes. All subjects volunteered to participate. Consent forms were supplied by the teachers and the students' parents.

Schools. Teachers selected for the study were teaching in seven different public schools, all located within the city of Lansing, Michigan. The percentage of families receiving Aid to Families with Dependent Children in each school ranged from 17% to 47%. Four of the schools received Title One money; the remaining three were not eligible. Finally, three of the schools were participants in the cluster desegregation plan and only went through the fourth grade. The schools form two distinct clusters above and below the mean receiving AFDC (33%). The lower cluster (range = 17.36 - 19.21) included two teachers for each socialization style under scrutiny, as did the higher cluster (range = 39.46 - 47.40).

Teachers. The teachers all were female, had a minimum of five years teaching experience, and had participated in the Classroom Strategy Study (CSS). Through their involvement in the CSS, they had been identified as outstanding in their ability to deal with difficult students. In addition to establishing their expertise, their CSS interview data allowed them to be classified into two distinct socialization styles. Their responses to a series of vignettes depicting student problem behavior were coded, among other things, for the use of rewards, the extent of language used when correcting inappropriate student behavior, and the goal of the teachers' influence attempts (promoting mental health vs. rewards/shaping vs. punishment/control). Teachers' codes on these

variables for each vignette were summed across the 24 vignettes and averaged. These mean scores yielded two distinct profiles, with four teachers in each. The "Inductive" socialization style profile included more teacher statements of support and encouragement ($33.75_{\overline{X}IND}$ vs. $28.75_{\overline{X}BM}$) relative to the "Behavior Modification" socialization style. The Inductive profile also included greater use of extended rationales for student behavior change demands ($15.55_{\overline{X}IND}$ vs. $11.50_{\overline{X}BM}$). The Behavior Modification profile was further differentiated from the Inductive style in that teachers viewed as behavior modifiers used more simple imperatives for behavior change ($4.50_{\overline{X}BM}$ vs. $0.92_{\overline{X}IND}$), more non-language strategies for dealing with students ($7.75_{\overline{X}BM}$ vs. $4.84_{\overline{X}IND}$), and more rewards ($4.00_{\overline{X}BM}$ vs. $1.5_{\overline{X}IND}$), rewards/shaping goals ($7.75_{\overline{X}BM}$ vs. $6.00_{\overline{X}IND}$), and more punishment/control goals ($11.75_{\overline{X}BM}$ vs. $10.00_{\overline{X}IND}$).

On the basis of these data, the teachers' profiles were accepted as distinct. To verify that changes in attitude had not occurred in the time lapse since their participation in the CSS (approximately two years), teachers were asked to describe their general philosophy of teaching as part of their interview. Teachers' responses confirmed their assignment to the socialization style categories.

Teachers were also evenly distributed into two grade groups: grades 1 and 2 (grade group 1) and grades 3 through 5 (grade group 2). This range, which spans the developmental transition between preoperational and concrete operational thought, allows examination of the nature and degree of differences in students' social cognition which may occur between these age levels. Teachers were matched by grade group and socialization style, so that there were two teachers in each condition (Inductive, Grade Group 1; Inductive, Grade Group 2; Behavior Modification, Grade

Group 1; Behavior Modification, Grade Group 2). All teachers actually contacted agreed to participate. (Some substitution of the original list was required due to four teachers leaving the profession or changing grade levels. The sample description of the teachers is drawn from the group of teachers actually involved in the study. The required substitutions did not appear to compromise the distinctions between comparison groups).

Students. The 144 students selected for the study (18 per classroom) were nominated by their teachers either as exhibiting one of the three types of classroom problem behavior, based on Gordon's criteria for problem ownership (teacher-owned, student-teacher shared, or student owned), or as being a nonproblem student who was easy and pleasurable to teach. Investigations concerning adult behavior toward children (Stollak, Scholom, Kallman, and Saturansky, 1973; Kallman, 1974) and teachers' reported behavior toward students presenting problems varying in levels of problem ownership (Brophy and Rohrkemper, 1981; Rohrkemper and Brophy, 1980) led to the hypotheses that these subgroups of students experienced the classroom in qualitatively distinct ways, and that these differential experiences would be evidenced in students' predictions about, understandings of and responses to classroom behavior.

It was expected that students presenting teacher owned problems, who were capable of self control but intentionally acted in ways that threatened the teacher's authority and control needs (N = 32, 4 per classroom), including underachieving, aggressive, and defiant students, would have primarily punitive classroom experiences, with relatively less exposure to teacher rationales. Students presenting teacher-student shared problems are those who have difficulty adjusting to the student role (N = 32, 4 per classroom). These include the hyperative, distractible, and shy

students. These students, whether perceived to be capable of controlling themselves or not, typically are seen as acting unintentionally, although perhaps thoughtlessly. They pose no direct threat to the teacher's authority, but interfere with smooth classroom functioning. They were expected to experience relatively more teacher shaping through rewards and behavior modification programs, and consistent reminders when not meeting student role expectations.

Students nominated for the student owned problem (N = 32, 4 per classroom) category are seen as unable to control themselves, as victimized, and as acting unintentionally. They do not pose a threat to the teacher, but suffer from self-devaluation. These students (low achievers, failure syndrome students, and students rejected by their peers) were expected to experience the most extended teacher language and support as their teachers engaged in long term efforts to change their self evaluations. The nonproblem students (N = 48, 6 per classroom), identified by their teachers as easy and pleasurable to teach, were included because they experience the least conflict in the classroom, and are least likely to be ego defensive in reporting their perceptions. Besides appearing more objective, it was expected that these students' reports would be the closest to those provided by the teacher and the observer.

The students can also be understood in relation to the interview instrument. In each classroom, two students parallel the behavior depicted in each of the three vignettes, so that six students in each class (Target Problem Students) are exposed to fictional depictions of their own characteristic behavior, while six students with a history of other adjustment difficulties (Matched Problem Students) and six Nonproblem Students respond to the same vignettes. This classification of students

allows the comparison of "self" vs. "other" perceptions within each level of problem ownership.

It was expected that student group nomination would be confounded with sex (teacher-owned problem group consisting of proportionately more boys, and the nonproblem students more girls). Such an uneven distribution of students by sex would inhibit discussion of differences in social perception by level of adjustment. To avoid this, teachers were asked to nominate males and females equally to each group. Thus, teachers were instructed to name that girl (boy), who compared to other girls (boys) in the class, exhibited the given behavior the most.

The final sample consisted of 72 males and 72 females overall. There was some uneveness within individual classrooms due to the uneven distribution of students in the first place. The range of males within individual classrooms was 14 - 3 with a mean of 9. There were equal numbers of males (and females) within each grade group (N = 36). Within levels of socialization style, however, there were 28 males in the Inductive classes and 44 in the Behavior Modification classes.

Overall, there was an 11% substitution rate for the student subjects. Parents who did not return the permission slip, which allowed agreement or disagreement, were sent a second version of the permission form that was written as a note to the student, in simplified language. This more easily read letter was successful in obtaining permission for most of the students. The 11% substitution rate, then, was due to parental denial of permission, not subject resistance or attrition once the interview had begun. Parental lack of permission (N = 13) was fairly evenly distributed across the individual student nomination categories, although it is interesting that most denials occurred for students exhibiting

teacher-student shared problems (hyperactive, distractible, and shy students, N = 6).

In summary, the sample consisted of eight experienced elementary school teachers from Lansing, judged to be outstanding, who were matched by grade group (grades 1 and 2 vs. grades 3 - 5) and socialization style (Inductive vs. Behavior Modification). Each teacher nominated a total of 18 students, balanced as much as possible by sex, who exhibited differing levels of adjustment in the classroom.

Measures

Teacher Interview. The author conducted all eight teacher interviews. The instruments for the interview included three written vignettes previously used with teachers across grades K - 6 in the Classroom Strategy Study (CSS) (See Appendix B). These vignettes depict events typical of underachieving, hyperactive, and low achieving students. The three vignettes describe specific situations (in all cases, a student not doing his work) within a context of different, but chronic problem behavior spanning the three levels of problem ownership (underachiever = teacher-owned problem; hyperactive = shared problem; and low achiever = student owned problem). All references to student race, age, or SES level are intentionally deleted from the vignettes to maximize their usefulness as projective devices, to minimize stereotyping of the student described, and to increase the likelihood that teachers and students could readily imagine the events occurring in their classroom. All vignettes presented to the teachers referred to male students (as opposed to the student interviews, in which the sex of the student in the vignette was matched with the sex of the subject).

Upon completion of their responses to the vignettes, teachers addressed open-ended questions about their general philosophy of teaching, their primary goals for students, and how these goals are reflected in their classroom management style. (See Appendix C). Teachers' responses to these questions served as a check on their socialization style classification.

The second phase of the teacher interview involved teacher nomination of students. First, teachers examined written descriptions of the three types of problem student depicted in the vignettes, also used in the CSS (See Appendix D). Using their class lists, teachers nominated the boy (and girl) in the class who, compared to the other boys (girls) exhibited the behavior under consideration the most. There were six Target Problem Students. Next, teachers nominated the Matched Problem Students. Again, using problem type descriptors and their class lists, teachers nominated one boy and one girl for each of the three levels of problem ownership, for a total of six students. The descriptions for students presenting teacher owned problems included aggressive and defiant students; descriptions of students with shared problems consisted of distractible and shy students; and descriptions of students possessing student owned problems included failure syndrome students and students rejected by their peers. The final nominees, the Non Problem Students, consisted of three boys and three girls who, compared to their classmates, were easy and pleasurable to teach.

Classroom Observation. Each classroom was observed for two half-days by staff members (both female) who were blind to the teacher socialization style and the student adjustment level hypotheses (the author did not participate in this phase of data collection). The observations

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served two functions. First, they provided some amount of shared experience to enhance student ease and comfort in the interview situation and to help the staff member understand students' references to classmates or class routines in the interviews. Second, after completing the observation, the staff member responded to the same three written vignettes depicting inappropriate (male) student behavior that the teachers were exposed to (see Appendix A). The observer stated what she thought the teacher would say and do (and why) should each event occur in the classroom. The observer then analyzed her predictions of the teacher's responses with a series of codes designed to assess use of rationales, rewards, punishments, goals, and so on (see Appendix M). These coded scripts (after dual coding with resolution of differences) served as one of the three sources (along with teacher and student self-report) of predictions about the teacher's classroom behavior. To maximize the observers' objectivity, the observers were not shown the teacher interview data, and the observations preceded the student interviews.

Student Interviews. The student interviews are considered the primary data of this investigation. These interviews were constructed to funnel from an open, free description of likes and dislikes about school and teacher; to semistructured questions concerning predictions of teacher responses to the three vignettes; to specific, structured questions to assess attributional understandings of the teacher's and the fictional student's motivations and expectations; to, finally, more open, less structured questions about the student's feelings and reactions to the fictional student (see Appendix G). Each question was paired with a standardized, "back up" question and a routinized probing procedure to

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be used when necessary.

Both the interview questions and the vignettes were presented in a fixed order. Ordering effects were not as much of a concern as fatigue and satiation were. To allow for some evidence of this should it occur, the vignette that was most distinctive was always presented last. Thus, the sequence of underachiever, hyperactive, and low achiever was constant. As the data indicate, there were no substantial carry over effects or fatigue evidenced in the responses to the third vignette. Sex of the perpetrator in the vignette was matched to the sex of the subject, but none of the names used were represented in any of the classrooms.

Following the presentation of each vignette, the check for student understanding and recall, and completion of the questions probing students' social cognition, the students' perceptions of their own similarity with the fictional student were gauged using a modified version of the "Self Concept of Attainment" measure (Nicholls, 1976, 1979; Weinstein and Middlestadt, 1978). This instrument consists of a vertical series of circles, with a line drawn at the median, which the students are told represent the students in their class. Using standardized descriptions interviewers told students that the circle at the top represented the person in their class who acts most like the fictional student in the vignette; the circle at the bottom, the person who acts that way the least, and the circles around the middle line were the people who act that way some of the time. The students were asked to place an "X" in the circle that represented how much they acted that way in class (see Appendix I).

After proceeding in this manner through all three vignettes, the students were again presented each vignette. This time they reported

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what they would say and do if they were teachers and a student in their class acted this way. Following their role play, the students ranked the three hypothetical students by liking, and by preference to work with (see Appendices J and K). In both rankings students were required to name their most preferred friend or partner and their second preferred. In this way, students were not required to name a least liked friend or workmate. These ranking formats were designed to maintain a positive tone and to avoid placing students in an uncomfortable position.

The final student instrument consisted of the Classroom Stress Scale (see Appendix L). This measure consisted of 17 events, adapted from Yamamoto (1978), that are routine in classrooms (i.e., giving a class report, answering wrong, having to sit alone, a noisy classroom, and so on). Using a series of five circles of increasing size to represent "bothers me a little" through "bothers me a lot," students indicated how much stress they associated with each event. Immediately following their report of the degree of stress associated with each event, students were also asked to indicate how frequently they had experienced the event. Their frequency responses were given verbally to help differentiate the frequency question from the stress inquiry. So that after pointing to a circle in answer to "How much does that bother you?" students verbally responded to "And how often does that happen?" by choosing from "hardly ever," "just sometimes," "pretty often," and "a lot."

The stress scale concludes the instruments used in the investigation.

Procedures

After the study had been approved by the Human Subjects Committee at Michigan State University, the instruments had been pilot tested and

revised, and the teachers had been selected for the study, the proposal was sent to the Lansing School District Office of Evaluation for approval. Once permission had been obtained, the principals of each school involved in the study were contacted by both the school district office and the author. Principal permission having been given, the teachers were then met with individually and presented with the full rationale and data collection methods for the study, with the exception of the observer predictions of teacher behavior and specific hypotheses about their socialization style. This information was withheld to prevent any invalidation of the observation data or biasing in the teacher interview. (Teachers will be provided the full rationale as well as the data from their own classrooms at the conclusion of the study.) All teachers actually contacted agreed to participate, provided consent forms, and received a $25 honorarium for their participation.

Teacher Interview. An appointment for the teacher interview was made at the time of the initial contact. Interviews typically occurred in the teachers' classrooms after school. The interview, which lasted about two hours and was tape recorded, consisted of two basic parts. First, the teachers' responses to the vignettes and their statement of general philosophy; and second, the teachers' nominations of students for inclusion in the study. These student nominations were made with class lists and the student problem type descriptions discussed previously. The student nomination segment was not tape recorded to encourage teachers to talk frankly about each student, to insure that the student did in fact match the problem type description under consideration. After teachers completed their nominations and agreed to distribute the student permission forms, the observations were scheduled.

Classroom Observation. Teachers were told that observations would consist of two half-days and that it was important that these times be "typical," as much as possible. (That is, we were not interested in observing standardized or lengthy unit tests, field days, assemblies, etc.) Teachers were told that the observer (one per classroom) would be the person helping the author with the student interviews. The person was described (correctly) as someone who was enrolled at Michigan State University and interested in child development, but unfamiliar with elementary schools. Teachers were further told that the purpose of the observation was to acquaint the assistant with the general routines of the classroom (seating and room arrangements, bathroom procedures, etc.) and the teachers' own styles (rules, work groups, accountability procedures, etc.) to facilitate the student interviews. Teachers were told that the author would not be observing, as she had prior knowledge (from association with CSS) about the teachers' classroom arrangements and styles.

The observers, both college age females, were blind to the purposes of the study, including the interest in socialization styles. Observers were told to establish themselves during observations, as an interested, "nice person" to enhance the smoothness of the subsequent student interviews. They were further instructed to remain as unobtrusive as possible (typically seated in the back of the room) throughout the observation, to minimize any disruption of activities. In addition to the general information about the room, as described to the teachers, the observers were to note qualitative aspects of the teachers' strategies with the students, as outlined in the coding manual for the teachers' (self-reported and other predicted) responses to the vignettes (see Appendix M). Observers were also to record verbatim any incident between the teacher

and student where the teacher was trying to change or influence the student in some way.

At the conclusion of both observations, using their field notes to guide them, the observers responded to the identical three vignettes depicting inappropriate student behavior that the teachers had responded to in their interview with the author. The observers wrote their predictions of how the teachers would respond should these incidents occur in their classroom. These predictions were written as scripts for a play and included what the teacher would say and do and her expected rationale. For example, in response to the first vignette portraying the underachieving student, an observer predicted the following teacher response:

> "Carl, put away the airplane and get back to work." If there were many people doing this I would turn out the lights--this is their signal for stopping. If Carl persisted, I would say, "Carl, I'm getting angry that you are still fooling around. I'll have to take out some marbles." We have a large jar, when the class is good or someone does something exceptional, I put marbles into it. If someone is misbehaving, I take marbles out. When the jar gets full of marbles, the class gets a party. This works well because besides self reward--a party--there's peer pressure on a student to behave--everyone wants a party. I would also say, "Carl, if your work isn't done you'll have to stay in from recess to finish it."

After scripts were written, the observer coded them using the coding system for teacher strategies which was used to guide their observations (see Appendix M).

Student Interviews. The observations completed and student parental permission forms returned, student interviews were begun. Prior to speaking with any students, the interviewers were trained, using role play and critiques, in interviewing children according to the principles

outlined by Yarrow (1960), Weinstein, (Note 7) and drawn from other investigators in social psychology, child development, and cognition and memory. The training was especially careful to include handling pauses, "I don't knows," alternative questions and elaborations, and recognition of when a response was complete. Because many of the students to be interviewed were selected precisely because they were difficult to cope with, interviewers were told to use the techniques the classroom teacher used to refocus these students should it become necessary. In fact, this only became an issue with students who appeared hyperactive and distractible. When interviewing these students, interviewers were prepared to touch them on the knee, put a pencil in their hand, have them close their eyes, explain why it's important that they try hard, and so on, whatever the classroom teacher did, to help them focus on the interview task.

To start off the student interviews the author and classroom observers introduced themselves to the entire class as people who were interested in learning about schools and teachers. Students were portrayed as experts that we could learn from. Students were told that their teacher already had her turn to talk to us, and now it was theirs. Students were guaranteed that just as they would not hear what their teacher had said, their teacher would not be told what they reported either. This created an atmosphere of secrecy that quickly turned into a game in most classrooms.

All students who received parental permission were interviewed. The students who had not been nominated by their teachers recieved an abbreviated version of the interview. Thus, the students were not aware of our interest in specific people, but instead thought that everyone was included. The interview assistants (and to a great extent, the author)

could identify only those children who had not been selected for the study (because of the abbreviated interview). They did not know the problem type classifications of the selected students, although a few types, like the shy, distractible, and hyperactive nominees were apparent. All student nominees had been alphabetized and given a subject number. Further, the interviewers' classroom lists (including the author's) only included the students' first name and last initial, and all student data were marked with only one subject number. All records of student problem type identification were destroyed by the author as soon as parental permission was verified and substitutions were not required.

The students were guaranteed confidentiality and the right to discontinue if they wished. If students did want to stop the interview, interviewers were to reassure them that they were being helpful, that there were no right or wrong answers, that it sure was a tough job with a lot of hard questions, etc., but under no circumstances did the interviewers offer comparisons with peers ("Well, Tom got through all of it. . .") or rewards for continuing. These reassurances that the student was in fact meeting the demands of an "expert" were successful, in that only one student terminated the interview, and he asked to start over the next day.

Interviews were conducted at the teacher's and student's preference, which eliminated testing times, assemblies, gym, and recess, to minimize student distraction or worry about missing out on something. Teachers were asked to select class leaders and gregarious students for the initial interviews in each room, to establish a positive tone and a model that the interview was "fun." This was useful in that students who initially expressed reservations about participating did decide to try it after classmates reported how "neat" it was. The tape recording aspect

of the interviews was also a definite "draw" for students.

The actual interviews took place in empty rooms within the schools, preferably as far from the classroom as possible, to reinforce the notion that this was "different" and confidential and to allow more time to ease into the interview itself. On the way to the room, the interviewers attempted to establish an easy rapport, used their first names when introducing themselves, and immediately asked, "Do you know why I'm here?" to allow the student to discuss any doubts or questions. The interviewer then conversed informally with the student, and was careful to again insure confidentiality. The actual taping began with the students getting to "try out" the tape recorder, hear their voices, and so on.

The formal, taped interview began with two general free description questions to insure that the students would feel successful in being "experts" about school related matters. Within each question, one about school, the other about the teacher, the students were first asked what they liked before being asked what they disliked. This again was an attempt to maintain a positive attitude toward the interview. The "warm-up" with these open ended questions completed, the vignettes, depicting the same inappropriate student behavior that the teachers and observers responded to, only rewritten in language more suitable for children, were presented (see Appendix F).

Each vignette was read to the students and immediately followed with a memory/comprehension check ("What's going on in that story?"). If students did not understand or remember the story, it was reread, and if necessary, elaborated with standardized additions, until it was comprehended. (Most students understood all three vignettes on a single reading. Of those who required an additional reading, it typically involved

only one of the three stories.) Once comprehension was established, the interview proceeded with the semistructured and specifically structured questions, which embedded recall cues, to assess the students' perceptions, attributions, and reactions to the fictional classroom events. The interviewers repeated the story if, as the interview progressed, it became clear that the student had become confused with a previous story and the embedded recall cues were insufficient. This delayed repetition was seldom required. Interviewers were instructed to allow minor digressions, but to gently get the student back on target as soon as possible. (Although the potential loss of valuable insights to students' thinking is recognized, it was decided that for the present study, a high degree of standardization across students was preferable.) There proved to be a wide range in the amount of meandering among the students.[1]

Upon completion of the set of questions following each vignette, the student completed the adapted self-comparison form described previously. The student proceeded in this manner through all three vignettes. When finished, the vignettes were presented once again. This time the students reported what they would say and do if they were teachers and a student acted this way in class. These student role play reports will be compared to the students' predicted teacher responses and to the teachers' reports to assess the teachers' modeling influence. This segment concluded the taped portion of the interview. Student form responses were then collected. Students first ranked the fictional students by liking (first choice, second choice), then by work preference (again, first

[1]Note: This sequence was not held in approximately one-fourth of the interviews where student reactions to the fictional students (Q) 17-20 were mistakenly omitted. For these cases, the bystander behavior questions were asked at a separate setting where each story was re-read followed by a memory check and the appropriate questions.

choice, second choice).

The Stress Scale responses were the final data collected. Students were first trained in how to use the series of five circles of increasing size to indicate amount of stress. This proved to be one-trial learning. Second, students were introduced to the choices for how frequently they had experienced the events. Any problems with vocabulary were rectified. If a problem did occur, it was typically with the term "pretty often."

At the conclusion of the interview, students were thanked, assured that the interviewer had really "learned a lot" and were escorted back to their rooms. The length of the entire student interview ranged from approximately 30 - 60 minutes, most occurring in a single session. The students were "talked out" by the end of the interview, but the variation in the content and task structure, combined with an interested listener, apparently were successful in combating boredom and fatigue. Most students seem to have enjoyed the process and felt important because they were teaching a grown-up.

The overall time line for implementing the study was four months. The Human Subjects Committee at Michigan State University was contacted in February, 1980; the School District in March. Data collection began in April and was completed in June, 1980. This focus on the end of the school year increased the likelihood that students knew their teachers well and were not confusing them with teachers from previous grades.

Analyses

All tapes (N = 152) were transcribed. The typescripts were then proofed while listening to the tape by staff members to insure that all student data were recorded, relevant names were changed or deleted, and

all pauses, sighs, physical tappings, etc. were marked on the typescript. This proofing stage proved to be invaluable in that much of student talk about punishment, fears, and generally negative events was hushed and mumbled. Many of these comments were either not heard or not understood on the dictaphone equipment, only on the more powerful Sony recorders. This preparation of typescripts took approximately six months.

Predictions of Teacher Responses to the Vignettes. Predictions about what the teacher would say and do should each vignette occur in their classrooms were provided by the teachers themselves, their students, and the observers. Each of these predictions were coded with the same variables. These included a set of coding systems designed to assess teachers' use of rewards, punishments, and supportive and threatening behavior (Rewards and Punishments), general problem solving style (Teachers' General Strategies), goals and use of language and rationale (Universal System), when coping with inappropriate student behavior. These systems, developed in (and where necessary, adapted from) the Classroom Strategy Study are included in Appendices M. In addition to these systems, the reports of teacher responses were also analyzed with four variables which appeared important as the interviews progressed. They were: giving chances, reporting ease, nonverbal behavior and primary domain of teacher language (see Appendix M). The Student-As-Teacher role play responses to each vignette were also analyzed with these variables, as well as an additional code for degree of congruence between the students' predictions about their teacher and themselves.

Student Perceptions. Recall that predictions of teacher behavior, although the main data obtained from the teachers and observers, was only a part of the student interview. The remaining student data were

analyzed as follows. The Free Response Questions were coded with variables influenced by an empirical and theoretical analysis. Thus, students' concerns about school and their teacher were catalogued and interpreted in terms of themes based on Maslow's theory of needs. Student responses were examined for concerns about or satisfaction with issues of safety, love and belongingness, and esteem. In addition, students' attitudes toward school and their teacher were rated on a five-point scale ranging from very positive to very negative. Also examined was the students' sophistication in describing their teacher (see Appendix M).

Memory prompts for vignettes were simply catalogued, while Student Understanding of Teacher Behavior, gleaned from questions 3 - 5 of the interview, were analyzed with a series of empirically derived codes. A subset of student responses to these questions were read to ascertain those dimensions that helped distinguish among the students. The result of this process was the assessment of student vs. teacher causality for teacher behavior; affective components; nature of the teacher goal; and level of inference in student reports, based on work by Selman and Byrne (see complete system in Appendix M).

Student Perception of Hypothetical Student (Appendix M) was explored with questions 6 through 16. These data were coded with variables derived from attribution theory, socialization literature, and recurring themes that appeared important and distinctive in the interviews. (For example, the notion of interactive causality was included in the system along with internal and external factors which were theoretically derived, when it became apparent that many of the students evoked modeling of adults and peers as the reason the student acts as s/he does). As the appendices indicate, subsets of questions were coded together, so that

questions 6 - 8 provide the data for the locus of causality; questions 9 and 10 the intentionality; 11 and 12 the controllability; 13 and 14 the stability (both past and future) and 15 and 16 the globality issues.

The final segment, the Student Reactions to the Hypothetical Student, obtained in questions 17 through 20, was analyzed with codes derived from the helping behavior literature and socialization research. In this way, students' own affective and behavioral responses to the fictional students can be compared with their beliefs about their classmates' reactions.

The student rating forms include three self comparison forms (scores ranging from 1 to 20), one for each vignette; a ranking of the fictional students by liking and by preference to work with (both ranging 1 - 3); and ratings of degree of stress associated (1 - 5) and frequency of experience (1 - 4) with a series of routine classroom events. All of these data were treated as scales.

Coding Procedures. Coders did not participate in data collection, were all trained by the author, and except for the author, were all blind to the specific hypotheses of the study. All data were coded twice, with the exception of the predictions of teacher response to the vignettes. These data were coded by a single individual who, as an ongoing member of the CSS staff, had been using those types of codes (if not the exact codes) with teacher responses to problem students for three years. A percent exact agreement analysis between the coder and the author was completed on a subset of data. (Percent exact agreement = (total number of agreements) divided by (itself, plus number of disagreements, plus number of codes made by the first coder but not the second, plus the codes made by the second coder but not the first).

The overall percent exact agreement was 86.5%, ranging from 82.5% on vignette one data, 88.5% on vignette two, and 88.3% on vignette three. Resolution of disagreement indicated that the staff member's (as opposed to the author's) coding was typically more appropriate. Because of this and the conservative approach to assessing agreement (i.e., each level within each category rather than between categories, so that if coders disagreed on whether a reward was symbolic or teacher-based, it was entered as a disagreement even though both coders agreed it was a reward), it was decided that dual coding of the data was unnecessary.

All remaining data were coded twice. Percent exact agreement before resolution was computed for each system based on the codes of the first, middle and last subject in each class for each vignette (except for the Free Response Questions which were independent of the vignettes). The percent exact agreement for each system was: Free Response Questions: 76% (this lower figure is probably due to the unstructured quality of the data so that coders had to decide what to include for coding as well as how to code it); 84% for Student Understanding of Teacher Behavior; 84% for Student Perception of Hypothetical Student and 90% for Student Reaction to Hypothetical Student.[2] The coding of the data took approximately five months.

Analyses. Each category within each variable in each of the coding systems for all of the interview data from teachers, observers, and students (with the exception of five scale variables) was treated as a 0 (not

[2]Note: Reliability training procedures varied from the norm in the coding of the Student Reaction to the Hypothetical Student variables. The final comparisons between coders revealed that both coders had slipped into inappropriate coding algorithms. Thus, coders were retrained and separately re-coded the affected variables. Percent exact agreement reported here is based on the recoding of the data.

used) or 1 (used) possibility and aggregated according to the specific analyses undertaken for each vignette. Averaging the codes in each level of aggregation yielded mean proportion scores indicating the likelihood that that subset of subjects would use each category in responding to that particular question for that vignette.

Frequency and breakdown data were then obtained for each system. Examination of the mean and standard deviation values for each variable facilitated decisions about collapsing, summing, or eliminating certain variables and the usefulness of forming proportion scores.

Data reduction was especially important in the analysis of the sources of predictions about teacher behavior, where many variables included in the coding system were coded "not present" (0) across the three vignettes and across the sources of prediction (teacher, observer and students). In analyzing these data, the types of predicted rewards, punishments, supportive behaviors, and threatening or pressuring behaviors were summed to form a single score for each variable. These sum scores reflect the number of different types within each of these four major clusters of behaviors. The coding of teachers' predicted problem solving strategies with the fictional students also appeared to be too molecular. Accordingly, the different types of teacher strategies for nonacademic problem behavior were subgrouped by similarity where possible, as were the levels of student insight and the types of teacher rationale.

Additional data reduction efforts included casting the students' concerns about school (obtained from the Free Response Questions at the beginning of the interview and coded with great specificity) into a theme analysis adapted from Maslow's hierarchy of needs. Remaining data

reduction consisted of elimination of variables because of low frequency. These typically consisted of "can't rate" and "other" values within a given variable.

The remaining dichotomous and scale variables, along with the newly constructed sum and proportion variables were subjected to a multivariate repeated measures analysis separately for each vignette. The design includes five factors over subjects: teacher socialization style (with two levels: behavior modification and inductive); grade group (with two levels: lower and upper); classroom (nested within teacher socialization style and grade group with two levels per nest); student nomination type (with seven levels: the three types of target students that match the stimulus materials, underachievers, hyperactives, and low achievers, students who present teacher owned, student owned or teacher-student shared problems, and the non-problem students); and student sex (two levels). Vignette type has three levels: underachievement, hyperactivity and low achievement. The 2X2X7X2 fixed factor design was repeated for each dependent measure separately for each vignette in the following manner: 1) a four-way ANOVA with classroom (C) nested within teacher socialization style (T) and grade group (G), and crossed with student nomination type (S) (T, G and S all crossed); 2) a four-way ANOVA with classroom nested within teacher socialization style and grade group, and crossed with student sex (X), (and T, G, and X all crossed). All ANOVA results reported were significant at or below the .05 level.

The sources of prediction about teacher responses to the fictional students portrayed in the vignettes (obtained from the teachers, classroom

observers and students) and the students' role play about how they would respond if they were teachers, were examined for both the extent of agreement among the sources of prediction and the similarity between the students predictions about their teacher's responses and their own role play responses. The points of agreements and the nature of the disagreements among the sources of prediction and between the students' predictions and self reports will be discussed.

Finally, the student form data (self comparison to the student portrayed in each of the three vignettes, the ranking of the fictional students by liking and by work preference and the ranking of classroom events by degree of stress and frequency of experience)were treated as scales and, except for the classroom events data, were subjected to the same analysis of variances procedures discussed earlier with the student interview data.

RESULTS

Presentation of the data will proceed in the order in which it was collected: 1. Student Free Response about School; 2. Student Predictions of Teacher Response and comparison with the other sources of prediction (observers and teachers); 3. Student Understanding of Teacher Behavior; 4. Student Perception of Hypothetical Student; 5. Student Reaction to Hypothetical Student; 6. Student as Teacher Role Play, including comparison with the student predictions about their teacher; and 7. Student Form Data.

Within each of these sections, the data will first be discussed in terms of general trends.[3] This will be followed by discussion of differences in these trends associated with student grade level and sex. Although there were no specific hypotheses associated with these variables, discussion of any patterns that may be associated with each will be useful in better understanding the data. Finally, the specific hypotheses of the investigation as they apply to the subsection of data under scrutiny will be examined. First, differences in student reports associated with differing levels of teacher socialization style will be examined, and second, any differences due to student adjustment level will be discussed. Once each subsection of the data has been presented in this manner, the data as a whole will be re-examined in light of the specific hypotheses and general findings.

[3]The Student Free Response about School data, obtained from the initial open-ended questions of the interview, which served as a "warm up" period, will only be discussed at the general trends level, as will the students' ratings of their classroom experience data obtained at the close of the interview.

The interview protocol and a complete description of the dependent measures are provided in Appendices G and M, respectively. Each subsection of the data is associated with the table numbers listed after the section heading. All differences associated with the student classifying variables that are discussed were significant at or below the .05 level. All values included in the text are mean proportion values (range = 0 - 1) unless stated otherwise. The exceptions include mean sum scores, mean proportion scores, and mean scale values, and are indicated as such in the text.

Student Free Response Data (Interview "Warm Up") (Table 1)

General trends. Students' concerns about school, obtained in their responses to the open-ended questions, "What things do you like best about your school? What things aren't so good? (which served as a "warm up" for the more structured interview which followed) were first categorized and grouped according to nonacademic or academic components, and within these, positive and negative aspects. This procedure revealed that most student comments were about positive academic aspects of schooling (1.36). Second most frequent were positive nonacademic facets of school (1.29). Negative comments were more concerned with nonacademic factors (.81) than they were with academic factors (.74). Overall, the proportion of positive statements was .63, and the proportion of academic comments was .49. Within the positive nonacademic statements, the most frequently mentioned events were scheduled breaks (lunch and recess) (.45). The most frequently reported positive, academic facet of school was math (.31), followed closely by reading (.28). The most frequently discussed negative, nonacademic problem with school was difficulty with peers (.21). Finally, the most frequently mentioned negative aspect of academics was again math (.16) and learning in general (.14). Student responses to these questions were rated on a five-point scale ranging from "very positive" (1) through "very negative" (5). The average rating was 2.32, indicating a generally positive regard for school.

Student reports of their concerns about school were also grouped to represent themes adapted from Maslow's theory of needs. Student responses were analyzed for reference to safety concerns, love and belongingness needs and esteem issues. (See Table 1 for specific item clustering decisions.) This theme analysis indicated that in relation to all comments

about school, the proportion of safety needs discussed was low (.01). The proportion of all statements that reflected love and belongingness concerns was more substantial (.15), and the proportion of statements reflecting esteem needs was highest (.31). Within the statements categorized by these need considerations, most were concerned with esteem (.65), followed by love and belongingness (.31). Remarkably few statements dealt with safety concerns (.02). Of the love and belongingness concerns discussed, the majority (.65) indicated that these needs were not fulfilled, and typically involved problems with peers rather than teachers or other adults in the school. Similarly, the esteem issues discussed also indicated that these needs were often unmet (.53).

These analyses indicate that students primarily discuss their concerns about competence and learning potential in the classroom, and discussion of their concerns about acceptance and group membership occurs much less frequently. It is also the case that students typically discuss esteem and belongingness issues when they are unable to satisfy them. These concerns are not readily apparent from overall ratings of school.

Student responses to ". . . If I was a new student in your class, what kinds of things would you tell me about your teacher?" were analyzed for their concerns about their teacher. Student comments about their teacher were typically global, positive evaluations, "She's nice" (.74), followed by positive evaluations about teacher expertise, "She's a pretty good teacher" (.12). Frequently students substantiated these evaluations with specific teacher behavior or anecdotes (.41). Students seldom discussed their teacher's expectations for students, but when they did it was likely to be tied to procedural expectations ("be sure to sit in your seat right and be quiet when she starts to count") (.16), followed

closely by academic expectations ("listen to directions. . . finish all the page") (.14). Spontaneous references to the quality of the teacher-student relationship were usually positive (.26) or mixed (.19). ("Mixed in that the relationship varied depending on student behavior, i.e., "Sometimes she's nice, but it depends. If the kids . . ."). Students' descriptions of their teacher were rated on a five-point scale similar to that used to evaluate their descriptions of school (1, very positive, "She's great" through 5, very negative, "She's the meanest teacher I ever had"). The average student evaluation of his/her teacher was 1.9, generally positive and somewhat higher than the mean evaluation of school (2.32).

Students' descriptions of what it was like in their classroom were also examined for any mention of reward. Recall that one-half of the sample was chosen because of the teacher's use of behavior modification, which includes consistent reward use. Interestingly, most students did not discuss rewards (.89). The rewards that were mentioned were fairly evenly distributed across symbolic rewards (stars, smile faces) (.04), material rewards (food, drink, prizes) (.06), and special privileges (free time, special helper) (.04).

Finally, student comments about their teachers were rated for their sophistication and organization. A three-point scale was used to evaluate the responses as isolated or separate pieces of information ("She's pretty), sketches ("She's nice. . . she says, "Oh, what a pretty dress!") or portraits ("She's nice. She lets you play after we do our work. She likes teaching. She laughs a lot."). The average rating given to the descriptions was 1.8. Thus, student descriptions were typically sketch-like in that the information they provided held together, but was not

inferential or insightful.

In summary, the students' responses to the open-ended questions about school and their teacher replicate what others have found concerning students' general attitude toward school (Blumenfeld, 1981). That is, students have a positive attitude toward their schooling in general and their teachers in particular. Further, students express a general level of satisfaction with school. The theme analysis adapted from Maslow reveals concerns primarily with higher level esteem needs. Student safety concerns are not predominant, and for most students, neither are love and belongingness needs. This positive tone is not surprising given the expertise of these students' teachers. The interview took place then, within a generally positive set.

Student Predictions of Teacher Response (Tables 2 - 14)

General Trends. Students' predictions of their teacher's responses to the three hypothetical students were analyzed for reported rewards, punishments, supportive or threatening behavior, general problem solving strategies and goals, and use of language and nonverbal cues. Notably absent in these student predictions is the mention of reward. This is not surprising given that the vignettes concern undesirable student behavior. Taken together with the student free response data discussed previously, however, it does seem clear that teachers' rewards are not as salient to students as one might expect. Across all three vignette situations, the mean proportion of any type of reward being reported was .01. Supportive behavior was equally scarce in predicted teacher responses to the underachiever in Vignette One and the hyperactive student in Vignette Two (.03, .01, respectively), but was the most frequently predicted teacher response to the low achiever in Vignette Three (.79). Punishment, typically involving referral to other adults or punitive isolation, and threatening/pressuring behavior, particularly criticism, were most descriptive of teachers' predicted handling of both the underachiever in Vignette One and the hyperactive student in Vignette Two (punishment: .71, .71; threatening/pressuring: .71, .85 respectively).

Students descriptions of their teacher's general problem solving style with inappropriate student behavior varied across the vignettes in ways compatible with their predictions of teachers' use of rewards and punishments. Teachers' general style with the underachiever in Vignette One was characterized as involving strategies for nonacademic problems (.99). These were primarily punitive and likely to include isolation, as

mentioned previously. Simple management responses were also mentioned with the underachiever (.30). Students did not believe that their teacher would attempt to gather more information from the underachiever before acting (.99), attempt to develop this student's insight into why his/her behavior was a problem for others (.97), or seek student input into any change strategy (1.00). Further, students typically did not report any teacher rationale for demands upon the student (.60). Rationales that were reported were restricted to the teacher citing classroom rules (.38). Teacher language in general was characterized as concerned only with social procedures (.97). Students were in agreement that their teacher's goal with the underachiever was to control (stop) the misbehavior (.92), rather than to replace the misbehavior with more appropriate behavior. Some students also reported that their teacher would give the underachiever "a chance" before punishing him/her (.30).

Students' reports of teacher problem solving strategies with the hyperactive student in Vignette Two closely parallel their Vignette One predictions. Thus, students again predict nonacademic problem solving approaches (.99), again primarily involving punitive measures (.60), and isolation (.31). Simple management responses were again represented (.29). Although students also report that their teacher would not seek more information before acting (.99) or involve the student in developing an appropriate strategy (.99), some students did report that their teacher would attempt to develop the hyperactive student's insight into how his/her behavior affected classmates and the teacher (.12). Similarly, when discussing their teacher's verbal rationales to the hyperactive (.37), students reported some discussion of empathy for others (.11) as well as rule citation (.24). Teacher language with the hyperactive student, like

that with the underachiever, was seen as concerned only with social procedures and norms (.99). Teacher goals with the hyperactive student were also believed to be primarily control attempts (.90), but there was some reporting of rewards and shaping goals (.14). (That is, the teacher's goal was believed to involve replacing the inappropriate behavior with more acceptable behavior, rather than merely stopping it.) Some students again reported "giving chances" (.36).

Students' descriptions of their teacher's general style with the low achiever in Vignette Three were markedly different. Here, students were more likely to discuss academic strategies (.86) involving helping the student, dealing with the students' feelings, reducing or changing the task, and so on, than they were to describe nonacademic strategies. Nonetheless, nonacademic strategies were reported (.27). The most frequently mentioned strategy was the simple management response (.12), followed by punishment (.10) and isolation (.08). Teachers typically were believed to respond uniquely in several respects to the low achiever, then, but like their dealings with the other students, they were not expected to seek student input (.98) or (like the underachiever especially) to try to develop student insight (.99). Information gathering was still infrequent, but was reported the most with the low achieving student (.11).

Given that teachers typically were not expected to make nonacademic demands on the low achiever, discussion of teacher rationales for demands is limited. Of those students who did discuss nonacademic strategies (.21), however, most did not include a teacher rationale provided the student (.16). Reported teacher language matches this pattern. Most students reported language concerning academic performance

(.79), with some students discussing social procedures (.17).

Students' understanding of their teacher's goals was the most varied with the low achiever. Rewards/shaping goals (replacing inappropriate behavior with appropriate behavior) were described the most frequently (.55), followed by control goals (.31) and mental hygiene goals (dealing with the causes of the problem behavior in a long term sense) (.16).

In general, then, students predicted similar (punitive) teacher responses to the students portrayed in Vignettes One and Two, but predicted different (more helpful or sympathetic) teacher behavior with the low achiever in Vignette Three. Even though students never predicted teacher rewards, they did predict supportive teacher behavior with the low achiever. In the following sections, distinctions within student reports as a function of student grade level, sex, teacher socialization style, and student level of classroom adjustment will be examined.

Grade Level Differences. Students' predictions of their teacher's responses to the students portrayed in each vignette frequently differed as a function of student grade level. In fact, grade level accounts for most of the variation among students. Predictions of teachers' use of rewards, punishments, supportive and threatening/pressuring behavior were associated with differences in student grade level in Vignette Two and Vignette Three responses. In their predictions of teacher responses to both the hyperactive and low achieving students, lower level students were more likely to report teacher punishments (V2: $.85_L, .58_U$; V3: $.28_L, .07_U$). although the prediction of punishment when dealing with the low achiever occurred much less frequently. Related to this, in both Vignettes Two and Three, but especially with the hyperactive student in Vignette Two, younger students elaborated more on types of teacher punishment

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(V2: 1.40_L, $.86_U$; V3: $.49_L$, $.08_U$). Student predictions of teacher behavior toward the hyperactive student in Vignette Two were further distinguised by grade level in the discussion of teacher threatening/pressuring behavior. In this situation, upper level students were more likely to mention teacher threatening/pressuring behavior ($.79_L$, $.90_U$), which typically consisted of teachers' specific criticism of the hyperactive student's behavior. Thus, it appears that the older students tend to think of their teacher's response to this student as primarily verbal, rather than tied to punishments. Finally, Vignette Three predictions of teacher supportive behavior were associated with differences in student grade level. Older students were more likely to report teacher supportive behavior with the low achieving student ($.67_L$, $.92_U$), and to elaborate on differing forms of this teacher support ($.89_L$, 1.31_U).

Students' discussions of their teacher's general problem solving style with the fictional students were also associated with differences in student grade level. These distinctions were most pronounced in Vignette One and Two responses, and the identical trends in effected variables were replicated across all vignettes. Thus, younger students were more likely to include teacher punishments in teachers' nonacademic problem solving strategies in both Vignettes One and Two (V1: $.81_L$, $.64_U$; V2: $.74_L$, $.47_U$), and to discuss removal and isolation techniques in all three vignettes (V1: $.44_L$, $.30_U$; V2: $.35_L$, $.26_U$; V3: $.17_L$, $.00_U$). Further, younger students were less apt to discuss teacher attempts to develop the underachiever's or the hyperactive student's insight into his/her own behavior and its effects on others (V1: $.00_L$, $.06_U$; V2: $.06_L$, $.19_U$). Younger students were also less likely to discuss teacher rationales for behavior change demands to the hyperactive student ($.24_L$ $.51_U$). Finally,

in their Vignette One and Vignette Two predictions, older students were more likely to discuss teacher rationales for behavior change demands to the hyperactive student ($.24_L, .51_U$). Finally, in their Vignette One and Vignette Two predictions, older students were more likely than their younger counterparts to describe teacher rationale to the fictional students as rule citation (V1: $.18_L, .59_U$; V2: $.11_L, .38_U$).

Student predictions of teacher problem solving with the low achiever in Vignette Three were distinctive in two ways. First, this was the only vignette in which students discussed teacher academic strategies. Second, students differed in that older students were even more likely to discuss these academic strategies ($.78_L, .94_U$), and to elaborate upon teacher behaviors that were likely to include helping the student, reducing the size of the task, dealing with the student's affect and so on ($1.01_L, 1.26_U$).

Differences among students' descriptions of the nature of their teacher's goals that were associated with student grade level only occurred in Vignette Three. In their descriptions of their teacher's expected response to the low achiever, older students were more likely to describe goals that involved shaping ($.42_L, .68_U$), while younger students reported more teacher control goals ($.44_L, .17_U$).

Finally, student emphasis and noting of nonverbal teacher behavior also differed by grade level. Older students were more likely to report what their teacher would say rather than what she would do with the hyperactive student (consistent with their focus on teacher threatening/pressuring behavior as opposed to punishment) ($.19_L, .35_U$), and more likely to report teacher nonverbal behavior (facial expression, stance, etc.) in both Vignette One and Vignette Two responses (V1: $.08_L, .21_U$; V2: $.10_L, .24_U$).

Thus, older students appear to be more tuned into the subtleties of teacher behavior. Finally, in their Vignette Three predictions, older students were more apt to report teacher language concerned with student academic performance (as opposed to social issues) ($.74_L$, $.93_U$).

In summary, grade level differences in students' predictions of their teacher's behavior were frequent and consistent. In general, younger students report more actual or threatened teacher punishment, while older students report more verbal controls and rationales from teachers. Older students are also more attuned to the subtleties of teacher nonverbal behavior. It appears then, that younger students focus much more on the more salient qualities of their teacher's behavior.

Sex Differences. Students' responses seldom varied as a function of sex. Differences which did occur were primarily associated with predicted teacher responses to the hyperactive and low achieving students. In their predictions, girls were more likely than boys to include more teacher language involving rationales for demands made upon the hyperactive student. Boys, on the other hand, were somewhat more apt to confine not only teacher language, but also teacher goals to mere control over the hyperactive student. Sex differences in responses to the low achiever only occurred in the predictions of teachers' nonacademic strategies. Young boys were more likely to discuss these nonacademic strategies in the first place, but older girls' predictions of nonacademic strategies were most likely to include simple management responses and teacher nonverbal behavior. Finally, predictions of teacher response to the underachiever indicated that older boys were more apt to discuss simple management responses, but younger boys were the least likely to do so.

In summary, sex differences in students' predictions of their teacher's responses to the fictional students portrayed in the vignettes were infrequent. Student gender apparently is a less important factor in the prediction of teacher behavior than the other status variables included in this investigation: grade level, teacher socialization style, and student level of classroom adjustment.

Teacher Socialization Style Differences. Differences in student predictions associated with teacher socialization style were less frequent than those associated with grade level, and often involved interactions with grade level. Affected variables differed across the vignettes, thus each vignette will be discussed separately. Student predictions of their teacher's responses to the underachiever in Vignette One were associated with the most distinctions due to teacher socialization style. Students in behavior modification classrooms, particularly younger students, were less likely to describe teacher strategies with the underachiever as consisting of brief management strategies, i.e., simple reminders to the student to get back to work ($.08_{BL}$, $.44_{IL}$, $.28_{BU}$, $.36_{IU}$). Students in behavior modification classrooms were instead more apt to describe teacher punishment ($.92_{B}$, $.78_{I}$) and removal and isolation techniques ($.50_{B}$, $.24_{I}$). Students whose teacher's socialization style had been identified as inductive were more likely to predict their teacher citing rules to explain her demands on the underachiever ($.26_{B}$, $.49_{I}$). Students also differed in their descriptions of teacher goals. Although occurring infrequently, students in inductive classrooms were the only students who discussed teacher shaping goals with the underachiever ($.00_{B}$, $.10_{I}$). Similarly, older students in inductive classrooms discussed

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teacher goals as simple control over the underachiever the least ($.94_{BL}$, $.97_{IL}$, $.94_{BU}$, $.75_{IU}$). Finally, examination of the focus in students' reports revealed that students in general discussed both their teachers' words and actions with the underachiever, especially the younger students in behavior modification classrooms, and the older students in inductive classrooms, ($.81_{BL}$, $.64_{IL}$, $.61_{BU}$, $.83_{IU}$), but that upper level behavior modification students were especially apt to focus more on teacher words than on teacher actions ($.08_{BL}$, $.17_{IL}$, $.28_{BU}$, $.11_{IU}$).

Student predictions of teacher responses to the hyperactive student that were associated with teacher socialization style were infrequent. Those differences that did occur, however, indicated that younger students in behavior modification classrooms were least likely to describe their teacher's strategies with the hyperactive student as involving a brief management response ($.11_{BL}$, $.33_{IL}$, $.39_{BU}$, $.31_{IU}$). In addition, students in behavior modification classrooms were less apt to describe their teacher's goals with the hyperactive student as including shaping ($.07_{B}$, $.21_{I}$).

Vignette Three predictions were also infrequently associated with differences in teacher socialization style. Those that did occur are consistent with the pattern associated with Vignettes One and Two, however. In their discussions of teacher strategies with the low achiever, younger students in behavior modification classrooms were the least likely to mention teacher supportive behavior ($.53_{BL}$, $.81_{IL}$, $.92_{BU}$, $.92_{IU}$), and also reported the least elaborated teacher language (2.50_{BL}, 2.03_{IL}, 1.77_{BU}, 1.86_{IU}). Finally, consistent with this pattern, but not statistically significant was the trend associated with the discussion of teacher goals as being concerned with student mental hygiene is least

associated with the younger students in behavior modification classrooms ($.05_{BL}$, $.17_{IL}$, $.19_{BU}$, $.22_{IU}$).

In summary, across all three vignettes, predictions of teacher behavior associated with students in behavior modification classrooms, particularly at the earlier grade levels, consisted of more teacher punishment and control goals, and were less language oriented than were the predictions of teacher behavior made by students in inductive classrooms.

Student Level of Adjustment Differences. Differences in students' predictions of their teacher's responses were associated with student level of classroom adjustment only in Vignette One and Vignette Two responses. Students differed in their discussion of teacher use of punishment with the underachiever in Vignette One. A three-way interaction revealed that students in behavior modification classrooms ($.94_{BL}$, $.89_{BU}$), especially the younger students, were the most likely to discuss teacher punishment. Punishment was reported by all students in lower level behavior modification rooms with the exception of the nonproblem student nominees (.83). In contrast, the students in inductive classrooms, particularly the older students, were the least likely to do so ($.81_{IL}$, $.75_{IU}$). Within the lower level inductive classrooms, the hyperactive nominees and the students presenting student owned problems were the least apt to discuss teacher punishment with the underacheiver ($.50_{H}$, $.50_{SO}$). (For student owned problem nominees, this probably was the result of generalization of their own experiences with the teacher.) Students presenting teacher owned problems and the nonproblem students were the most likely to do so (1.00_{T-O}, 1.00_{NPS}). (Again, the teacher owned problem nominees were probably drawing on their own experiences with the teacher. The

nonproblem student nominees in contrast, were likely to be responding from an authority based morality.) In contrast, in the upper level inductive classrooms, the students presenting teacher owned problems were the least likely to report teacher punishment (.50), while the hyperactive nominees and those students presenting student owned problems were the most likely to do so (1.00_{H}, 1.00_{S-O}). This reversal is puzzling, but may reflect the accumulated experiences of the teacher owned problem nominees who consistently act inappropriately, and have come to realize that punishment does not always follow a transgression. The increase in the nominees and those students presenting student-owned problems increases predictions of punishment may reflect the opposite phenomenon. That is, these students are apt to have less direct experience with teacher punishment and as such are less realistic. This lack of experience, coupled with the generally positive relationship these students typically have with their teacher likely results in moralistic thinking as well, so that these students are apt to believe that the underachiever "should be punished.

Predictions of teacher response to the hyperactive student in Vignette Two were associated with differences in student nomination type with respect to teachers' predicted threatening/pressuring behavior. When discussing their teacher's handling of the hyperactive student in Vignette Two, students nominated as hyperactive themselves and those nominated for their low achievement were the <u>least</u> likely to mention use of threats and pressuring behavior ($.44_{H}$, $.44_{LA}$). Those students most likely to both mention (1.00_{S-O}, $.94_{UA}$, $.94_{SH}$) and to elaborate upon (1.0_{S-O}, 1.00_{UA}, 1.00_{SH}) teacher attempts to pressure the student were those students nominated as presenting student owned problems, underachievement,

and shared problems.

Students also differed in their discussion of their teacher's general problem solving style. This was particularly the case with respect to teacher strategies with the hyperactive student. Students varied in their predictions to this vignette in five different categories of teacher nonacademic problem strategies, while there was only a single distinction between students who differed in level of classroom adjustment that was associated with Vignette One. This difference in the Vignette One predictions again concerned teacher punishment. As discussed previously, in general, the younger students reported the most punishment overall. Within the lower grade levels, the hyperactive nominees were the least likely to report punishment (.63), and those students presenting teacher owned problems were the most apt to do so (1.00). In contrast, within the upper grades, the students presenting teacher owned problems were the least likely to discuss teacher punishment (.29), a reversal which replicates the findings discussed above.

Differences in discussion of teacher nonacademic problem solving strategies also occurred in Vignette Two reports. In general, the younger students were more apt to report removal and isolation techniques with the hyperactive student. This was especially the case with students presenting student owned problems (.63). Of the older students, the shared problem nominees reported isolation the most frequently (.50). The remaining variables associated with differences among the student nominees concerned teacher attempts to develop student insight, and the provision and type of teacher rationale for demands for student behavior change. Younger students typically did not discuss development of student insight (.94), nor did their older counterparts (.81). Within the older

students, however, the group that stands out -- surprisingly -- as those who are most apt to report teacher attempts to develop the hyperactive student's understanding of how his/her behavior affects others, was the underachiever nominees (.62). Students also differed in their discussion of teacher rationales to the hyperactive student, in that hyperactive nominees were the least likely to report any teacher rationale at all (.22), and the nonproblem students were the most likely to (.48), followed by the underachiever (.50). Of the rationales reported, the most frequent was "cites rules." Students presenting teacher owned and student owned problems were especially likely to predict that their teacher would evoke classroom rules to justify behavior demands ($.38_{T-O}$, $.38_{S-O}$), while the hyperactive and low achiever nominees discussed this the least ($.06_{H}$, $.06_{LA}$). Finally, older students ($.10_{L}$, $.18_{U}$) in general were more likely to describe teacher rationale as inducing empathy for others in the hyperactive student. Within this, it was the older underachieving nominees who were distinctive in this prediction (.63).

Vignette Two responses were further characterized by differences among students associated with reported teacher language and goals. Consistent with previously discussed patterns, the underachieving students reported the most elaborated teacher language (2.33_{UA}), (lower value indicates more language) while the teacher-owned problem student nominees reported the least language (2.94_{T-O}), followed by the hyperactive and teacher-student shared problem nominees (2.88_{H}, 2.88_{T-O}). The remaining distinction in student prediction of teacher behavior with the fictional hyperactive student concerned teachers' described goals. Underachieving students in the upper grades were the most likely to report

shaping goals (substituting inappropriate behavior with the more desirable behavior) ($.63_{UA,U}$), and the nonproblem students in the lower grades were most apt to do so ($.21_{NPS}$). Further, all of the younger nonproblem students to report these goals were in inductive classrooms (.42).

In summary, the analyses of students' predictions of their teacher's responses as a function of student level of classroom adjustment revealed that the second vignette, portraying the hyperactive student, differentiated students the most. The pattern that emerged the most consistently in this analysis was the performance of the underachiever nominees. Recall that these students were more likely to report teacher threatening/pressuring behavior (as opposed to actual punishment), teacher attempts to develop the hyperactive student's insight into his/her own behavior, to describe the teacher rationales as empathy for others, to predict the most elaborate teacher language, and to report teacher shaping goals. The underachiever nominees, then, portray their teacher as verbal, as reasoned in her approach with students (hyperactive students, at least), and as ultimately concerned with influencing the student to act appropriately in the classroom. It seems clear that the underachieving students understand their own interactions with their teacher, although given their nominee status, this understanding appears to be at the level of introjection rather than internalization, in that it does not seem to be associated with behavior change.

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Discussion. In summary, the students' predictions of their teacher's responses to the fictional students appear to be most clearly ordered by the vignettes themselves. Students' predictions of their teacher's handling of the low achieving student portrayed in Vignette Three were especially distinct from their notions of teacher strategies with the fictional underachiever and hyperactive students. Student grade level appears to be the second most powerful organizer of the data. Younger students' responses to all three vignettes consistently differed from the older students' predictions, especially in the younger students' discussion of teacher punishment and the absence of teacher language in their reports.

Teacher socialization style also ordered student responses in ways consistent with expectations. Thus, students in behavior modification classrooms, particularly in the lower level classrooms, reported more actual teacher behavior, in terms of punishment and control goals, while students in inductive classrooms included more teacher language and rationales in their predictions. Analysis of students' responses by the students' level of classroom adjustment revealed interesting patterns of change across the grade levels, possibly reflecting the accumulation (or lack) of experience by students whose behavior in the classroom differs. Thus, teacher owned problem nominees (consisting of hostile aggressive and defiant students) and student owned problem nominees (consisting of failure syndrome students and students rejected by their peers) were associated with interesting reversals between grade levels. The underachiever nominees' reports are also interesting in that these students appear to have the most savvy of the students. These results are intriguing and provide some insight into why these students are able to provoke

their teachers so easily. Given that they understand classroom dynamics, their behavior appears to be quite calculated and under control. Finally, sex differences were the least useful in understanding the students' predictions of their teacher's responses to the students portrayed in the vignettes.

Comparison of the Sources of Prediction of Teacher Response to the Fictional Students. (Table 2)

Predictions of teacher responses to the fictional students were obtained from the teachers themselves, their students, and a classroom observer. These predictions were obtained to assess the extent of agreement that specific teacher behaviors would in fact occur. There were no specific hypotheses associated with this comparison, although it was expected that agreement, in general, would be higher between the teachers and students than it would between teachers and observers, because of the observers' lack of historical knowledge of teacher behavior.

General Trends. Reports of Rewards, Punishments, Supportive and Threatening Behavior. Teachers' reports of their responses to the underachiever included rewards and supportive behavior in addition to (and more than) punishments and threatening behavior. In contrast, observers primarily, and students exclusively reported punishing and threatening teacher behavior. This trend is also present, although not as sharply contrasted, in the Vignette Two predictions. Teachers again reported rewards and supportive behavior in response to the hyperactive student in addition to punishing and threatening behavior. In contrast to their Vignette One reports, however, teachers reported more threatening behavior than punishments. In the Vignette Two situations, observers' reports also stressed threatening behavior as opposed to actual punishment and, while mentioning some rewards and supportive behavior, nonetheless placed less emphasis on them than the teachers. As in their Vignette One predictions, students again reported punishment and threatening behavior exclusively, however, unlike Vignette One, students reported slightly more

threatening behavior than punishment, a trend compatible with the teacher and observer reports.

All informants' predictions of teacher response to Vignette Three, the low achiever, differed markedly from their Vignette One and Vignette Two scenarios. In this situation, teachers reported almost exclusive supportive behavior, as did the observers. Students were more varied in their predictions, but also emphasized supportive behavior in addition to some threatening and pressuring behavior.

Reports of General Strategies. Teachers' reported responses to the underachiever differ from the observers' and students' in that teachers reported both academic and non-academic problem solving strategies. Within the non-academic techniques, however, the three sources were in close agreement, especially in teachers' use of punishment. Where they did diverge, not surprisingly, was in reported use of rewards, where teachers reported using them far more than observers and students. Teachers and observers agreed both in their reports of some teacher attempts to develop student insight and in the presence and type of teacher rationale for demanded behavior change. In contrast, students did not stress teacher attempts to promote insight or to provide rationales for demands. When teacher rationales were reported, however, they were confined to citing rules.

Unlike their reported strategies with the underachiever, teachers' reports of their responses to the hyperactive student were almost exclusively non-academic in nature. Also in contrast to Vignette One, these reports de-emphasized punishment and isolation techniques in favor of rewards and proscriptive statements (stating what the student was <u>not</u> to be

doing). Teachers' reports of their responses to the hyperactive student contained the greatest number of problem solving strategies, as did the observer and student predictions. Teachers were twice as likely as in their strategies with the underachiever to report developing student insight into others' as well as the teachers' feelings, and to evoke empathy for others as a rationale to the hyperactive student for their demands that the student change his/her behavior. This relative emphasis on empathy and de-emphasis on rules and logical analysis to explain required behavior change was also in direct contrast with Vignette One reports.

Observers' predictions paralleled the teachers' reports. Observers also reported non-academic problem solving strategies, but with far less emphasis on reward. The observer and teacher reports were highly similar with some slight differences in emphasis between inducing empathy and provision of rationale. Students also agreed that their teacher's strategies would be nonacademic (like their predictions of teacher response to the underachiever), but students placed a heavy emphasis on teacher punishments and excluded any mention of reward. Students were again the least apt to report teacher rationales for behavior change, but those that were reported included empathy induction in addition to citing rules.

Response predictions to the low achiever in Vignette Three were again distinctive from the two other vignettes. This uniqueness held across all three sources of prediction. Teachers and observers were in agreement that teachers would handle the low achieving student with problem solving strategies that were focused on academic difficulties. These strategies involved helping the student with additional instruction,

reducing or changing the task requirements and dealing with student affect. While students by and large agreed with this, some students (and one teacher) did report non-academic strategies that were not supportive or nurturant, and that were also unlikely to be associated with any rationales.

Reports of Teacher Goals. The three sources of prediction also varied in differing degrees across the vignettes in their beliefs about teachers' goals when dealing with the fictional students. In their dealings with the underachiever in Vignette One, teachers reported mostly rewards and shaping goals (i.e., establishing appropriate behavior) with some teachers also reporting a concern for student mental hygiene, and a single teacher reporting mere control as a successful goal for the underachiever. Observers reported equal proportions of shaping and control goals along with one report of mental hygiene, and students' responses were concentrated only on control goals.

Predictions of teacher goals with the hyperactive student were similar. Teachers again reported reward/shaping goals the most frequently, but in this instance stressed control/punishment slightly more than mental hygiene goals. Observers' reports were identical to their Vignette One predictions. They again stressed shaping and control goals equally. The overwhelming student view was on teachers' pursuit of control goals. In contrast to their Vignette One predictions, however, some students (14) also reported teacher concern with shaping goals.

Finally, goals with the low achiever in Vignette Three were distinct from those reported in Vignettes One and Two. Teachers mostly reported mental hygiene (typically involving extensive reteaching) (.88) with this student, although there was some mention of attempts to merely shape the

student's behavior and to teach the student less comprehensively (.25). Observers reported mental hygiene goals involving extensive reteaching exclusively. Student predictions were the most varied in that they spanned all possible categories. Students reported shaping goals the most frequently (a sharp contrast to their predictions of teacher responses to the underachiever and hyperactive students), followed by a substantial proportion of control attempts (focused primarily on the student "getting the answer" rather than learning the material) and to a lesser extent, mental hygiene goals.

Additional Variables. When dealing with the underachiever in Vignette One, some teachers reported "giving chances" before punishing, and also reported using nonverbal behavior. Of special interest is these teachers' reports of only academic (or academic and social) concerns with this student. Teachers did not report concerns that were only social in nature. In sharp contrast, observers reported only social domains as being of interest to teachers, more use of nonverbal communication, and a greater likelihood of "giving chances." Students agreed with observers (and contradicted teachers) that teachers' concerns were with social procedures and norms, and not with academic issues. While students reported equivalent probabilities that the teacher would "give chances" they seldom reported teacher nonverbal behavior.

Teachers' responses to the hyperactive student differed from those with the underachiever. In dealing with the hyperactive student, most teachers reported non-verbal communication, and some reported giving chances. In contrast to their Vignette One reports, teachers' reported concerns were primarily with social procedures and norms, or with both academic and social concerns. Teachers did not report any

purely academic concerns with this student. Observers were similar to teachers in their reports of nonverbal behavior and language domain, and were even more optimistic about teachers giving chances. Students did not report nonverbal behavior anywhere near the degree that teachers and observers did. Further, they confined their predictions of teacher concern to the social domain.

Finally, predicted responses to the low achieving student were associated with teachers and observers in high agreement that all teachers would focus on academic performance and some teachers would also use nonverbal behavior. Students again failed to report the nonverbal aspects of their teachers' responses and, although they primarily reported the academic focus of teacher concerns, there was also some reporting of social procedure issues.

Teacher Socialization Style and Grade Level Differences. Teachers' self reports and observers' and students' predictions of teacher responses to the fictional students were further compared for differences by grade level-teacher socialization style combinations, separately for each vignette. These analyses were conducted to identify which type of teacher was most likely to be associated with predictive agreement with the observers and/or the students, or with neither. This analysis was conducted through comparison of the mean values for each variable for each vignette from each of the three sources of prediction so that the teacher was the standard of comparison to which the observer reports and student predictions were separately compared. Mean values that differed less than or equal to .15 were considered agreements. Once the agreement status was determined for each variable, sum scores of agreement were

formed to describe agreement at both the teacher variable level and at the vignette level.

This procedure revealed patterns of agreement that varied by vignette. Predictions of teacher response to the underachiever involved the most disagreements (80) of the three vignettes. Disagreements were especially prevelant in the lower level inductive classrooms, where both observers and students disagreed the most with teacher self report. In contrast, the extent of agreement was highest in the lower level behavior modification classrooms, especially for the students themselves.

The patterns of agreement that were associated with predictions of teacher response to the hyperactive student differed in that they were more associated with grade level differences than with teacher socialization style. Agreements in prediction were much higher in the lower level classrooms than they were in the upper level classes. Within this, students' agreement in behavior modification classrooms was the highest of all students, while observer agreement was high in both of the lower grade levels.

Finally, the predictions of teacher response to the low achiever illustrated a reversal to this trend. Recall that this vignette evidenced the highest agreement overall. Within this, the lower level behavior modification classrooms were associated with the most disagreement about teacher behavior, and this held for both observers, and to a lesser extent, students. The remaining levels were all associated with high rates of agreement, particularly the upper level inductive classrooms.

It appears, then, that the predictability of teacher behavior varied considerably by the situation, and that this variation was systematic. In the underachiever vignette and in the hyperactive situation, which

require primarily management strategies, students in the lower level behavior modification classrooms were better able to predict their teacher's behavior than the other students. Further, in regard to hyperactivity, a problem particularly prevelant in the earlier grades, the younger students in both socialization styles were noted for their greater extent of agreement. Finally, in responses to the low achiever, this general agreement which had been especially characteristic of the lower level behavior modification classrooms was instead associated primarily with the remaining students, particularly the older students in inductive classrooms. This change in agreement patterns, particularly in lower level behavior modification classrooms, is likely the result of the greater subtlety and privacy of teacher behavior when responding to the low achiever.

Overall, then, the younger behavior modification students were noteworthy for their consistent agreement with their teacher's reported responses, a finding unsettling given these students' greater likelihood of predicting teacher punishment (See Student Predictions of Teacher Response discussion). A closer examination of the sources of these agreements between younger students in the behavior modification classrooms and their teachers revealed that all of the points of agreement in prediction to the underachiever were on things that the teacher would <u>not</u> do. Thus, the younger students agreed with their teacher only on things that she would not say or do, rather than on descriptions of what she <u>would</u> do. Examination of Vignette Two predictions parallel this. Again, students agreed with their teacher on what she would not say or do or on goals that she would not pursue with the hyperactive student. Their predictions in this instance, however, also included agreement with their

teacher in the use of punishment and the pursuit of control goals. Finally, the agreement between students' and teachers' predictions of teacher response to the low achiever again consisted primarily of agreements as to what the teacher would not do. These teachers' strategies, then, appear to be the least elaborated, both behaviorally and verbally, of the teachers in the study. As such, predictions of the teachers' behavior consist of sampling from a more restricted range of possibility. Thus, points of agreement are automatically increased. It does not appear, however, that these students are more insightful than students in the other classrooms in that, even within this restricted range of behavioral choice, students did not agree with their teacher at all on what she would do with the underachiever, and the agreement in predicted dealings with the hyperactive student were restricted to aspects of punishment and control goals. A similar lack of agreement on actual behavior was also associated with the low achiever responses. These students' comparatively high ratings of predicting teacher behavior, then, appear to be unanticipated artifacts of teacher socialization style.

Discussion. In general, then, the unique aspects of teachers' self reports (i.e., those not reported by either observers or students) were most apparent with the underachiever and included teacher reports of rewards and positive, proactive language in the academic domain, aspects of teacher behavior that were never discussed by observers and students. This difference does not appear to result from teacher ego-enhancement or social desirability, however, because teachers also reported punishing and threatening behavior with this student, in fact, more so than the observers did (who, in general, appeared reluctant to report punitive or

pressuring teacher behavior). What does appear to explain these differences (which also occur, although to a lesser extent, with the hyperactive student), is the difference in perceived scope of teacher behavior. Thus, observers and students seemed to focus only on immediate teacher behavior, while the teachers typically discussed their strategies with the students as occurring within a treatment package that involved differing teacher behavior and goals that evolved over time. This programmatic teacher behavior was understandably missed by the observers whose classroom observations were brief (two half days). What is not as readily dismissed, however, is the students' lack of knowledge of these general programs. Apparently the students do not imbed a specific teacher strategy with a particular student within a larger complex of behavior. The student predictions suggest, then, that while teachers may interact individually with students within a framework that for them provides meaning and direction to that specific action, students are unaware of this long term purposefulness. Students' perceptions of the immediacy of teacher goals with students were further validated through direct questioning (See Student Understanding of Teacher Behavior discussion). If students are unaware of the "larger picture" of teacher behavior, the question that arises, then, is to what extent would teacher strategies be more (or less) successful if students had more insight? That this is not easily answered is underscored by the underachiever nominees, who, in their understanding of teacher behavior exhibited the most savvy of all students (See Student Understanding of Teacher Behavior). By their very status, however, this knowledge does not appear to always result in behavior change. Nonetheless, students' lack of knowledge of the full range and planfulness of their teacher's behavior is surprising,

especially given their teacher's expertise in dealing with students.

The one exception to this finding of elaborated, long range teacher strategies unrecognized by students occurred in lower level behavior modification classrooms, as discussed above. These teachers apparently did not have long term strategies that differed in kind from their immediate behavior. Thus, in these classrooms the outcomes for behavior may differ (reward vs. punishment), but the implementation and criteria for these outcomes remain constant. As such, these teachers' strategies, in general, are less diverse and more routinized and salient, and thus, apt to be more readily predicted by students. As was indicated earlier, however, the younger students in behavior modification classrooms were apparently aware of what their teacher would <u>not</u> do, but were not particularly cognizant of what their teacher would do (or, more correctly, would report doing).

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Student Understanding of Teacher Behavior (Tables 15 - 30)

General Trends. The presentation of the vignettes and the interviewing procedures were apparently successful. Overall, there were no serious memory problems with the stories, and student responses indicate that the questions were understood as intended. When repetitions of the vignettes were required, however, they were most apt to occur with the low achiever in Vignette Three ($.01_{V1}$, $.05_{V2}$, $.13_{V3}$). These repetitions typically consisted of a single re-reading of the story to ensure student comprehension before proceeding with the interview. Memory distortions requiring prompts beyond those embedded in the interview as it progressed were also unlikely, but when they did occur, it was again in association with Vignette Three ($.00_{V1}$, $.02_{V2}$, $.09_{V3}$). These distortions usually involved the subject claiming that despite what the vignette said, the low achiever really could do the work if s/he wanted. Once these misconceptions were corrected, the interview proceeded.

Student responses to question three, "Why do you think Mrs. _____ would do those things?" indicated that for all vignettes, teacher behavior was understood to result from role constraints (both teacher and student) rather than from personality factors. Typically these role demands were understood in terms of the student's failure to meet classroom role expectations ("he's supposed to be doing his work now") ($.60_{V1}$, $.45_{V2}$, $.45_{V3}$). Responses due to the teacher's role demands ("because she's supposed to teach us") were also present ($.33_{V1}$, $.36_{V2}$, $.40_{V3}$). Thus, students appeared to de-emphasize the personal aspects and possible dispositional causes ("because she don't like that") of teacher motivation. This did not exclude the discussion of teacher affect, however. Even though students evoked established roles as reasons for teacher behavior,

they nonetheless frequently discussed the affective quality of the teacher's motives. Students reported positive concern as a motivational construct, especially as characteristic of teacher behavior with the low achiever ($.21_{V1}$, $.32_{V2}$, $.52_{V3}$). Negative teacher affect was evoked less frequently, but when it was mentioned, it was likely to be associated with responses to the underachiever ($.16_{V1}$, $.08_{V2}$, $.01_{V3}$). This appearance of negative affect and relative absence of positive affect associated Vignette One is compatible with the limited naming of teacher personality (rather than role) attributions that occurred with this vignette ($.13_{V1}$, $.10_{V2}$, $.06_{V3}$). Taken together, these findings are consistent with the problem ownership literature and suggest that students believe that teachers are most apt to "lose their cool" when dealing with the underachieving students.

Responses to question four, "What does Mrs. _____ expect _____ to do after she says and does those things?" indicate that students typically understood their teacher's goals to be prescriptive, focused on what the student was supposed to do (not) ($.83_{V1}$, $.67_{V2}$, $.96_{V3}$), immediate as opposed to long range ($.92_{V1}$, $.96_{V2}$, $.97_{V3}$), and tied to specific student behavior ($.94_{V1}$, $.96_{V2}$, $.73_{V3}$). Variations in this trend include the linking of both prescriptive and proscriptive goals with teachers' strategies for the hyperactive student in Vignette Two ($.11_{V1}$, $.21_{V2}$, $.01_{V3}$) and the focusing on both student behavior and attitude associated with the low achiever in Vignette Three ($.04_{V1}$, $.02_{V2}$, $.17_{V3}$).

Students' perceptions of teacher goals are more clearly distinguished across the three vignettes in terms of the perceived primary focus of these goals. Students perceive the teachers' goals: to include both

managerial and instructional components with both the underachiever in Vignette One and the hyperactive student in Vignette Two ($.64_{V1}$, $.51_{V2}$, $.17_{V3}$); to focus primarily on instructional improvements with the low achiever in Vignette Three ($.09_{V1}$, $.04_{V2}$, $.75_{V3}$); and as also likely to involve the stressing of purely management concerns with the hyperactive student ($.25_{V1}$, $.43_{V2}$, $.07_{V3}$). While teachers' motivations are perceived similarly in several respects, then, they are differentiated by teachers' perceived primary concerns for the students. The Vignette One and Three goals are clearly distinguished from one another in this respect, and the Vignette Two goals form a third distinct, although less salient, profile.

The final question, concerning teacher cognition, "What does Mrs. _____ think about _____? What sort of person does she think _____ is?" was analyzed for the presence and level of student inference about teacher thoughts, as well as the content of those thoughts. Student inference was assessed with a variable adapted from Selman and Byrne's (1974) research on stages in social cognition. These researchers distinguished "Level 1" from "Level 2" inference. Level 1 inference includes discussion of another's behavior or trait ("She thinks he's not a very good student."). Level 2 inference is considered developmentally more advanced and reflects recognition that another person thinks about someone else's thoughts or cognitions, not just their observable behavior ("She thinks he doesn't care very much about school."). The data revealed that most students inferred something about their teacher's attitudes, and did not merely confine their remarks to either noninferential description of the student's behavior ("She thinks he throws paper airplanes.") ($N = 25$), or discussion of teacher affect ("She'd be mad.") ($N = 5$).

However, these student inferences were typically at Level 1, confined to teacher thought about student behavior or traits. This was especially characteristic of Vignette Three responses ($.68_{V1}$, $.75_{V2}$, $.83_{V3}$). Level 2 inference (teacher thought about student cognition) was also evidenced, although markedly less so, particularly with reference to Vignette One ($.17_{V1}$, $.13_{V2}$, $.10_{V3}$).

The content of these inferences (teachers' ascribed evaluations of the fictional students) varied somewhat across the vignettes, although global evaluations of the student per se were the most frequent ($.53_{V1}$, $.66_{V2}$, $.51_{V3}$). Performance ($.17_{V1}$, $.09_{V2}$, $.29_{V3}$) and ability ($.04_{V1}$, $.02_{V2}$, $.36_{V3}$) judgments were typically evoked to describe the low achiever; while adherence to procedures and rules were often evoked with the underachieving and low achieving students ($.29_{V1}$, $.24_{V2}$, $.04_{V3}$). Teacher inferences about student affect (as opposed to behavior) were reported infrequently, but when they were discussed, it was most often in regard to the underachiever ($.11_{V1}$, $.05_{V2}$, $.04_{V3}$). Given these trends, the positive - negative valences of these evaluations are not surprising. The evaluations associated with the low achiever were judged to be primarily positive ($.06_{V1}$, $.04_{V2}$, $.41_{V3}$) or neutral in tone ($.10_{V1}$, $.15_{V2}$, $.27_{V3}$). The underachievers and hyperactive students were believed to engender mostly negative ($.58_{V1}$, $.58_{V2}$, $.20_{V3}$) or mixed ($.17_{V1}$, $.15_{V2}$, $.07_{V3}$) teacher judgments ("Mixed" in that these students recieved a combination of positive and negative statements, typically in the form, "She likes him as a person, but doesn't like what he's doing.").

Finally, student responses to all three questions concerning the rationales for their teacher's predicted responses were assessed for mention of teacher concern for the rest of the class when responding to an

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individual student. This was seldom discussed, but when it was reported, it was usually associated with teachers' handling of the hyperactive student ($.11_{V1}$, $.32_{V2}$, $.02_{V3}$).

Overall, then, the vignettes and interview questions were understood as intended. Students' responses indicated that they were aware of and accepted the role demands for teachers and students. Further, students appeared to interpret teacher behavior and teacher motivation within the context of these roles, and were aware that role expectations give rise to differing goals and demands for students who differ in their classroom behavior.

Grade Level Differences. In general, the differences in students' understanding of their teachers' behavior that were associated with grade level were consistent with expectations derived from developmental theory. These differences reveal a generally higher level of differentiation and sophistication in psychological and motivation constructs and goals among the older students, as compared with the still motivational, but more global and value-laden constructs of the younger children. These differences were particularly salient in the interpretation of teacher behavior, but were also evidenced in student understanding of the vignettes themselves. As discussed earlier, memory problems with the vignettes and interview procedures seldom occurred, but when they did, it was most likely with Vignette Three, the low achiever. Grade level differences indicate that this was due primarily to the younger students' performance ($.79_{L}$, $.93_{U}$), and probably resulted from fatigue and carry-over from the previous vignettes. (Recall that in all cases, the vignette was repeated and student comprehension assured before the interview proceeded.)

Differences in students' interpretations of teacher behavior were more substantive and relevant to this investigation. In response to question three, "Why do you think Mrs. _____ would do those things?" students differed in their understanding of the causes of their teacher's response. In both Vignette One and Vignette Two, the younger students were less likely to evoke teacher role as the reason for the teachers' response (V1: $.21_L$, $.45_U$; V2: $.23_L$, $.50_U$). These differences between grade levels did not hold in Vignette Three. The younger students were also less apt to discuss teacher affect as a motivational construct across all three vignettes (V1: $.29_L$, $.52_U$; V2: $.31_L$, $.54_U$; V3: $.44_L$, $.73_U$). Related to this, older students reported more positive teacher affect as a potential cause of their teacher's response in all three vignettes (V1: $.11_L$, $.31_U$; V2: $.14_L$, $.49_U$; V3: $.34_L$, $.69_U$).

Responses to question four, "What does Mrs. _____ expect _____ to do after she says and does those things?" indicate that while teacher goals were generally perceived similarly, upper level students were unanimous in naming teachers' goals with the low achiever as prescriptive, while a few of the younger students disagreed ($.92_L$, 1.00_U). Further, upper level students were more likely to view their teacher's goals with the low achiever as primarily instructional ($.61_L$, $.90_U$) and less managerial (managerial: $.13_L$, $.01_U$; instructional and managerial: $.25_L$, $.08_U$). Upper level students were also apt to view teachers' goals as less purely managerial with the hyperactive student ($.54_L$, $.32_U$), and were more apt to see them as including both instructional and managerial aims ($.42_L$, $.60_U$).

Analysis of students responses to question five, "What does

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Mrs. _____ think about _____? What sort of person does she think _____ is?" indicate developmental trends in the level of student inference of teacher cognition, but only with respect to Vignettes One and Two. In discussing teacher thought about the underachiever and hyperactive student, lower grade level students were more apt to confine their remarks to teacher inference about student behavior (V1: $.81_L$, $.56_U$; V2: $.85_L$, $.65_U$; V3: $.86_L$, $.81_U$). The upper grade level, although mostly containing students who were also thinking in primarily Level One terms, did include some students who illustrated Level Two inference about their teacher's thinking (V1: $.06_L$, $.29_U$; V2: $.06_L$, $.21_U$; V3: $.06_L$; $.14_U$).

The differences in students' reports of the content of these teacher thoughts are consistent with these distinctions in level of inference. In all three vignette situations, younger students spoke more of global teacher evaluations about the student <u>per se</u> (V1: $.71_L$, $.35_U$; V2: $.78_L$, $.54_U$; V3: $.66_L$, $.36_U$), while older students evoked more behavior specific evaluations, including student performance (V1: $.10_L$, $.25_U$; V2: $.04_L$, $.14_U$; V3: $.18_L$, $.40_U$), ability (V1: $.00_L$, $.07_U$; V3: $.18_L$, $.54_U$), conformity (V1: $.17_L$, $.40_U$; V2: $.13_L$, $.35_U$), and affect (V1: $.03_L$, $.19_U$). Older students were also less apt to evoke value laden teacher judgments (negative evaluations: V1: $.68_L$, $.47_U$; V2: $.71_L$, $.44_U$; V3:$.28_L$, $.11_U$;neutral evaluations: V2: $.06_L$, $.24_U$; V3: $.14_L$, $.40_U$), although in Vignette One responses, older students discussed mixed teacher evaluation of the underachiever's behavior more (V1: $.11_L$, $.24_U$).

Finally, throughout these questions, older students were more likely to evoke teacher concern for others when discussing teacher motivation with respect to Vignette One ($.07_L$, $.15_U$) and Vignette 2 ($.19_L$, $.40_U$).

In summary, differences among the students that were associated with grade level were generally compatible with developmental expectations. Younger students used motivational and goal directed constructs in understanding their teacher's behavior, but perceived less differentiation in their teacher's motivations, goals, and thoughts about students than did the older students. Younger students' responses also indicated that, in contrast to older students, much of their understanding of teacher affect was in terms of evaluation of others rather than motivation for behavior.

Student Sex Differences. Sex differences in students' understanding of their teacher's predicted responses to the fictional students were most likely to occur in their interpretations of teacher behavior with the low achiever. Further, sex differences were most associated with student interpretations of their teacher's motives when responding to the fictional students and differed in that boys in general, particularly younger boys, were typically less apt to report teacher affect as a reason for teacher behavior. Not only were girls more likely to do so, they were also more likely to interpret this affect as positive concern for others. (This trend did not hold for older boys' responses to the underachiever, however, which indicated strong negative teacher affect as the impetus for teacher behavior). This recognition of teacher affect did not interfere with girls' perceptions of teacher role, however, in that girls were also more likely than boys to see their teacher's response to the fictional students as stemming from teacher role expectations. It appears, then, that the girls' views of their teacher's motives for responding to students were more elaborated and nurturant than the boys' notions.

Sex differences in students' understanding of their teacher's goals when dealing with the fictional students primarily occurred in their understanding of teacher intentions with the low achiever, and these differences only involved slight variations on major themes. Thus, students in general agreed that the target of their teacher's efforts were immediate and focused on student behavior. Boys were apt to stress these points slightly more than girls, however, and were somewhat more likely to predict both instructional and managerial goals for teacher strategies with the hyperactive and low achieving students.

Sex differences associated with students' thoughts about teacher cognition were more frequent, but these differences did not involve the level of student inference. They were instead concerned with the focus of teacher judgment and the positive or negative nature of that judgment. Sex differences in these evaluations typically involved interactions with teacher socialization style. In general, students in inductive classrooms were more likely to discuss teacher evaluation of student performance. Within this, with the exception of discussions relating to the low achiever, it was the boys who accounted for this difference associated with teacher socialization style. In their attributions of the low achiever, the boys in the inductive classroom were again noteworthy in that they were the most apt to focus on teacher evaluation of student ability. In general, then, boys in inductive classrooms were the most likely to understand teacher evaluation as tied to student behavior rather than global evaluation of the student per se.

Finally, although less consistently, students also differed in their descriptions of the affective tone of these teacher evaluations. These differences again interacted with teacher socialization style. Boys in

behavior modification classrooms were more likely to characterize their teacher's evaluation of the underachiever as negative, and boys in inductive classrooms were more apt to describe their teacher's evaluations of the hyperactive student as "mixed," ("she likes him ok, but she don't like him to make noise"), consistent with their greater likelihood to predict teacher evaluation of student performance.

In summary, sex differences were not as useful an organizer of the data as the other status variables under scrutiny. They are interesting, however, in that while reports of teacher affect mesh with commonly held gender beliefs (i.e., girls perceiving their teacher as more positive and more nurturant), the data do not support the myths surrounding girls social "intuitions." Girls did not evidence more sophisticated social perception than boys.

Teacher Socialization Style Differences. Differences in students' understanding of their teacher's behavior associated with differing teacher socialization style were consistent with expectations. Analysis of student responses to question three, "Why do you think Mrs. _____ would do those things?" indicated that for both Vignettes Two and Three, students in inductive classrooms were more likely to attribute their teacher's behavior to her role as a teacher than to personal factors or student behavior (V1: $.28_B$, $.44_I$, V2: $.29_B$, $.52_I$). Attributions to teacher personality as the cause of teacher behavior were infrequent, but when discussing their teacher's response to Vignette Two, younger students in behavior modification classrooms and older students in inductive classrooms were most apt to do so ($.17_{BL}$, $.03_{BU}$, $.03_{IL}$, $.17_{IU}$). Differences in understanding the cause of teacher behavior were especially pronounced in Vignette Three, where students in behavior modification classrooms

were more likely to perceive the low achiever's failure to meet his/her student role appropriately as the cause of their teacher's response (V3: $.53_B$, $.37_I$).

Notable differences between the students as a function of teacher socialization style also occurred in the reporting of teacher affect as a motivational construct. In their responses to all three vignettes, students in inductive classrooms were significantly more likely to report positive teacher affect in terms of concern for the fictional student or his/her classmates (V1: $.13_B$, $.29_I$; V2: $.24_B$, $.39_I$; V3: $.43_B$, $.61_I$).

Interesting differences in students' reasoning also occurred in response to question four, "What does Mrs. _____ expect _____ to do after she says and does those things?" Distinctions among the respondents occurred in their assessment of the primary focus of their teacher's goals. With respect to Vignette Three, students in inductive classrooms or in upper level classrooms were more likely to see their teacher's primary goal with the low achiever as purely instructional. Thus, younger students in behavior modification classrooms were the least likely to perceive their teacher's goals with the low achiever as purely instructional ($.46_{BL}$, $.89_{BU}$, $.75_{IL}$, $.91_{IU}$). Although reported much less frequently, when pure managerial goals were discussed, they were likely to be reported by students in behavior modification classrooms ($.11_B$, $.03_I$). Similarly, students differed in their notions of the teachers' goals with the hyperactive student in Vignette Two. Again, students in behavior modification classrooms were more likely to report only managerial goals ($.52_B$, $.33_I$), while students in inductive classrooms were likely to perceive their teacher's goals as both managerial and instructional when dealing with the hyperactive student ($.42_B$, $.60_I$). Least frequent was

the reporting of purely instructional goals. When this did occur, however, it was most apt to be reported by upper level students in inductive style classrooms ($.03_{BL}$, $.03_{BU}$, $.00_{IL}$, $.11_{IU}$).

The final variables associated with teacher socialization styles involved students' perceptions of their teacher's thoughts about the fictional students (obtained from question five). In their responses to Vignette One, students in inductive classrooms were more likely to discuss teacher evaluation of the underachiever's performance than were the students in the behavior modificatiom classrooms ($.08_{B}$, $.26_{I}$). This difference was especially salient in the upper grades ($.08_{BL}$, $.08_{BU}$, $.11_{IL}$, $.42_{IU}$). In addition, students' perceptions of the affective quality of their teacher's judgments about the underachiever differed. Younger students in behavior modification classrooms were the most likely to report negative teacher evaluations, while upper level students in behavior modification classrooms were the <u>least</u> likely ($.78_{BL}$, $.39_{BU}$, $.58_{IL}$, $.56_{IU}$). Although occurring less frequently than negative evaluations (but more frequently than positive teacher evaluations), mixed evaluations of the underachiever ascribed to teachers were likely to be from older students in behavior modification classrooms ($.03_{BL}$, $.33_{BU}$, $.19_{IL}$, $.14_{IU}$).

Distinctions related to teacher socialization styles were also seen in the types of evaluation that teachers were believed to make about the hyperactive student in Vignette Two. Again, lower level students in behavior modification classrooms were most likely to report negative teacher evaluation, and upper level behavior modification students were least apt to do so ($.86_{BL}$, $.36_{BU}$, $.56_{IL}$, $.53_{IU}$). Consistent with the mixed evaluation differences found in Vignette One, when neutral evaluations

were ascribed to teachers, they were likely to be ascribed by upper level students, particularly those in behavior modification rooms ($.00_{BL}$, $.31_{BU}$, $.11_{IL}$, $.17_{IU}$).

Students' perceptions of teacher thoughts about the low achieving student in Vignette Three differed significantly with respect to the focus of the evaluation ascribed to the teacher. Thus, students in classrooms associated with inductive socialization were more likely to expect their teachers to evaluate the low achiever's academic performance ($.23_{B}$, $.36_{I}$). In addition, an interaction between grade level and socialization style occurred with respect to teachers' positive evaluation of the low achiever. This interaction revealed that the students most likely to ascribe positive feelings to the teacher were the younger students in inductive classrooms ($.56_{IL}$). Interestingly, the group that was next most likely to do so were the older students in behavior modification classrooms ($.44_{BU}$).

Throughout this phase of the interview, differences in students' discussion of teacher concern for others occurred. Older students in behavior modification classrooms were most likely to ascribe concern for others as part of their teacher's motivation for dealing with the underachieving student ($.08_{BL}$, $.22_{BU}$, $.06_{IL}$, $.08_{IU}$). Differences associated with the hyperactive student in Vignette Two indicate that younger students in behavior modification classrooms were least likely to mention teacher concern for others ($.06_{BL}$, $.47_{BU}$, $.33_{IL}$, $.42_{IU}$). With respect to teacher concern for others when dealing with the underachiever, students typically focused on fairness in terms of "if the rest of the class has to work, he does too." The reported concerns associated with Vignette Two were typically of the form "he's making too much noise, so it's

hard for the other kids to concentrate and get all their work done." The first form, associated with the underachiever's behavior, appears to be motivated by self interest, while that associated with the hyperactive student seems more altruistic.

Overall, then, it appears that the students in inductive classrooms were more likely to perceive their teacher as acting within her role, and that positive concern for students was part of this role. Students in behavior modification classrooms were less likely to perceive instructional goals in their teacher's behavior and instead focused more on managerial concerns. Examination of student thought about teacher cognition revealed that behavior modification was consistently associated with strong grade level differences. Younger students in classrooms selected for their teachers' behavior modification approaches were distinctive in both the focus and nature of student evaluation ascribed to the teacher. These students' perceptions of their teacher's cognition are best described as undifferentiated, global, and negative, and as such, are the least sophisticated among those included in the study.

Student Adjustment Level Differences. Student understanding of teacher behavior was seldom related to the student's level of adjustment in the classroom, and, when it was, it typically interacted with student grade level.

Memory difficulties with the low achiever description in Vignette One and the hyperactive student portrayal in Vignette Two were associated with differing types of students. Students nominated as underachievers were most likely to require story repetition in each case ($.12_{V1}$, $.19_{V2}$). In Vignette One, this was due to the older nominees in behavior

modification classrooms (.12) and the younger nominees in inductive classrooms. With respect to Vignette Two, the younger nominees accounted for this difference (.38). Students presenting teacher-student shared problems also had some difficulty with Vignette One, while the remaining student types did not require any repetition. For Vignette Two responses, low achieving students in both grade levels needed repetition (.12) and students in lower level classrooms identified as presenting teacher owned problems also needed repetitions (.25). None of the students presenting shared problems or student owned problems required memory prompts. Neither did the nonproblem students.

Responses to question three, "Why do you think Mrs. _____ would do those things?" were distinctive across the vignettes. Teacher response to the hyperactive student in Vignette Two was seldom attributed to student personality factors, but when it was, it was apt to be by the target problem students (underachievers, hyperactive students, low achievers) in the lower grades, particularly by the hyperactive nominees ($.06_{UA}$, $.13_{H}$, $.06_{LA}$). Further, these students were typically in classrooms of teachers who used behavior modification programs ($.09_{BML}$ $.03_{INDL}$; $.00_{BMU}$, $.00_{INDU}$).

Student responses also differed in discussion of teacher affect. In Vignette One these differences concerned the discussion of negative teacher affect. Target problem students were the most likely to discuss negative teacher affect. This was especially the case for the hyperactive nominees, a pattern which parallels the above discussion ($.27_{UA}$, 38_{H}, 25_{LA}, $.06_{T}$, $.19_{SH}$, $.06_{S}$, $.08_{NPS}$). In the discussion of teacher affect with respect to the low achiever in Vignette Three, students presenting teacher owned problems and the target problem students were the least

likely to report teacher affect ($.37_{T}$, $.44_{UA}$, $.44_{H}$, $.56_{LA}$), and students presenting shared problems were the most apt to report such affect (.93).

Students' responses to question four, "What does Mrs. _____ expect _____ to do after she says and does those things?" typically varied across the vignettes within categories that were seldom used (mean proportion overall at or below .05) or evidenced little variation, and thus will not be discussed here. Students' perceptions of the primary focus of their teacher's efforts with the low achieving student in Vignette Three did indicate meaningful variation, however. Students nominated for their hyperactivity, along with the remaining students representing shared problem behavior, indicated teacher managerial goals the most frequently ($.50_{H}$, $.38_{SH}$). In contrast, students nominated for presenting student owned problems or for being nonproblem students evoked teacher managerial concerns the least ($.13_{S}$, $.13_{NPS}$).

Differences in student responses to question five, probing students' thoughts about teacher cognition, were primarily associated with Vignette Two (the hyperactive student). In each case, student nomination type interacted with grade level. Thus, lack of inference about teacher thought was associated in younger students with those presenting shared problems (matched to the vignette) (.25). In older students, lack of inference occurred with those students presenting student owned problems (.38). Negative evaluation of the hyperactive student was always ascribed to the teacher by hyperactive students and students presenting shared problems in the lower grades (1.00_{H}, 1.00_{SH}), but seldom by their low achieving peers (.25). Upper level students varied in that underachievers and students presenting shared and student-owned problems were the most likely to attribute negative evaluation to the teacher ($.63_{UA}$, $.63_{SH}$, $.63_{S}$),

while hyperactive students in the upper grades were the least apt to do so ($.13_{H}$). Finally, mixed affective evaluations acribed to teachers were most characteristic of younger low achieving students ($.50_{LA}$) and upper level hyperactive students ($.50_{H}$). It appears that both of these groups of students were the most likely to understand their teacher's evaluation of the hyperactive student as not negative per se, but instead as critical of the student's behavior, while positive toward the student him/herself.

One interaction between student nomination type and teacher socialization style occurred. Negative evaluation of the underachiever in Vignette One was typically ascribed to teachers by underachieving nominees and by students presenting shared problems in behavior modification classrooms ($.88_{UA}$, $.88_{SH}$), but was most characteristic of students presenting student-owned problems in inductive classrooms.

In summary, the most salient and consistent findings associated with student nomination type concern the hyperactive students. This group, especially in the younger grades and when discussing teacher behavior with the hyperactive student in Vignette Two, stands out as being the most likely to attribute teacher behavior to negative affect, managerial concerns, and negative evaluations of the students.

Discussion. In summary, students' understanding of their teacher's predicted responses to the fictional students were ordered in varying degrees by the vignettes themselves. Students' understanding of their teacher's motives for responding were consistent across the vignettes, but the primary goal of these responses differed, as did the perceived content of teacher thoughts about each of the fictional students. These differences reflected the patterns of teachers' attributions and behavior that

have been found to be associated with the levels of problem ownership (Brophy and Rohrkemper, 1981). Thus, in general, students appear to be aware of how their classroom behavior in turn affects their teacher's cognitions and behavior.

Grade level differences in students' understanding of their teacher's behavior ordered the data in patterns consistent with developmental theory. Differences associated with student grade level primarily occurred in interpretations of teacher motivation (vs. perceived teacher goals) and in thoughts about the students ascribed to the teacher. Thus, younger students were less likely to evoke teacher role expectations, including teacher affect, as motivational, and their understanding of teacher thoughts about the fictional students were more global and value laden. The differences between the grade levels, then, was not in the use of motivational constructs per se, but in the differentiation and sophistication of those constructs.

Differences in students' understanding of their teacher's behavior that were associated with teacher socialization style indicated that, in general, students in behavior modification classrooms perceived their teacher's goals with students as primarily managerial, and as less apt to evolve from teacher role expectations and concern for problem students. An interesting pattern that also emerged that involved an interaction between grade level and socialization style, specifically behavior modification. This interaction indicated that the younger students in behavior modification classrooms were the least sophisticated of all students in their understanding of teacher behavior. These students' perceptions of teacher thought were noted for their generally negative tone and global characteristics. It appears, then, that younger students, who typically have

less differentiated social cognition, do not learn these interpersonal skills through behavior modification procedures. Rather, they appear to benefit more from inductive socialization styles.

Student level of classroom adjustment was not as useful in ordering the data as the other status variables. The only consistent finding related to student nomination type involved the hyperactive nominees. These students, when discussing teacher behavior with the fictional hyperactive student, were more likely to ascribe to their teachers negative affect toward, and negative evaluation of this student.

Finally, student sex differences also were not powerful organizers of students' understandings of their teacher's behavior. Findings which did occur, however, were interesting and included girls' descriptions of their teacher as more affective and nurturant. Girls did not, however, evidence more sophisticated social perception.

Student Perceptions of the Hypothetical Students (Tables 31-45)

General Trends. Student perceptions of the hypothetical students were obtained with a series of questions designed to assess the following attributional dimensions: locus of causality (questions 6 - 8); intentionality (questions 9 - 10); controllability (questions 11 - 12); stability (questions 13 - 14); and globality (questions 15 - 16). The data will be discussed separately for each of these dimensions.

Locus of causality attributions (why does the student act as s/he does?) were assessed with several codes. First, the responses were analyze for the spontaneous constructs that the students evoked. Thus, the first reason for the given fictional student's behavior was coded separately from the others, to distinguish spontaneous constructs (assumed to be most like those used when understanding interpersonal behavior as it actually occurs) from the reflective constructs which the child is capable of using (Selman, 1981). This analysis revealed that for all three vignettes, the students' spontaneous description of the fictional students' behavior typically ascribed it to an internal factor. This was especially true with the hyperactive and low achieving students ($.40_{V1}$, $.56_{V2}$, $.52_{V3}$). Interactive factors (involving a combination of factors internal to the student that interact with an environment which facilitates the expression) underlying student behavior were spontaneously evoked the least frequently, but when they were mentioned, it was likely to be with the underachiever ($.25_{V1}$, $.18_{V2}$, $.10_{V3}$). Of the three vignettes, the underachiever was associated with the most even distribution of spontaneous reasoning across the locus of causality factors ($.40_{I}$, $.35_{E}$, $.25_{IxE}$).

Locus of causality responses were also assessed for stability. Thus, students' causal reasoning was coded as involving enduring or immediate

factors. This analysis indicated that students were most likely to view the underachiever in terms of short term, immmediate causes for behavior (.55). In contrast, the students' perceptions of the reasons underlying the hyperactive student's behavior were fairly evenly distributed across immediate and long term factors, and were also likely to include discussion of both factors as well ($.37_L$,$.32_S$,$.29_B$). Finally, the students were most apt to evoke causes which were long term and stable for the low achiever's behavior (.53).

Student discussion of the external causes of the fictional students' behavior were noted and further analyzed for beliefs that the student was: essentially a "victim"of ongoing relationships or forces beyond his/her control ("the other kids make him do that or they won't be his friend any more"); indirectly controlled by others ("his mama don't teach him right"); or the victim of a specific environmental assault ("he got hit in the head"). External factors were discussed approximately half of the time for all three vignettes ($.50_{V1}$, $.40_{V2}$, $.44_{V3}$). Of these external factors, indirect control from others was cited most often for the underachieving and hyperactive students ($.40_{V1}$, $.29_{V2}$). Students were equally likely to view the low achiever as a "victim" of external control ("his parents made him that way") (.20) or as influenced indirectly by others ("the kids make too much noise") (.20).

In addition to being the most frequent spontaneous construct, internal causal factors were also evoked most frequently overall ($.63_{V1}$, $.71_{V2}$, $.79_{V3}$), particularly for the low achiever. Internal causal factors were coded as causes that were a function of birth ("he was born not smart") or as causes that were more under the individual's control ("he got into the habit"). Students were most apt to view the underachiever as a

product of his/her own behavior, habits and desires (.43) as opposed to factors present at birth (.25). The hyperactive student was seen as equally likely to be the product of birth (.43) or habit (.44). In contrast to both of these patterns, the low achiever was most often seen as a product of birth (.56) and secondly as the result of habit or desire (.38). The causal factors coded as due to behavior or desire with the low achiever typically reflected "just world" notions, in that the student was believed to be trying now, ". . . but when he was little, he just fooled around and didn't care, and now he can't learn even if he wants to."

Finally, students' attributions concerning the cause of the fictional students' behavior were analyzed for interactive components. Included here were discussions of student behavior or ability in terms of teacher expectations or the difficulty of the work ("One day he flunked, so he knew he wasn't smart no more."), and explanations involving modeling ("He's just copying off the grownups."). Interactive causes were evoked the least frequently ($.38_{V1}$, $.23_{V2}$, $.17_{V3}$), but when they were mentioned it was usually in connection with the underachiever, and involved modeling effects (.29). Copying or modeling of others was also the primary interactive factor mentioned with regard to the hyperactive student (.17).

In general, then, students typically evoked internal causes for the fictional students' behavior, both in their spontaneous and in their more elaborated discussion. Within these internal factors, as within the external causes discussed, there were important distinctions in attributional understandings across the vignettes. All three hypothetical students were apt to be perceived as acting because of internal factors, but the nature of these internal factors differed markedly. Thus, the

underachiever was believed to more likely to act from desire, and the low achiever to be the product of factors present at birth. The hyperactive student's behavior was evenly attributed to birth and to habit or desire. Similar distinctive patterns were associated with the students' discussion of potential external factors underlying the hypothetical students' behavior.

Intentionality attributions (concerning the perceived purposefulness of the student's behavior) were assessed with two variables. First, the students' responses were analyzed for understanding of the fictional student's behavior as intentional vs. unintentional. Second, responses indicating that the behavior was perceived as intentional were further analyzed for the reasons underlying this behavior. Reasons included student self indulgence ("he just likes to do that"), self protection ("he's just afraid and he's nervous"), aggression toward others ("he don't like the teacher") and habit ("he's just used to it, that's why"). This analysis revealed that students' notions of intentionality were similar for the underachieving and hyperactive students. In both situations, students were slightly more apt to perceive ($.50_{V1}$, $.51_{V2}$) intentional rather than *unin*tentional behavior ($.44_{V1}$, $.42_{V2}$). In contrast, most students believed that the low achiever was acting unintentionally (.81).

In all three situations, the rationales that students provided for their intentionality attributions usually involved student self-indulgence ($.42_{V1}$, $.43_{V2}$, $.16_{V3}$). Thus, a student was believed to be acting purposefully because "he feels like it." The next most common reason given for a student's intentional behavior was aggression toward others. Although mentioned infrequently, aggression toward others ("he likes to bug the other kids.") was typically associated with the hyperactive student (.08).

Students did not agree about the purposefulness of the underachiever's or the hyperactive student's behavior then, although they usually saw the lower achiever as acting unintentionally. When students were believed to be acting intentionally, this was typically assumed to be due to a general egocentrism, in which the student acted to please him/herself without motivation toward or regard for others.

Controllability attributions (the extent to which the student is believed capable of self control and is thus accountable for his/her behavior) were assessed with several codes that first established whether in fact the student was perceived to be capable of control. If the student was believed to be able to change his/her behavior, and thus capable of control, things that would facilitate this process were examined in terms of their source: internal student control ("try harder"), external environment ("get a meaner teacher"), or a combination of an internal student control and an environment that allows an opportunity for change ("make nicer friends and watch how they do it and do just like them"). Change strategies were also catalogued as prescriptive ("do's") or proscriptive ("don't's") in form, and global or specific in scope. If change was <u>not</u> believed to be possible (the student was not seen as capable of control), the response was further analyzed for the source of uncontrollability: factors internal ("he's born that way forever") or external to the student ("his teacher just won't learn him.").

These analyses indicated that the overwhelming majority of students were optimistic that change was possible for all three fictional students ($.91_{V1}$, $.85_{V2}$, $.85_{V3}$). They were most apt to speak of internal controls to facilitate change, especially with the underachiever ($.75_{V1}$, $.66_{V2}$, $.67_{V3}$). External factors that enable the student to change, either through help

or coercion, were infrequent, but when they were postulated it was usually with the hyperactive student (.14), and often involved doctors, medication, or special foods. Finally, interactive processes involving the student and others working together to facilitate change were infrequent, but apt to be associated with the low achiever (.17). Included here were discussions of the teacher or parents helping the student who would "try his best and listen real hard."[4]

Change strategies mentioned by the students were typically prescriptive, focused on what the student was to do to promote desirable consequences, especially with the low achiever ($.57_{V1}$, $.42_{V2}$, $.79_{V3}$). Mere proscriptive strategies, restricted to what the student was <u>not</u> to do to avoid undesirable consequences, were infrequent, but combinations of both prescriptive and proscriptive strategies were well represented, especially with the underachiever and the hyperactive student ($.28_{V1}$, $.29_{V2}$, $.09_{V3}$).

The perceived scope of changes in student behavior differed across the fictional students. Changes occurring in the underachiever were equally likely to be seen as global or situation specific ($.48_{G}$, $.46_{S}$). The hyperactive student was more associated with specific behavior change ($.25_{G}$, $.63_{S}$), while the low achiever was typically believed to change in more generalized ways ($.56_{G}$, $.35_{S}$).

Students were quite optimistic about the fictional students' ability to change then, and cited internal self-controls as the impetus for this change. They saw change as prosocial and focused on appropriate ways of behaving, rather than merely tied to behavior restrictions. Students differed in their evaluations of the scope of the fictional

[4]When change was <u>not</u> seen as possible, in itself a rare event, it was usually believed the result of factors internal to the student ($.04_{V1}$, $.08_{V2}$, $.07_{V3}$).

students' behavior change, however, varying in their assessments of the underachiever, stressing situation specific changes in the hyperactive student's behavior, and expecting generalized changes in the low achiever. These differential assessments of the scope of behavior change appear to reflect differential understanding of the scope of the problem behavior itself.

Notions of stability of the fictional students' behavior -- both past and future -- were analyzed, as well as the perceived causes of behavioral continuation or cessation. Thus, if students believed that the fictional student's behavior would continue the next year, the reasons for this were coded as due to lack of desire to change or inability to change. Inability to change was further assessed for locus of the inability: within the student, within a nonsupportive environment, or due to an interaction of these factors. Beliefs that the student's behavior would be unstable in the future (that it would cease) were also assessed for mention of internal controls, external controls, or potential interactions of these factors.

These analyses indicate that in all three situations, students typically viewed the fictional students' behavior as unstable historically. That is, they did not believe that the students had always acted as they were portrayed in the vignette ($.59_{V1}$, $.57_{V2}$, $.55_{V3}$). Future stability predictions were more varied. For all three students, approximately one-third of the students: predicted continuation of the problem behavior (future stability) ($.35_{V1}$, $.36_{V2}$, $.31_{V3}$); predicted cessation of the problem behavior (future instability) ($.32_{V1}$, $.34_{V2}$, $.39_{V3}$); or made qualified predictions based on the student taking advantage of available opportunities for change ($.33_{V1}$, $.28_{V2}$, $.31_{V3}$).

Predictions of continued behavior were typically associated with perception of the problem student as having no desire to change ($.41_{V1}$, $.41_{V2}$, $.16_{V3}$). Although this lack of desire was also characteristic of students' understanding of the low achiever's continued behavior, other factors were associated as well. Thus, students also discussed stability of the low achiever's behavior in terms of internal factors (.10), factors external to the student (.10), and combinations of both (.09), all of which were believed beyond the low achiever's realm of control. Cessation of student behavior, or future instability, was typically seen to result from external environmental controls exerting pressure on the underachiever and the hyperactive students ($.26_{V1}$, $.34_{V2}$, $.19_{V3}$), and internal self control within the low achiever ($.19_{V1}$, $.13_{V2}$, $.28_{V3}$).

Although the majority of students felt that the fictional students could change (recall the controllability data) and that this ability to change emerged from factors internal to the student, their predictions about whether or not a student would change were much more pessimistic. Further, for the underachiever and the hyperactive student, any changes that were predicted to occur were expected to result primarily from external pressures, rather than self control. These students typically were seen as not changing because they did not want to change then, and not because they were unable to.

The final attributional dimension was globality (generalization of the students' problems). These attributions were catalogued as either classroom specific or as generalized. Also coded, if appropriate, was the nature of the behavioral generalization. Thus, generalized behaviors were documented as involving other places, activities, or persons. This analysis revealed that students typically perceived the behavior in each

situation as generalized rather than classroom specific ($.63_{V1}$, $.65_{V2}$, $.56_{V3}$), although surprisingly less so with the low achiever. Further, the problem behavior was believed to generalize to other places (movies, museums, gas stations, zoos) ($.69_{V1}$, $.68_{V2}$, $.51_{V3}$), but not to other activities (playing, working, shopping) ($.17_{V1}$, $.14_{V2}$, $.20_{V3}$) or persons ($.09_{V1}$, $.07_{V2}$, $.04_{V3}$).

In summary, attributional understandings of the fictional students varied across the vignettes, and verify that students perceived and interpreted each student uniquely. Students' discussion of the locus of causality of these students' behavior was especially informative. The further differentiation of the traditional internal and external locus of causality factors into types of internal, external and interactive factors was particularly useful in identifying the distinctive qualities of students' understanding of the students portrayed in the vignettes. Students' intentionality attributions were not cleanly sliced. Students as a group did not clearly differentiate the underachiever's intentional behavior in Vignette One from the unintentional behavior of the hyperactive student in Vignette Two. The majority of students did (correctly) perceive the low achiever's behavior as unintentional, however. Finally, students were generally optimistic about the fictional students' ability to change their behavior through self initiative, but were less inclined to predict that the students would actually do so, without external persuasion.

Grade Level Differences. Students' understanding of the locus of causality of the fictional students' behavior revealed the greatest number of main effects associated with grade level of the five attributional dimensions under scrutiny (locus of causality, intentionality,

controllability, stability, and globality). These differences were especially prominent in student discussion of the underachiever. Younger students were more likely than the upper level students to spontaneously describe external factors accounting for the underachiever's behavior ($-.50_L$, $.19_U$). As discussed previously, interactive attributions were not spontaneously evoked in general, but when they did occur, they were more likely to be mentioned by an upper level student ($.14_L$, $.36_U$). There were no differences in students' spontaneous causality attributions associated with the hyperactive student, but student responses to the low achiever revealed distinctions which parallel the differential perceptions of the underachiever. Thus, upper level students were also more apt to initially evoke internal factors when explaining the low achiever's behavior ($.43_L$, $.50_U$), while the lower level students were more likely to ascribe the low achiever's behavior to external factors ($.50_L$, $-.25_U$). In general, then, it appears that the younger students' spontaneous attributional understandings lean toward external factors while older students are more likely to immediately look to factors solely internal to the student, or to assess how these internal factors interact with the environment to explain student behavior.

Notions of the stability of the causes believed to underlie student behavior did not differ by grade level, with a single exception. When examining the causes of the hyperactive student's behavior, upper level students were more likely than the younger students to view these factors as short term, rather than more enduring ($.28_L$, $.46_U$).

Consistent differences in the type of external factor believed responsible for the fictional students' behavior were associated with grade level. With both the underachiever and the low achiever, older students

were less likely to evoke an external factor at all (V1: $.60_L$, $.40_U$; V3: $.57_L$, $.31_U$) when explaining these students' behavior. Younger students were not only more likely to discuss external factors per se, they were also more apt to view these external factors in the form of indirect control by others (such as, "the other kids holler in his ear too much") (V1: $.50_L$, $.29_U$; V2: $.38_L$, $.21_U$; V3: $.31_L$, $.10_U$). This type of reasoning appears to recognize student action at some level, but to immediately note the extenuating circumstance that excuses it. It is somewhat surprising that this is associated more with the younger students.

Attribution of internal factors per se does not differentiate the students, but the type of internal attribution does. Younger students were more likely to attribute the underachiever's and hyperactive student's behavior to internal factors that consisted of "being born that way" (V1: $.39_L$, $.11_U$; V2: $.57_L$, $.29_U$). In terms of their perceptions of the underachiever, these younger students' "product of birth" attributions significantly contrasted with the older students' understanding of the underachiever's behavior as due to his/her own behavior or desires ($-.35_L$, $.51_U$).

Interactive causal attributions (involving the development of a situation that allows the expression of an internally based behavior) were less frequent overall, but nonetheless more frequent in discussion of the underachieving and hyperactive students. In both cases upper level students were more likely to evoke interactive causal factors (V1: $.24_L$, $-.53_U$; V2: $.17_L$, $.31_U$), typically modeling effects (V1: $.18_L$, $.40_U$; V2: $.14_L$, $.19_U$).

Student attributions of the students' intentions varied more as a function of vignette than as a result of student grade level.

Distinctions that did occur typically included variables too infrequent to discuss. The primary difference that was significantly associated with grade level concerned younger students' greater likelihood to perceive the hyperactive student's behavior as intentional ($.57_L$, $.44_U$).

Controllability attributions distinguished the students more clearly, particularly with respect to the low achiever. Although in general, students felt that the low achiever was capable of change, older students were more likely to discuss this change possibility in a qualified way ($-.00_L$, $.11_U$). Further, older students were more apt to discuss an interaction between student internal controls (effort) and a helpful environment as a potential facilitator ($.07_L$, $.26_U$). Change strategies with the low achiever, in general, were prescriptive, especially with upper level students ($.69_L$, $.89_U$). Finally, discussion of change in the underachiever also varied. Older students were again more likely to discuss change in terms of both the student and his/her environment ($.07_L$, $.17_U$) and, although rarely discussed, when it was believed that the underachiever was unable to change, it was a younger student who felt that this inability to change was due to factors internal to the student ($.07_L$, $.00_U$).

The fourth attributional dimension explored in the interview, the stability of the fictional students' behavior, was associated with differences in grade level with respect to all three fictional students. When discussing the underachiever, younger students were more likely to interpret his/her behavior as having a stable past history ($.49_L$, $.17_U$). In contrast, upper level students typically perceived the underachiever's past behavior as unstable ($.46_L$, $.71_U$). Further differences occurred in the students' predictions of the underachiever's future behavior. Younger students, while more likely to believe that the underachiever has

always acted that way, nonetheless were more apt to predict that s/he will not continue to do so in the future ($.42_L$, $.21_U$). Older students were apt to discuss future behavior in qualified terms. Thus, they were more likely to allow that the student could change, but may or may not actually do so (V1: $.21_L$, $.44_U$).

There were no grade differences in students' notions of the historical stability of the hyperactive student's and the low achiever's behavior, but there were in student's predictions of their future stability. These differences parallel those associated with the underachiever. Thus, younger students were more apt to see the students as not continuing their behavior into the future (V2: $.44_L$, $.24_U$; V3: $.47_L$, $.31_U$), while older students were more apt to discuss future stability in qualified terms (V2: $.15_L$, $.40_U$; V3: $.18_L$, $.43_U$). Student discussion of the hyperactive student was further distinguished in that upper level students were more likely to discuss behavior continuation in the hyperactive student as due to interactive factors ($.00_L$, $.14_U$) and to attribute the student's behavior change to internal factors, i.e., self control ($.07_L$, $-.19_U$). In contrast, younger students were more apt to attribute the hyperactive student's behavior change to control from others ($.44_L$, $.23_U$).

Finally, the fifth attributional dimension, perceived globality or generalization of the students' inappropriate behavior, revealed only a single difference associated with grade level. When discussing the low achiever, older students were more likely to mention his/her behavior as generalizing to other activities ($.10_L$, $.31_U$), as opposed to only other places or persons. Thus, older students were apparently more apt to focus on the relationship between ability and activity.

In summary, the clearest grade level differences in students'

attributional knowledge occurred in the locus of causality attributions. Students differed not only in their spontaneous attributions, but also in their reflective attributions. These differences involved locus factors at both the global and the differentiated levels. Throughout their discussion of the fictional students in terms of the five attributional dimensions, older students were often more complex than their younger counterparts. Older students were also more apt to evoke interactive constructs and to qualify their predictions of future student behavior, thus recognizing the fluctuation and threat to predictability that results from behavior which is perceived to be internally or interactively controlled. In contrast, younger students were much more environmentally oriented in their explanations of behavior. They were also more apt to evoke historical stability in behavior, while at the same time being more optimistic that the student could, and would, change in the future. Equally interesting are differences which did not occur. Students, in general, did not differ in their intentionality attributions as a function of grade level, except for a moderately greater likelihood that younger students would attribute intentionality to the hyperactive student ($.57_L$, $.44_U$). It appears, then, that developmental levels are not as strong a factor in children's understanding of intention in actual experience as is often suspected.

Sex Differences. Sex differences in students' responses were primarily associated with their understanding of the underachiever, and occurred in all the attributional dimensions except the intentionality considerations. The differences associated with locus of causality revealed that older boys, especially in inductive classrooms, were likely

to discuss a greater variety of reasons for the underachiever's behavior. These reasons spanned internal and external considerations and were more apt than other students to include possible physical problems and victimization from others, as well as potential internal factors. Finally, in their perceptions of the underachiever, boys in inductive classrooms and girls in behavior modification classrooms discussed the most potential internal factors responsible for the behavior. Differences associated with students' discussion of the locus of causality of the low achiever's behavior continue this pattern. Girls in inductive classrooms discussed the most potential external causes of low achievement, followed by the boys in behavior modification classrooms.

Differences associated with students' understanding of the fictional students' control over their behavior were again typically interactive and concerned with the underachiever. All students were optimistic that the underachiever could change his/her behavior, especially the girls in inductive classrooms. Differences among students' notions of how the change could come about involved minor variations between prescriptive strategies alone ("concentrate more on his work") and combinations of prescriptive and proscriptive strategies ("don't fool around and try to do his work"). These differences were minor elaborations on the general point that all students were able to describe strategies available to the underachiever. The final distinction between students' discussion of change in the underachiever's behavior involved the scope of the changes made possible by these strategies. An interaction between student gender and grade level indicated that younger girls and older boys were the most apt to describe changes which were narrowly focused on specific behavior.

Differences in students' predictions of the future stability of behavior were associated with both the underachieving and the hyperactive vignettes. These distinctions again involved interactions with grade level and indicated that with the underachiever, students were, in general, less apt to think of any future behavior change as self determined. Within this, older girls and younger boys were more apt to predict future behavior change because of external pressures on the underachiever, while older boys and younger girls were more apt to figure the student would not change at all because s/he had to desire to. The differences between students, then, appears to be in whether or not other persons were expected to successfully coerce the underachiever to change, and did not involve differences in their understandings of the student's desire (or lack of desire) to change. Students' stability predictions with the hyperactive student essentially replicate these patterns, and further elaborate upon them so that the younger girls in behavior modification classrooms and the older boys in the inductive classrooms were most likely to predict future stability in the hyperactive student's behavior.

Finally, sex differences in students' discussions of the globality of the fictional students' behavior were confined to their descriptions of the low achiever. These differences were main effects, and were large and consistent. Boys were more likely than girls to understand the low achiever's behavior as generalized, and as occurring in other places beyond the classroom.

In general, then, sex differences did not systematically order the data, and were not as useful as the other status variables in understanding students' perceptions of the fictional students. The one finding

that did occur, however, was the boys' greater likelihood of recognizing the low achiever's behavior as part of a generalized problem and as extending to other places in the low achiever's experience. These data indicated that boys are more likely to view low achievement as a chronic and generalized problem. In contrast, girls apparently do not typically think of low achievement in school as an indication of the more pervasive lack of ability, and thus do not usually imagine the low achiever's difficulties extending beyond the classroom. This finding is intriguing and is consistent with the literature on sex differences in children's play. The more rule oriented team games typical of boys' play are probably more likely to underscore children's ability ranges. In contrast, girls' play, which typically involves fewer persons and more verbal and motor skill chains, would not underscore differences in intellectual ability to the same extent that boys' play would.

Teacher Socialization Style Differences. Differences in students' responses associated with their teacher's differing socialization styles are intriguing. Main effects were associated only with the underachiever and hyperactive student discussions. Interactions between teacher socialization style and student grade level were the only statistically significant effects associated with the low achiever, and also entered heavily into student perceptions of the underachiever. Discussion of these results will be organized separately for each vignette along the attributional dimensions.

Underachiever. Discussion of the locus of causality of the underachiever's behavior was associated with only one difference among students whose teacher's differed in socialization style. Younger students in

inductive classrooms cited the most potential external causes of the underachiever's behavior ($.56_{BL}$, $.92_{IL}$, $.47_{BU}$, $.44_{IU}$). Students' notions of the intentionality of the underachiever's behavior were associated more consistently with differences among the students. Students in inductive classrooms were more apt to (correctly) perceive the student's behavior as intentional ($.40_{B}$, $.60_{I}$) or as potentially intentional ($.00_{B}$, $.08_{I}$); while the students in behavior modification classrooms were more likely to (incorrectly) view the underachiever's behavior (making paper airplanes rather than doing his work) as unintentional. This difference was due to the older students in behavior modification classrooms ($.56_{BL}$, $.58_{IL}$, $.25_{BU}$, $.61_{IU}$). Consistent with their greater likelihood of discussing intentional behavior, students in inductive classrooms also were more apt to believe the underachiever acted from self indulgence ($.31_{B}$, $.53_{I}$) motives. Thus, these students discussed the underachiever as misbehaving because he wanted to.

Student discussion of the underachiever differed in the attributions of controllability, in puzzling ways. Interactions between grade level and teacher socialization style were evidenced in the discussion of both the type and the scope of change strategies available to the underachiever. Thus, while there were no differences among students in assessment of the underachiever's ability to change, students did differ in describing how this change was to occur. Older students in inductive classrooms never discussed only proscriptive change strategies for the underachiever, while their peers in behavior modification classrooms did so the most frequently of the students ($.06_{BL}$, $.08_{IL}$, $.19_{BU}$, $.00_{IU}$). Further, student discussion of the scope of these changes revealed that younger students in inductive classrooms were more apt to discuss the possibility

of change in the underachiever in specific ("only make airplanes at home") as opposed to global terms ($.22_{BL}$, $.64_{IL}$, $.53_{BU}$, $.44_{IU}$), while the younger students in behavior modification classrooms were distinctive for their reporting of global change strategies ("be good") ($.61_{BL}$, $.31_{IL}$, $.47_{BU}$, $.50_{IU}$).

Interactions between student grade level and teacher socialization style also played a role in students' notions of the stability -- both past and future -- of the underachiever's behavior. Younger students, especially those in behavior modification classrooms, were more likely to see the underachiever's behavior in stable historical patterns. Thus, these students were the most likely to report that the underachiever had "always acted this way" ($.61_{BL}$, $.36_{IL}$, $.14_{Bu}$, $.19_{IU}$). In contrast, the older students in behavior modification classrooms were the most likely to discuss the underachiever's behavior as unstable in the past, followed by the students of both grade levels in inductive classrooms ($.33_{BL}$, $.58_{IL}$, $.83_{BU}$, $.58_{IU}$). Finally, there were some, although infrequent, perceptions of the underachiever's behavior as having a sporadic history. This type of reasoning was typically of the form "he acts that way when he don't like what we're studying" or "he acts that way only at the end of the year" and was likely to be mentioned by students in inductive classrooms ($.00_{B}$, $.10_{I}$). Students' notions of the future stability of the underachiever's behavior varied in less straightforward ways in that younger students in inductive classrooms and older students in behavior modification classrooms were the least apt to predict that the underachiever would continue to act as s/he does in the future.

A final distinction between students concerned their discussion of the globality of the underachiever's behavior. Older students in

inductive classrooms were the most likely to discuss the underachiever's behavior as generalizing to other activities. In contrast, the older students in the behavior modification classrooms were the least apt to think so ($.19_{BL}$, $.14_{IL}$, $.08_{BU}$, $.28_{IU}$). These students apparently thought of the underachiever's behavior primarily in terms of place, rather than activity.

Hyperactivity. Student discussion of the locus of causality of the hyperactive student's behavior indicated that students in behavior modification classrooms were more likely than their peers in inductive classrooms to spontaneously evoke external factors as causes of the student's behavior ($.33_{B}$, $.19_{I}$). Further distinctions in discussion of locus of causality included evoking specific environmental assault as an external factor responsible for the hyperactive student's behavior (i.e., the student was "hit by a car" or "ate something"). Although infrequent overall, this type of external factor was most characteristic of the older students in behavior modification classrooms, and never associated with the older students in inductive classrooms ($.06_{BL}$, $.11_{IL}$, $.14_{BU}$, $.00_{IU}$). The final category reflecting differences in perceptions of students whose teachers differ in socialization style concerned the type of internal factors believed underlying student behavior. Students in inductive classrooms were more apt to perceive the hyperactive student's behavior as an internal function of his own behavior, habits, and desires ($.32_{B}$, $.56_{I}$), rather than as due to birth or physiological factors.

Student perceptions of the intentionality of the hyperactive student's behavior that differed as a function of teacher socialization style parallel the discussion of the underachiever. When reflecting upon the hyperactive student's behavior, students in inductive classrooms were again

more likely (and this time incorrectly) to evoke intentional behavior on the part of the hyperactive student. Thus, students' in inductive classrooms perceptions of locus of causality of the hyperactive students' behavior were further elaborated in discussion of intentional behavior. The hyperactive student was seen as behaving intentionally ($.41_B$, $.61_I$). This was believed to be due to student self indulgence ($.31_B$,$.54_I$). In contrast, students whose teachers use behavior modification systems were more likely to perceive the hyperactive student's behavior as unintentional ($.54_B$, $.31_I$).

Other distinctions concerned the students' discussion of controllability. Students in inductive classrooms believed more than their peers in behavior modification classrooms that change in the hyperactive student could be facilitated through a combination of efforts involving both the student and a supportive environment ($.04_B$, $.17_I$), that these changes would be global in nature ($.17_B$, $.32_I$), and that any predictions of future behavior would have to be qualified ($.18_B$, $.38_I$).

Low achievement. Differences in students' attributional understanding of the low achiever primarily involved interactions between the students' grade level and their teacher's socialization style. Most of these differences were associated with the locus of causality attributions, and involved students (in both grade levels) in the behavior modification classrooms. The younger students in behavior modification classrooms were least likely to discuss the causal factors of the low achiever as enduring and long term ($.36_{BL}$, $.56_{IL}$, $.69_{BU}$, $.50_{IU}$), and the older students in behavior modification classrooms were the most likely to do so. These younger students were most apt to focus on short term causes of behavior ($.31_{BL}$, $.22_{IL}$, $.06_{BU}$, $.28_{IU}$), while their older

counterparts were the least apt to do so. Other distinctions involving these students included the citing of external factors underlying the low achiever's behavior. Younger students in behavior modification classrooms were the most likely to discuss the low achiever as indirectly controlled by others ($.42_{BL}$, $.19_{IL}$, $.06_{BU}$, $.14_{IU}$), and the most likely not to discuss internal factors at all when attributing the origins of the low achiever's behavior ($.36_{BL}$, $.14_{IL}$, $.14_{BU}$, $.19_{IU}$).

Differences in discussion of intentionality were also confined to the students in behavior modification classrooms. Younger students in these classrooms were most apt of all students to view the low achiever's behavior as intentional ($.31_{BL}$, $.11_{IL}$, $.03_{BU}$, $.17_{IU}$), and least apt to perceive this behavior as unintentional ($.67_{BL}$, $.88_{IL}$, $.92_{BU}$, $.78_{IU}$). Consistent with this, younger students in behavior modification classrooms were the most apt to discuss the low achiever's not working as due to personal indulgence, that is, he just "didn't feel like doing it" ($.31_{BL}$, $.08_{IL}$, $.06_{BU}$, $.19_{IU}$). (Throughout these trends, the ranking of the older students in inductive classrooms is interesting. These students were closest to the younger students in behavior modification classrooms in the frequency of their intentional attributions. Recall that inductive students, in general, were distinctive in their misattribution of the hyperactive student's intentions.)

The controllability dimension revealed additional differences within students in behavior modification classrooms. Older students in these rooms were least apt to believe the low achiever could change through internal factors alone (i.e., simply "try hard") ($.78_{BL}$, $.67_{IL}$, $.50_{BU}$, $.75_{IU}$). Further, older students in behavior modification classrooms were more likely than the other students to discuss interactions between the

student's effort and a helpful environment to facilitate change ($.00_{BL}$, $.14_{IL}$, $.33_{BU}$, $.19_{IU}$). Younger students in behavior modification classrooms never discussed this possibility.

The final distinction between students associated with teacher socialization style was a main effect associated with prediction of future stability of the low achiever's behavior. Although discussed infrequently, students in inductive classrooms were more likely than the students in behavior modification classrooms to maintain that the low achiever would continue to act "that way next year" because of factors internal to him/herself and factors located in the environment. When they occurred, these statements consisted of beliefs that the student was not smart in the first place and that the work would be even harder the next year.

In summary, it appears that the inductive socialization style (as opposed to the behavior modification approach) does in fact teach students to attend more to the intentional aspects of others' behavior, so that they sometimes inappropriately attribute behavior to intentions that are not present. These intentionality attributions form the basis for continued inappropriate interpretation of that behavior. In contrast, it seems evident that behavior modification techniques do not facilitate the analysis of others' behavior, so that students exposed to these programs may not perceive even blatant misbehavior as intentional. This lack of attribution is not always wrong, however, as the discussion of the hyperactive student underscored.

Student Adjustment Level Differences. Students' perception of the hypothetical students varied as a function of students' level of

classroom adjustment, especially in terms of interactions with teacher socialization style and student grade level. In four instances, three way interactions occurred without associated main effects, in variables of low frequency. These were assumed to represent random events, and were deleted from further discussion.

In general, the difference in student perceptions involving student level of classroom adjustment were confined to the underachieving and hyperactive student vignettes and were most interesting and interpretable in students' attributions of locus of causality and intentionality. Only a single variable associated with the low achiever vignette was related to student level of adjustment. This involved the expectation of the low achiever's ability to change through external (vs. internal) controls. Infrequent overall (.08), when factors external to the low achiever were discussed, they were most likely to be evoked by younger students nominated for their hyperactivity or shared problem status in the classroom ($.25_{H}$, $.25_{SH}$).

The primary foci of this discussion, however, are the locus of causality and intentionality dimensions concerning the fictional underachieving and hyperactive students. Differences associated with nomination type in students' spontaneous attribution of locus of causality occurred only in their discussion of the hyperactive student. Students in behavior modification classrooms were more varied, but, in general, were less apt than the students in inductive classrooms to initially evoke internal causal factors underlying the student's behavior. This trend was especially true for the hyperactive nominees, who were the least likely of all the students to name internal causation for the portrayed hyperactivity (.13). Student owned problem nominees differed by teacher socialization

style. Students presenting student owned problems in behavior modification classrooms were the most apt to initially evoke internal causation (.88), while their counterparts in the inductive classrooms were the least apt to do so (.38). Spontaneous discussions of external factors parallel these trends. Students in behavior modification classrooms were more likely overall to evoke external causation, and this was especially true with the hyperactive nominees (.75). In contrast, the low achieving student nominees in the inductive classrooms were most apt of the students in inductive classrooms to evoke external causes first in interpreting the hyperactive behavior (.50). This was, however, still less than the hyperactive students in behavior modification classrooms ($.75_{H}$, $.50_{LA}$).

In general, then, the behavior modification students were more likely to initially evoke external causality for the hyperactive student's behavior. Hyperactive students in these classrooms are especially notable in this respect. These spontaneous responses of the hyperactive students are consistent with their reflective discussions of the locus of causality. Of all students, the hyperactive nominees were the most likely to discuss external factors responsible for the fictional hyperactive student's behavior (.75), while the teacher-owned problem nominees (consisting of hostile aggressive and defiant students) were the least likely to do so (.19). Further, the hyperactive nominees were most apt to describe these external factors as indirect control from others ("his friends bother him all the time") ($.63_{H}$), while the teacher-owned and student-owned problem nominees were the least apt to mention this as a potential cause ($.19_{T-O}$, $.19_{S-O}$). Hyperactive student nominees also discuss the most types of external causation as well (.88) while the teacher

owned problem nominees discuss these the least ($.19_T$).

These patterns undergo interesting revisions when the underachiever's behavior is under scrutiny. Older students, in general, were less apt to discuss potential external factors causing the underachiever's behavior. Within this, hyperactive students in the lower level behavior modification classes are distinctive, this time for their lack of discussion of external factors causing behavior (.00). In contrast, nonproblem students, teacher owned problem nominees, and underachiever nominees, in general, discuss external causality the most frequently.

Overall, then, external factors underlying behavior were more often evoked in students' discussion of the hyperactive student (.60) than they were in their discussions of the underachiever (.50). Within this, hyperactive nominees were likely to evoke external factors as the cause of hyperactivity, particularly in the form of indirect control from others. This "yeah, but . . ." type of reasoning also appears to characterize their thinking about other students, with a notable exception, however. Younger hyperactive nominees in behavior modification classrooms, who always externalized the hyperactive student's behavior, always looked to factors internal to the underachieving student to explain his/her behavior. A similar phenomenon is associated with the teacher owned problem nominees who attributed hyperactivity to factors internal to the student, but evoked external causation when interpreting the underachiever's behavior.

Differences associated with student level of adjustment that are also of interest are those associated with student discussion of intentionality in the hyperactive student's behavior. As discussed previously, the only differences in student intentionality attributions that were

associated with student grade level occurred with the hyperactive student. These differences were exaggerated by the teacher owned problem nominees in the younger grades. All of these students viewed the fictional hyperactive student's behavior as intentional. This is consistent with the teacher owned problem nominees being the least likely to evoke external causation for the fictional hyperactive student's behavior in the first place. Surprisingly, hyperactive students were not distinctive in their intentionality attributions. The students who were least apt to discuss intentionality in both grade levels were the low achieving and underachieving students (L: $.38_{LA}$, $.50_{UA}$; U: $.25_{LA}$, $.17_{UA}$). A further distinction relevant to this discussion is the attribution of the hyperactive student's intentional behavior as a function of self indulgence ("he just feels like doing it, that's all"). Younger students overall, including those nominated for presenting teacher owned problems, were likely to attribute the hyperactive student's behavior to self indulgence (.46). In addition, although this trend did not reach statistical significance, teacher owned problem nominees, in both grade levels and teacher socialization styles, attributed this behavior to the hyperactive student's aggression toward others (.25), more than the other students.

In summary, what is interesting in students' discussion of intentionality is the teacher owned problem nominees' lack of discussion of external causes of hyperactive behavior co-occurring with their attributions of intentionality in this student's behavior, and the consistent discussion of aggression toward others as the reason for this behavior. These students, then, when examining ambiguous behavior, appear to be the most likely to attribute aggression. Recall that the teacher owned problem category consists of those students nominated by their teachers as being

either hostile aggressive or defiant in the classroom. This projection of hostility onto the hyperactive student is consistent with the recent work reported by Dodge (1980). Dodge found that children identified as aggressive attributed intentional and harmful motives to others when the nonaggressive children did not (in ambiguous situations; there were no differences when motivation was obvious). A similar trend is evidenced in the teacher owned nominees' understanding of the hyperactive student's behavior.

Student responses in the remaining three dimensions -- controllability, stability, and globality -- were associated with differences that do not appear to form consistent and interpretable patterns. These also frequently involved interactions between nomination type and teacher socialization style on low frequency variables, and are primarily associated with the underachiever vignette. For instance, the discussion of interactive factors aiding change in the underachiever's behavior was infrequent overall (.12), and never mentioned by the low ability nominees in either grade level. A reversal occurred between grade levels with the underachiever nominees and the nonproblem students, however. Where the younger underachieving and nonproblem student nominees never discuss interactive change efforts, their older counterparts do. This pattern of findings, involving reversals between teacher socialization style rather than grade level, and usually involving hyperactive, low achiever, and student owned problem nominees, typifies the remaining data on the prescriptive-proscriptive change strategies discussed as part of the controllability dimension. Reversals between teacher socialization style and underachiever and teacher owned problem nominees occur in discussion of the stability dimension, both in students' past and future stability

expectations.

Finally, globality discussions with the underachiever are characterized by unusual fluctuation in the underachieving students' responses, while the hyperactive nominees were consistently the most apt to discuss generalization to other places ($.100_{H}$). Generalization of the fictional hyperactive student's behavior to activities was discussed infrequently (.13), but was apt to be predicted by the student owned problem nominees, in both grade levels of behavior modification classrooms and in the upper level inductive classrooms ($.50_{BL}$, $.00_{IL}$, $.50_{BU}$, $.25_{IU}$), but was not discussed at all by the younger student owned nominees in the inductive classrooms. Discussion of the hyperactive student's behavior generalizing to other persons seldom occurred (.07), but when it did it was most likely discussed by student owned problem nominees or those selected for presenting shared problems in the classroom ($.19_{S}$, $.19_{SH}$). In contrast, teacher owned problem nominees and nonproblem students never discussed this possibility.

In summary, the data that emerge from the students' level of classroom adjustment that appear to be the most informative concern first the lack of differences associated with student perception of the low achiever, and second, the pattern of differences associated with the locus of causality and intentionality dimensions of the underachiever, and especially, the hyperactive vignette. Notable in these attributions were the hyperactive nominees' discussion of external causality for the fictional hyperactive student's behavior, an external orientation that did not hold as strongly in their understanding of the underachiever, and did not hold at all for the younger hyperactive nominees in behavior modification classrooms. Another interesting finding concerns the teacher owned

problem nominees' attribution of the fictional hyperactive student's behavior to internal factors. These students also typically believed the hyperactive student's behavior was intentional. Especially intriguing was the finding that these students, although also discussing self indulgence as underlying the hyperactive student's behavior, were also more apt than any of the other nominees included in the study to assume that this intentionality stemmed from aggression toward others.

Discussion. In summary, students' perceptions and attributional inferences about the fictional students were clearly ordered by the vignettes themselves. Students' interpretation of each of the fictional student's behavior was distinct. These differences were apparent throughout the attributional dimensions, especially in their locus of causality attributions, both in the types of internal and external factors attributed to the students, and in the stability of these causal factors. Students' perceptions of the intentionality of the student's behavior differentiated the underachiever and the hyperactive student from the low achiever. Their beliefs about the scope of potential behavior change differed across all three vignettes, as did their predictions about the probability of such change actually taking place. Students' positions along the attributional dimensions differed by vignette, then, and as such, substantiate the usefulness of these dimensions in children's interpretation of other's behavior.

Grade level differences systematically ordered the students' attributional interpretations of the fictional behavior on four of the five attributional dimensions. These differences were especially apparent in the locus of causality considerations where older students differed

substantially from younger students both in spontaneous and reflective attributions (in which the younger students were characterized as more environmentally oriented), and at the global and more differentiated levels. In general, older students' responses differed throughout the dimensions in complexity and in qualifications. Thus, younger students' ascriptions were typically of an "either - or" form, while the older students were more apt to evidence dialectical thinking in the form of perceived interactions between the self and the environment. Also, in apparent recognition of the unpredictability of behavior that is to some extent, if not totally internally controlled, older students were often qualified in their predictions of future behavior for the fictional students.

Intentionality was the only dimension not associated with these grade level differences. It appears that the attempts to construct stimulus materials which were ecologically sound (i.e., based in the child's life experiences) and the efforts to reduce cognitive strain through systematic memory prompts in the interview, were successful. Thus, it appears that students' "active" rather than "theoretical" reasoning was being assessed in the interview, and, as such, is perhaps closer to approximating that which is spontaneously used in real-life situations.

In general, however, grade level was a powerful factor ordering the data, and along with the vignettes themselves, accounts for much of the variation in students' attributional interpretations of behavior.

Differences in students' perceptions of the fictional student which were associated with teacher socialization style appear to underscore the differences between the construction of thought (related to development) and the socialization of thought. Thus, students' attributional

inferences, when examined for relationships with teacher socialization style, indicated that students' notions of intentionality, while not associated with developmental differences were clearly and consistently related to differences in teacher socialization style. Students in behavior modification classrooms were noteworthy for the absence of intentionality considerations in their understandings of others' behavior. In contrast, students in inductive classrooms did attend to the intentional aspects of behavior. What was also clear, however, was that many of these students overgeneralized this analysis of others' behavior so that (as evidenced with the hyperactive vignette) they also were apt to attribute behavior to intentions which did not exist. It seems that while behavior modification techniques do not encourage such analytic skills in students, inductive socialization may "overteach" the analysis of others' behavior so that all behavior is believed determined.

Finally, the younger students' in behavior modification classrooms reappearance as the most uninsightful of the students in their interpretations of peer behavior (recall that these students were also distinctive in their undifferentiated interpretations of their teacher's behavior) indicates the potential power of the socialization process in promoting children's social cognition. The difference between these students and their peers in lower level inductive classrooms is a compelling one. The effects of socialization, then, appear to be most intense among the younger children.

Student level of adjustment considerations were less powerful in ordering the data. In general, student nomination type differences were restricted by vignette (to the hyperactive and underachieving vignettes), by attributional dimension (locus of causality and intentionality) and by

student level of adjustment (hyperactive and teacher owned problem nominees). Three noteworthy trends emerged. First was the consistent external attribution of locus of causality for hyperactive behavior by the hyperactive nominees themselves. The second finding of interest involved the teacher-owned nominees' pattern of inferences about hyperactivity. These students discussed internal causal factors underlying the hyperactive student's behavior, and believed that the behavior was intentional. Although infrequent, these students were the most apt of any of their peers to discuss aggression toward others as a potential reason for this behavior. This projection of hostility onto the hyperactive student by students who are aggressive themselves is consistent with the literature concerning aggressive children's interpretations of ambiguous behavior. The third finding of interest was the total absence of differences in students' attributions with the low achiever. There were no other consistent and interpretable patterns in students' attributional knowledge that were associated with student level of adjustment. It appears, then, that these categories are only useful organizers of the data when the student nominee him/herself identifies with the student in the vignette and feels a need to defend that student (as the hyperactive nominees apparently did) or an attributional dimension is under scrutiny which reveals a unique and general predisposition in a specific type of student's interpretation of others' behavior (as occurred with the teacher owned problem nominees). Neither of these conditions were apparently relevant for the remaining students. Thus, it is likely that attributional knowledge of peer (vs. adult) behavior is most revealing of students' vulnerabilities with themselves or with one another, while student interpretations of teacher behavior highlights those students

who are vulnerable with respect to their teacher.

Finally, sex differences, like the student level of adjustment variable, were of minimal usefulness in ordering the data. The finding of interest that did emerge, however, was the boys' better understanding of the low achiever's behavior as part of a generalized and chronic ability problem. Perhaps these differences reflect boys' and girls' differing social worlds, where boys' play includes both more children (thus increasing the likelihood of comparison among these children) and more rule-oriented, decision making team games (thus underscoring differences in intellectual ability). In contrast, girls' play is usually with only one or two others and typically involves clapping and rhythm games that do not require more than verbal and motor chains. Girls, then, are typically not in situations which would encourage understanding of ability differences as generalized phenomena.

Student Reactions to Hypothetical Student. (Tables 46-59)

General trends. Students' reported reactions to the fictional students (both their discussion of their own reactions and their expectations for their classmates') are similar to adults' responses in that variation occurs across the levels of problem ownership. Interestingly, the responses to the hyperactive student indicate the greatest negativism. This is likely due to the interference the hyperactive student presents to his/her classmates' need fulfillment (that is, to their successfully meeting student role expectations for work completion). Thus, the hyperactive student makes it difficult for others to concentrate, and thus takes on the qualities of a teacher-owned problem for students. In contrast, the underachiever presents a problem for his/her classmates only indirectly, in that s/he can affect the classroom tone or atmosphere by upsetting the teacher and thus causing teacher anger, irritation or punishment, which indirectly affects the entire class. In this sense, from the students' perspective, the underachiever presents a shared problem situation between the class and the teacher.

Thus, student responses indicate that the hyperactive student (who directly thwarts student progress) receives both the greatest amount of negative affect ($.45_{V1}$, $.68_{V2}$, $.11_{V3}$), and the most intense student affect (2.48_{V1}, 2.66_{V2}, 2.44_{V3}) of the three fictional students. Even so, students typically report acting on behalf of the hyperactive student (i.e., acting without involving the teacher or threatening the student) ($.43_{V1}$, $.49_{V2}$, $.49_{V3}$), if they act at all ($.61_{V1}$, $.66_{V2}$, $.62_{V3}$). If students do report acting counter to the student's interests (by intimidating the student or involving the teacher, for example), however, it is likely to be with the hyperactive student ($.16_{V1}$, $.22_{V2}$, $.04_{V3}$). These reported student

strategies were also judged to be the least effective of the coping behaviors reported (1.57_{V1}, 1.62_{V2}, 1.25_{V3}), and were especially likely to be motivated by self interest ($.50_{V1}$, $.68_{V2}$, $.14_{V3}$).

Students' reported responses to the low achiever form the opposite pattern. Although the intensity of reported affect was not judged to be as extreme as that expressed with the hyperactive student (2.48_{V1}, 2.66_{V2}, 2.44_{V3}), students typically reported positive affect ($.16_{V1}$, $.11_{V2}$, $.59_{V3}$) and sympathy ($.14_{V1}$, $.11_{V2}$, $.57_{V3}$) underlying their responses to the low achiever. Like their dealings with the other students, students typically reported themselves as acting on behalf of the low achiever. These student behaviors toward the low achiever were typically altruistic rather than self serving ($.17_{V1}$, $.11_{V2}$, $.56_{V3}$) and were judged to be the most effective of the reported responses to the fictional students (1.57_{V1}, 1.62_{V2}, 1.25_{V3}).

Student responses to the underachiever form a third profile, similar to that associated with the hyperactive student, only lacking its extremes and intensity. Thus, students also reported primarily negative affect ($.45_{V1}$, $.68_{V2}$, $.11_{V3}$), stemming primarily from self-interest concerns ($.50_{V1}$, $.68_{V2}$, $.14_{V3}$). As well as being less pervasive, these negative affect reports were also judged as less intense with the underachiever (2.48_{V1}, 2.66_{V2}, 2.44_{V3}). Students again reported acting in the underachiever's behalf ($.43_{V1}$, $.49_{V2}$, $.49_{V3}$), or not responding at all ($.39_{V1}$, $.34_{V2}$, $.38_{V3}$), and like their dealings with the hyperactive student, they were likely to respond out of self interest ($.59_{V1}$, $.68_{V2}$, $.21_{V3}$). Finally, these student responses to the underachiever were also judged to be essentially ineffective (1.57_{V1}, 1.62_{V2}, 1.25_{V3}).

Student predictions of classmate behavior parallel the trends in

their self reports. Classmates typically were expected to act in the students' behalf ($.43_{V1}$, $.44_{V2}$, $.45_{V3}$), if at all ($.64_{V1}$, $.69_{V2}$, $.60_{V3}$). The hyperactive student was again the most likely to be the target of classmates' behavior that was counter to his/her interests, while the low achiever was least apt to be the victim of such behavior ($.19_{V1}$, $.25_{V2}$, $.11_{V3}$). Interestingly, classmates' projected responses to the students were typically assessed as less effective than the students' self reports (1.71_{V1}, 1.75_{V2}, 1.53_{V3}). This was especially true for the responses to the low achiever. The motivations assumed to underlie the class's behavior parallel the students' self reports. The class as a whole was expected to respond to the underachiever, and especially the hyperactive student, out of self interest concerns ($.55_{V1}$, $.66_{V2}$, $.21_{V3}$), and responses to the low achiever typically were believed to be altruistically motivated ($.15_{V1}$, $.05_{V2}$, $.47_{V3}$).

Students' self reported responses and those projected onto their classmates were assessed for degree of congruence. These ratings, on a three-point scale from "essentially the same" through "conflicting," indicated that students typically reported strategies for themselves and their peers in response to the underachieving and hyperactive students that were different, but not conflicting. They were more apt to report essentially the same strategies for dealing with the low achiever (1.68_{V1}, 1.60_{V2}, 1.38_{V3}). Finally, students assessed the three fictional students' liking for school similarly: neutral to negative (3.61_{V1}, 3.56_{V2}, 3.66_{V3} where 1 = very positive and 5 = very negative).

The three vignettes, then, are associated with distinct profiles of student and class attitudes and behavior. Students' responses to the hyperactive student, who directly interferes with their own need fulfillment,

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are the most negative and the most vested in self interest. Student responses to the underachiever parallel these trends, but are less extreme in both tone and behavior. Finally, student attitude and behavior toward the low achiever are qualitatively different from their reactions to the other two students. Student responses to the low achiever, both those self reported and those predicted for the class, indicate positive attitudes and sympathetic behavior that is altruistically motivated, concerned with helping the low achiever rather than benefitting themselves. These three profiles indicate differential attitudes and behavior toward others that parallel the problem ownership predictions for adults. Thus, students, like adults, are likely to react negatively and out of concern for themselves when their own needs are threatened, either indirectly (by the underachiever) or especially, directly (by the hyperactive student). Finally, students' attitudes and behavior are likely to be sympathetic and altruistic in those situations where another individual's problem does not directly affect them, and for which the person is not believed to be directly responsible.

Grade Level Differences. Students' attitudes toward the fictional students were obtained from the question, "How do you feel when _____ acts this way?" Differences in students' reported attitudes toward the fictional students that were associated with student grade level varied across the vignettes. As discussed previously, students' reported affective responses toward the underachiever were typically negative. Reports of neutral affective responses ("I don't feel nothing. . . I don't care.") were infrequent (.10 overall), but when these did occur they were likely to be from an older student ($.04_L$, $.15_U$). Similarly, neutral

affect was also an infrequently reported reaction to the hyperactive and low achieving students, but again, was associated primarily with older students (V2: $.00_L$, $.07_U$; V3: $.04_L$, $.14_U$). Students' reports of positive feelings toward the fictional students were not so consistently associated with grade level. Although typically reporting negative reactions, younger students were nonetheless more likely than older students to report positive feelings toward the hyperactive student ($.15_L$, $.06_U$). In contrast, while positive feelings were the most typical overall, the upper grade level students did report more positive feelings toward the low achiever ($.50_L$, $.68_U$) than the younger students. Reports of negative affect continue these trends. Younger students reported much more negative (as opposed to neutral) affect toward the low achiever than the older students ($.17_L$, $.04_U$).

The reported sources of these affective reactions complete the portrayal of affective reactions to the fictional students. Upper level students' responses to the underachiever were more likely to stem from self interest ("I feel bad because he'll get the teacher mad at all of us.") ($.40_L$, $.58_U$). In contrast, these self interest concerns were more likely to be evoked by younger students in their affective responses to the low achiever ("I feel bad 'cause he gets all the teacher's help.") ($.21_L$, $.07_U$), while the older students responded more from sympathy for this student ("I feel bad because he's trying hard.") ($.47_L$, $.66_U$).

Students' reports of what they would <u>do</u> should they see a student acting that way in their classroom were analyzed for presence and type of response, motivation for responding, and effectiveness. Student bystander behavior varied by grade level in the following ways. Younger students were more likely to act counter to the underachiever's interests

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("I'd tell the teacher on him.") ($.24_L$, $.07_U$), and to not respond to the low achiever at all ($.47_L$, $.28_U$). Differences in effectiveness of reported strategies with the fictional students that were associated with grade level only occurred in reported reactions to the underachiever. In their responses to this vignette, older students were more likely to discuss strategies that were judged to be effective with the underachiever ("I'd tell him that if the teacher saw him she'd get mad and he'd miss recess so he'd stop and be careful.") (1.82_L, 1.30_U, where 1 = effective). Finally, older students' strategies with the underachiever and the low achiever were more likely than younger students' reactions to be altruistically motivated (V1: $.11_L$, $.22_U$; V3: $.44_L$, $.68_U$), although such motivation was nonetheless infrequent with the underachiever overall. In contrast, the older students' strategies with the hyperactive student were more apt to reflect concern for their own welfare ("I'd make him stop it cause I can't get my work done,") ($.58_L$, $.77_U$).

Students' predictions of how their classmates would respond that differed as a function of grade level were generally compatible with their self reports. Thus, older students were more apt to predict that their classmates would act in the underachiever's behalf ($.33_L$, $.51_U$). Older students were also more likely to report their classmates initiating actions with the hyperactive student ($.25_L$, $.63_U$), while younger students were more likely to report that the class would "do nothing" ($.44_L$, $.18_U$). These predicted class reactions of upper level students to the hyperactive student were also more likely to based on self concerns rather than altruistically motivated ($.55_L$, $.77_U$).

Students' responses to the final interview question, "What do you think school is like for _____?" were only associated with grade level

differences with the underachiever. In their discussion, younger students were likely to perceive the underachiever's school experience more negatively than the older students (3.74_L, 3.49_U), although both groups thought the underachiever's attitude was generally negative.

In summary, then, the older students seem to be more emotionally detached but at the same time to have more of a sense of personal efficacy and identification with their classmates than the younger students do. Thus, older students, in general, are more apt to take action with their classmates. It is also clear, however, that older students have little patience for the hyperactive student. Their responses to this student were typically motivated by self concern and negative affect. This irritation is less evident in their dealing with the underachiever and not present at all in their behavior with the low achiever. In contrast, younger students appear relatively unbothered by hyperactivity, but it is the younger students who are likely to report anger and frustration with the low achiever. In general, nonaction or action counter to the student's interests is also more likely to occur among younger students. It seems that the younger students typically have an authority-maintaining attitude in that they themselves do not initiate in the classroom. Younger students instead are likely to rely on their teacher to deal with inappropriate behavior and apparently are willing to involve the teacher even when it is counter to another student's interests. The younger students, then, do not appear to have developed as strong a sense of personal efficacy or of group membership as the older students, and instead identify more with their teacher.

Sex differences. Sex differences in students' reactions to the fictional students did not occur frequently or systematically. Differences

associated with reported reactions to the underachiever and hyperactive students involved both response strategies and the motivation underlying them. Boys in behavior modification classrooms and girls in inductive classrooms were more likely to respond to the underachiever, and boys in general, especially the boys in behavior modification rooms, typically did so out of self concern. These students (boys in behavior modification classes and girls in inductive classrooms) were also most apt to predict classmate reactions similar to their own. Responses to the fictional hyperactive student that were associated with sex differences were the reverse of the reactions to the underachiever. Girls in behavior modification classrooms and boys in inductive classrooms were more likely to report that their classmates would respond to the hyperactive student. In addition, girls in behavior modification classrooms were noteworthy for their identical self reported and classmate predicted responses.

Finally, sex differences associated with student responses to the low achiever were more sensible and confined to affective reactions. Girls reported more positive and intense feelings for the low achiever than the boys. In general, then, student gender does not appear to be as informative a way to organize student reactions to the fictional students as the other student status variables were.

Teacher Socialization Style Differences. Differences in students' reported affective responses to the fictional students associated with teacher socialization style only occurred with the underachiever and the hyperactive student, and these typically involved interactions with student grade level. Thus, negative affect toward the hyperactive student

was most likely to be reported by older students in behavior modification classrooms, and least characteristic of the younger students in behavior modification classrooms ($.53_{BL}$, $.64_{IL}$, $.91_{BU}$, $.63_{IU}$). Concerns underlying these attitudes toward the hyperactive student parallel these trends. Older students in behavior modification classrooms were most likely to report self interest underlying their attitudes toward the hyperactive student, while younger students in behavior modification classrooms were least apt to report such self concern ($.53_{BL}$, $.61_{IL}$, $.94_{BU}$, $.66_{IU}$). Finally, students' in behavior modification classrooms reported affective responses to the hyperactive student were judged to be more intense than were the affective reactions of the students in inductive classrooms (2.70_{B}, 2.62_{I}). Within this, older students in inductive classrooms were the least concerned (2.63_{BL}, 2.75_{IL}, 2.76_{BU}, 2.50_{IU}). The remaining distinctions among students associated with teacher socialization style concerned students' affective reactions to the underachiever that were motivated by sympathy. Although this occurred less frequently overall, sympathetic feeling toward the underachiever were most likely to be discussed by younger students in inductive classrooms ($.06_{BL}$, $.28_{IL}$, $.11_{BU}$, $.11_{IU}$).

Students' reported bystander behavior was also associated with differences between students whose teachers differed in socialization style. In each vignette these distinctions were associated with students' reports of their own actions concerning the fictional student. In each situation, the younger students in behavior modification classrooms were the least likely to report taking action themselves, particularly with the low achiever, while the older students in behavior modification classrooms were the most likely to report doing so (V1: $.31_{BL}$, $.47_{IL}$, $.58_{BU}$,

$.33_{IU}$; V2: $.33_{BL}$, $.50_{IL}$, $.69_{BU}$, $.44_{IU}$; V3: $.19_{BL}$, $.56_{IL}$, $.66_{BU}$, $.56_{IU}$). Reports of not being allowed to respond to a classmate seldom occurred, but were associated with teacher socialization style differences in students' responses to the low achiever. Although these responses were infrequent overall (.09), students in upper level inductive classrooms were the most apt to report not responding to the low achiever because they were not allowed to do so ($.11_{BL}$, $.03_{IL}$, $.06_{BU}$, $.17_{IU}$). Finally, self concern motives in student strategies with the hyperactive student were more associated with students in behavior modification classrooms than with students in inductive classrooms ($.77_{B}$, $.58_{I}$).

Students' expectations for their classmates' reactions to the fictional students were also associated with differences in teacher's socialization style. Differences in whether or not classmates were expected to respond at all only occurred in predictions with the low achiever. Younger students in behavior modification classrooms were the least apt to predict that their classmates (like themselves) would respond at all to the low achiever, while the older students in behavior modification classrooms were also consistent with their self reports in predicting more than any other group that their classmates would respond ($.26_{BL}$, $.42_{IL}$, $.71_{BU}$, $.42_{IU}$). Remaining distinctions in students' discussions of their classmates' behavior concerned their assumed motivations and occurred in responses to all three vignettes. Altruistic motives underlying responses to the underachiever and the hyperactive student were infrequent, but believed most characteristic of classmates in inductive classrooms V1: $.08_{B}$, $.21_{I}$; V2: $.01_{B}$, $.09_{I}$). Conversely, classmates in behavior modification classrooms, especially younger students with the underachiever, were more likely to be expected to respond only because of self interest

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(V1: $.78_{BL}$, $.39_{IL}$, $.56_{BU}$, $.47_{IU}$; V2: $.73_{B}$, $.59_{I}$). These patterns reverse in students' predictions and interpretations of classmates' motives with the low achiever, however. Classmates in upper level behavior modification classrooms who were most expected to respond to the low achiever in the first place, were also expected to respond for altruistic reasons. In keeping with their predicted lack of response, classmates in lower level behavior modification classrooms were least apt to be thought of as acting altruistically ($.26_{BL}$, $.44_{IL}$, $.74_{BU}$, $.44_{IU}$). In fact, when classmates in lower level behavior modification classrooms did respond, they were more likely to be thought to do so out of self concern rather than concern for the low achiever ($.31_{BL}$, $.14_{IL}$, $.14_{BU}$, $.25_{IU}$). A surprising finding that does not appear consistent with other reports is the substantial self interest motivation students in upper level inductive classrooms ascribed to their classmates. Such predictions are contrary to the expectations of this study.

Finally, the degree of congruence between students' self reports and their predictions of their classmates' behavior was associated with differences in teacher socialization style in responses to the hyperactive student. Students' self reports in behavior modification classrooms were more closely related to their expectations for their classmates than were the students' reports in inductive classrooms (1.35_{B}, 1.66_{I}).

In summary, differences in students' reactions to the hypothetical students that are associated with teacher socialization style are best understood as interactive with grade level. The effects of teacher socialization style are most apparent in younger children. Thus, younger students in behavior modification classrooms are the epitome of the good boy - good girl authority maintaining stage of moral development. These

students reported the least affective reactions to and strategies for coping with their fictional classmates, and projected these same nonresponses onto their classmates. Apparently these students could not imagine themselves initiating in the classroom, and relied totally upon their teachers to do so. Reports from the younger students in inductive classrooms are quite distinctive from those of their peers in behavior modification classrooms. Recall that these students' teachers were selected for their focus on providing a psychological context for behavioral demands through extended language stressing the cause of and rationales for teacher response. These teachers focus more on producing psychological insights into behavior than on consistency in presenting teacher based consequences for a given behavior. Younger students in these inductive classrooms did not exhibit the same patterns of nonresponse that were evidenced by their peers in behavior modification rooms. Thus, inductive socialization appears to have countered the authority-based morality and individual passivity that was characteristic of the students in behavior modification classrooms. Young students exposed to inductive teachers were more like the older students in their reports of attitudes and behavior toward their peers. Further, these students' reports of positive affect and altruistic behavior toward hypothetical classmates were notable contrasts to the students in lower level behavior modification rooms. That these differences among students are solely attributable to teacher socialization style cannot be argued here, but the strength of the relationship is compelling.

The effects of teacher socialization style on older students are less straightforward. Recall that students in upper level behavior modification rooms were the most likely of all students to respond to their

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classmates. These responses to the underachiever and especially to the hyperactive students were typically associated with negative student affect and motivated by student self interest. Responses that these students predicted their classmates would make parallel these trends, except for the predicted reactions to the low achiever, which were believed to stem from altruistic motives.

In contrast, older students whose teachers were inductive socializers were more likely to report positive regard for the fictional students, and did not report as intense or negative affect to the hyperactive student as their peers in behavior modification classrooms did. This generally more positive regard was not as likely to translate into behavior, however. The students in upper level inductive classrooms were much less likely than those in upper level behavior modification classrooms to take action on behalf of another. The distinction between the students seems to be twofold: first, in the type of affect experienced and in the corresponding motivation; and second, in whether such motives were transformed into actual strategies. Thus, while the students in inductive classrooms reported more positive regard than the students in behavior modification classrooms, it was the students in behavior modification classrooms who would take action. This action, typically in the best interests of the fiction hyperactive or underachiever classmate, nonetheless was typically motivated by self interest rather than altruism. The key question this pattern of findings raises is whether over time, the inductive socialization focus on psychological causality and insight fails to highlight the appropriate behavioral action (given such insight). In addition, it appears that behavior modification strategies, which are action - consequence oriented, provide an active interpersonal model for

students. In any case, students in these classrooms appear more willing to initiate responses to others. This active role is apparently learned independently from affective and motivational responses, because these students respond similarly to another whether because of self or other benefit, or from anger or compassion.

Student Level of Adjustment Differences. Differences in students' reactions to the hypothetical students that were associated with student level of adjustment occurred across all three vignettes. These effects frequently involved interactions with teacher socialization style.[5] This was especially the case in students' discussion of their affective reactions to the underachiever and hyperactive students. In their responses to, "How do you feel when _____ acts this way?" following the underachiever portrayal, students in inductive classrooms were most likely to report positive affect ($.13_B$, $.20_I$). This was due mostly to the younger hyperactive and teacher owned problem nominees in these inductive classrooms ($.50_H$, $.50_{T-O}$) who were quite distinctive from the remaining students in their reports of positive affect. Students' reports of sympathy for the underachiever continue these trends. Students in inductive classrooms were more likely to report sympathy ($.08_B$, $.20_I$), especially younger students in inductive classrooms ($.06_{BL}$, $.28_{IL}$, $.11_{BU}$, $.11_{IU}$), again, primarily because of the hyperactive and teacher owned problem students.

Neutral affective responses of the form "I don't care" were infrequent, but were more associated with inductive classrooms ($.07_B$, $.13_I$), this time primarily due to older students in these classes, particularly

[5]As in previous discussions, all data involving three-way interactions that were not associated with a main effect were deleted from discussion, as were all variables with mean values at or below .10.

the hyperactive and low achiever nominees ($.75_{H}$, $.50_{LA}$). Negative affective responses to the underachiever, then, were most associated with the students in behavior modification classrooms ($.52_{B}$, $.38_{I}$), particularly the hyperactive and shared problem nominees ($.75_{H}$, $.75_{SH}$). The reported negative affect of the hyperactive nominees is particularly notable in that the hyperactive students in inductive classrooms responded so differently. The students in the inductive classrooms who were most apt to report negative feelings toward the underachiever were the nonproblem students (.67), who approximate norms in the behavior modification classes. One final trend of interest is the consistently low likelihood of negative affect reported across each grade level and teacher socialization style by the student owned problem nominees (.25). These students were the only group to respond similarly across each level.

Students' reports of their affective reactions to the fictional hyperactive student reveal similar patterns of negative reaction among students who differ in level of adjustment. Thus, in their affective responses to the hyperactive student, the shared problem student nominees were associated with the most negative affect (.81), followed by the nonproblem student nominees (.79). The teacher owned problem nominees reported the least negative affect (.44). Recall that the teacher owned nominees (consisting of hostile aggressive and defiant students) were also the students associated with the most positive regard for the underachiever. Taken together, these data seem to indicate denial among these students who were selected for their anger and inability to get along with others.

Reported feelings toward the hyperactive student that were based on self concerns also differed across students, and in general, were most prevalent in upper level behavior modification classrooms ($.53_{BL}$, $.61_{IL}$,

$.94_{BU}$, $.66_{IU}$). This parallels the reports of negative affect. Thus, nonproblem students were the most apt to indicate that they were angered by the hyperactive student because of his/her effect on them (.83), followed by shared problem student nominees (.81). In keeping with the denial process inferred above, teacher owned nominees were the least likely to evoke self interest when describing their affective reactions to to the hyperactive student (.50).

Finally, students' reports of their affective reactions to the fictional students were assessed with a three-point scale to indicate intensity. Differences between students were associated with both the hyperactive and low achiever vignettes. Differences in students' reactions to the hyperactive student were associated with a main effect for nomination type. This analysis indicated that the low achieving student nominees were the least intensely concerned about the hyperactive student (1.87), while the hyperactive nominees indicated the most concern of the students (2.75), followed by the shared problem student nominees (2.69).

Student reports of affective intensity toward the fictional low achieving student were associated with an interaction between teacher socialization style and student nomination type. Although there were no overall differences between the behavior modification and inductive classrooms (2.13_{B}, 2.14_{I}), there was considerable variation among student nomination levels between the differing socialization styles. Most striking were the distinctions involving the underachieving and teacher owned problem nominees. In behavior modification classrooms, underachieving students' affective responses were judged the most intense (along with the hyperactive, shared problem, and nonproblem student nominees: BM: 2.50_{UA}, 2.50_{H}, 2.50_{SH}, 2.52_{NPS}), and the teacher owned problem nominees'

responses were judged to be the least involved (1.13_{T-O}). In contrast, in inductive classrooms, teacher owned problem nominees revealed the most intensive affective reactions to the fictional low achiever (2.63), and their underachieving peers reported the least affective involvement (1.38).

Contrasts such as these do not seem to form larger patterns. One pattern relevant to the concerns of this investigation, however, concerns the reported affective reactions of the teacher owned problem nominees. These students appear to be "protesting too much" in their claims of lack of negative affect, and to some extent, presence of positive regard for students who typically evoke irritation among their classmates. Their reported affect toward the fictional hyperactive student is particularly suspect, given their interpretations of this behavior. Recall that the teacher owned problem nominees were the most likely to attribute hyperactivity to internal causes, to perceive this behavior as intentional, and to assume aggression toward others as a plausible motive.

Students' reports of what they would <u>do</u> should a student in their classroom behave as described in the vignette were also associated with differences in level of classroom adjustment. With respect to the underachiever, these differences occurred in students' reports of themselves taking action that would benefit the fictional underachiever. In general, as already discussed, older students in behavior modification classrooms were the most likely to report doing so. With the exception of the student owned problem nominees (distractible and shy students) who never reported taking action, the students in these classrooms were consistent in their reports of responding to the underachiever themselves (range = .50-.75).

The lower level behavior modification classrooms were also fairly consistent across nominee categories in the proportion of students discussing strategies with the underachiever. Mean response values were typically low ($.31_B$), ranging from .25 - .50. In contrast to both grade levels of behavior modification classrooms, students in inductive classrooms exhibited substantial fluctuation within each grade level and often revealed contrasting patterns. Thus, younger (inductive) students were more likely to report responding to the underachiever ($.47_{IL}$, range .00 - 1.00; $.33_{IU}$, range - .00 - .75), but within this, younger teacher owned problem nominees always reported responding ($1.00_{T\text{-}O,IL}$), while their older counterparts never did ($.00_{T\text{-}O,IU}$). Other notable reversals involved contrasts in the opposite direction. Younger hyperactive nominees and student owned problem nominees in the inductive classrooms never took action with the underachiever, while their counterparts in the upper level classrooms were the most likely of all the students in their level to do so (IL: $.00_H$, $.00_{S\text{-}O}$; IU: $.50_H$, $.75_{S\text{-}O}$).

Examination of the differences in students' reports associated with the hyperactive vignette revealed variation both in students' reports of taking action counter to the student's interests (typically involving the teacher), and in the assessed effectiveness of their reported strategies. Overall, the students in inductive classrooms were slightly less apt to report doing so ($.24_B$, $.21_I$). The data associated with nomination type are intriguing. Strategies counter to the hyperactive student were only reported moderately frequently (.22). The students who were most apt to take action that would cause the fictional hyperactive student trouble, however, were the hyperactive nominees themselves (.50). This group of

students report taking such action more consistently across grade level and teacher socialization style than any other group ($.50_{BL}$, $.50_{IL}$, $.25_{BU}$, $.75_{IU}$). The low achiever nominees consistently do not report such behavior ($.00_{BL}$, $.00_{IL}$, $.00_{BU}$, $.25_{IU}$). The group of students that was also unlikely to act counter to the fictional hyperactive student's interests were the teacher owned problem nominees ($.00_{BL}$, $.00_{IL}$, $.50_{BU}$, $.00_{IU}$). These students were not as consistent across grade and socialization style levels, however. The major fluctuations occurred with the shared problem type nominees (range =.00 - 1.00).

The effectiveness of these students' strategies flesh out the above discussion. The hyperactive students' responses to the fictional hyperactive students were judged to be the least effective (1.75), and the teacher owned problem and low achiever nominees' strategies were rated as the most effective ($.75_{T-O}$, $.75_{LA}$).

Finally, student responses to the third vignette were associated with differences in reported strategies, effectiveness of those strategies, and motivations underlying them. Those students least apt to respond at all to the low achiever were typically in lower level behavior modification classrooms ($.56_{BL}$, $.39_{IL}$, $.26_{BU}$, $.31_{IU}$). These students, particularly the hyperactive nominees (1.00), seldom reported taking action with the low achiever, while their counterparts in the upper level classrooms always did. The pattern of equal or greater likelihood to not respond within the lower level behavior modification classrooms as compared to all other grade level and socialization styles held for each problem type nominee.

Effectiveness of student responses also differed as a function of socialization style interacting with student adjustment level. Students

in behavior modification classrooms were slightly less effective than their peers (1.30_B, 1.21_I where lower value indicates greater effectiveness). Within this, student nominees again fluctuated between socialization style levels in puzzling ways. The hyperactive, nonproblem students, and student owned problem nominees' behavior toward the fictional low achiever was judged the most effective of the behavior modification students (1.00_H, 1.00_{S-O}, 1.53_{NPS}), and the teacher owned problem nominees were believed to respond the most ineffectively (1.80_{T-O}). (These ineffective responses were typically of the form "Let him copy my answers.") In contrast, in inductive classrooms the underachievers' and the teacher owned nominees' strategies with the low achiever were judged the most effective (1.00_{UA}, 1.00_{T-O}), student-owned problem nominees were the least effective (2.00_{S-O}) followed by the shared problem nominees (1.43).

Finally, students' discussion of motive varied in their responses to the low achiever. Self interest motives were uncommon overall (.21), but most apt to be associated with student owned problem nominees (.50), followed by nonproblem students (.23). Further, students in behavior modification classrooms were most likely to discuss self interest motives, particularly the hyperactive (.38) and teacher owned problem nominees (.38), and the nonproblem student nominees (.34). In the inductive classrooms, the students most apt to respond to the low achiever due to their own interests were the student owned problem nominees (.88), followed by the shared problem nominees (.25). The remaining students in inductive classrooms typically did not pursue self interest goals with the low achiever.

Altruistic motives were more characteristic of the inductive students

($.52_B$, $.60_I$), (with the notable exception of the student owned problem nominees (.00)),especially the hyperactive nominees (1.00). In contrast, hyperactive nominees in behavior modification classrooms were unlikely to report such motives (.38), particularly the lower level hyperactive students (.00). These responses again illustrate much variation without apparent patterns.

Students' predictions about their classmates' behavior toward the fictional students were associated with significant differences involving nomination type in the projected motives assumed to underlie responses to the underachiever and to the low achiever vignettes. Differences associated with the underachiever's responses reveal that the underachiever nominees were the most consistent across the grade and socialization levels, and the most likely to report self interest motivations for their classmates ($.50_{BL}$, $.75_{IL}$, $.75_{BU}$, $.75_{IU}$). Also frequently evoking these self concerns were the hyperactive nominees, especially those in lower level behavior modification classrooms (1.00) and those in upper level inductive classrooms (.75), and the nonproblem students, again particularly in the lower level behavior modification classes (1.00) and in the upper level behavior modification classes (.50). Much fluctuation again occurred across the nomination types.

The final difference among students that was associated with their nomination type concerned the motives believed to underlie the predicted group responses to the low achiever. In these situations, the underachiever and low achiever nominees were the least apt to report self concern rather than altruistic motivation ($.63_{UA}$, $.63_{LA}$). The student owned problem nominees were by far the most apt to project self concern onto classmates,(.50), followed much later by the teacher owned problem

nominees (.25) and nonproblem students (.23). The differences in projections of group motivation between the underachiever and low achiever vignettes are striking. The students apparently brought different associations to bear in their understandings of how others respond.

In summary, student level of adjustment data interact with teacher socialization style and grade level, and show wide fluctuation from group to group without forming interpretable patterns, even though some patterns occur. There were no hypotheses for student reactions associated with student level of adjustment, and it is clear that the levels of problem ownership in the vignettes in general were not powerful in ordering the data by student nomination type. The one exception to this was the teacher owned problem nominees' responses. These students, noted for their general hostility and inability to get along with others (and who, as discussed previously, were the most apt to attribute hyperactivity to internal factors and intentional motives, including aggression toward others) were the primary group of students to maintain that such behavior did not really bother them. These students' responses consistently indicated less negative and more positive and neutral affect toward the fictional students. Thus, it appears that this group, more than the other student nominees, was the most sensitive to how others perceived their interpersonal behavior. This concern appears to have resulted in systematic denial by these students.

In Summary. In summary, students' reactions to the hypothetical students appear to be most clearly ordered by the vignettes themselves. Recall that the vignettes were selected to represent the three levels of problem ownership defined from an adult (teacher) perspective:

1) teacher owned problems, where the teacher's needs for authority and control are directly threatened by student behavior; 2) teacher-student shared problems, where the teacher and the student interfere with each other's need satisfaction; and 3) student owned problems, where the student's self devaluation problems are not directly caused by or affecting the teacher. The selection of vignettes to represent these categories also reflect adults' perspectives. That they do not necessarily represent the students' point of view has become clear in the analysis of students' bystander behavior. Thus, students' patterns of responses across the vignettes indicate that the hyperactive student, while representing a shared problem for teachers, directly thwarts students' needs to fulfill classroom demands and work expectations, and as such, the hyperactive student represents a "teacher owned" problem for his/her classmates. Similarly, underachievers, who are seen as directly challenging teachers' needs, are only an indirect threat to students in so far as they are capable of adversely affecting the classroom atmosphere through confrontations with the teacher. In keeping with these distinctions, students' reported self reactions to the hyperactive student, and those predicted for their classmates, were characterized by the most negative and intense affect, more strategies that were motivated by self interest, and strategies that were also more apt to be counter to the student's best interests. In contrast, students' affective responses to the low achiever (a "student owned" problem) were generally positive and sympathetic and their strategies with the low achiever were altruistically motivated. Finally, student responses to the underachiever, although similar to their reported behavior toward the hyperactive student, were less pervasively and intensively negative.

Grade level differences in students' reports were interesting in that older students appeared more emotionally detached in the classroom but at the same time were more likely to respond to their fictional classmates than the younger students were. Younger students, while typically more affectively involved in other's behavior, were more passive in responding to that behavior. Finally, students' affective reactions toward the hyperactive student in particular differed by grade level and varied from general trends in that older students were more bothered by hyperactivity.

Student reactions to the fictional students were not as straightforwardly ordered by teacher socialization style. Patterns which did emerge involved interactions with grade level and were most apparent in the younger children. Thus, younger students in behavior modification classrooms were the least involved, both affectively and behaviorally, in their fictional classmates' behavior. In contrast were the younger students in inductive classrooms who typically reported positive affect and altruistic behavior toward these potential classmates. Older students differed in that those students in upper level behavior modification rooms were clearly the most action oriented, and the most consistently motivated by self interest of the students interviewed. In contrast, the older students in inductive classrooms reported less negative and more positive feelings toward the fictional students, but these attitudes were seldom translated into behavior.

Student adjustment level was much less powerful in ordering the data. When analyzed at the nomination type level, students' responses fluctuated without forming interpretable patterns. The single exception was the

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teacher owned problem nominees, noted for their hostility toward others, who appeared to consistently exhibit denial of this hostility.

Finally, student sex was the least useful in ordering the data. Sex differences were infrequent and only formed interpretable patterns in responses to the low achiever, where girls reported more positive and intense feelings than the boys.

Student Self Comparison (Tables 60-63)

General Trends. Students' assessments of their own classroom behavior were obtained with a modified version of the self comparison form developed by Nicholls (1976). Students were asked to identify which circle in a series of 20 best represented their own behavior as compared to the student portrayed in each vignette. The circle at the top (value = 1) indicated that the student acted like the fictional student the most of anyone in the class, and the circle at the bottom (value = 20) indicated that the student acted that way the least of anyone. The mean ranks for the underachiever comparison was 14.94, for the hyperactive student 16.08, and for the low achiever 15.26. Thus, there was little variation across the vignettes as students tended to distance themselves from each of the fictional students. An important threshhold appears in each vignette between the ninth and tenth ranks. Recall that a line was drawn at the median of the scale and that that location of the scale was described as those students who "act like _____ sometimes." Fifteen students placed themselves in ranks 1 - 9 for Vignette One, six students ranked themselves similarly for Vignette Two and 14 students did so for Vignette Three. Frequencies for ranks 10 - 12 for each of the vignettes were 38 for Vignette One, 32 for Vignette Two, and 34 for Vignette Three. These frequencies indicate students' greater willingness to describe themselves as acting like the fictional students "some of the time." This seems to be especially true with respect to the hyperactive student portrayal. A sizable percentage of students placed themselves at the greatest distance from the inappropriate behavior. Again, this is particularly the case with the hyperactive student. Thus, ranks 18 - 20 were chosen by 60 students for the underachiever in Vignette One, 77 students

placed themselves in these ranks for Vignette 2, and 59 students did so when comparing themselves to the low achiever in Vignette Three.

In summary, the student self comparisons were undifferentiated across the vignettes. Students tended to maximize the distance between the fictional student and themselves. This appeared to be especially true for self comparisons with the hyperactive student.

Grade Level Differences. Differences that occurred in students' self comparisons to the fictional students portrayed in the vignettes were primarily associated with student grade level. In each of the three vignette comarisons, older students ranked themselves closer to the fictional student (V1: 16.21_{L}, 13.69_{U}; V2: 16.79_{L}, 15.39_{U}; V3: 16.13_{L}, 14.40_{U}). It appears, then, that older students are more comfortable reporting their own inappropriate classroom behavior. This appears to be especially true with underachievement.

Sex Differences. Sex differences in students' self comparisons were only associated with the low achiever and involved an interaction with teacher socialization style. These interactions indicated that girls in behavior modification classrooms were the most likely to rate their behavior as similar to the low achiever's, while the boys in these classrooms distanced themselves the furthest from the low achiever ($16.40_{BM,M}$; $13.57_{BM,F}$; $14.32_{IND,M}$; $15.82_{IND,F}$).

Teacher Socialization Style Differences. There were no differences in students' self comparisons that were associated with differences in teacher socialization style.

Student Level of Adjustment Differences. Differences in students' rankings that were associated with level of classroom adjustment only occurred in self comparisons with the low achiever. Students nominated as low achievers themselves typically placed themselves closest to the fictional low achiever in their classroom (12.44). Interesting was the close placement of the underachiever nominees (12.94). Those students distancing themselves the most from low achievement were the student owned problem nominees (17.25), followed by the teacher-owned problem nominees (17.13).

Low achieving students, then, were more likely to recognize their behavior, and were less hesitant to report their similarities to this behavior than were the underachieving and hyperactive nominees when confronted with their own behavior styles. This is likely the result of the generally positive classroom atmosphere with respect to learning procedures and difficulties (see Student Ratings of Classroom Experience discussion), and the relatively greater stress and condemnation associated with underachievement and hyperactivity. Further, student rankings of the fictional students by liking and work preference indicated that low achieving students do not suffer devaluation by their classmates, while underachieving and especially hyperactive students apparently do. This data, taken together with the students' reported altruistic reactions to the hypothetical low achieving student and primarily negative and self-serving responses to the hyperactive and underachieving students, helps provide a context for understanding the low achievers' apparent greater ease with themselves. It is surprising that the underachieving nominees place themselves so close to the fictional low achiever, however. One

can only speculate that these students may in fact feel that they are often unable to do their work or perhaps they feel that the low achiever is often avoiding work as they themselves do, and for similar reasons (i.e., unwilling as opposed to unable).

Overall, then, the low achieving students appear to recognize and report their behavior more than the underachievers and hyperactive students whose behavior was also portrayed in the vignettes. Even so, the highest mean self ranking was only 12.44. Thus, students, in general, appeared reluctant to report their own inappropriate or unsuccessful classroom behavior. This hesitancy is especially characteristic of the younger students who consistently distance themselves farther from each of the target behaviors than do the older students. The student self-ranking data, then, which revealed few meaningful differences among students who nonetheless differ in their level of classroom adjustment.

Student Rankings of Hypothetical Students (Tables 64-68)

General Trends. Students' choice of who they would like the most among the three fictional students was typically the low achiever (78%). The underachiever was chosen as best friend by 14% of the students, and the hyperactive student by 8%. Second choice preferences were evenly distributed between the underachiever (43%) and the hyperactive student (42%). The hyperactive student was most likely to remain unchosen, followed by the underachiever.

Students' choices of who they would most like to work with were less extreme, but still parallel the patterns of their friendship rankings. Students' first choice of a work partner was again most likely to be the low achiever (64%), followed by the underachiever (21%) and the hyperactive student (15%). Second choice nominees again were evenly divided between the underachieving and hyperactive students (43%, 40% respectively). Again, the hyperactive students had the greater likelihood of not being chosen as a work partner at all.

These rankings of students by work and play preference are noteworthy in several respects. First is the overwhelming selection of the low achiever as first choice for friendship. It appears that the academic ability sorting that by necessity occurs in classrooms and is commonly believed to be so powerful in children's peer choices is not necessarily the case, at least in the first through fifth grades. It is likely that at this age span, children's requirements for friendship usually are not yet based on skills related to academic ability. In addition, the data indicate that low achievement per se is not unacceptable in the classroom. What appears to be unacceptable is lack of effort resulting in poor

achievement.

The status of the hyperactive student is also of interest. Students chose this student the least frequently overall, and most selections that did occur were for the "second best" category. Hyperactive students are not liked by their classmates, as other investigators have discussed (See review by Milich and Landau, in press). The students' responses throughout the interview underscore this point. They reported the greatest amount of negative affect toward the fictional hyperacitve student. This was likely due to these students' interfering with their classmates' ability to meet classroom expectations (See Student Reaction to Hypothetical Student discussion). One suspects that this general irritation is further supported on the playground with this age of students, in that unlike the other fictional students, the hyperactive student's "problem" is just as troublesome in play situations as it is in the classroom. Overall, the hyperactive student appears to be the most vulnerable of the fictional students to peer rejection.

A final point of interest is the parallel rankings of liking and work preference. This seems to indicate that students' choices of work partners is typically based more on compatability than on productivity, in that the low achiever was selected as preferred work partner more than the others.

Grade Level Differences. Students' rankings of the fictional students by liking and by work preference were only associated with differing grade levelsin the selection of the low achiever as first choice for a work partner. Younger students were more likely than older students to make the low achiever their first choice of someone to work with ($.73_L$,

$.54_U$). This difference between grade levels probably reflects a combination of older students' greater awareness of the low achiever's limitations in academic situations, their goal orientation toward work completion, and their separation of the goal of work completion from friendship.

Sex Differences. Sex differences in students' rankings of the fictional student were only associated with the choice of the underachiever as "best friend." This difference indicated a greater likelihood that boys would choose the underachiever for friendship first, rather than the girls. This difference is not surprising given boys' greater likelihood in general to accept the role of "class clown."

Teacher Socialization Style Differences. Differences in students' rankings of fictional students by liking and by work preference that were associated with teacher socialization style only occurred in their second choice of a work partner. These selection differences revealed that students in inductive classrooms were more likely to choose the hyperactive student as their second preferred working partner than the students in the behavior modification classroom ($.27_B$, $.53_I$). This difference was especially pronounced in the upper level behavior modification classrooms. These students were the least likely of anyone to select the hyperactive student as second preferred work partner ($.34_{BL}$, $.44_{IL}$, $.19_{BU}$, $.61_{IU}$). These data (taken together with the low probability that the older students in behavior modification classrooms would select the hyperactive student as a first choice workmate either ($.22_{BU}$)), further elaborate these students' negative reactions to the hyperactive student in the interview. As described earlier, the students in upper level behavior modification classrooms were noteworthy for the negative tone and

intensity of affect of their reported feelings about the fictional hyperactive student. These students' choice rankings, then, appear to reflect avoidance of the hyperactive student. Further substantiation is found in behavior modification students' in general greater likelihood to choose the low achiever as second choice work partner. Thus, the behavior modification and inductive students do not make appreciably different first choices, i.e., they both typically choose the low achiever, but when the low achiever is not first choice, it appears that the behavior modification students will select this student second, again probably more out of avoidance of the hyperactive student than anything else. In contrast, the inductive student's greater likelihood of selecting the hyperactive student as second preferred work partner, particularly the upper level students, further substantiates these students' stance in the Student Reaction to the Hypothetical Student, where they were noted as less negatively and intensively emotional toward the hyperactive fictional student.

Student Adjustment Level Differences. Differences in students' rankings of their fictional peers were associated with differences in students' level of adjustment in the classroom. All of these differences involved interaction with grade level and, more typically, teacher socialization style, and were concerned primarily with the choice of a work partner. The only differences in students' responses associated with liking rankings concerned the choice of the low achiever as the second preferred friendship. Recall that for most students the low achiever was first choice in friendship, thus limiting the probability of second choice. This selection trend does not apply to the younger

hyperactive and teacher owned problem nominees, however, who are likely to list the low achiever as second preference in friendship, if at all, ($.50_H$, $.43_{T-O}$). (This was especially the case with the hyperactive and teacher owned problem nominees in lower level behavior modification classrooms (BL: $.75_H$, $.67_{T-O}$; IL: $.25_H$, $.25_{T-O}$).

Differences in student work preferences were associated with both first and second choices. Students differed in their selection of the low achiever as their most preferred work mate in complicated ways. First, as mentioned previously, younger students were more likely to choose the low achiever than older students ($.73_L$, $.54_U$) and within this, younger students in inductive classrooms were the most likely to select the low achiever first ($.66_{BL}$, $.81_{IL}$, $.56_{BU}$, $.53_{IU}$) .

There was considerable fluctuation across the nominees within the upper level classrooms. Teacher-owned problem nominees were consistent across all grade levels and teacher socialization styles in selecting the low achiever as first choice of work partner more than any other nominee group ($.94_T$). Shared problem nominees were least likely to select the low achiever (.50), particularly those nominees in upper level behavior modification classrooms (.00), followed by student-owned problem nominees (.56).

In summary, the greater likelihood that younger students, particularly in inductive classrooms, would choose the low achiever first as a work partner is consistent with the developmental trends and teacher socialization style effects evidenced throughout the interview. What is surprising, however, is the teacher-owned problem students' selections. These students chose the low achiever as a preferred work partner more often than they chose him/her for a "best" friend. Students' selections of

the low achiever as their second preference for work partner indicate that the younger and older students are equally likely to choose the low achiever ($.17_L$, $.17_U$) and students in behavior modification classrooms are more apt to make this choice than students in inductive classrooms ($.25_B$, $.08_I$). This taken together with first choice data indicate that the younger students clearly prefer working with the low achiever ($.90_L$, $.71_U$). In addition, those students who do not choose the low achiever at all are primarily in the upper level inductive classrooms (especially the underachiever nominees (.75) and the low achiever nominees (.75). The next most apt to overlook the low achiever totally were the younger shared problem nominees in inductive classrooms (.50), the older student owned problem nominees in behavior modification classrooms (.50), and the older hyperactive nominees in inductive classrooms (.50).

Finally, students differed in their remaining second choices for work partners. These differences were evidenced with both the underachiever and hyperactive fictional students. Choices of the underachiever were most characteristic of students in behavior modification classrooms, especially underachievers themselves (.63), followed by the teacher owned problem nominees (.56). Finally, students least apt to select the underachievers were the shared problem nominees (.32), especially in the behavior modification classrooms where they never chose the underachiever (.00).

Second selection of the hyperactive student for work partner was most typical of the shared problem nominees in the lower level behavior modification classroom (1.00). In addition, the low achiever nominees in the younger grades were the most likely of the younger students to select the hyperactive student (.75), while the younger hyperactive

nominees and students presenting student owned problems were the least apt to do so ($.25_{H}$, $.25_{S-O}$). Hyperactive nominees in the upper level classrooms were the most apt to make the fictional hyperactive student their second choice work partner (.75), followed by the student owned problem nominees (.63). (Again, these students' responses are reversed across the age levels. Recall that these reversals reoccur throughout the interview data.) Finally, the low achiever in the upper grades was least likely to choose the hyperactive student as a work partner (.13). (It is interesting that the hyperactive nominees typically did not initially choose the fictional hyperactive student to work with (1st: $.50_{BL}$, $.00_{IL}$, $.00_{BU}$, $.00_{IU}$), and a substantial proportion of these nominees, excluding the older inductive classrooms, did not select the fictional hyperactive student at all (2nd: $.00_{BL}$, $.25_{IL}$, $.50_{BU}$, 1.00_{IU}).

Discussion. In summary, the vignettes themselves are the primary organizers of the data. Students were most likely to choose the low achiever as both their potential best friend and their preferred work mate. Hyperactive nominees were the least apt of the three fictional students to be selected at all for friend or workmate. These data are consistent with the interview discussions of students' reactions to the fictional students. Recall that students reported positive affect toward the low achiever, and expressed the most negative feelings toward the hyperactive student.

Group level differences were more restricted in ordering the students' rankings. The one difference that did occur was associated with the selection of the low achiever as most preferred workmate. This selection was most typical of younger students and probably reflects older

students' greater awareness of the implications of limited ability and their concern that the work get done.

Differences in students' choices that were related to teacher socialization style were also confined to a single variable, the second choice of a work partner. The data were again consistent with the interview portion of self report in that students in behavior modification classrooms, particularly the upper level students, avoided the hyperactive nominee.

Student adjustment level differences ordered the data in less compelling and credible ways. All differences associated with student nomination type involved interactions with grade level and/or teacher socialization style and were primarily concerned with choice of work partner. Two findings of interest that did occur included first, the teacher owned problem nominees' choices. These students selected the low achiever as preferred work partner more than they chose him/her for friendship. These selections may reflect two concerns. First, the teacher owned problem nominees are likely to value play interactions more than school work. And second, the low achiever is not in a position to challenge them in academic situations as s/he is in play. Thus, by choosing the low achiever only to work with, rather than play with, the teacher owned problem nominees may be seeking to minimize potential conflict. Second, the hyperactive nominees themselves typically avoided choosing the fictional hyperactive student to work with. Apparently this was in recognition of their own intrusiveness in work situations.

Finally, sex differences were the least powerful in ordering the students' rankings. The one difference which did occur was associated with

the underachiever as "best" friend. Boys were more likely to make this choice than girls, consistent with gender differences in classroom tomfoolery.

Student As Teacher Role Play (Tables 69-70)

General trends. Students' role play responses (what they would do if they were a teacher and a student acted that way in their class), were obtained at the end of the taped interview for each vignette. Students' reported actions with the fictional students were rated on a three-point scale comparing their own reports with those predicted for their teachers. The scale values ranged from "essentially the same" through "different but not conflicting" and finally, "conflicting". These ratings indicated that for all three vignettes, students' responses were typically rated as somewhat different than, but not conflicting with their teacher predictions (1.72_{V1}, 1.85_{V2}, 1.85_{V3}). Thus, in all three situations, students appear to have internalized their teachers' believed strategies for dealing with the fictional students, but not to the extent of verbatim replication.

Grade Level Differences. Students' role play with the fictional students were only associated with differences in student grade level in their responses to the hyperactive student. In this situation, younger students' role play was more similar to their teacher's than the older students' (1.73_{L}, 1.97_{U}). This is not surprising given the greater incidence of hyperactivity in the lower grades, so that the younger students were likely to have more recent experience with this behavior and thus to have witnessed teacher coping strategies more frequently.

Sex Differences. There were no differences in students' role play responses associated with student sex differences.

Teacher Socialization Style. There were no differences in students' role play responses associated with teacher socialization style.

Student Level of Adjustment Differences. There were no differences in students' role play responses associated with student level of adjustment.

Discussion. In summary, neither the vignettes themselves nor the remaining status variables ordered the data in any significant way. With the exception of students' role play with hyperactive students, in which younger students even more closely approximated their teachers, students' responses consistently paralleled those predicted for their teachers. Teacher modeling effects appear to be quite strong for all students, then, in all three situations. Recall that students perceived teacher behavior quite differently across the vignettes. Teacher responses to the underachiever and the hyperactive student were typically believed to include substantial punishment, threatening/pressuring behavior, restricted language and limited goals for these students. Teachers' perceived handling of the low achiever typically included more supportive and helping behavior. Students apparently accept these response patterns as desirable ways of dealing with inappropriate student behavior. This strong modeling effect, combined with the patterns of effects associated with teacher socialization style on students' social cognition and interpersonal behavior which were evidenced throughout the interview, underscores the powerful role that the teacher can play in students' socialization.

Student Ratings of Classroom Experiences (Table 71)

General Trends. At the conclusion of the interview, students were asked to indicate how much each of a series of 17 classroom events "bothered them" and how frequently they experienced each event. Students reported the degree of stress associated with each event by pointing to one of a series of five circles of increasing size representing "bothers me a little" through "bothers me a lot." Student reports of the frequency of experience with each event were given orally and chosen from "hardly ever," just sometimes," "pretty often," and "a lot."

The results indicate that the students used the entire scale to indicate degree of stress, although rating 5, "bothers me a lot" was clearly the predominant category. Average student ratings ranged from 4.40, the highest mean stress value associated with the item "sent to the principal" to "going to the board," at 1.95, the least stressful event. As would be expected the student stress ratings indicate that the amount of stress associated with an event increases with the students' potential blameworthiness. Thus, "sent to the principal," "caught cheating," "teacher wants to see your parents," and receiving a "poor report card" along with being "made fun of in class" were the five most stressful events (4.40, 4.30, 4.20, 4.15, 4.01 respectively).

Four of the five least stressful events consisted of classroom learning procedures. Included were "hard to learn something new," "giving a class report," "reading out loud," and "going to the board" (3.15, 2.50, 2.35, 1.95 respectively). (The remaining low stress event, "having to sit alone" recieved a mean rating of 3.13). These ratings indicate that students see the classroom as a place to learn and any unsuccessful attempts to do so, public or otherwise, are not considered humiliating

events.

Students' reports of the frequency of their own experience with each event were quite low. The most frequently experienced event, a "noisy classroom" was reported as happening "pretty often" (2.87). The majority of the remaining items were reported as happening to the student "just sometimes" (range = 2.32 - 1.64). Finally, three of the four items that students reported experiencing the least frequently were those items associated with the greatest stress: "teacher wants to see your parents," "caught cheating," and "sent to the principal" (1.52, 1.45, 1.43). ("Having to sit alone," a relatively non-stressful event was also reported to be infrequently experienced (1.46)).

These frequency ratings, taken together with the stress scale data, portray students' classroom experience as typically low key, consisting mostly of learning procedures which are perceived as essentially nonstressful. Those events which do intimidate students the most are reported to be experienced infrequently. The climate in these classrooms, then, appears to be one that promotes learning in nonthreatening, nonjudgmental ways.

DISCUSSION

Independent measures. Overall, the vignettes used in this investigation appear to have portrayed classroom incidents realistically, and the interview questions appear to have been understood as intended. These vignettes, along with interview procedures that included memory prompts and standardized back up questions, constituted ecologically sound stimulus materials that appear to have captured students' active reasoning in the classroom.

The vignettes themselves organized the students' responses most powerfully. Recall that in every section of the interview, students' responses formed patternsunique to each vignette, and that these patterns differed if students were discussing their perception of adult behavior and cognition or their own understanding and reactions. The levels of problem ownership appear to hold in principle for both adults and children, but to consist of different instances. Thus, those student behaviors that represent teacher owned problems (underachievement) or teacher-student shared problems (hyperactivity) from an adult perspective, although recognized as such by students, are not view similarly by them. From the students' perspective, it is the hyperactive student who most directly interferes with need satisfaction (and thus functions as their "teacher owned problem"). The underachiever is only capable of thwarting their needs indirectly through disruption of classroom atmosphere (creating for them a "shared" problem with the teacher). The student owned problem apparently was perceived as such by both the teachers and the students. It appears, then, that students face a difficult social cognition task in the classroom. They must be able to predict and understand teacher actions and goals with students (to minimize difficulty

with authority), yet simultaneously adhere to their own criteria which differ in some key respects from their teacher's.

Grade level differences were also strongly in evidence. The developmental trends that emerged were not in the use of social cognitive constructs per se, but rather in the sophistication of these constructs. Thus, older students' responses were typically more elaborated and differentiated than younger students, whose constructs tended to be more global, emotional, and value laden. The single attributional variable that was not consistently associated with developmental differences was the intentionality dimension. This lack of difference is likely due to the study's capturing of students' active as opposed to theoretical thought.

Teacher socialization style was a surprisingly powerful factor. Socialization style was consistently related to the prediction and interpretation of teacher behavior, the understanding of and reaction to student behavior, and to student role play. These effects were especially potent with the younger students. This strong teacher socialization style effect is likely due to several factors. Recall that these teachers were selected on two criteria. First was their expertise. All teachers had previously participated in the Classroom Strategy Study, and had been judged by the author as outstanding in their ability to deal effectively and consistently with difficult students. Secondly, the teachers were categorized as representing one of two "types" of socialization styles. The teachers who participated in this study, then, do not represent "the average classroom teacher." The findings of this investigation are best viewed as evidence of the potential that teachers have (or do not have) to influence their students' social cognition and interpersonal behavior,

through a consistent socialization style.

Student level of classroom adjustment was less useful in organizing the data than had been expected. Students who had been nominated as "nonproblem" students who were easy and pleasurable to teach did not differ from their peers who had been selected for their adjustment difficulty, in their prediction or understanding of teacher and student behavior, or in their own self comparisons (in which all students evidenced equally strong positive self concepts). Further, students who had been selected because they behaved -- from the adult perspective -- within the same levels of problem ownership represented by the vignettes, did not identify with the students whose behavior was portrayed in the "matched" vignette. Finally, of the students whose behavior was replicated in the vignettes, the hyperactive nominees were the only students who consistently responded distinctly from their peers. These students appear to be the most vulnerable in the classroom, in their beliefs about how their teachers regard them, in their own defensiveness, and in how their classmates view them.

In contrast, both teachers and students respond to the low achieving students positively. They are well liked and valued by their classmates, and apt to receive help when needed. Further, students' free response concerns and ratings of classroom experiences indicated that esteem needs were discussed most frequently, and that learning routines and difficulties were not particularly stressful. The low achiever nominees themselves typically were not distinctive in their reports. The only variables that did identify them separately were the interactive levels within several of the attributional dimensions. Low achieving nominees were never coded as using interactive constructs. Thus, ability per se did not

appear to either hamper or enhance social cognition except for use of the more sophisticated dialectical constructs.

Student sex differences were the least useful in data organization. Recall that student sex was viewed as a controlled factor and not associated with any hypotheses. Analyses revealed that sex differences seldom occurred. Those that did emerge were interesting, and revealed differences in sophistication in which boys were more aware of their peers, especially the low achiever, and girls appeared more knowledgeable when discussing their teacher. Reported affect was similar to expected trends.

Dependent measures. In general, students' predictions of their teacher's responses indicated that students focused on their teacher's specific behavior in isolation from the larger context of programmatic strategies. Thus, while students and teachers appear to basically agree on how the teacher would respond to a student in the immediate situation, especially in behavior modification classrooms, they show less agreement about the existence of a larger goal. Students perceived and interpreted teacher goals as immediate and specific, while teachers typically perceived a given behavior in terms of how it related to their general program.

Data on students' understanding of their teacher's behavior further indicated that most students perceived their teacher as acting out of role expectations for her students, and to a lesser extent for herself. The most variation in students' responses about their teacher was associated with students' assumptions about teachers' thoughts concerning the fictional student. Students' own thoughts about their fictional classmates were ordered by the five attributional dimensions (locus of causality, intentionality, controllability, stability, and globality),

and indicated the complexity and differentiation of students' social understanding. Students' own affective and behavioral reactions toward these students indicated a difference between student and teacher views on which student behavior constituted an instance of a given level of problem ownership. Within this, students' reported reactions to their fictional peers were consistent with findings associated with the helping behavior and problem ownership literatures based on adults. Finally, students' teacher role play responses to the students portrayed in the vignettes indicated strong modeling of perceived teacher behavior. Thus, students evidenced one pattern across the levels of problem ownership when discussing their feelings and reactions as fellow students, but adopted another, that perceived as characterizing their teacher, when pretending to assume a teacher role. This modeling underscores both powerful teacher influences upon students and students' beliefs that their teacher's responses to them are motivated by teacher role expectations and are not due to personality factors.

Limitations. The findings of the present study are provocative, particularly with respect to teacher socialization style. As discussed above, these may rest on teacher expertise and extremes in socialization style. Nonetheless, the differences between the "behavior modification" students and the "inductive" students are compelling. Several caveats need to be kept in mind, however. First, the study was correlational. Thus, the relationships found associated with comparison groups cannot be interpreted as causal relationships. In addition, all the data are self report. Teacher (N = 8) and student (N = 144) selections were based on self report

as well. These verbal responses were analyzed, but the crucial final link in the perception - attribution - behavior linkage has only been reported and not observed. There is also the issue of the stability and generalization of these students' perceptions. This study has focused on students' perceptions at the end of a single school year. Whether or not these perceptions are stable from year to year, or across situations (i.e., beyond the classroom), is unknown. Another concern is the structuring of the interview itself. Students' responses were obtained with specific structured questions, and it is not known whether their reported perceptions and orderings along the attributional dimensions parallel those spontaneously used in actual interpersonal understanding. Finally, the fact that the interviews were conducted by adults, rather than by peers, may have influenced the students' reports.

Final comments. In closing, it is clear from this investigation that children's social cognition is unique, complex, differentiated, and influenced heavily by the social environment. Hartup's (1979) concern that we do not know enough about the effects of our major social agency for socializing children is well taken.

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A. Observer Report

1. Prediction of Teacher Response/Rationale to the vignettes.

Instructions: Read the following vignettes one at a time. After each vignette, record: 1) What you think the teacher would say and do if this were to occur in her classroom; 2) Why you think she would say and do that; and 3) How she would describe the student if explaining the incident to someone else.

Vignette 1T: Carl

V1T: Carl can do good work, but he seldom does. He will try to get out of work. When you speak to him about this, he makes a show of looking serious and pledging reform, but his behavior doesn't change. Just now, you see a typical scene: Carl is making paper airplanes when he is supposed to be working.

Vignette 2T: Paul

V2T: Paul can't seem to keep his hands off the things and people in the room. He also seems to want to inspect or play with whatever is at hand. When he is not physically manipulating someone or something else, he hums, whistles, grimaces, drums his fingers, taps his feet, or makes other noises through physical activity. Just now he has discovered that one of the screws holding the back of his chair to its frame is loose, and he is pushing and pulling at the loose piece. In the process, he is further loosening the connection and at the same time distracting the class with the noise he is making.

Vignette 3T: Tim

V3T: Tim is a poor student. He has a low potential for school work and also lacks the basic experiences that help a child function in the classroom. You have just presented a new lesson to the class and have assigned related seatwork. You look over the class and see that Tim is upset. When you ask him if something is wrong, he tells you that he can't do it -- it's too hard.

2. Predicted teacher response codes. Code your teacher predictions for each vignette on the following variables: Rewards and Punishments System (Variables A, B, C, D); Universal Coding System (Variables A, B1/B2, C, D, J); General Strategies System (Variables A, B, C, D, E, F).

System indicated included as Appendices M.

B. Vignettes for Teachers

Instructions: Please read the following vignettes one at a time. After each vignette, please tell me: 1) What would you say and do if these were to occur in your classroom; 2) Why you would say and do that; and 3) Describe the student involved as if you were explaining the incident to a student teacher. Include your ideas about why the student acts as he does and how you see him developing in the future.

Vignettes:

Vignette 1T: Carl

V1T: Carl can do good work, but he seldom does. He will try to get out of work. When you speak to him about this, he makes a show of looking serious and pledging reform, but his behavior doesn't change.

Just now, you see a typical scene: Carl is making paper airplanes when he is supposed to be working.

Vignette 2T: Paul

V2T: Paul can't seem to keep his hands off the things and people in the room. He also seems to want to inspect or play with whatever is at hand. When he is not physically manipulating someone or something else, he hums, whistles, grimaces, drums his fingers, taps his feet, or makes other noises through physical activity. Just now he has discovered that one of the screws holding the back of his chair to its frame is loose, and he is pushing and pulling at the loose piece. In the process, he is further loosening the connection and at the same time distracting the class with the noise he is making.

Vignette 3T: Tim

V3T: Tim is a poor student. He has a low potential for school work and also lacks the basic experiences that help a child function in the classroom. You have just presented a new lesson to the class and have assigned related seatwork. You look over the class and see that Tim is upset. When you ask him if something is wrong, he tells you that he can't do it -- it's too hard.

C. Teacher Statement of General Philosophy

What is your overall philosophy in dealing with students? What are your primary goals for the students in your class? How are these goals reflected in your approach to classroom management and student socialization?

D. Teacher Nomination of Students

Instructions: Now I'd like you to read a series of descriptions of difficult or troublesome students, nominating students in your own room who are best described by each. Using your class list, I'd like you to name one boy and one girl for each description. These students are to be the ones who, compared to the others in the class, act this way the most. Please nominate a student only once. If a student has already been named to a description and also meets the criteria (i.e., acts this way the most) for a second description, name the boy (or girl) who is second in that type of behavior in the classroom. Along with each nomination, briefly describe what the student is generally like and how s/he interacts in the classroom.

1. Target problem students. Nominate one boy and one girl for each of the following.

TPSI. These children do a minimum to just "get by." They do not value schoolwork.

1. indifferent to school
2. minimum work output
3. not challenged by schoolwork; poorly motivated

TPS2. These children show excessive and almost constant movement, even when sitting. Often their movements appear to be without purpose.

1. squirms, wiggles, jiggles, scratches
2. easily excitable
3. blurts out answers and comments
4. often out of seat

5. bothers other children with noises, movements
6. energetic but poorly directed
7. excessively touches objects or people

TPS3. These children have difficulty, even though they may be willing to work. Their problem is low potential or lack of readiness rather than poor motivation.

1. difficulty following directions
2. difficulty completing work
3. progresses slowly

2. Matched Problem Students. Using your class list, nominate two students, one boy who (compared to the other boys) and one girl who (compared to the other girls) acts like any one of the descriptions in each group the most. Nominate one boy and one girl for each of the three clusters of descriptions. Name one boy or one girl then, for both descriptions in each group. When finished, you will have nominated six students. Along with each nomination, briefly describe what the student is generally like, and how s/he interacts in the classroom.

MPS1:

MPS1a. These children express hostility through direct, intense behaviors.

1. initimidates and threats
2. hits and pushes
3. damages property
4. antagonizes
5. hostile
6. easily angered

MPS1b. These children resist authority and carry on a power struggle with the teacher. They want to have their way and not be told what to do.

1. resists verbally
    a. "You can't make me. . ."
    b. "You can't tell me what to do . . ."
    c. makes derogatory statements about teacher to others.
2. resists non-verbally
    a. frowns, grimaces, mimics teacher
    b. arms folded, hands on hips, foot stomping
    c. looks away when being spoken to
    d. laughs at inappropriate times
    e. may be physically violent toward teacher
    f. deliberately does what teacher says not to do.

MPS2:

MPS2a: These children have short attention spans. They seem unable to sustain attention and concentration. Easily distracted by sounds, sights, or speech.

1. has difficulty adjusting to changes
2. rarely completes tasks
3. easily distracted.

MPS2b: These children avoid personal interaction, are quiet and unobtrusive, and do not respond well to others.

1. quiet and sober
2. does not initiate or volunteer
3. does not call attention to self.

MPS3:

MPS3a: These children are convinced that they cannot do the work. They often avoid starting or give up easily. They expect to fail, even after succeeding.

1. easily frustrated
2. gives up easily
3. says, "I can't do it."

MPS3b: These children seek peer interaction but are rejected, ignored, or excluded.

1. forced to work or play alone
2. lacks social skills
3. often picked on or teased

3. Non-problem students. Again using your class list, please name six students, three boys and three girls, compared to the other boys (girls) are not only <u>not</u> troublesome, but are easy to work with and a pleasure to teach. Again, along with each nomination, briefly describe what the student is generally like and how s/he interacts in the classroom.

E. Teacher Nomination Recording Form

Teacher_____ Grade _____ Number _____

Type	Name	Number
TPS1-M		
TPS1-F		
TPS2-M		
TPS2-F		
TPS3-M		
TPS3-F		
MPS1a/-M/F		
MPS1b/-M/F		
MPS2a/-M/F		
MPS2b/-M/F		
MPS3a/-M/F		
MPS3b/-M/F		
NPS-M		
NPS-M		
NPS-M		
NPS-F		
NPS-F		
NPS-F		

F. Vignettes for Students

Hypothetical student in each vignette matched by sex to the subject using standardized names that do not appear in any of the participating classrooms.

Vig-1S: Underachiever

_____ could do good work in school, but s/he fools around a lot. _____ hardly ever does his/her assignments, even when s/he tells Mrs. T. that s/he will. Today during worktime everyone is busy, except _____. S/he is making paper airplanes and Mrs. T. just noticed this.

Vig-2S: Hyperactive

_____ never sits still. S/he is always out of his/her seat, humming, jiggling, and making noises. Today during worktime, _____'s chair is loose, and s/he's wiggling hard, making it move back and forth. _____'s getting pretty noisy. It's getting harder for you and the other kids to get your work done. Mrs. T. just noticed it, too.

Vig-3S: Low Achiever

_____ is not very smart in school. Even though _____ tries hard, s/he has trouble learning things and lots of times s/he gets answers wrong. Today Mrs. T. gave the class new work in math. Everyone is busy except _____. Mrs. T. asked _____ if something was wrong. _____ said s/he tried, but s/he couldn't do his/her work, it was too hard.

G. Student Interview: Introductions

Interviewer: Your stance is that of a friendly, warm, trustworthy and interested person, who wants to learn from the student. Begin with casual introductions as you walk from the classroom to the interview room:

"Hi, _____, my name is _____.

Do you know why I'm here?

I'm here to talk to you about what it's like to go to school.

I'd like to know what you think it's like to be a student in your classroom.

I'm going to tell you three stories about students in your grade in school and ask you what you think about them.

Anything you tell me is just between you and me. I won't tell anyone what you said -- not your teacher, Mrs. _____, not any of your friends, not even anyone in your family. This is just between you and me. If you want to tell people that's OK, but I won't.

We're going to tape record our conversation to help me remember everything you say. Have you ever heard your voice tape recorded before? Would you like to hear it now? (Let child talk into recorder, play back -- emphasize this as fun.)

I mentioned before that I'm going to tell you three stories and then ask you some questions. There are no right answers to these questions, I just want to know what you think.

Some of the questions are pretty unusual and you might have to think pretty hard. So take as long as you want to answer. If you ever want me to repeat a question, or you don't understand, be sure to let me know. Do you have any questions? Let's start!"

G_{II} Student Interview: Free Description Questions

"Ok, before the stories, I'm going to ask you about your school."

1. First, pretend that I just moved into your neighborhood, and I'm going to go to your school. What things do you like best about your school? _____ What things aren't so good?_____

2. Now pretend that I'm going to be in your class. If I was a new student in your class, what kinds of things would you tell me about your teacher? _____

G_{III} Student Interview: Vignettes (Repeats for each vignette)

"Now we're ready for the stories. These are pretend stories about children your age in school. I'd like you to pretend that these children are in your room and that the story tells about something that happened in class this morning. Listen to the story carefully. . .

Read Vignettes in order Vig-1S, Vig-2S, Vig-3S. Be sure to match the character (and pronouns) in the vignette and subsequent questions with the sex of the child.

After each vignette:

"What was _____ doing in this story?"

(Check for memory/accurate interpretation. If the child does not recall the story, or his/her interpretation is inaccurate, repeat the story. If another repetition is necessary, paraphrase the story, noting that this was necessary.

A. Student perception of teacher response.

"Now I'm going to ask you some questions about what your teacher would do if _____ acted this way in class."

1. What would Mrs. (T.) say to _____ if s/he acted this way in class?
("What words would she use?)

2. What would Mrs. (T.) do?
(Would she act in a certain way or do certain things to _____ if s/he did this in class?

3. Why do you think Mrs. (T.) would do those things?

4. What does Mrs. (T.) expect _____ to do after she says and does those things?
(What does she want _____ to do?

5. What does Mrs. (T.) think about _____? What sort of person does she think _____ is?

B. Student Perception of Hypothetical student.*

Now I'd like you to tell me what you think about _____ when (paraphrase vignette) (see attached.)

6. What do you think made _____ start behaving this way?

7. If you had to choose, would you say that _____ was born this way or that things happened to _____ that made _____ act this way?

8. Can you think of anything else that might have made _____ start acting this way?

9. Do you think _____ wants to act this way?

10. (If response to 9 is yes) Why would _____ want to act this way?

11. Could _____ change?

12. (If response to 11 is yes) What things could s/he do to change?
(If response to 11 is no) Why not?

13. Do you think _____ has always acted like this?

14. If _____ acts this way this year, will _____ act that way next year, too? Why?

15. Does _____ act this way only in class, or does _____ act that way in other places, too?

16. (If appropriate) Where else does _____ act this way?

*Questions 6, 7, 8, 9, 10, 11, 12, 13 from Maas, Marecek and Travers, 1978
*Question 14 based on Weinstein and Middlestadt, 1978

C. Student Reaction to Hypothetical Student.

17. How do you feel when _____ acts this way?
(What do you think about?)

18. Do you say or do anything when _____ acts this way? (If yes -- what? If no -- why not?)

19. Do any of the other students in class say or do anything? (If yes -- what? If no -- why not?) (Which students?)

20. What do you think school is like for _____? What sort of days does _____ have?

Wrap Up:

"Now, I'd like to read you the stories again, and this time I want you to tell me what you would do if you were a teacher. Ok? So, this time I'd like you to pretend that you are a teacher and a student in your classroom:

(Read Vig 1 (2) (3))

What would you say if you were a teacher and _____ acted this way?

What would you do?

(After child responds to all three vignettes): Ok, that's the end of the part we're going to tape record. I do have some more questions, but for these I'll just write down your answers.
(Now do student rankings of the hypothetical students by liking and work preference, and administer the stress scales.)

H. Student interview Key

A. Recall, accuracy of interpretation check.

1-5: Student perception of teacher response

1. prediction of teacher behavior (language)
2. prediction of teacher behavior (actions)
3. perception of teacher intent
4. perception of teacher expectations
5. perception of teacher perceptions

6-16: Student perception of hypothetical student

6. locus of causality
7. locus of causality
8. locus of causality
9. intentionality
10. intentionality
11. controllability
12. controllability
13. stability - past
14. stability - future
15. globality
16. globality

17-20: Student reaction to hypothetical student

17. own attitude toward
18. own behavior toward
19. class behavior (attitude toward)
20. summary perception

I. Student Self-Comparison

Interviewer: After the student completes the interview questions for each vignette, administer the self-comparison form. Match sex of student with vignette name and personal pronouns.

Instructions to the student: (Point/gesture to help student focus).

"Now I want you to pretend that each circle in the line going down the page is a student in your class. The circle at the top is the person who acts like (name) the most. That person. . . (insert behavior description for the vignette - insert A) . . . a lot, more than anyone else in class. The circle at the bottom of the page is the person who never acts like that. That person acts like that the least of anyone in class. (Insert B) The line is drawn in the middle of the class. Students in the middle of the class act like (name) sometimes, but not a whole lot. (Insert C). So, the circle at the top is the person who acts like (name) the most of anyone, the circle at the bottom is the person who acts like that the least, and the people near the middle line act like that sometimes. Ok? (If the student doesn't get it, rephrase). Now, I'd like you to put an "X" on the circle that shows how much you act the way (name) acts."

Behavior description inserts:

Vignette 1. _____. Insert A: "(That person) doesn't seem to care very much if his/her work is good. S/he hardly ever gets his (her) work done because s/he fools around (a lot more than anyone else in class)."

Insert B: "S/he always does his (her) work the best s/he can."

Insert C: "Sometimes they fool around, but lots of times they work hard too."

Vignette 2: _____ Insert A: "(That person) never sits still. S/he wiggles and makes noises (a lot, more than anyone else in class.)"

Insert B: "S/he always works quietly."

Insert C: "Sometimes they're noisy and move around, but sometimes they sit quietly and do their work too."

Vignette 3: _____. Insert A: "(That person) isn't very smart. S/he tries his (her) best, but the work is too hard and s/he gets wrong answers (a lot, more than anyone else in class.)"

Insert B: "S/he always knows the right answers."

Insert C: "Sometimes they don't understand and get answers wrong, but sometimes they do know and they get the answers right too."

I_2

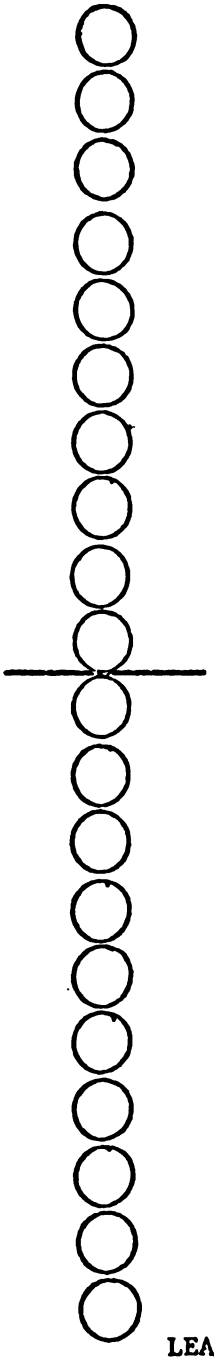
Student Self Comparison *

Vignette _____

Student _____

MOST

Where are you?



LEAST

*Adapted from Nicholls (1976)

Student _____

_____

J. Ranking of Hypothetical Students by Liking

Pretend _____, _____, and _____ live in your neighborhood. Who do you think you'd like best? (Answer 1). Who would you like second best? (Answer 2).

1. Like best: Vig. _____
2. Like second best: Vig. _____

Student _____

_____

K. Ranking of Hypothetical Students by Work Preference.

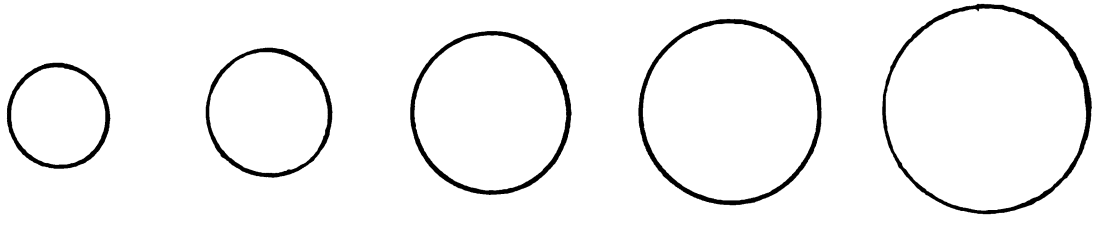
Pretend your class is going to work with partners in reading today. If you could choose your partner from _____, _____, and _____, who would you like to work with the most? (Answer 1). If (Answer 1) was sick today, who would you choose next to work with? (Answer 2).

1. First choice: Vig _____
2. Second choice: Vig. _____

L. Student Ratings of Classroom Experiences

After each event is read to student, student indicates 1) how stressful the event is; and 2) how often it happens. Student responses are recorded by interviewer.

1. Stress Scale: Instructions: The little circle means that when something happens it only bothers you "just a little." The big circle means it bothers you "a lot." The bigger the circle gets, the more it bothers you. (Practice until student masters scale use.)



1 2 3 4 5

2. Frequency: How often does this happen to you in school?

1. never or almost never?
2. just sometimes?
3. pretty often?
4. a lot?

Student _____

_____

L. Student Ratings of Classroom Experiences

Event	Rating (1-5)	Frequency (1-4)
*1. Giving a class report	_____	_____
*2. Moving to a new school	_____	_____
3. Answering wrong	_____	_____
*4. Sent to the principal	_____	_____
*5. A poor report card	_____	_____
6. Teacher disappointed in you	_____	_____
*7. Made fun of in class	_____	_____
8. Have to miss recess to make up work	_____	_____
9. Going to the board	_____	_____
10. You're having a bad day, and the teacher wants to see your parents	_____	_____
11. Doing poorly on a test	_____	_____
12. Forgetting your homework	_____	_____
13. Hard to learn something new	_____	_____
14. Have to sit alone	_____	_____
15. Reading out loud	_____	_____
16. Noisy classroom	_____	_____
17. Caught cheating	_____	_____

*Item numbers 1, 2, 4, 5, 7 from Yamamoto (1979).

Classroom Perspectives Study

M. CPS Coding Manual

General Instructions:

Coding conventions which are to be followed include: 1) if multiple codes are necessary, always code in the order in which they appear; 2) as with previous systems, where multiple codes are appropriate, separate codes with a comma (,); 3) if you are unsure of a code, place it in parentheses ( ) to indicate your hesitancy -- use "can't rate" conservatively; 4) all "other" codes as well as those codes starred (*) are to be discussed on the Special Notes sheet and identified by subject number, question number and variable letter and code; 5) if a question has been omitted by the Interviewer, code 99 -- not ascertained.

CPS Coding Manual: Table of Variables

Part I: Free Response Questions

Variable List

Question 1a, 1b

I/A/A Positive aspects about school: nonacademic

I/A/B Positive aspects about school: academic

I/A/C Negative aspects about school: nonacademic

I/A/D Negative aspects about school: academic

I/A/E General evaluation of school

Question 2

I/B/A General remarks about teacher

I/B/B Remarks about teacher expectations for student behavior

I/B/C References to teacher-student relationship

I/B/D Mention of rewards

I/B/E General evaluation of teacher

I/B/F Sophisitication of student description

CPS Coding Manual: Part I

Free Response Questions

A. Student Concerns About School

Question 1a. . . What things do you like best about your school? (Note: Student responses about school often include things specific to the classroom, include such comments here.)

I/A/A. Positive aspects about school: nonacademic

0. No positive, nonacademic aspects mentioned.

1. Scheduled breaks: lunch, recess, playtime, gym.

2. Special events/programs: field trips, competitive contests, after school activities, sports, variety of activities.

3. Special things: rugs on the floor, pretty pictures on the board, monkey bars on the play ground, toys, food.

4. Special privileges: take the lunch pails, be student of the week, be a patrol boy/girl, be special helper.

5. Positive interaction with peers (in nonacademic framework): "have fun. . . play around. . . walk to school with. . . play."

6. Positive interaction with adults (teacher, aide, other teachers, principal, janitor, lunchroom staff, bus drivers): "They tell you jokes. . . They say you have a pretty dress on. . . They say, 'Oh, you nice boy.'"

7. Other (list)/can't rate. (Includes comments like "I like the schedule here. . . I like to have math before reading.").

I/A/B. Positive aspects about school: academic

0. No positive, academic aspects mentioned.

1. Learning procedures: doing workbooks, copying from the board,

going to group, answering questions, reading out loud.

2. General learning: "It makes you smart. . . It learns you. . . You learn a lot. . . Variety of things to learn. . . doing my work."

3. Specific subject: reading.

4. Specific subject: math.

5. Specific subject: science.

6. Other subject areas: spelling, art, music, storytime.

7. Special events: start new book, do well on tests, move to new group.

8. Special things: your own books, lots of paper, stories.

9. Special privileges: papers hung up, get to help grade papers, go to the library, do special projects, free reading.

10. Positive interaction with peers: to tutor or to be tutored, positive group membership ("I like my reading group.").

11. Positive interaction with adults to help student learn: teacher, aide.

12. Other (list)/can't rate.

Question 1b. . . What things aren't so good about school? (Again, student responses about school may include things specific to the classroom, nonetheless include those comments here.)

I/A/C. Negative aspects about school: nonacademic.

0. Student does not mention any negative, nonacademic aspects of school.

1. Scheduled routines, procedures: lining up, routines for getting drinks, going to the bathroom, late recess, riding the bus, etc.

2. Scheduled breaks: lunch, recess, gym.

3. Unusual events/unscheduled interruptions: fire drills, P.A. announcements.

4. Special events: competition, sports.

5. Denial/loss of privileges, events, things (includes punishment, deserved or otherwise): can't go out to recess, sit alone, expelled, etc.

6. Negative interaction with peers: "fights. . . get picked on . . . take my stuff. . . get me in trouble. . . tattle on me."

7. Negative interaction with adults (teacher, aide, other teachers, principal, janitor, bus driver): "They yell at you. . . hit you. . . be mean to you. . . call your mom to get you in trouble."

8. Threats to safety. "I get smushed. . . I hurt my eyes. . . The kids hurt my friend."

9. Other (list)/can't rate.

I/A/D. Negative aspects about school: <u>academic</u>

0. Student does not mention any negative, academic aspects of school.

1. Learning <u>procedures</u>: doing workbooks, copying from board, going to group, answering questions, reading out loud.

2. General learning: "It's hard. . . it's not fun. . . it's dumb . . . I don't like to work. . . It's boring."

3. Specific subject: reading.

4. Specific subject: math

5. Specific subject: science.

6. Other subject areas: spelling, art, music, storytime, social studies.

7. Absence of plaudits received by successful students: don't

get pluses, stars, papers hung up, fun books, to help grade papers, to do special projects, etc.

8. Negative interaction with peers: "They don't help you. . . they don't like you to help them," dislikes group membership, ("My reading group is dumb. . . they make too much noise, you can't think."

9. Negative interaction with adults to help student learn (teacher, aide): "They don't teach good. . . They don't help you. . . They say, "You don't try," or "You didn't listen."

10. Other (list)/can't rate.

I/A/E. General evaluation of school. How would you rate this student's overall evaluation of school? Does s/he feel that school is . . .

0. Can't rate.

1. Very positive ("great. . . fun").

2. Generally positive ("it's all right. . . nice.")

3. Neutral/mediocre ("it's ok. . . not bad. . . sometimes good, sometimes bad.").

4. Generally negative ("It's not very fun. . . I'd rather stay home.").

5. Very negative ("I hate it. . . it's like a prison.")

NOTE: Star (*) and separately list any unusual descriptions of school.

B. Student Discussion of Teacher.

Question 2. . . If I was a new student in your class, what kinds of things would you tell me about your teacher?

I/B/A. General remarks about teacher appearance, character, personality, ability.

0. No general reference to/evaluation of teacher.

1. Physical description. "She's pretty. . . She's taller than me . . . She's a girl. . . Her name is _____."

2. Global personal evaluation: positive. "She's nice. . . I like her. . ."

3. Global personal evaluation: negative. "She's mean. . . The other first grade teacher is nicer."

4. Evaluation of teacher affect: positive. "She's always smiling . . . She's happy. . . She's funny."

5. Evaluation of teacher affect: negative. "She's mad a lot. . . She doesn't smile. . . She's grouchy."

6. Evaluation of teacher quality/expertise: Positive. "She's a good teacher. . . She learns you good."

7. Evaluations of teacher quality/expertise: negative. "She's not a good teacher. . . She don't teach us anything."

8. Other (list)/can't rate.

9. Code A9 if some teacher behaviors or reasons are also mentioned that substantiate the evaluations.

I/B/B. Remarks about teacher expectations for student behavior.

0. No mention of teacher expectations.

1. Procedural behaviors. "She expects you to be in your seat. . .

You have to raise your hand. . . Be quiet when she starts to count. . . don't mess around."

2. Academic behaviors: "You're supposed to do your work. . . listen to directions. . . finish all the page."

3. Global expectations: "Be good. . . try hard. . . learn good. . . be nice."

4. Other (list)/can't rate.

I/B/C. References to teacher-student relationship.

0. No reference to teacher-student relations.

1. Positive: "She jokes with us. . . She likes kids. . . She helps you. . . She's fair."

2. Negative: "She yells at us. . . She uses a cross voice. . . She don't like first graders."

3. Mixed. "Sometimes she's nice. . . It depends. If the kids. . ."

4. Absence of negative: "She doesn't yell a lot."

5. Other.

I/B/D. Student mention of rewards offered to the student <u>because of</u> the "good" behavior.

0. No rewards mentioned.

1. Symbolic rewards. Gold stars, smiling faces, etc.

2. Material rewards. Food or drink, money, prizes, etc.

3. Special privileges. Free time, run errands, etc.

4. Teacher reward. Personal attention from teacher, hugs, smiles, etc.

5. Other.

I/B/E. General evaluation of teacher. How would you rate this student's overall evaluation of his/her teacher?

0. Can't rate.

1. Very positive: "She's neat. . . She's great."

2. Generally positive: "She's pretty nice."

3. Neutral/mediocre: "She's ok. . . She's not bad."

4. Generally negative: "She's mean. . . I wish I had a different teacher."

5. Very negative: "I hate her. . . She's the meanest teacher I ever had."

NOTE: Star (*) and separately list any unusual descriptions of teacher.

I/B/F. Rating of sophistication of student description.

0. Can't rate -- no response.

1. Isolated or separate pieces of information: "She's nice. . . She's pretty."

2. Sketch (information holds together): "She's nice. . . She says, 'Oh, what a pretty dress! ' . . She smiles."

3. Portrait (information and inference): "She's nice. . . She lets you play after we do our work. . . She laughs a lot. . . Sometimes she tells us jokes. . ." She likes teaching kids. (inferential component.)

CPS Coding Manual - Table of Variables

Part II, A, Questions 1 and 2. Student Predictions of Teacher Response

Variable List

II/A/A Rewards and Punishments (CSS)

A. Rewards and contracts

B. Punishments

C. Supportive behavior

D. Threatening/pressuring behavior

II/A/B Teacher General Strategies (CSS)

A. Strategies for solving academic problems

B. Problem solving strategies (non-academic)

C. Information gathering

D. Student input re: solutions

E. Developing student insight

F. Rationale/justification for demands

II/A/C Universal Coding System (CSS)

B. Instructive vs. imperative content of message

D. Goal of influence attempt

II/A/D Giving chances

II/A/E Reporting ease

II/A/F Non-verbal behavior

II/A/G Primary domain of teacher language

CPS Coding Manual: Part II

Student Classroom Perceptions

A. Student Predictions of Teacher Response.

Questions 1 and 2: What would Mrs. Teacher say. . . do?

II/A/A. Rewards and Punishments (CSS): A, B, C, D

II/A/B. TGS (CSS) A, B, C, D, E, F

II/A/C. Universal (CSS): B, D, G,

II/A/D - II/A/G.

II/A/D. Giving chances. In the reporting of teacher behavior with non-academic problemsdoes the student refer to "fairness" or giving warnings?

0. Not applicable. Teacher behavior/language not reported.

1. Yes.

2. No.

II/A/E. Reporting ease. Which does the student appear to be more at ease reporting: Teacher words or teacher actions?

0. Not applicable.

1. Teacher words.

2. Teacher actions.

3. Equally facile (or difficult).

4. Can't rate.

II/A/F. Non-verbal behavior. Does the student report non-verbal teacher cues -- i.e., teacher stance, smile/frown, hands on hips, location in room, looking at clock, etc.

0. Not applicable/no response at all/"I don't know."

1. Yes.

2. No.

II/A/G. Primary domain of teacher language. What is the major focus of the teacher's language, as reported by the student? (Blumenfeld)

0. Not applicable/can't rate.

1. Academic performance: Teacher's comments are focused primarily on the student's academic performance, including both quality and quantity.

2. Academic procedures: Teacher's comments are addressed primarily to academic procedures -- the appearance, sequencing and rate of student work.

3. Social procedures: Teacher's comments are concerned primarily with the student's adherence (or lack of) to procedures/rules for a smooth-running classroom. Such comments are confined to description/reminders of procedure rather than more extended discussion as in 4 below.

4. Social/moral norms: The thrust of the teacher's comments are on the contracts implicit in classroom rules. Teacher may refer to fairness, equal opportunity, etc.

5. More than one of the above.

II/A/A. Coding Rewards and Punishments

For this coding, rewards or punishments that the teacher mentions will be coded and also listed separately for later additional coding. Also, in addition to explicit rewards and punishments, teacher behavior that provides support for the student or threatens/pressures the student will be coded.

A. Rewards and Contracts. (Offered or delivered)

A reward is anything offered to the student in the belief that the student will value it and attempt to earn it. It can be offered in advance of the contigent behavior as an incentive, or after the completion of the behavior as a reward or reinforcement. We will code two aspects of reward: type of reward (categories 1-5), and method of delivery of reward (category 6). Use the entire response to the vignette in doing the coding, and multiple code several categories if appropriate.

0. None. No rewards mentioned.

1. Symbolic rewards. Gold stars, smiling faces, large "C" (for correct) hanging good work on the bulletin board or the wall.

2. Material rewards. Food or drink, money, toys, trinkets, prizes.

3. Special privileges. Free time, opportunity to play monitor roles or run errands, opportunity to use desired equipment, being first in line, getting to choose the activity.

4. Teacher reward. Teacher rewards student through special personal attention; hugs or other physical contact; winks or smiles; (but not praise.). NOTE: Praise is not coded here even if explicitly described as reward; code all praise as C1 or C2.

5. Other. Any other thing or event that fits the definition of a reward but does not fit into the above categories.

6. Contracts. The rewards in question are to be delivered within a contract system requiring certain behavior on the part of the child in order to earn the rewards. In a contract system, the rewards are offered in advance as incentives, and the teacher and student come to an agreement that the rewards will be delivered if the student meets his/her end of the bargain. Where the teacher speaks of such a contract system, code here as well as in one or more of the above categories.

B. Punishments (threatened or invoked).

A punishment is anything threatened as a sanction against undesirable conduct, threatened because the teacher believes that the students will fear or dislike it and seek to avoid it. Any punishment which is threatened if . . . then or actually invoked during any part of the response is coded in the categories below and recorded verbatim on the accompanying punishment list. Use as many categories as apply.

0. None. No punishments mentioned.

1. Loss of privileges. Student will miss recess, be late for lunch, or lose other privileges that may have been abused, or will be excluded from special events.

2. Punitive isolation. The student is isolated from the rest of the class, not as a supportive measure to allow time to deal with emotions (see category C7 below), but as a punishment. *Includes "Put your head down."

3. Extra time. Student must stay after school or otherwise spend extra time with the teacher (as a punishment, not for help).

4. Extra requirements. Calisthentics, writing penances, or other activities imposed arbitrarily as punishment (does not include

restitution).

5. Restitution. The student is required to apologize or to take actions to make up for the harm done by his/her misbehavior.

6. Physical punishment. The student is slapped, spanked, or otherwise caused physical pain as a punishment (do not include physical restraint which is intended only to keep the student from doing further harm rather than to punish the student with physical pain).

7. Other adult. Teacher arranges for parent or other adult (principal, counselor) to punish this student (presumably with one of the above methods).

8. Other. The teacher threatens or invokes some other punishment that does not fit the above categories. (Includes ripping up airplanes or throwing them away, but not telling student to put them away.)

C. Supportive Behavior (including praise and encouragement).

Other than offering rewards, what does the teacher do to help the student cope with problems or feel better? The key here is teacher intention; code any teacher behavior that is intended to provide support or assistance to student (as opposed to trying to control the student or merely providing information). Use the entire response, and multiple code as needed.

0. None. No supportive behavior mentioned.

1. Specific behavioral praise. Teacher praises specific accomplishments or behavior.

2. Global personal praise. The teacher focuses not so much on specific behavior but on the student as a person.

3. Encouragement. Teacher states personal belief in student's success potential, or otherwise presents positive, credible

encouragement or support (not nagging, shaming, or pressuring). "I know you can do it. . . I'm sure if you try. . . Don't get discouraged, keep at it and you'll succeed. . ." Faith statements.

4. Comfort/reassurance. Teacher tries to comfort or reassure the student. "It's alright. . . don't worry. . ."

5. Defending. The teacher publicly defends the student against accusations or hostility of others.

6. Kid gloves. Teacher withholds, postpones, or minimizes negative response to student failure or misbehavior, believing that the student is already overly frustrated and that more negative feedback will only make the problem worse.

7. Supportive isolation. Teacher allows student to leave the scene of conflict or threat, to allow time/privacy for assimilating the experience and preparing to cope with it.

8. Involves peers. The teacher involves one or more peers to support or help the student: tutoring, buddy relationships, class meeting (geared to promote better understanding of or support for the student, not to pressure the student).

9. Involves parents. Teacher involves the parents as resources to support or help the student (but not merely to get information or to punish the student).

10. Involves other adults. Teacher involves principal, counselor, teacher aide, or other adult in an attempt to get more support or help for the student (but not merely to get more information or to punish the student).

11. Instruction. Teacher provides support or help through special or extra instruction (includes instruction on how to cope with

problems as well as instruction in the curriculum).

12. Modeling acceptance. Teacher makes a point of playing with/publicly accepting the child, to serve as model to child's peers.

13. Other. Teacher provides support or help in some way other than those in the above categories.

D. Threatening/pressuring behavior.

Does the teacher say or do things that threaten/pressure the student, short of punishing? Code here whenever the teacher's stance toward the student is not supportive or neutral but involves elements of rejection or attack on the student's sense of well being or acceptance. Use as many categories as apply.

0. None. No threatening/pressuring behavior mentioned.

1. Specific behavioral criticism. Teacher criticizes specific objectionable behavior on the part of the student.

2. Global personal criticism. Teacher criticizes student in a more general, personal, and rejecting way.

3. Sarcasm/ridicule. Teacher's comments about the student go beyond objective description of the student's inappropriate behavior by belittling, ridiculing, or blaming.

4. "Diagnosing." Teacher attributes student behavior to evil intentions ("You are trying to get me") or immature motives ("You are just trying to get attention."). This is said directly to the student or to the class as a whole (as opposed to being a comment made to the interviewer which would not be made to the student).

5. Third degree. Teacher questions or cross examines the student to bring out incriminating or embarrassing information. The teacher already knows or has decided that the student is guilty of

something, and is trying to prove it rather than merely to seek information about what has happened.

6. Involves peers. Teacher tries to get peers to pressure the student (class meetings held to discuss the problems that the student is causing for the class as a whole or to send threatening "messages" to the student; punishing a group or the class as a whole for the student's mibehavior).

7. Involves parents. Teacher tries to get parents to threaten/pressure the student, presumably using the above methods. (If teacher tries to get parents to punish the student, code C9).

8. Involves other adults. Teacher asks principal, counselor, social worker, or other adult to try to pressure/threaten the student, presumably using the methods listed above. If the teacher tries to get one of these adults to punish the student, code B7.

9. Other. Teacher threatens/pressures the student (short of punishment) in some way not listed in the above categories.

II/A/B. Coding Teacher Strategies for Responding to Vignette Situations.

This coding will focus on the strategies teachers report for coping with the problem situations depicted in the vignettes. Use the entire response, including alternate strategies and follow-up strategies, in making the coding. Use as many categories as apply. The strategies the teachers report using are coded in the categories below. The strategies that they say they would not use are listed separately (see Rejected Strategy List).

A. Strategies for solving academic problems.

This section is used only for vignettes in which all of part of the problem is perceived by the teacher to be an academic problem (the problem involves failure to cope with academic tasks, seen by the teacher as due to the student's lack of knowledge or skill, and not to unacceptable attitudes or behavior). The key here is the teacher's perception of the nature and cause of the problem: If the teacher sees the problem as academic in part or whole, use categories 1-5 here; if not, code 0.

0. None. The teacher perceives the problem as attitudinal or behavioral, not academic.

1. Help. The teacher provides additional instruction, tutoring, modeling, or some other kind of help to enable the student to do the task.

2. Reduce/change task/eliminate task. The teacher reduces or changes the task, presumably because the student would not be able to do the original task, even with help.

3. Deal with affect. Even though the problem is academic in whole or part, the teacher responds by trying to deal with the child's

affect (encourage, support, improve self-concept) in addition to or instead of providing extra instruction or simplifying the task.

4. Other. Teacher perceives the problem as academic and responds in some way other than those listed above.

B. Problem solving strategies (non-academic).

Use the following categories to code teacher strategies to problems seen as attitudinal or behavioral in whole or part. Use as many categories as apply.

0. None. The problem is seen as purely academic (coded in section A above) or there are no strategies reported.

1. No response/avoidance. The teacher would ignore or not respond to the problem because it is not serious enough to bother with, or the teacher wants to avoid dealing with the problem for some reason.

2. Teacher delegates problem to other authority. The teacher does not deal with the problem him/herself, instead he/she sees to it that another authority handles the situation (i.e., the principal, the social worker, the aide, etc.).

3. Extinguish. The teacher deliberately ignores or fails to respond to the problem, so as not to call attention to it or reinforce the student. The teacher considers the problem important enough to try to eliminate, but chooses the strategy of extinction through non-response.

4. Postpone. The teacher would not interrupt on-going activities to deal with this problem, but would handle it later.

5. Management response. Teacher intervenes with brief request or signal/command to change behavior (presumably this is all that is

required - no threats, etc.).

6. Tension release. Teacher takes action to release tension in the problem student or the class as a whole (breaks tension with humor, starts a new activity to try to get everyone's mind off the subject, sends problem student on an errand or to an isolation area to allow the student to assimilate the experience and begin to cope with it, etc.).

7. Reward. Teacher offers rewards or uses contract systems to provide incentives to get the student to change behavior.

8. Punishment. Teacher threatens or invokes punishment as a way to get the student to change behavior (Includes ripping the airplanes throwing them away, threatening to send student to office).

9. Removal or isolation. Teacher threatens to, or does, remove or isolate the student. This enforced isolation is not for student self-reflection or insight (if so, code I6). Distinguish isolation from punishment (8), change physical environment (12) and insight (16). Includes "Put your head down."

10. Prescribing/modeling. The teacher shows or tells the student how to behave appropriately, emphasizing what to do and how to do it.

11. Proscribing. Teacher explains why student's present behavior is inappropriate or ineffective, stressing what not to do and why not.

12. Change physical environment. Teacher changes seat location, uses carrels for privacy or easier sustaining of attention, or makes some other change in the student's physical environment in the classroom that will presumably help him/her stay out of trouble in the future.

13. Change social environment. Teacher tries to change the quantity or quality of interactions that the problem student shares with peers

(changes group assignments, has class meeting to try to get peers to understand the student better or change the behavior toward him/her, introduces games or teams to promote social interaction, tries to develop peer pressure on the student to conform).

14. Eliminating source of problem. Teacher sees the problem behavior as stemming from some cause, and speaks of finding and eliminating this cause in order to eliminate the problem behavior. Teacher treats the cause of the problem, not its behavioral symptom. Presumably treatment of the cause will eliminate the specific behavioral symptom in the future.

15. Catharsis. Teacher encourages or allows student to ventilate feelings through verbalization or to express them through substitute behaviors.

16. Insight. Teacher tries to get student to have a better insight into his/her own behavior or the reasons for it. Presumably, student behavior will improve as a direct result of this new insight, which is produced by asking "leading" questions or by explaining the psychological basis for the behavior by relating it to underlying student needs or desires.

17. Builds self concept. Teacher attempts to improve student's self-image by identifying, calling attention to, or building upon strengths and successes.

18. Relationship. The teacher speaks of building a close personal relationship with the student in order to understand the student better and to increase the degree to which the student values the teacher's advice and opinions.

19. Other. The teacher mentions one or more strategies that do not fit into any of the above categories.

C. Information Gathering.

Does the teacher gather information through observation or questioning before deciding on action?

0. No. The teacher takes action without gathering information first.

1. Yes. The teacher gathers information before acting.

2. Can't tell/other.

D. Student Input RE Solutions.

Does the teacher seek student input about possible solutions or conduct a discussion with the student in which both parties would contribute to the solution?

0. No.

1. Yes.

2. Can't tell/other.

E. Developing Student Insight.

If increasing the student's insight to his/her own behavior is part of the teacher's strategy, what insights does the teacher try to develop? For the teacher to be given credit for developing student insight, s/he must state this to the student explicitly, or at least very clearly implicitly (i.e., ". . . divide Joe's assignment into smaller segments, praising and point out each success: 'I knew you could do it,'" etc.) Do not credit the teacher if developing insight is only mentioned in his/her rationale to the interviewer. Code as many categories as apply.

0. None. Increasing student insight is not mentioned.

1. Recognize own behavior or its conseqeunces. The student apparently does not even realize what s/he is doing, or does not realize the consequences, and the teacher's goal is to promote this recognition.

2. Causes of own behavior. The student may recognize his/her own behavior, but does not realize the causes for it, and the teacher tries to clarify those causes.

3. Recognize others' behavior. The student seemingly does not realize what others are doing, and the teacher tries to clear up this ignorance or misperception.

4. Causes of others' behavior. The student does not realize why others act as they do, or attributes their behavior to inappropriate causes, and the teacher tries to clarify.

5. Student's feelings. Teacher tries to clarify the student's own feelings to the student.

6. Others' feelings. Teacher tries to clarify the feelings of peers or others that the student deals with (especially when trying to show the student how his/her behavior affects others).

7. Teacher's goals/feelings. Teacher tries to clarify his/her own goals or feelings to the student (typically to help the student see that teacher behavior is justified or well intended).

8. Other. Teacher tries to produce insights other than those listed above.

F. Rationale/Justification For Demands.

If the teacher makes behavioral demands on the student, what kind of rationale, if any, is offered to justify those demands? (NOTE: Threat

of punishment is not a rationale or justification for a demand).

0. No demands. No behavioral demands are made on the student.

1. No rationales. The teacher makes demands but gives no rationales to justify them. Presumably, either the student already understands the reasons for them or no rationales are needed because the teacher is the authority in the classroom and must be obeyed.

2. Cites rules. The teacher's "rationale" is confined to citing previously established classroom rules, without further explanation (appeals to specific classroom or school rules).

3. Personal appeal. Teacher appeals to student to do as teacher asks as a courtesy to the teacher or out of concern for the teacher's feelings or general welfare. (Appeals to student's concern for the teacher).

4. Moralizes. Teacher exhorts, preaches, or moralizes about why demanded behavior is desirable or forbidden behavior is undesirable (appeals to general ideas re right vs. wrong).

5. Induces empathy. Teacher uses Golden Rule approach, trying to get the student to see that s/he would not want to be treated the way s/he is treating others, or that the student is not being fair to others. Emphasis is on getting the student to put self in other's place. (appeals to the student's concern for others).

6. Logical analysis. Teacher attempts to justify demands by presenting logical arguments showing that the student (or everyone) will be better off is s/he does what the teacher demands. Stress is on getting the student to see his/her own or the class' best interests, or to see that undesirable behavior is counterproductive for the student as well as problematic for the teacher (appeals to student's self interest).

8. Safety. Teacher appeals to safety needs, noting that problem behavior is dangerous to the student or to others.

9. Other. Teacher presents a rationale to justify demands that does not fit into the above categories.

10. Can't rate/no language.

II/A/C. Universal Coding System (to be used with all vignettes.)

7. Pride/self concept. Teacher suggests that problem behavior is beneath the student's dignity or contrary to his/her good nature or intentions. (Appeals to student's pride, self respect, or sense of responsibility).

8. Safety. Teacher appeals to safety needs, noting that problem behavior is dangerous to the student or to others.

9. Other. Teacher presents a rationale to justify demands that does not fit into the above categories.

10. Can't rate/no language.

II/A/C. Universal Coding System

B_1. Instructive vs. imperative content of message. Does the teacher's response include reasons why the expressed behavior is inappropriate or change is expected, or does the teacher simply demand/command the student? Do the teacher's attempts to influence/change the student include rationales?

This category also applies to commands for reparation and to do's and don't's in the future.

1. Highly instructive. Teacher provides full, detailed rationale/information for expectations/actions regarding the student's behavior. (Includes teacher being an integral part of solving problem.)

   "Were the boys doing or saying anything to you to make you feel bad or to hurt you? If not, I really don't want you to come and tell me about their behavior. Other children don't like to be tattled on any more than you do. So unless you or someone else is being hurt, I'd rather you didn't tell me about it."

2. Minimally instructive. Teacher provides limited rationale/information for expectations/actions regarding the student's behavior. The message is not confined to commands, as those scored 3. That is, responses scored 2 are essentially "padded" commands. Include rules, if phrased as rules.

   "You don't bother me about that. You only need to worry about yourself - unless someone is getting hurt or it's an emergency."

3. Imperative. Teacher makes demands without giving explanations.

   "Don't tell me that stuff."

   "Play on another part of the playground."

4. Can't rate/other. Teacher response does not include instructions

or imperatives or teacher doesn't say enough. The teacher may ignore or distract the student. Code here for teacher instructions for discussion or problem solving, contracts, and other positive approaches. Code modeling without explanation or comment here. I.e., "I'd play with Mark so the others would see. . .

"I wouldn't answer her."

"I'd just ignore it.:

"Tell me about the game you were playing."

"I'd tell them they must solve the problem and then I'd help them get started."

B_2. Instructive vs. imperative content of teacher's message in instructional situations.

1. Highly instructive. Teacher provides full, detailed instruction/help in a positive and supportive way, or sends the student to a tutor who presumably will do the same.

2. Minimally instructive. Teacher provides limited help in a stopgap way, provides a specific answer without concern for understanding of necessary concepts, etc. Teacher irritation or disappointment may be present.

3. Imperative. Berates/scolds. Tells student to pay attention or do it right. Acts as if problem is willingness to try rather than low ability.

4. Teacher does not directly help student or provide assistance. May ignore, distract, or change the assignment. Included here are contracts and other positive approaches.

D. Goal of the influence attempt. What is the goal of the teacher's response to the student? Just to stop the behavior in the present? To control its expression in the future? To replace it with more appropriate behavior? This category is used both where a change in student motivation or behavior is needed and where teacher help is needed. Multiple code if more than one alternative applies. (Examples from underachiever vignette).

1. Mental hygiene/coping techniques. The goal is replacement of inappropriate behavior with desirable behavior, via a "cure" or change in what the teacher perceives to be the cause of the behavior. I.e., meeting student needs. (Example from underachiever vignette).

"Then I would give him a more active role in the classroom to help him learn to like and value school."

Also coded 1 are responses that involve building the student's skills for coping with problems. Those coping strategies are general, extending beyond the immediate situation: (Example from short attention span vignette)

"George, you know what I think about listening. . . Then I'd work on listening skills with him. . ."

2. Rewards/shaping. The goal involves immediate (and future) replacement of inappropriate behavior with desirable behavior via praise, rewards, or contract systems. This category includes teachers shaping successive approximations. Score all ILTW's here. ("I like the way. . .").

"I'd tell him to put the airplane away. Then I'd set up a contract with him: if he finished and corrected all his work by the end of each week he could spend time making airplanes.

"I wouldn't say anything to him, but loud enough so he could hear, I'd say, 'I like the way most of you are busy working."

"Every day I'd stand a little further from her and say, 'Linda a little louder. . .', and praise her when she did speak up. Eventually I'd be on the other side of the room."

3. Control/threat or punishment. The goal is to control the expression of inappropriate behavior in the immediate situation and/or the future. The teacher's concern is not with the substitution of desirable behavior, but is limited to inhibiting the undesirable behavior, often through threats or punishment. Deliberate ignoring that is based on extinction principles is also coded here.

"I'd tell him if he ever made airplanes again, he'd stay after school and he'd know I meant it."

"I'd tell him to put those away."

4. Avoidance. The teacher's goal is to avoid dealing with the situation. Uses distracting or ignoring, not for extinguishing the behavior, but for avoiding dealing with the situation.

"I wouldn't bother with him."

"Look everyone, Carl made an airplane."

5. Can't rate/other.

CPS Coding Manual - Table of Variables

Part II, A, Questions 3 - 5, Student Understanding of Teacher Behavior

Variable List

II/a/a Memory Check

II/a/b Memory Prompts

II/a/c Distortion

Question 3: Teacher Motivation

II/A/H Perceived Cause of Teacher Response

II/A/I Affective Quality

Question 4: Teacher Goals

II/A/J Nature of Teacher Goal

II/A/K Target of Teacher Influence

II/A/L Range of Teacher Expectations

II/A/M Primary Focus

Question 5: Teacher Thought

II/A/N Student Inference of Teacher Thought

II/A/O Presence/Type of Judgment/Evaluation

II/A/P Nature of Judgment/Evaluation

Overall:

II/A/Q Concern for Others

CPS Coding Manual

Part II, A. Student Understand of Teacher Behavior. (Code the memory checks for the entire vignette, and the student responses to questions 3, 4, and 5).

II/a/a. Memory Concerns

Memory Check: Was it necessary for the interviewer to repeat the story initially, before questioning began, either because the student could not remember it, or didn't hear it or misinterpreted it?

0. No repetitions necessary.
1. Interviewer repeated story once.
2. Interviewer repeated story twice.
3. Interviewer repeated story three or more times.

II/a/b. Memory Prompts

Memory prompts: Was it necessary for the interviewer to repeat the story beyond the structured memory prompts, as the interview progressed, either because the student forgot the story or in the process of answering the questions reconstructed it inaccurately?

0. No repetitions necessary.
1. Interviewer repeated the story once.
2. Interviewer repeated the story twice.
3. Interviewer repeated the story three or more times.

II/a/c. Distortion

Distortion: If the student distorted the story, was the distortion due to misattributions of:

0. No distortions

1. Locus of Causality.

2. Intentionality.

3. Other/can't rate.

Question 3 . . .Why do you think Mrs. Teacher would do those things?

II/A/H. Perceived cause of teacher response:

0. Can't rate.

1. Teacher personality/disposition. Teacher responds as she does because of her disposition/character: "Cuz she don't like that. . . because she's nice. . . she's mean."

2. Teacher role. Teacher responds as she does because of her job as a teacher which includes both teaching and managing: "Cuz she's supposed to teach him. . . Because she wants us to be able to learn."

3. Student personality/disposition. Teacher responds as she does because of the student's disposition/character: "Because he's a nice boy. . . because he's so bad. . . because he didn't learn well when he was little."

4. Student role. Teacher responds as she does because of the student's failure to meet the demands of the student role. These demands include effort, learning, doing work and not interfering with a smooth-running classroom: "Because he's supposed to be working, not playing around. . . because he's been trying hard as he can. . . because he was being bad."

II/A/I. Affective Quality.

0. No affective component.

1. Positive affect/genuine concern: "She likes being a teacher. . .

She's worried about him. . . she cares." Includes concerns that classmates be able to listen, concentrate.

2. Negative affect/lack of concern: "she's cross. . . she's mad . . .she don't care."

3. Can't rate.

Question 4. . . What does Mrs. Teacher expect _____ to do after she says and does those things?

II/A/J. Nature of Teacher Goal.

Does the student describe teacher goals in terms of prescriptive behaviors or attitudes or in terms of proscriptive behavior or attitudes?

0. Not applicable. No response, "I don't know."

1. Prescriptive. The teacher's goal is described positively in terms of what the student is to do.

2. Proscriptive. The teacher's goal is described negatively, in terms of what the student is not to do.

3. Both prescriptive and proscriptive teacher goals are described.

II/A/K. Target of Teacher Influence.

What does the teacher try to influence or change in the student?

0. Not applicable. No response, "I don't know."

1. Student behavior.

2. Student attitude/belief/feeling (includes "try").

3. Both student behavior and attitude/belief/feeling.

II/A/L. Range of Teacher Expectations.

Does the student confine the teacher's expectations to immediate behavior change or are the teacher's expectations more extended and global?

0. Not applicable. No response, "I don't know."

1. Immediate. Includesdoing the immediate "correct" thing and doing the immediate punishment: "Do his work. . . Stop it. . . Go in the hall."

2. Long term. Includes positive and non-negative: "Always be good . . . learn. . . like school. . . don't be bad no more."

II/A/M. Primary Focus

What is the primary focus of the teacher's concerns? NOTE: Match with reported strategies to make distinction here. If "do work" coupled with punishment -- code 3.

0. Not applicable. No response, "I don't know."

1. Instructional. Teacher is concerned with the student's academic performance (for the student's good).

2. Managerial. Teacher is concerned with classroom management, that the student does not interfere with a smooth-running classroom (for the teacher's good).

3. Both. Includes "do her work."

Question 5. . . What does Mrs. Teacher think about _____? What sort of person does she think _____ is?

II/A/N. Student Inference of Teacher Thought (Selman & Byrne)

NOTE: Code the highest level that applies.

0. No inference. Remarks are confined to description of the student's behavior: "She'd think he was fooling around making paper airplanes."

1. Inference limited to description of teacher's affective reaction to student: "She'd be mad. . . She'd feel sorry."

2. Recognition of teacher perspective, level 1: discussion of teacher cognitions concerning student behavior or trait: "She thinks that he's not a very good student. . . She thinks he needs to work more. . . She thinks he's lazy."

3. Recognition of teacher perspective, level 2: Discussion of teacher thoughts concerning student cognition/psyche: "She thinks that he doesn't care about his work. . . She thinks that he feels bad."

4. Can't rate.

II/A/O. Nature of Evaluation of Student Ascribed to Teacher.

0. No moral judgments/evaluations about student attributed to teacher.

1. Judgment about student per se.

2. Judgment about student performance. Includes effort, quality and quantity of work.

3. Judgment about student ability, skills knowledge.

4. Judgment about student adherence to procedures, conformity to rules and student social behavior, including references to student's sense of responsibility, cooperation, interpersonal skills, etc.

5. Judgment about student affect.

6. Other/can't rate.

II/A/P. Nature of Moral Judgment/Evaluation of Student Ascribed to Teacher.

0. Can't rate.

1. Positive - protective (includes positive plus neutral evaluation).

2. Negative - rejecting (includes negative plus neutral evaluation).

3. Neutral - indifferent ("He's slow, careful, tries, not bright, not as smart as the others, etc.).

4. Mixed: positive and negative

II/A/Q. Concern for Others.

Does the respondent mention any effects the student may have on other class members ("He's so noisy, other kids can't think") when discussing teacher intention/goal/thoughts?

0. No.

1. Yes.

CPS Coding Manual - Table of Variables

Part II, B, Questions 6 - 16. Student Perception of Hypothetical Student

Variable List

Questions 6 - 8: Locus of Causality

II/B/A Spontaneous response

II/B/B Causal stability

II/B/C Physical causes

II/B/D External causes

II/B/E Internal causes

II/B/F Interactive causes

Questions 9 - 10: Intentionality

II/B/G Intentionality

II/B/H Reasons for intentional behavior

Questions 11 - 12: Controllability

II/B/I Possibility of change

II/B/J Facilitating change

II/B/K Prohibiting change

II/B/L Change strategies

II/B/M Generality of change

Questions 13 - 14: Stability

II/B/N Past stability

II/B/O Future stability

II/B/P Reasons for continuation of behavior

II/B/Q Reasons for cessation of behavior

Part II, B (cont'd.).

Questions 15 - 16: Globality

II/B/R Globality of student behavior

II/B/S Nature of behavior generalization

CPS Coding Manual

Part II, B, Questions 6 - 16, Student Perception of Hypothetical Student

Questions 6, 7, and 8: Locus of Causality.

6. What do you think made _____ start behaving this way?

7. If you had to choose, would you say that _____ was born this way or that things happened to _____ that made _____ start acting this way?

8. Can you think of anything else that might have made _____ start acting this way?

II/B/A. What is the student's first choice, an internal or external cause? (See D, E, F for additional examples).

1. Internal: "Born that way. . . He's dumb. . . He's mean."

2. External: "He got hit by a car. . . he's didn't eat this morning. . . the kid next to him is too noisy.

3. Interactive. "He's trying to act like his brother."

II/B/B. Does the student refer to factors which are stable, enduring, long term causes for the student's present behavior, or to more immediate, short term, transitory factors? (code independent of internal-external dimension).

0. Can't rate.

1. Long term: "He was born that way. . . he never studied when he was little."

2. Short term: "The kid next to him is too noisy. . . the other kids told him it's cool. . . he's hungry."

3. Both long and short term causal factors mentioned.

II/B/C. Does the student refer to physical reasons ("he's tired. . . he's hungry. . .he has a rash.") for the student's behavior?

0. No.

1. Yes.

II/B/D. Nature of external causes mentioned for student behavior (multiple code, but code in order mentioned by student).

0. External causes for student behavior not given, or student response to Q7 "something happened" is not developed).

1. Student essentially a "victim" of forces beyond his/her control: "The devil is in him. . . the other kids make him do that or they won't be his friend. . . his parents made him that way. . . his mama moved too much when he was in her . . . the work's too hard."

2. Student indirectly controlled by others: "His brother made him so mad he couldn't help it. . . his mama don't teach him right. . . his friends bug him all the time. . . holler at him/her. . . his chair's loose."

3. Student victim of environmental assault, a specific event as opposed to ongoing processes/relationships as in 1, 2: "He got hit in the head. . . he got poisoned. . . he got hurt real bad."

4. Other (list)/can't rate.

II/B/E. Nature of internal causes mentioned for student behavior (multiple code, but code in order mentioned by student).

0. Internal causes for student behavior not given.

1. Student essentially a product of birth: "Born that way. . . born not smart. . . he's black (white). . .that's the way boys are."

2. Student product of his own behavior/desires (includes "just world" notions): "He got into a habit. . . he feels like it. . . he never studied before and now he can't even if he wants to . . . he thinks it's cool. . . he doesn't try. . . he's bad."

3. Other (list)/can't rate.

II/B/F. Nature of cause is interactive: a situation develops that allows the expression of an internally caused student behavior: (Multiple code, but code in order mentioned by student).

0. Interactive causes not mentioned.

1. Student behavior is the result of expectation effects: "No one thinks he's smart so he don't even have to try."

2. Student behavior is the result of his ability or character and the nature of the teacher or the work. (Includes readiness explanations): "He's not smart and the work is too hard for him. . . One day he flunked so he knew he wasn't smart, so he didn't try no more, he didn't want to learn no more. . . he acts like that whenever we have a substitute teacher. . . he forgot to take his pill."

3. Student behavior is the result of modeling adults or other children: "He's just copying off the grown-ups. . . He's trying to be like his brother."

4. Other.

Part II, B, Questions 9 and 10, Intentionality.

Question 9: Do you think _____ wants to act this way?

Question 10: (If yes) Why would _____ want to act this way? (Code reasons given for intentional behavior only).

II/B/G. Intentionality. Here we are trying to distinguish three aspects of intentional behavior: intentional, thoughtless, and unintentional.

0. Can't rate ("I don't know," no answer).

1. Intentional. The student wants to act as s/he does.

2. Thoughtless. The student is in a habit and didn't really think about it.

3. Unintentional. The student does not want to act as he does, his behavior is the result of an accident or beyond his control.

4. Qualified response. The student might be acting intentionally, but then again. . .

II/B/H. Reason(s) for behavior (if intentional).

0. Reasons for behavior not discussed.

1. Self-indulgence: "He wants to. . . he likes it."

2. Self-protection: "He's afraid. . . he's nervous."

3. Aggression toward others: "He don't like the teacher. . . he likes to but the other kids."

4. Habit: "He's just used to being like that . . ."

5. Other. (List separately).

Part II, B, Questions 11 and 12, Controllability

Question 11: Could _____ change?

Question 12: (Yes) What things could s/he do to change?

(No) Why not?

II/B/I. Is change possible?

0. Can't rate, no answer, "I don't know."

1. Yes.

2. No.

3. Qualified response: "It depends. . ."

II/B/J. Things That Facilitate Change:

0. Can't rate. Change not possible.

1. Internal controls. Student refers to things within the student's capabilities to produce change: "try harder. . . be good. . . listen better. . . Change his color. . . watch himself more. . . grow up."

2. External. Student refers to forces/events/people which can help the student change: "get a meaner teacher. . . have a nicer brother. . . someone scare him into it."

3. Interactive. Student refers to a combination of an internal student control and an environment that allows an opportunity for change: "Make nicer friends and watch how they do it and then do just like them."

II/B/K. Why change is not possible.

0. Can't rate. Change is possible.

1. Internal factors. Student refers to factors within the student, over which the student has no control: "He's just like that, that's all. . . he's born that way forever. . . he can't change cuz he's got too strong a habit. . . s/he doesn't know how to."

2. External factors. Student refers to factors external to the student, over which the student has no control and which prevent the student from changing: "The devil won't let him. . . grown-ups don't help you. . . his teacher just won't learn him."

II/B/L. If change is possible what is the nature of the change strategy?

0. Can't rate, change is not possible.

1. Prescriptive: focus on do's to promote positive consequences: "Study harder. . . do nice stuff. . . listen."

2. Proscriptive: focus on don't's to avoid undesirable consequences: "Don't goof off. . . don't be dumb. . . not be mean."

3. Both.

II/B/M. If change is possible, are these changes global in nature or situation specific? NOTE: If student discusses both global and specific change, code 1, global.

0. Can't rate, change is not possible.

1. Global. Change discussed is generalized, encompassing more than the specific behavior described in the vignette (includes learning to learn strategies).

2. Situation specific. Change discussed is confined to specific behavior, includes statements confined to "do his work."

Part II, B, Questions 13 and 14, Stability: past, future.

Question 13: Do you think _____ has always acted like this?

Question 14: If _____ acts this way this year, will _____ act that way next year, too? Why?

II/B/N. Stability of behavior: past.

0. Can't rate/"I don't know,"/no answer.

1. Stable behavior. Student has always acted this way, this is a long-standing issue.

2. Unstable behavior. Student has not always been this way, but for whatever reason, he has a fairly strong record of acting this way.

3. Sporadic behavior. The student's behavior is not interpreted against a background history, but is viewed as transitory, fleeting.

4. Qualified response. "It depends. . ."

II/B/O. Stability of behavior: future.

0. Can't rate/"I don't know."/no answer.

1. Future stability. Student will continue to act this way.

2. Future instability. Student will not act this way next year.

3. Qualified response. "It depends."

II/B/P. Reasons for continuation of behavior.

0. Can't rate. Behavior will stop.

1. Student has no desire to change (student could change but does not care or want to).

2. Student can't change because of problems within himself.

3. Student can't change because of forces/problems within his environment over which he has no control (includes student not being able to get others to help).

4. Student can't change because of an interaction of internal and external factors.

II/B/Q. Reasons for cessation of behavior.

0. Can't rate. Behavior won't stop.

1. Self control. Student has the desire/ability to exert change for intrinsic reasons: change is the result of self control.

2. Other control/environmental forces: Persons/events/things will alter or coerce the student to change or cause the student to avoid such outcomes: other control.

3. Interaction of self and environmental controls. The student's behavior will stop as a result of his/her efforts or desire and the support of his/her environment. ("He'll try real hard and his mom will help him. . . he will be bigger then and he will have learned a lesson.")

Part II, B, Questions 15 and 16: Globality

Question 15: Does _____ act this way only in class, or does _____ act that way in other places, too?

Question 16: (If appropriate) Where else does _____ act this way?

II/B/R. Globality of student behavior.

0. Can't rate/"I don't know."/no response.

1. Situation specific. Student acts this way only in class.

2. Generalized. Student acts this way other places.

II/B/S. Nature of behavior generalization. (Multiple code as needed, but code in order mentioned by student).

0. Can't rate. Behavior does not extend beyond the classroom.

1. Parallel places. The student also acts this way in music class, Mrs. _____'s room, Sunday school, summer school, etc.

2. Other places. The student also acts this way at home, at the store, gas stations, zoos, parking lots, movies, in church, etc.

3. Parallel activities. The student also acts this way when he plays school, when he reads for his gramma, when he studies, etc.

4. Other activites. The student also acts this way when he's shopping, playing, working at his dad's, etc.

5. Parallel persons. The student also acts this way when he's with Mrs. Principal, last year's teacher, the lunchroom aide, etc.

6. Other persons. The student also acts this way when he's with specific persons: his parents, his brother, his friends, etc.

NOTE: Star (*) and separately list any unusual responses.

CPS Coding Manual - Table of Variables

Part II, C, Questions 17 - 20. Student Reaction to Hypothetical Student

Variable List

Question 17: Student Affect

II/C/A Quality of student affect

II/C/B Property of reported affect

II/C/C Intensity of reported affect

Question 18: Student Bystander Behavior

II/C/D Respondent behavior toward student

II/C/E Effectiveness of respondent behavior

II/C/F Respondent motivation

Question 19: Group Bystander behavior

II/C/G Group behavior toward student

II/C/H Effectiveness of group behavior

II/C/I Group motivation

II/C/J Comparison of respondent and group

Question 20: Summary Perception

II/C/K General rating of student attitude toward school

CPS Coding Manual

Part II, C, Questions 17, 18, 19, and 20, Student Reaction to Hypothetical Student.

Question 17: How do you feel when _____ acts this way?

II/C/A. Quality of student affect.

0. Student does not report affect, instead reports behavior.

1. Positive - protective: "I feel bad for him. . . I worry about him."

2. Neutral - indifferent: "I don't care. . . I don't feel nothing."

3. Negative - rejecting: "I feel irritated. . . I feel mad."

4. Can't rate. "I feel bad. . ." (without additional information.)

II/C/B. Property of Reported Affect

0. Can't rate.

1. Sympathy. (feel for) Reported feelings toward student in terms of that student" "I feel bad for him cuz he's trying hard."

2. Empathy. (feel with) Reported feelings toward student are in terms of how the respondent would feel in a similar situation: "I feel bad for him cuz I'd feel sad if I couldn't learn."

3. Self interest. Reported feelings toward student are in terms of how that student affects the respondent: "I feel bad cuz then he won't be able to play with me at recess. . . I feel bad cuz he'll get all the teacher's help and I won't get any."

NOTE: Code 3*, any responses that are self interest but based on a fairness rationale, i.e., "The rest of us have to work, so s/he does too."

II/C/C. Intensity of reported affect. Rate the intensity of the student's feelings concerning the student portrayed in the vignette. Does the respondent seem quite taken with the student (positively or negatively) or really not all that involved? NOTE: Code intensity independent of positive or negative qualities.

0. Can't rate.

1. Apathetic/unaware.

2. Somewhat concerned.

3. Very concerned.

Question 18: Respondent Bystander behavior: Do you say or do anything when _____ acts this way? (What? or why not?)

II/C/D. Respondent behavior toward student. NOTE: Multiple code as needed.

0. Can't rate/"I don't know."/no answer.

1. Respondent does nothing. No action is taken because respondent doesn't feel/see the need. "Nothing, I just do my work. . . others will."

2. Respondent not allowed to do anything. Student does not act because of classroom rules forbidding exchanges between students: "Nothing. I'd get in trouble if I talked to him."

3. Respondent instrumental to getting student required help/etc.: "I'd find someone who knew how to do it and ask them to help. . . I'd tell someone near him to tell him to be quiet."

4. Respondent acts him/herself: "I'd help. . . I'd let him copy . . . I'd ask him to stop."

5. Respondent acts counter to student's interests: "I'd tell the

teacher on him. . . I'd get him in trouble. . . I'd beat him. . . tell him "shut up." NOTE: Star (*) and list any mention of physical intimidation or abuse.

II/C/E. Effectiveness of respondent behavior toward student. Will the respondent's actions be helpful/useful to the student?

0. Can't rate.

1. Effective.

2. Ineffective, but not harmful either.

3. Harmful.

NOTE: If respondent reports that s/he'd do X, and if that didn't work, s/he would tell the teacher, code 2.

II/C/F. Respondent Motivation. If the respondent does help or act toward the student in some way, why does this occur?

0. Can't rate/no help/etc. given student.

1. Altruistic motivation. Respondent strategy reflects concern for student: "I'd tell him to be quiet so he won't get in trouble."

2. Self interest motives. Respondent strategy reflects concern for own welfare: "I'd tell him to be quiet so the teacher won't get mad and make us all stay in for recess. . . I'd ask him to sit still so I could get my work done."

Question 19: Group bystander behavior: Do any of the other students in class say or do anything? (What or why not?)

II/C/G. Group behavior toward student.

0. Can't rate/"I don't know."/no answer.

1. Group does nothing. No action is taken because the group does

not feel/see need: "Nothing, they just do their work."

2. Group not allowed to do anything. Students do not act because of classroom rules forbidding exchanges between students: "Nothing. They'd get in trouble if they talked to him."

3. Group instrumental in getting student desired response: "They'd find someone who knew how to do it and ask them to help. . . They'd tell someone near him to tell him to be quiet."

4. Group acts themselves: "They'd help. . . they'd let him copy . . . they'd ask him to stop."

5. Group acts counter to student's interests: "They'd tell the teacher on him. . . They'd get him in trouble. . . They'd beat him . . . tell him "shut up." NOTE: Star (*) and list any mention of physical intimidation and abuse.

II/C/H. Effectiveness of group behavior toward student. Will the group's actions be helpful/useful to the student?

0. Can't rate.

1. Effective.

2. Ineffective, but not harmful either.

3. Harmful.

NOTE: If respondent reports that the group would do X, and if that didn't work, they'd tell the teacher, code 2.

II/C/I. Group motivation. If the group does help or act toward the student in some way, why does this occur?

0. Can't rate/no help/etc. given student.

1. Altruistic motivation. Group strategy reflects concern for student" "They tell him to be quiet so he won't get in trouble."

2. Self interest motives. Group strategy reflects concern for own welfare: "They'd tell him to be quiet so the teacher won't get mad and make us all stay in for recess. . . They'd ask him to sit still so they could get their work done."

II/C/J. Compare the respondent's self-report with his/her reports of the class' behavior. How closely do these reports converge?

0. Can't rate.

1. Responses are essentially the same.

2. Responses are different, but not conflicting.

3. Responses in opposition to each other.

Question 20: Summary perception: What do you think school is like for _____? (What sorts of days does _____ have?)

II/C/K. General rating of student's attitude toward school.

0. Can't rate/"I don't know."/no answer.

1. Very positive: "great . . . fun. . . he really likes it."

2. Generally positive: "It's alright. . . he thinks it's nice."

3. Neutral/mediocre/mixed: "It's ok. . . it's not bad. . . sometimes it's good, sometimes bad. . . pretty hard."

4. Generally negative: "It's not very good. . . he doesn't like it very much. . . he'd rather be home."

5. Very negative: "He hates it. . . it's a prison."

NOTE: Star (*) and separately list any unusual descriptions.

CPS Coding Manual

Part III, Student As Teacher

In this section, we are concerned with comparing the student's role play of being a teacher with his/her perceptions of his/her present teacher. By necessity, then, we will code the student's response to each vignette on:

III A) Rewards and Punishments (CSS): A, B, C, D

B) TGS (CSS) A, B, C, D, E, F

C) Universal (CSS) B, D.

Additional Codes:

D) Giving chances.

E) Reporting ease.

F) Non-verbal behavior.

G) Domain of teacher language

H) Congruence of student role play and teacher report.

0. Can't rate.

1. Essentially the same.

2. Different but not conflicting

3. Conflicting

*See Part II, A, Questions 1, 2: "Student predictions of teacher response" coding subsection for complete variable descriptions. NOTE that variable H is unique to this section.

N. Parental Permission Form

March 1, 1980

Dear Parent:

I am presently preparing to do my dissertation research under the direction of Professor Jere Brophy of the College of Education at Michigan State University. My study will look at how children think about school and how they make sense of their teacher's behavior when s/he response to problems that frequently occur in classrooms.

I would appreciate your consent to ask the children questions about how they like school in general and about three "pretend stories" about classroom events in particular. The stories are all based on a student not doing his work, but for three different reasons: He doesn't care about it; he is distracted from it; or he is unable to do it. The children will read these stories and asked a series of questions after each to assess their understanding of the student in the story, their beliefs about what the teacher would do, and their own reactions should this occur in their classrooms. The children will be asked to compare themselves to the student in the story: Do they ever do those kinds of things? How often? The children will also be asked which pretend student they liked the best and second best. Finally, the children will be asked how much different events which are common in classrooms "bother" them and how often they happen. This list includes going to the board, making a mistake, doing poorly on a test, sent to the principal, and so on.

This would be the extent of the children's involvement. All responses will, of course, be kept confidential and no names will be used in any research reports based on those interviews.

Your consideration is greatly appreciated. If you have any questions or desire additional information, please feel free to contact me at 353-9177 or 353-6470 between 8:00 A.M. and 5:00 P.M.

Sincerely

Mary M. Rohrkemper

- -

_____ I have read the above statement and agree to allow my child to participate.

_____ I prefer that my child not participate in the study

______________________________ ____________________

Parent's signature Date

Please send this completed form back with your child to his or her teacher.

O. Teacher Consent Form

I understand that the Classroom Perspectives Study is an attempt by Mary Rohrkemper, under the direction of Professor Jere Brophy from the Institute for Research on Teaching at Michigan State University, to gather information about students' perceptions of hypothetical classmates and my responses to them. I understand that the study is an attempt to gather information rather than an experiment or treatment, that my responses to the interview questions will be tape recorded for later transcription and analysis, including comparison with the perceptions of students in my classroom, and that data will be held in confidence and reported without mention of the names of any of the participating teachers or of any students who have been identified for participation.

I also know that I am free to discontinue my participation in the study at any time, and that I will be given a report of the findings of the study when it becomes available.

_____
(Signature)

_____
(Date)

P. Information for Principals

The Classroom Perspective Study compliments the Classroom Strategy Study directed by Jere Brophy from 1978 to the present. In the Classroom Strategy Study, 54 Lansing teachers reported strategies which they have developed to cope with difficult or troublesome students in their classrooms. These teacher interviews, and those of Detroit teachers, are presently being analyzed to identify both common themes and distinctive qualities in strategies reported by teachers who differ in grade level, school system (Detroit vs. Lansing) and so on.

The data from the Classroom Strategy Study provide a wealth of information about teachers' perceptions of, thinking about, and strategies for handling difficult students. What is not included, however, is how students perceive these teacher strategies. In the Classroom Strategy Study it was assumed that students understand their teacher's actions as they were intended or as adults would interpret them. The present study, the Classroom Perspectives Study, investigates this assumption by exploring students' perceptions of routine classroom events. Because students experience events that occur in the classroom, both directly as participants and indirectly as observers, it is important to know how these incidents are interpreted, including students' perceptions of the role of the teacher, of the student directly involved, and of the remainder of the class.

In the study, teachers and selected students in their classroom are individually interviewed about the teacher's response -- actions and intentions -- to three hypothetical students who are portrayed in written vignettes as not doing their work, but for different reasons. These interviews will be

examined for both points of agreement and unique patterns of perceptions among students.

Differences among students are expected, given the participants chosen for the study. Teachers who were selected have participated in the Classroom Strategy Study discussed above. Their interviews from that study indicate that they are not only effective in dealing with troublesome students, but that they also differ in their management styles. Teachers who have been selected emphasize primarily either a behavior modification approach or a language oriented problem-solving approach in dealing with students. Teachers were also chosen to evenly represent grades 1 through 4.

One aspect of the study, then, will be to see if students exposed to teachers with contrasting styles have contrasting perceptions of classroom events.

The most significant differences in students perceptions, however, are expected to be due to the types of students interviewed. These will be students who were identified by their teachers as those who exhibit achievement problems, or are easy and pleasurable to teach. Nominated students whose parents provide permission and who agree to participate will be included in the study, and will be interviewed by a trained staff member who is unaware of the students' group memberships.

If you have any questions or request further information, please contact me. Mary Rohrkemper, 252 Erickson Hall, Michigan State University. Phone 353-9177 or 353-6470, 8:00 A.M. to 5:00 P.M. Monday through Friday.

Table 1. Means and Standard Deviations for Student Free Response Data.[1]

	Item	$\bar{X}$	SD
Positive Non Academic			
	IAA0. None	.19	.39
	IAA1. Breaks	.45	.50
	IAA2. Special events	.11	.31
	IAA3. Special things	.20	.40
E+	IAA4. Special privileges	.01	.12
L+	IAA5. Positive with peers	.29	.46
L+	IAA6. Positive with adults	.17	.38
	IAA7. Other	.08	.27
Positive: Academic			
	IAB0. None	.32	.47
	IAB1. Learning procedures	.06	.23
E+	IAB2. General learning	.20	.40
E+	IAB3. Reading	.28	.45
E+	IAB4. Math	.31	.46
E+	IAB5. Science	.01	.12
E+	IAB6. Other subjects	.25	.43
E+	IAB7. Special events	.02	.14
	IAB8. Special things	.06	.24
E+	IAB9. Special privileges	.06	.24
L+	IAB10. Positive with peers	.03	.17
L+	IAB11. Positive with adults	.02	.14
	IAB12. Other	.04	.18

Table 1. (cont'd.)

	Item	$\bar{X}$	SD
Negative Non Academic			
	IAC0. None	.48	.50
	IAC1. Routines	.04	.20
	IAC2. Breaks	.04	.20
	IAC3. Unusual events	0	0
E-	IAC4. Special events: competitive	.02	.15
E-	IAC5. Denial/loss of privileges	.14	.35
L-	IAC6. Negative with peers	.21	.41
L-	IAC7 Negative with adults	.11	.32
S	IAC8. Threats to safety	.09	.28
	IAC9. Other	.14	.34
Negative Academic			
	IAD0. None	.46	.50
	IAD1. Learning procedures	.04	.20
E-	IAD2. General learning	.14	.35
E-	IAD3. Reading	.12	.33
E-	IAD4. Math	.16	.36
E-	IAD5. Science	.03	.17
E-	IAD6. Other subjects	.13	.34
E-	IAD7. Absence of plaudits	.01	.08
L-	IAD8. Negative with peers	.05	.22
L-	IAD9. Negative with adults	.01	.12
	IAD10. Other	.06	.23
	IAE. Evaluation of school	2.32	.86

Table 1. (cont'd.)

Items	$\bar{X}$	SD
General Remarks About Teacher		
IBA0. None	.06	.25
IBA1. Physical description	.07	.26
IBA2. Global/personal: positive	.74	.44
IBA3. Global/personal: negative	.05	.22
IBA4. Teacher affect: positive	.06	.23
IBA5. Teacher affect: negative	.01	.12
IBA6. Teacher expertise: positive	.12	.33
IBA7. Teacher expertise: negative	.01	.09
IBA8. Other	.07	.26
IBA9. Behaviors substantiate evaluation	.41	.49
Teacher Expectations		
IBB0. None	.71	.45
IBB1. Procedural	.16	.37
IBB2. Academic	.14	.35
IBB3. Global	.05	.22
IBB4. Other	.02	.15
References to Teacher-Student Relationship		
IBC0. None	.41	.49
IBC1. Positive	.26	.44
IBC2. Negative	.06	.23
IBC3. Mixed	.19	.39
IBC4. Absence of negative	.07	.26
IBC5. Other	.01	.12

Table 1. (cont'd.)

Items	$\bar{X}$	SD
Mention of Rewards		
IBD0. None	.89	.32
IBD1. Symbolic	.04	.19
IBD2. Material	.06	.23
IBD3. Special privileges	.04	.19
IBD4. Teacher	0	0
IBD5. Other	0	0
IB/E. General Evaluation of Teacher		
IBE1-5	1.9	.91
IB/F. Rating of Sophistication		
IBF1-3	1.8	.66
Sum IAA (Positive Nonacademic)	1.29	.96
Sum IAB (Positive Academic)	1.36	1.32
Sum IAC (Negative Nonacademic)	.81	.97
Sum IAD (Negative Academic)	.74	.83
Sum IA1 (Proportion Positive)	.63	.21
Prop IA2 (Proportion Academic)	.49	.30
Maslow Analyses		
Prop S: Proportion safety needs, overall	.01	.05
Prop L: Proportion love needs, overall	.15	.15
Prop E: Proportion esteem needs, overall	.31	.19
Prop L: Proportion positive love needs	.35	.43
Prop E: Proportion positive esteem needs	.47	.42

Table 1. (cont'd.)

Items	$\bar{X}$	SD
PS2: Proportion safety to S, L, E needs	.02	.08
PL2: Proportion love to S, L, E needs	.31	.32
PE2: Proportion esteem to S, L, E needs	.65	.34

[1]E+ indicates variable was included in esteem concerns and treated as positive.

E- indicates variable was included in esteem concerns and treated as negative

L+ indicates variable was included in love and belongingness concerns and treated as positive.

L- indicates variable was included in love and belongingness concerns and treated as negative

S indicates variable was included in safety concerns.

Table 2.

Means and Standard Deviations for Teacher Self Report, Observer Predictions, Student Predictions, and Student as Teacher Vignette 1 (V1), Vignette 2 (V2), and Vignette 3 (V3).

	Teacher Self Report						Observer Predictions						Student Predictions						Student As Teacher					
	V1		V2		V3		V1		V2		V3		V1		V2		V3		V1		V2		V3	
ITEM	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Rewards and Punishments																								
AAA0. None mentioned	0	0	38	52	1.00	0	63	52	75	46	88	35	99	08	99	12	99	12	98	14	99	12	1.00	0
AAA1. Symbolic	38	52	13	35	0	0	13	35	0	0	0	0	0	0	01	12	0	0	0	0	0	0	0	0
AAA2. Material	38	52	13	35	0	0	25	46	13	35	0	0	0	0	0	0	0	0	01	08	0	0	0	0
AAA3. Special privileges	50	54	63	52	0	0	0	0	0	0	0	0	0	0	0	0	01	08	01	12	01	12	0	0
AAA4 Teacher	13	35	0	0	0	0	0	0	0	0	13	35	0	0	0	0	0	0	0	0	0	0	0	0
AAA5. Other	25	46	0	0	0	0	0	0	0	0	0	0	0	0	01	08	01	08	01	08	0	0	0	0
AAA6 Contracts	50	54	50	54	0	0	25	46	25	46	0	0	01	08	0	0	0	0	0	0	0	0	0	0
Punishments																								
AAB0. None	13	35	50	54	88	35	38	52	63	52	1.00	0	16	36	29	45	83	38	27	45	34	48	88	33

Table 2 (cont'd).

	Teacher Self Report						Observer Predictions						Student Predictions						Student As Teacher					
	V1		V2		V3		V1		V2		V3		V1		V2		V3		V1		V2		V3	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
AAB1. Loss of privileges	63	52	25	46	13	35	63	52	38	52	0	0	18	39	11	32	07	26	12	33	13	34	04	20
AAB2 Punitive isolation	0	0	13	35	0	0	13	35	25	46	0	0	37	49	33	47	08	27	22	42	27	45	03	17
AAB3 Extra time	13	35	0	0	0	0	0	0	0	0	0	0	04	19	0	0	01	08	05	22	01	12	01	08
AAB4 Extra requirements	13	35	0	0	0	0	13	35	0	0	0	0	06	25	05	22	0	0	04	18	04	18	01	08
AAB5 Restitution	0	0	0	0	0	0	0	0	0	0	0	0	01	08	01	08	0	0	0	0	01	08	0	0
AAB6 Physical punishment	13	35	13	35	0	0	0	0	0	0	0	0	14	35	18	39	04	20	08	27	15	36	02	14
AAB7 Other adult	38	52	0	0	0	0	0	0	0	0	0	0	41	49	38	49	05	22	33	47	28	45	02	14
AAB8 Other	25	46	0	0	0	0	25	46	0	0	0	0	20	41	08	27	04	20	15	36	04	20	05	22
Supportive Behavior																								
AAC0 None	25	46	38	52	0	0	88	35	63	52	0	0	97	17	99	12	21	41	88	33	97	18	24	43

Table 2 (cont'd.)

		Teacher Self Report						Observer Predictions						Student Predictions						Student As Teacher					
		V1		V2		V3		V1		V2		V3		V1		V2		V3		V1		V2		V3	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
AAC1	Specific praise	38	52	13	35	0	0	0	0	0	0	38	52	0	0	0	0	0	0	0	0	0	0	01	12
AAC2	Global praise	0	0	0	0	0	0	0	0	0	0	13	35	0	0	0	0	01	08	01	08	0	0	0	0
AAC3	Encouragement	25	46	13	35	25	46	0	0	0	0	88	35	01	08	01	08	24	43	02	14	01	08	24	43
AAC4	Comfort/ reassurance	0	0	0	0	38	52	0	0	13	35	13	35	0	0	0	0	04	20	01	08	0	0	04	18
AAC5	Defending	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AAC6	Kid gloves	0	0	0	0	13	35	0	0	13	35	0	0	0	0	0	0	0	0	0	0	0	0	01	08
AAC7	Supportive isolation	0	0	25	46	0	0	0	0	0	0	0	0	01	12	0	0	0	0	01	08	01	08	02	14
AAC8	Involves peers	0	0	13	35	63	52	0	0	0	0	25	46	0	0	0	0	08	27	0	0	01	08	07	26

Table 2 (cont'd.)

	Teacher self Report						Observer Predictions						Student Predictions						Student As Teacher					
	V1		V2		V3		V1		V2		V3		V1		V2		V3		V1		V2		V3	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
AAC9 Involves parents	0	0	0	0	25	46	13	35	0	0	0	0	01	08	0	0	03	17	0	0	0	0	03	17
AAC10 Other adults	13	35	38	52	38	52	0	0	0	0	25	46	0	0	01	08	06	24	01	08	01	08	05	22
AAC11 Instruction	50	54	0	0	88	35	13	35	0	0	1.00	0	01	08	0	0	62	49	07	26	02	14	60	49
AAC12 Models acceptance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AAC13 Other Threatening/pressuring behavior	0	0	0	0	0	0	0	0	13	35	13	35	0	0	01	08	03	17	01	08	0	0	02	14
AAD0 None	63	52	13	35	1.00	0	13	35	0	0	1.00	0	29	46	15	36	80	40	18	39	12	33	79	41
AAD1 Specific criticism	25	46	88	35	0	0	75	46	88	35	0	0	69	46	84	37	18	39	77	42	86	35	17	38
AAD2 Global criticism	0	0	13	35	0	0	13	35	0	0	0	0	0	0	01	08	0	0	0	0	01	08	01	08

Table 2 (cont'd.)

		Teacher Self Report						Observer Predictions						Student Predictions						Student As Teacher					
		V1		V2		V3		V1		V2		V3		V1		V2		V3		V1		V2		V3	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
AAD3	Sarcasm/ ridicule	0	0	0	0	0	0	13	35	0	0	0	0	01	08	0	0	01	08	03	17	0	0	02	14
AAD4	"Diagnosing"	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	01	08
AAD5	Third degree	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	01	08	0	0	0	0
AAD6	Involves peers	0	0	0	0	0	0	13	35	13	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AAD7	Involves parents	25	46	13	35	0	0	0	0	0	0	0	0	03	17	02	14	01	08	04	18	03	17	01	12
AAD8	Involves other adults	0	0	0	0	0	0	0	0	13	35	0	0	01	08	01	08	0	0	01	08	01	12	0	0
AAD9	Other	0	0	0	0	0	0	38	52	0	0	0	0	01	12	01	12	01	08	01	08	0	0	01	08
Teacher General Strategies																									
ABA0	None	13	35	88	35	0	0	88	35	88	35	0	0	99	08	99	08	14	35	94	23	97	17	14	35
ABA1	Help	50	54	0	0	88	35	13	35	0	0	1.00	0	0	0	0	0	58	50	04	20	01	12	51	50
ABA2	Reduce task	38	52	0	0	75	46	0	0	0	0	63	52	0	0	0	0	15	36	01	12	01	08	22	41

Table 2 (cont'd.)

		Teacher Self Report						Observer Predictions						Student Predictions						Student As Teacher					
		V1		V2		V3		V1		V2		V3		V1		V2		V3		V1		V2		V3	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
ABA3	Deal with affect	50	54	13	35	75	46	0	0	0	0	1.00	0	0	0	01	08	24	43	01	08	0	0	27	45
ABA4	Other	0	0	0	0	25	46	0	0	13	35	60	55	01	03	0	0	16	37	0	0	01	12	15	35
ABB0	None	0	0	0	0	88	35	0	0	0	0	1.00	0	01	08	01	12	73	45	04	20	01	12	80	40
ABB1	No response avoidance	0	0	0	0	0	0	0	0	13	35	0	0	01	08	0	0	01	08	01	08	0	0	0	0
ABB2	Delegates problem	0	0	0	0	0	0	0	0	13	35	0	0	03	17	02	14	0	0	01	12	03	17	0	0
ABB3	Extinguish	13	35	25	46	0	0	0	0	0	0	0	0	01	08	0	0	0	0	0	0	0	0	0	0
ABB4	Postpone	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	01	08	0	0	0	0	0	0
ABB5	Management response	38	52	38	52	0	0	50	54	50	54	0	0	30	46	29	45	12	32	39	49	23	42	10	30
ABB6	Tension release	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABB7	Reward	75	46	50	54	0	0	38	52	13	35	0	0	01	08	0	0	0	0	01	08	0	0	0	0
ABB8	Punishment	88	35	38	52	13	35	63	52	38	52	0	0	73	45	60	49	10	30	58	50	50	50	11	32
ABB9	Removal/ isolation	0	0	13	35	0	0	13	35	38	52	0	0	37	49	31	46	08	28	25	43	28	45	03	17

Table 2 (cont'd.)

	Teacher Self Report						Observer Predictions						Student Predictions						Student As Teacher					
	V1		V2		V3		V1		V2		V3		V1		V2		V3		V1		V2		V3	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
ABB10 Prescribing	25	46	0	0	0	0	25	46	38	52	0	0	01	08	0	0	0	0	02	14	01	08	0	0
ABB11 Proscribing	13	35	50	54	0	0	25	46	50	54	0	0	0	0	10	31	0	0	03	17	17	38	0	0
ABB12 Change physical environment	0	0	25	46	0	0	0	0	0	0	0	0	0	0	01	08	0	0	01	12	05	22	0	0
ABB13 Change social environment	0	0	0	0	0	0	13	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABB14 Eliminate source of problem	13	35	50	54	0	0	25	46	50	54	0	0	0	0	09	29	0	0	01	08	19	39	0	0
ABB15 Catharsis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABB16 Insight	0	0	0	0	0	0	0	0	0	0	0	0	02	14	02	14	0	0	03	17	02	14	0	0
ABB17 Builds self concept	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	01	08	0	0	0	0
ABB18 Relationship	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABB19 Other	0	0	0	0	0	0	0	0	13	35	0	0	01	08	01	08	0	0	01	08	01	12	01	08

Table 2 (cont'd.)

	Teacher Self Report						Observer Predictions						Student Predictions						Student As Teacher					
	V1		V2		V3		V1		V2		V3		V1		V2		V3		V1		V2		V3	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Information Gathering																								
ABC0 No	88	35	1.00	0	88	35	1.00	0	1.00	0	88	35	99	08	99	12	89	32	99	12	99	08	84	37
ABC1 Yes	13	35	0	0	13	35	0	0	0	0	13	35	01	08	01	12	10	31	01	12	01	08	17	37
ABC2 Can't rate/ other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	01	08	0	0	0	0	0	0
Student input re solution																								
ABD0 No	63	52	88	35	75	46	88	35	1.00	0	1.00	0	1.00	0	99	08	98	14	99	12	1.00	0	97	18
ABD1 Yes	38	52	13	35	25	46	13	35	0	0	0	0	0	0	01	08	01	12	01	08	0	0	04	18
ABD2 Can't rate/ other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	01	08	0	0	0	0
Developing Insight																								
ABE0 None	63	52	38	52	1.00	0	63	52	50	54	1.00	0	97	17	88	33	99	12	94	23	78	41	99	12
ABE1 Recognize own behavior and consequences	13	35	38	52	0	0	0	0	0	0	0	0	01	12	03	17	0	0	01	12	01	12	01	08

Table 2 (cont'd.)

	Teacher Self Report						Observer Predictions						Student Predictions						Student As Teacher					
	V1		V2		V3		V1		V2		V3		V1		V2		V3		V1		V2		V3	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
ABE2 Causes of own behavior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	01	12	01	08	01	08	01	08
ABE3 Recognize others' behavior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABE4 Causes of others' behavior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABE5 Student's feelings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABE6 Others' feelings	13	35	50	54	0	0	13	35	38	52	0	0	01	08	08	28	0	0	03	17	19	39	0	0
ABE7 Teacher's goals/feelings	25	46	38	52	0	0	38	52	25	46	0	0	0	0	01	12	0	0	02	14	03	17	0	0
ABE8 Other	0	0	0	0	0	0	0	0	0	0	0	0	01	08	01	08	0	0	0	0	0	0	0	0

Table 2 (cont'd.)

	Teacher Self Report						Observers' Predictions						Student Predictions						Student As Teacher					
	V1		V2		V3		V1		V2		V3		V1		V2		V3		V1		V2		V3	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Rationale For Demands																								
ABF0 No demands	25	46	0	0	1.00	0	0	0	0	0	1.00	0	0	0	05	22	79	41	06	24	04	18	82	39
ABF1 No rationales	13	35	25	46	0	0	0	0	13	35	0	0	60	49	63	49	16	37	48	50	52	50	10	31
ABF2 Cites rules	50	54	13	35	0	0	50	54	38	52	0	0	38	49	24	43	05	22	42	50	27	45	05	22
ABF3 Personal appeal	0	0	0	0	0	0	0	0	13	35	0	0	0	0	0	0	0	0	01	08	02	14	0	0
ABF4 Moralizes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABF5 Induces empathy	13	35	50	54	0	0	13	35	50	54	0	0	0	0	11	32	0	0	03	17	20	40	0	0
ABF6 Logical analysis	50	54	0	0	0	0	50	54	0	0	0	0	01	08	0	0	0	0	01	12	01	08	01	08
ABF7 Pride/self-concept	50	54	25	46	0	0	13	35	13	35	0	0	01	08	01	12	01	08	0	0	0	0	02	14
ABF8 Safety	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABF9 Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	01	08	0	0	0	0

Table 2 (cont'd.)

	Teacher Self Report						Observer Predictions						Student Predictions						Student As Teacher					
	V1		V2		V3		V1		V2		V3		V1		V2		V3		V1		V2		V3	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
ABF10 Can't rate/ other	0	0	0	0	0	0	0	0	0	0	0	0	01	12	0	0	0	0	0	0	0	0	0	0
Universal System Language																								
ACB - Language (higher value = less language)	1.63	52	1.75	71	1.25	46	1.75	71	1.75	71	1.00	0												
ACB4 no language	0	0	0	0	0	0	0	0	0	0	0	0	03	17	04	20	13	33	03	17	03	17	17	38
Goals																								
ACD0 None reported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ACD1 Mental hygiene	25	46	25	46	88	35	13	35	13	35	1.00	0	01	12	01	08	16	37	04	18	0	0	17	38
ACD2 Rewards/shaping	88	35	63	52	25	46	63	52	63	52	0	0	05	22	14	35	55	50	11	32	25	43	56	50
ACD3 Control/ punish	13	35	38	52	0	0	63	52	63	52	0	0	92	28	90	30	31	46	87	34	85	36	23	42
ACD4 Avoidance	0	0	0	0	0	0	0	0	0	0	0	0	01	12	02	14	04	20	01	08	02	14	06	24

Table 2 (cont'd.)

	Teacher Self Report						Observer Predictions						Student Predictions						Student As Teacher					
	V1		V2		V3		V1		V2		V3		V1		V2		V3		V1		V2		V3	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
ACD5 Can't rate/ other	0	0	0	0	0	0	0	0	0	0	0	0	01	08	01	08	02	14	01	12	01	12	03	17
Giving Chances																								
AD0 Not applicable	13	35	0	0	1.00	0	0	0	0	0	1.00	0	0	0	01	08	78	42	02	14	0	0	82	39
AD1 Yes	25	46	25	46	0	0	38	52	50	54	0	0	30	46	36	48	07	26	39	49	36	48	08	27
AD2 No	63	52	75	46	0	0	63	52	50	54	0	0	70	46	68	47	15	36	59	49	64	48	10	31
Reporting Ease																								
AE0 Not applicable													0	0	0	0	0	0	0	0	0	0	01	12
AE1 Teacher words													16	37	27	45	26	44	29	46	37	49	32	47
AE2 Teacher actions													11	31	04	20	13	33	01	12	04	18	08	27
AE3 Equally facile													73	44	67	47	59	49	69	46	59	49	58	50
AE4 Can't rate													0	0	02	14	04	18	0	0	01	08	01	08

Table 2 (cont'd.)

	Teacher Self Report						Observer Predictions						Student Predictions						Student As Teacher					
	V1		V2		V3		V1		V2		V3		V1		V2		V3		V1		V2		V3	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Non Verbal Behavior																								
AF0 Not applicable	0	0	0	0	0	0	0	0	0	0	0	0	01	08	01	08	0	0	0	0	01	08	01	12
AF1 Yes	38	52	63	52	38	52	75	46	63	52	25	46	15	36	17	37	10	30	06	24	10	30	07	26
AF2 No	63	52	38	52	63	52	25	46	38	52	75	46	85	36	83	38	91	29	94	24	90	31	92	28
Primary Domain of Teacher Language																								
AG0 Not applicable	0	0	0	0	0	0	0	0	0	0	0	0	01	08	01	08	02	14	0	0	01	08	04	20
AG1 Academic performance	38	52	0	0	1.00	0	0	0	0	0	1.00	0	0	0	01	08	79	41	04	20	01	12	81	40
AG2 Academic procedures	25	46	0	0	0	0	0	0	0	0	0	0	03	17	0	0	05	22	03	17	01	08	07	26
AG3 Social procedures	0	0	38	52	0	0	88	35	50	54	0	0	96	20	91	29	17	38	90	30	84	37	10	30
AG4 Social/moral norms	0	0	38	52	0	0	13	35	38	52	0	0	01	09	13	34	0	0	04	18	22	41	01	08
AG5 More than one of the above	38	52	25	46	0	0	0	0	13	35	0	0	0	0	0	0	0	0	01	08	0	0	0	0

Table 3. Student Predictions of Teacher Response. Summary of Significant Results of Analyses of Variance, Main Effects Due to Grade Level, Vignette 1.[1]

Variable	Lower $\bar{X}$	Lower SD	Upper $\bar{X}$	Upper SD	F
V1-ABB8: TGS: Nonacademic strategies: punishment	.81	.40	.64	.48	6.52*
V1-ABB9: TGS: Nonacademic strategies: Removal/isolation	.44	.50	.30	.46	4.57*
V1-ABE0: TGS: Developing insight: No attempts	1.00	.00	.94	.23	5.50*
V1-ABF2: TGS: Rationales for demands: Cites rules	.18	.39	.59	.50	31.94***
V1-AF1: Nonverbal behavior	.08	.28	.21	.41	5.03*

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 4. Student Predictions of Teacher Response. Summary of Significant Results of Analyses of Variance, Main Effects Due to Grade Level, Vignette 2.[1]

Variable	Lower $\bar{X}$	Lower SD	Upper $\bar{X}$	Upper SD	F
V2-AABO. R/P: No punishments reported	.15	.36	.42	.50	13.11***
SV2-AAB. R/P: Sum of punishments reported	1.40	.94	.86	.88	12.15***
V2-AADO. R/P: No threatening/pressuring behavior reported	.21	.41	.10	.30	3.91*
V2-ABB8: TGS: Nonacademic strategies: Punishment	.74	.44	.47	.50	10.94***
V2-ABB9: TGS: Nonacademic strategies: Removal/isolation	.35	.48	.26	.44	9.05**
V2-ABEO: TGS: Developing insight: No attempts	.94	.23	.81	.40	6.32**
V2-ABF1: TGS: Rationale for demands: No rationales	.76	.43	.49	.50	13.84***
V2-ABF2: TGS: Rationales for demands: Cites rules	.11	.32	.38	.49	16.76***
V2-AE1: Reporting ease: Teacher words	.19	.40	.35	.48	4.07*
V2-AF1: Nonverbal behavior	.10	.30	.24	.43	4.96*

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 5. Student Predictions of Teacher Response, Summary of Significant Results of Analyses of Variance, Main Effects Due to Grade Level, Vignette 3.

Variable	Lower Level $\bar{X}$	Lower Level SD	Upper Level $\bar{X}$	Upper Level SD	F
V3-AABO. R/P: Punishments: None mentioned	.72	.45	.93	.26	11.62***
SV3-AAB. R/P: Punishments: Sum score.	.49	.92	.08	.33	12.38***
V3-AACO. R/P: Supportive behavior: None mentioned.	.33	.47	.08	.28	17.47***
SV3-AAC. R/P: Supportive behavior: Sum score	.89	.80	1.31	.64	14.35***
V3-ABAO. TGS: Academic strategies: None reported	.22	.42	.06	.23	8.25**
SV3-ABA. TGS: Academic strategies: Sum score	1.01	.68	1.26	.58	6.00*
V3-ABB9. TGS: Nonacademic strategies: Removal/isolation.	.17	.38	.00	.00	12.57***
V3-ACD2. US: Teacher goals: Rewards/Shaping.	.42	.50	.68	.47	9.80**
V3-ACD3. Teacher goals: Control/punishment.	.44	.50	.17	.38	14.10***
SV3-AGI. Primary domain of teacher language: Academic	.74	.44	.93	.26	10.27**

* = p<.05, ** = p<.01, *** = p<.001

Table 6. Student Prediction of Teacher Response. Summary of significant Results of Analyses of Variance, Main Effects and Interaction Associated with Sex Differences, Vignette 1.[1]

Variable		$\bar{X}$	SD		$\bar{X}$	SD	F
GXS							
V1-ABB5. TGS:	Lower	.26	.44	Upper	.33	.47	4.34*
Nonacademic strate-	M	.17	.38	M	.43	.50	
gies: management	F	.36	.49	F	.23	.43	
response							

Table 7. Student Predictions of Teacher Response. Summary of Significant Results of Analyses of Variance, Main Effects and Interactions Associated with Sex Differences, Vignette 2.[1]

Variable		$\bar{X}$	SD		$\bar{X}$	SD	F
V2-ABF1 TGS: No rationales	Males	.72	.45	Females	.53	.50	5.50*
SV2-ABF1 TGS: Rationale for demands: concern for others	Males	.06	.23	Females	.17	.38	3.82*
V2-ACLANG US: Extent of language (1=higher)	Males	2.66	.68	Females	2.38	.86	3.95*
V2-ACD3 US: Teacher goal: control/ punish	Males	.97	.17	Females	.83	.38	6.37*

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 8. Student Predictions of Teacher Response. Summary of Significant Results of Analyses of Variance, Main Effects and Interactions Associated with Sex Differences, Vignette 3.[1]

Variable		$\bar{X}$	SD		$\bar{X}$	SD	F
GXS							
V3-ABB0 TGS:	Lower	.67	.47	Upper	.79	.41	5.14*
No nonacademic	M	.58	.50	M	.89	.32	
strategies	F	.75	.44	F	.69	.47	
V3-ABB5 TGS: Man-	Lower	.10	.30	Upper	.14	.35	5.53*
agement response	M	.11	.32	M	.03	.17	
	F	.08	.28	F	.25	.44	
V3-AF1 Teacher	Lower	.07	.26	Upper	.13	.33	7.87**
nonverbal be-	M	.11	.32	M	.03	.17	
havior	F	.03	.17	F	.22	.42	

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 9. Student Predictions of Teacher Response. Summary of Significant Results of Analyses of Variance, Main Effects Due to Teacher Socialization Style, Vignette 1.[1]

Variables	Behavior Modification $\bar{X}$	Behavior Modification SD	Induction $\bar{X}$	Induction SD	F
[I]V1-AABO. R/P: Punishments: None mentioned	.08	.28	.22	.42	6.55*
[I]V1-ABB5. TGS: Nonacademic strategies: Management response	.18	.39	.40	.49	10.43**
V1-ABB9. TGS: Nonacademic strategies: Removal/isolation	.50	.50	.24	.43	13.65***
V1-ABF2. TGS: Rationale for demands: Cites rules.	.26	.44	.49	.50	10.43**
V1-ACD2. US: Teacher goals: Rewards/Shaping	.00	.00	.10	.30	7.19**

* = $p<.05$, ** = $p<.01$, *** = $p<.001$

[I]indicates variable also involved in interaction

Table 10. Student Predictions of Teacher Response. Summary of Significant Results of Analyses of Variance, Main Effects Due to Teacher Socialization Style, Vignette 2.[1]

Variables	Behavior Modification $\bar{X}$	SD	Induction $\bar{X}$	SD	F
V2-ACD2. US: Teacher goals: Rewards/shaping.	.07	.26	.21	.41	6.32**

* = p<.05, ** = p<.01, *** = p<.001

Table 11. Student Predictions of Teacher Response. Summary of Significant Results of Analyses of Variance, Main Effects Due to Student Level of Adjustment, Vignette 2.[1]

Variable	UA $\bar{X}$	UA SD	HYP $\bar{X}$	HYP SD	LA $\bar{X}$	LA SD	T-O $\bar{X}$	T-O SD	SH $\bar{X}$	SH SD	S-O $\bar{X}$	S-O SD	NPS $\bar{X}$	NPS SD	F
V2-AADO R/P: No threatening/ pressuring behavior reported	.06	.25	.44	.51	.44	.51	.13	.34	.06	.25	.00	.00	.08	.28	5.09***
SV2-AAD R/P Sum of threatening/pressuring behavior	1.00	.37	.63	.62	.63	.62	.88	.34	1.00	.37	1.06	.25	.94	.32	3.08**
V2-ABF1 TGS: Rationales for demands: No rationales	.50	.52	.88	.34	.75	.45	.56	.51	.81	.40	.56	.51	.52	.50	2.25*
V2-ABF2 TGS: Rationales for demands: Cites rules	.19	.40	.06	.25	.06	.25	.38	.50	.13	.34	.38	.50	.33	.48	2.52*
V2-ACLANG US: Extent of teacher language (higher value = less language)	2.33	.98	2.88	.50	2.80	.56	2.94	.25	2.88	.50	2.81	.54	2.53	.81	2.39*

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 12. Student Predictions of Teacher Response. Summary of Significant Results of Analyses of Variance, Interactions, Vignette 1.[1]

TXG

Variables		$\bar{X}$	SD		$\bar{X}$	SD	F
V1-ABB5. TGS: Nonacademic strategies: Management response.	BM	.18	.39	IND	.40	.49	4.07*
	Lower	.08	.28	Lower	.44	.50	
	Upper	.28	.45	Upper	.36	.49	
V1-ACD3. US: Teacher goals: Control/ punish	BM	.94	.23	IND	.86	.35	4.69*
	Lower	.94	.23	Lower	.97	.17	
	Upper	.94	.23	Upper	.75	.44	
V1-AE1. Reporting ease: teacher words	BM	.18	.39	IND	.14	.35	4.18*
	Lower	.08	.28	Lower	.17	.38	
	Upper	.28	.45	Upper	.11	.32	
V1-AE3. Reporting ease: Words and actions equally.	BM	.71	.46	IND	.74	.44	7.33**
	Lower	.81	.40	Lower	.64	.49	
	Upper	.61	.49	Upper	.83	.38	

Table 12. (cont'd.)

GXS

Variables		$\bar{X}$	SD		$\bar{X}$	SD	F
V1-ABB8. TGS: Nonacademic strategies: Punishment.	Lower	.81	.40	Upper	.64	.48	2.52*
	NT1	.88	.35	NT1	.38	.52	
	NT2	.63	.52	NT2	.75	.46	
	NT3	.88	.35	NT3	.88	.35	
	NT4	1.00	.00	NT4	.29	.49	
	NT5	.88	.35	NT5	.88	.35	
	NT6	.88	.35	NT6	.50	.53	
	NT7	.71	.46	NT7	.70	.47	
V1-AE3. Reporting ease: Words and actions equally	Lower	.72	.45	Upper	.74	.44	2.58*
	NT1	.50	.53	NT1	.50	.53	
	NT2	.50	.53	NT2	.75	.46	
	NT3	.50	.53	NT3	1.00	.00	
	NT4	1.00	.00	NT4	.43	.53	
	NT5	1.00	.00	NT5	.88	.35	
	NT6	.75	.46	NT6	.75	.46	
	NT7	.75	.44	NT7	.78	.42	

Table 12. (cont'd.)

TGS Variables		$\bar{X}$	SD		$\bar{X}$	SD	F
V1-AABO. R/P: Punishments: None mentioned	BM	.08	.28	IND	.22	.42	2.29*
	Lower	.06	.23	Lower	.19	.40	
	NT1	0	0	NT1	.25	.50	
	NT2	0	0	NT2	.50	.58	
	NT3	0	0	NT3	.25	.50	
	NT4	0	0	NT4	0	0	
	NT5	0	0	NT5	.25	.50	
	NT6	0	0	NT6	.50	.58	
	NT7	.17	.39	NT7	0	0	
	Upper	.11	.32	Upper	.25	.44	
	NT1	.25	.50	NT1	.25	.50	
	NT2	0	0	NT2	0	0	
	NT3	0	0	NT3	.25	.50	
	NT4	.25	.50	NT4	.50	.58	
	NT5	0	0	NT5	.25	.50	
	NT6	.25	.50	NT6	0	0	
	NT7	.08	.29	NT7	.33	.49	

* = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 13. Student Predictions of Teacher Response. Summary of Significant Results of Analyses of Variance, Interactions, Vignette 2.[1]

TXG

Varables		$\bar{X}$	SD		$\bar{X}$	SD	F
V2-ABB5. TGS: Nonacademic strategies: Management response	BM	.25	.44	INU	.32	.47	4.48*
	Lower	.11	.32	Lower	.33	.48	
	Upper	.39	.49	Upper	.31	.47	
GXS Variables		$\bar{X}$	SD		$\bar{X}$	SD	
V2-ABB9. TGS: Nonacademic strategies: Removal/isolation	Lower	.35	.48	Upper	.26	.44	2.57*
	NT1	.25	.46	NT1	.25	.46	
	NT2	.38	.52	NT2	.38	.52	
	NT3	.50	.53	NT3	.00	.00	
	NT4	.25	.46	NT4	.25	.46	
	NT5	.25	.46	NT5	.50	.53	
	NT6	.63	.52	NT6	.38	.52	
	NT7	.29	.46	NT7	.21	.41	
V2-ABE0. TGS: Developing student insight: No attempts	Lower	.94	.23	Upper	.81	.40	2.49*
	NT1	1.00	.00	NT1	.38	.52	
	NT2	1.00	.00	NT2	.88	.35	
	NT3	1.00	.00	NT3	.88	.35	
	NT4	1.00	.00	NT4	1.00	.00	
	NT5	.88	.35	NT5	1.00	.00	
	NT6	.88	.35	NT6	1.00	.00	
	NT7	.92	.28	NT7	.71	.46	

Table 13. (cont'd.)

GXS		$\bar{X}$	SD		$\bar{X}$	SD	F
SV2-ABF1. Rationale for demands: Concern for others.	Lower	.04	.20	Upper	.18	.39	2.26*
	NT1	.00	.00	NT1	.63	.52	
	NT2	.00	.00	NT2	.13	.35	
	NT3	.00	.00	NT3	.13	.35	
	NT4	.00	.00	NT4	.00	.00	
	NT5	.13	.35	NT5	.00	.00	
	NT6	.00	.00	NT6	.00	.00	
	NT7	.08	.28	NT7	.25	.44	
V2-ACD2. TGS: Rationales for demands: Concern for others	Lower	.10	.30	Upper	.18	.39	2.47*
	NT1	.00	.00	NT1	.63	.52	
	NT2	.00	.00	NT2	.13	.35	
	NT3	.00	.00	NT3	.13	.35	
	NT4	.00	.00	NT4	.13	.35	
	NT5	.13	.35	NT5	.00	.00	
	NT6	.13	.35	NT6	.00	.00	
	NT7	.21	.41	NT7	.21	.41	

Table 14. Student Predictions of Teacher Response. Summary of Significant Results of Analyses of Variance, Interactions, Vignette 3.[1]

TXG

Variables		$\bar{X}$	SD		$\bar{X}$	SD	F
V3-AACO. R/P Supportive behavior: None mentioned	Lower	.33	.47	Upper	.08	.28	
	BM	.47	.51	BM	.08	.28	
	IND	.19	.40	IND	.08	.28	5.39*
V3-ACB. US; Teacher language (lower value indicates more elaborated language)	Lower	2.27	.74	Upper	1.82	.52	
	BM	2.50	.63	BM	1.77	.50	
	IND	2.03	.78	IND	1.86	.55	5.04*

* = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 15. Frequencies, means and standard deviations for Student Understanding of Teacher Behavior, Vignette 1, Vignette 2, and Vignette 3. Overall sample.

Item	Vignette 1			Vignette 2			Vignette 3		
	f	$\bar{X}$	SD	f	$\bar{X}$	SD	f	$\bar{X}$	SD
Memory Checks									
II/a/a/0. None	139	.98	.14	136	.94	.23	124	.86	.35
*II/a/a/1. Once	2	.01	.12	7	.05	.22	19	.13	.34
*II/a/a/2. Twice	1	.01	.08	1	.01	.08	0	.00	.00
*II/a/a/3. Three or more	0	.00	.00	0	.00	.00	1	.01	.08
Memory Prompts									
*II/a/b/0. None	142	.99	.12	141	.98	.14	141	.98	.14
*II/a/b/1. Once	2	.01	.12	3	.02	.14	3	.02	.14
*II/a/b/2. Twice	0	.00	.00	0	.00	.00	0	.00	.00
*II/a/b/3. Three or more	0	.00	.00	0	.00	.00	0	.00	.00
Distortion									
*II/a/c/0. None	144	1.00	.00	139	.97	.18	131	.91	.29
II/a/c/2. Intentionality	0	.00	.00	3	.02	.14	13	.09	.29
*II/a/c/3. Other/can't rate	0	.00	.00	2	.01	.12	0	.00	.00
Perceived Cause of Teacher Response									
*IIAH0. Can't rate	4	.03	.17	5	.04	.18	9	.06	.25
IIAH1. Teacher personality	18	.13	.33	14	.10	.30	9	.06	.25
IIAH2. Teacher role	47	.33	.47	52	.36	.48	57	.40	.49
IIAH3. Student personality	2	.01	.12	4	.03	.17	9	.06	.25
IIAH4. Student role	86	.60	.49	80	.56	.50	63	.45	.50
Affective Quality									
IIAI0. None	85	.59	.49	82	.57	.50	58	.41	.49
IIAI1. Positive	30	.21	.41	45	.32	.47	73	.52	.50
IIAI2. Negative	23	.16	.37	11	.08	.27	2	.01	.12
*IIAI3. Can't rate	5	.04	.18	5	.04	.18	8	.06	.23

Table 15. (cont'd.)

	Vignette 1			Vignette 2			Vignette 3		
	f	$\bar{X}$	SD	f	$\bar{X}$	SD	f	$\bar{X}$	SD
Nature of Teacher Goal									
*IIAJ0. Not applicable	3	.02	.14	3	.02	.14	1	.01	.08
IIAJ1. Prescriptive	118	.83	.38	96	.67	.47	136	.96	.20
IIAJ2. Proscriptive	7	.05	.22	14	.10	.30	3	.02	.14
IIAJ3. Both	15	.11	.31	30	.21	.41	2	.01	.12
Target of Teacher Influence									
*IIAK0. Not applicable	3	.02	.14	3	.02	.14	2	.01	.12
IIAK1. Student behavior	134	.94	.24	137	.96	.20	103	.73	.45
IIAK2. Student attitude	0	.00	.00	0	.00	.00	13	.09	.29
IIAK3. Both	6	.04	.20	3	.02	.14	24	.17	.38
Range of Teacher Expectations									
*IIAL0. Not applicable	3	.02	.14	3	.02	.14	1	.01	.08
IIAL1. Immediate	131	.92	.28	137	.96	.20	137	.97	.19
*IIAL2. Long term	9	.06	.24	3	.02	.14	4	.03	.17
Primary Focus									
*IIAM0. Not applicable	3	.02	.14	3	.02	.14	1	.01	.08
IIAM1. Instructional	13	.09	.29	6	.04	.20	107	.75	.43
IIAM2. Managerial	35	.25	.43	61	.43	.50	10	.07	.26
IIAM3. Both	92	.64	.48	73	.51	.50	24	.17	.38
Student Inference									
IIAN0. None	10	.07	.26	10	.07	.26	5	.04	.18
*IIAN1. Teacher affect	3	.02	.14	2	.01	.12	0	.00	.00
IIAN2. Level 1 cognition	98	.68	.47	108	.75	.44	119	.83	.38
IIAN3. Level 2 cognition	25	.17	.38	19	.13	.34	14	.10	.30
*IIAN4. Can't rate	8	.06	.23	5	.04	.18	5	.04	.18
Type of Teacher Evaluation									
*IIAO0. None	5	.04	.18	8	.06	.23	4	.03	.17
IIAO1. Student per se	76	.53	.50	95	.66	.48	73	.51	.50

Table 15. (cont'd.)

	Vignette 1			Vignette 2			Vignette 3		
	f	$\bar{X}$	SD	f	$\bar{X}$	SD	f	$\bar{X}$	SD
IIA02. Performance	25	.17	.38	13	.09	.29	42	.29	.46
IIA03. Ability	5	.04	.18	3	.02	.14	52	.36	.48
IIA04. Conformity	41	.29	.45	34	.24	.43	5	.04	.18
IIA05. Affect	16	.11	.32	7	.05	.22	5	.04	.18
*IIA06. Other	9	.06	.24	5	.04	.18	4	.03	.17
Nature of Judgment									
*IIAP0. Can't rate	14	.10	.30	13	.09	.29	8	.06	.23
IIAP1. Positive	9	.06	.24	6	.04	.20	58	.41	.49
IIAP2. Negative	83	.58	.50	83	.58	.50	28	.20	.40
IIAP3. Neutral	14	.10	.30	21	.15	.35	39	.27	.45
IIAP4. Mixed	25	.17	.38	21	.15	.35	10	.07	.26
Concern for Others									
*IIAQ0. No	128	.89	.32	98	.68	.47	140	.98	.14
IIAQ1. Yes	16	.11	.32	46	.32	.47	3	.02	.14

*Indicates this variable was not included in subsequent analyses.

Table 16. Student Understanding of Teacher Behavior. Summary of Significant Results of Analyses of Variance, Main Effects Due to Grade Level, Vignette 1. [1]

Variable		Lower Level $\bar{X}$	SD	Upper Level $\bar{X}$	SD	F
V1-IIAH2.	Teacher response due to teacher role	.21	.41	.45	.50	8.34**
V1-IIAI0.	Teacher affect not discussed	.71	.46	.48	.50	7.85**
V1-IIAI1.	Positive teacher affect as motive	.11	.32	.31	.47	7.99**
V1-IIAN2.	Student inference: Level 1	.81	.40	.56	.50	10.42**
V1-IIAN3.	Student inference: Level 2	.06	.23	.29	.46	14.52***
V1-IIAO1.	Teacher evaluation of student *per se*.	.71	.46	.35	.48	22.13***
V1-IIAO2.	Teacher evaluation of student performance.	.10	.30	.25	.44	6.08*
V1-IIAO3.	Teacher evaluation of student ability	.00	.00	.07	.26	4.82*
V1-IIAO4.	Teacher evaluation of student conformity	.17	.38	.40	.49	10.29**
V1IIAO5.	Teacher evaluation of student affect.	.03	.17	.19	.40	9.78**
V1-IIAP2.	Negative teacher judgment.	.68	.47	.47	.50	8.17**
V1-IIAP4.	Mixed teacher judgment	.11	.32	.24	.43	3.96*
V1-IIAQ1.	Teacher concern for others.	.07	.26	.15	.36	3.96*

[1] * = P< .05, ** = p< .01, *** = p< .001

Table 17. Student Understanding of Teacher Behavior. Summary of Significant Results of Analyses of Variance, Main Effects Due to Grade Level, Vignette 2.[1]

Variable		Lower Level $\bar{X}$	Lower Level SD	Upper Level $\bar{X}$	Upper Level SD	F
V2-IIAH2.	Teacher response due to teacher role.	.23	.42	.50	.50	13.58***
V2-IIAH3.	Teacher response due to student personality	.06	.23	0	0	9.78**
V2-IIAI0.	Teacher affect not discussed	.69	.47	.46	.50	7.33**
V2-IIAI1.	Positive teacher affect not as motive.	.14	.35	.49	.50	21.83***
V2-IIAM1.	Primary focus: Instructional	.01	.12	.07	.26	4.19*
V2-IIAM2.	Primary focus: Managerial.	.54	.50	.32	.47	5.69*
V2-IIAM3.	Focus on both instruction and management.	.42	.50	.60	.49	4.22*
V2-IIAN2.	Student inference: Level 1	.85	.36	.65	.48	6.78**
V2-IIAN3.	Student inference: Level 2	.06	.23	.21	.41	7.52**
V2-IIAO1.	Teacher evaluation of student *per se*.	.78	.42	.54	.50	8.48**
V2-IIAO2.	Teacher evaluation of student performance.	.04	.20	.14	.35	3.82*
V2-IIAO4.	Teacher evaluation of student conformity.	.13	.33	.35	.48	9.99**
V2-IIAP2.	Negative teacher judgment.	.71	.46	.44	.50	12.14***
V2-IIAP3.	Neutral teacher judgment.	.06	.23	.24	.43	9.53**
V2-IIAQ1.	Teacher concern for others.	.19	.40	.44	.50	11.00***

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 18. Student Understanding of Teacher Behavior. Summary of Significant Results of Analyses of Variance, Main Effects Due to Grade Level, Vignette 3.[1]

Variable		Lower Level $\bar{X}$	Lower Level SD	Upper Level $\bar{X}$	Upper Level SD	F
V3-IIAa0.	No memory difficulties	.79	.41	.93	.26	5.39*
V3-IIAI0.	Teacher affect not discussed	.56	.50	.27	.45	13.33***
V3-IIAI1.	Positive teacher affect as motive	.34	.48	.69	.47	21.02***
V3-IIAJ1.	Prescriptive teacher goal	.92	.28	1.00	.00	5.08*
V3-IIAM1.	Primary focus: instructional	.61	.49	.90	.30	17.77***
V3-IIAM2.	Primary focus: managerial	.13	.34	.01	.12	6.90**
V3-IIAM3.	Focus on both instructional and managerial goals	.25	.44	.08	.28	7.14**
V3-IIA01.	Teacher evaluation about student <u>per se</u>	.66	.48	.36	.48	11.47***
V3-IIA02.	Teacher evaluation about student performance	.18	.39	.40	.49	10.20**
V3-IIA03.	Teacher evaluation about student ability	.18	.39	.54	.50	23.83***
V3-IIAP2.	Negative teacher evaluation	.28	.45	.11	.32	7.54**
V3-IIAP3.	Neutral teacher evaluation	.14	.35	.40	.49	13.37***

* = p<.05, ** = p<.01, *** = p<.001

Table 19 Student Understanding of Teacher Behavior. Summary of Results of Analyses of Variance, Main Effects and Interactions Associated with Sex Differences, Vignette 1.[1]

Variable		$\bar{X}$	SD		$\bar{X}$	SD	F
GXS							
V1-IIAI0 Teacher	Lower	.71	.46	Upper	.48	.50	6.75**
affect not report-	M	.78	.42	M	.34	.48	
ed	F	.64	.49	F	.61	.49	
V1-IIA02 Teacher	Lower	.10	.30	Upper	.25	.44	4.82*
evaluation of stu-	M	.08	.28	M	.33	.48	
dent performance	F	.11	.32	F	.17	.38	
TXS							
V1-IIA02 Teacher	BM	.08	.28	IND	.26	.44	7.69**
evaluation of stu-	M	.07	.26	M	.43	.50	
dent performance	F	.11	.32	F	.16	.37	
V1-IIAP2 Negative	BM	.58	.50	IND	.57	.50	4.66*
teacher evaluation	M	.68	.47	M	.50	.51	
	F	.43	.50	F	.61	.49	

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 20 Student Understanding of Teacher Behavior. Summary of Results of Analyses of Variance, Main Effects and Interactions Associated with Sex Differences, Vignette 2.[1]

Variables		$\bar{X}$	SD		$\bar{X}$	SD	F
V2-IIAI1 Positive teacher concern	Males	.22	.42	Females	.41	.50	4.78*
V2-IIAM3 Focus on both instruction and management	Males	.58	.50	Females	.44	.50	6.02*
TXS							
V2-IIAO2 Teacher evaluation of student performance	BM	.07	.26	IND	.11	.32	5.15*
	M	.05	.21	M	.21	.42	
	F	.11	.32	F	.05	.21	
V2-IIAP4 Mixed teacher evaluation	BM	.11	.32	IND	.18	.39	4.46*
	M	.09	.29	M	.29	.46	
	F	.14	.36	F	.11	.32	

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 21. Student Understanding of Teacher Behavior. Summary of Results of Analyses of Variance, Main Effects and Interactions Associated with Sex Differences, Vignette 3.[1]

Variable		$\bar{X}$	SD		$\bar{X}$	SD	F
V3-IIAH2 Teacher response due to teacher role	Males	.30	.46	Females	.51	.50	4.02*
V3-IIAH3 Teacher response due to student personality	Males	.11	.32	Females	.01	.12	5.08*
V3-IIAI0 Teacher affect not reported	Males	.51	.50	Females	.31	.47	4.66*
V3-IIAK1 Target: student behavior	Males	.80	.40	Females	.65	.48	4.31*
V3-IIAK2 Target: student attitude	Males	.04	.20	Females	.14	.35	4.31*
V3-IIAM3 Focus on both instruction and management	Males	.24	.43	Females	.10	.30	4.19*
GXS							
V3-IIAL1 Range of expectations: immediate	Lower M	.99	.12	Upper M	.94	.23	3.97*
	M	1.00	.00	M	.94	.24	
	F	.97	.17	F	.94	.23	

Table 21 (cont'd.)

Variable		$\bar{X}$	SD		$\bar{X}$	SD	F
TXS							
V3-IIA02 Teacher	BM	.23	.42	IND	.36	.48	4.80*
evaluation of stu-	M	.27	.45	M	.29	.46	
dent performance	F	.15	.36	F	.41	.50	
V3-IIA03 Teacher	BM	.34	.48	IND	.39	.49	9.29**
evaluation of stu-	M	.25	.44	M	.54	.51	
dent ability	F	.48	.51	F	.30	.46	

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 22. Student Understanding of Teacher Beahavior. Summary of Significant Results of Analyses of Variance, Main Effects Due to Teacher Socialization Style, Vignette 1.[1]

Variable		Behavior Modification $\bar{X}$	SD	Induction $\bar{X}$	SD	F
V1-IIAI1.	Positive teacher affect as motive	.13	.34	.29	.46	5.87*
V1-IIA02.	Teacher evaluation of student performance	.08	.28	.26	.44	8.49**

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 23. Student Understanding of Teacher Behavior. Summary of Significant Results of Analyses of Variance, Main Effects Due to Teacher Socialization Style, Vignette 2. [1]

Variables		Behavior Modification $\bar{X}$	SD	Induction $\bar{X}$	SD	F
V2-IIAH2.	Teacher response due to teacher role	.28	.45	.44	.50	4.89*
V2-IIAI1.	Positive teacher affect as motive	.24	.43	.39	.49	4.23*
V2-IIAM2.	Primary focus: managerial.	.52	.50	.33	.47	4.27*
V2-IIAM3.	Focus on both instruction and management.	.42	.50	.60	.49	4.22*

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 24. Student Understanding of Teacher Behavior. Summary of Significant Results of Analyses of Variance, Main Effects Due to Teacher Socialization Style, Vignette 3.[1]

Variable	Behavior Modification $\bar{X}$	SD	Induction $\bar{X}$	SD	F
V3-IIAH2. Teacher response due to teacher role.	.29	.46	.52	.50	8.90**
V3-IIAI1. Positive teacher affect as motive	.43	.50	.61	.49	5.69*
V3-IIAM1. Primary focus: instructional	.68	.47	.83	.38	4.88*
V3-IIAM2. Primary focus: managerial	.11	.32	.03	.17	3.88*
V3-IIAO2. Teacher evaluation of student performance	.23	.42	.36	.48	3.99*

* = p<.05, ** = p<.01, *** = p<.001

Table 25. Student Understanding of Teacher Behavior. Summary of Significant Results of Analyses of Variance, Main Effects Due to Student Adjustment Level, Vignette 1.[1]

Variable	LA $\bar{X}$	LA SD	HYP $\bar{X}$	HYP SD	UA $\bar{X}$	UA SD	T-OWNED $\bar{X}$	T-OWNED SD	SHARED $\bar{X}$	SHARED SD	S-OWNED $\bar{X}$	S-OWNED SD	NPS $\bar{X}$	NPS SD	F
V1-IIAa0. No memory difficulties.	.88	.34	1.00	.00	1.00	.00	1.00	.00	.94	.25	1.00	.00	1.00	.00	3.80**
V1-IIAI2. Negative teacher affect as motive	.27	.46	.38	.50	.25	.45	.06	.25	.19	.40	.06	.25	.09	.28	2.23*
V1IIAM2. Primary focus: managerial.	.31	.48	.50	.52	.19	.40	.31	.48	.38	.50	.13	.35	.13	.33	2.21*

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 26. Student Understanding of Teacher Behavior. Summary of Significant Results of Analyses of Variance, Main Effects Due to Student Adjustment Level, Vignette 2.[1]

Variables	LA $\bar{X}$	LA SD	HYP $\bar{X}$	HYP SD	UA $\bar{X}$	UA SD	T-OWNED $\bar{X}$	T-OWNED SD	SHARED $\bar{X}$	SHARED SD	S-OWNED $\bar{X}$	S-OWNED SD	NPS $\bar{X}$	NPS SD	F
V2-IIAaO. No memory difficulties.	.81	.40	.94	.25	.88	.34	1.00	.00	1.00	.00	1.00	.00	1.00	.00	2.50*
V2-IIAH3. Teacher response due to student personality	.06	.25	.13	.34	.06	.25	.00	.00	.00	.00	.00	.00	.00	.00	3.87**

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 27. Student Understanding of Teacher Behavior. Summary of Significant Results of Analyses of Variance, Main Effects Due to Student Level of Adjustment, Vignette 3.[1]

Variables	UA $\bar{X}$	UA SD	HYP $\bar{X}$	HYP SD	LA $\bar{X}$	LA SD	T-OWNED $\bar{X}$	T-OWNED SD	SHARED $\bar{X}$	SHARED SD	S-OWNED $\bar{X}$	S-OWNED SD	NPS $\bar{X}$	NPS SD	F
V3-IIAI0. Teacher affect not discussed	.56	.51	.56	.51	.44	.51	.63	.50	.07	.26	.31	.48	.37	.49	2.98**
V3-IIAJ2. Proscriptive teacher goal	.13	.35	.00	.00	.06	.25	.00	.00	.00	.00	.00	.00	.00	.00	2.44*

* = p<.05, ** = p<.01, *** = p<.001

Table 28. Student Understanding of Teacher Behavior. Summary of Significant Results of Analyses of Variance, Interactions, Vignette 1.[1]

TXG Variables		$\bar{X}$	SD		$\bar{X}$	SD	F
V1-IIA02. Teacher evaluation of student performance	BM	.08	.28	IND	.26	.44	
	Lower	.08	.28	Lower	.11	.32	6.08*
	Upper	.08	.28	Upper	.42	.50	
V1-IIAP2. Negative teacher evaluation	BM	.58	.50	IND	.57	.50	
	Lower	.78	.42	Lower	.58	.50	6.14*
	Upper	.39	.49	Upper	.56	.50	
V1-IIAP4. Mixed teacher evaluation	BM	.18	.39	IND	.17	.38	
	Lower	.03	.17	Lower	.19	.40	8.26**
	Upper	.33	.48	Upper	.14	.35	
V1-IIAQ1. Teacher concern for others	BM	.15	.36	IND	.07	.26	
	Lower	.08	.28	Lower	.06	.23	8.26**
	Upper	.22	.42	Upper	.08	.28	
TXS		$\bar{X}$	SD		$\bar{X}$	SD	
V1-IIAP2. Negative teacher evaluation	BM	.58	.50	IND	.57	.50	2.63*
	NT1	.88	.35	NT1	.50	.53	
	NT2	.38	.52	NT2	.50	.53	
	NT3	.50	.53	NT3	.38	.52	
	NT4	.75	.46	NT4	.25	.46	
	NT5	.88	.35	NT5	.63	.52	
	NT6	.75	.46	NT6	.88	.35	
	NT7	.38	.49	NT7	.67	.48	

Table 28. (cont'd.)

TGS Variables		$\bar{X}$	SD		$\bar{X}$	SD	F
V1-IIAaO. No memory difficulties	BM						
	Lower	1.00	.00	Upper	.97	.17	5.43***
	NT1	1.00	.00	NT1	.75	.50	
	NT2	1.00	.00	NT2	1.00	.00	
	NT3	1.00	.00	NT3	1.00	.00	
	NT4	1.00	.00	NT4	1.00	.00	
	NT5	1.00	.00	NT5	1.00	.00	
	NT6	1.00	.00	NT6	1.00	.00	
	IND						
	Lower	.95	.23	Upper			
	NT1	.75	.50	NT1	1.00	.00	
	NT2	1.00	.00	NT2	1.00	.00	
	NT3	1.00	.00	NT3	1.00	.00	
	NT4	1.00	.00	NT4	1.00	.00	
	NT5	.75	.50	NT5	1.00	.00	
	NT6	1.00	.00	NT6	1.00	.00	
	NT7	1.00	.00	NT7	1.00	.00	

[1] * = p<.05, ** = p< .01, *** = p<.001

Table 29. Student Understanding of Teacher Behavior. Summary of Significant Results of Analyses of Variance, Interactions, Vignette 2.[1]

Variables	TXG	$\bar{X}$	SD		$\bar{X}$	SD	F
V2-IIAH1. Teacher response due to teacher personality	BM	.10	.30	IND	.10	.30	
	Lower	.17	.38	Lower	.03	.17	8.73**
	Upper	.03	.17	Upper	.17	.38	
V2-IIAM1. Primary focus: instructional	BM	.03	.17	IND	.06	.23	
	Lower	.03	.17	Lower	.00	.00	4.19*
	Upper	.03	.17	Upper	.11	.32	
V2-IIAP2. Negative teacher judgment	BM	.61	.49	IND	.54	.50	
	Lower	.86	.35	Lower	.56	.50	9.72**
	Upper	.36	.49	Upper	.53	.51	
V2-IIAP3. Neutral teacher judgment	BM	.15	.36	IND	.14	.35	
	Lower	.00	.00	Lower	.11	.32	4.57*
	Upper	.31	.47	Upper	.17	.38	
V2-IIAQ1. Teacher concern for others	BM	.26	.44	IND	.38	.49	
	Lower	.06	.23	Lower	.33	.48	4.89*
	Upper	.47	.51	Upper	.42	.50	

Table 29. (cont'd.)

GXS

Variables		$\bar{X}$	SD		$\bar{X}$	SD	F
V2-IIAa0. No memory difficulties	Lower	.92	.28	Upper	.97	.17	2.80*
	NT1	.63	.52	NT1	1.00	.00	
	NT2	1.00	.00	NT2	.88	.35	
	NT3	.88	.35	NT3	.88	.35	
	NT4	.75	.46	NT4	1.00	.00	
	NT5	1.00	.00	NT5	1.00	.00	
	NT6	1.00	.00	NT6	1.00	.00	
	NT7	1.00	.00	NT7	1.00	.00	
V2-IIAN0. No student inference	Lower	.07	.26	Upper	.07	.26	2.34*
	NT1	.00	.00	NT1	.00	.00	
	NT2	.00	.00	NT2	.00	.00	
	NT3	.13	.35	NT3	.00	.00	
	NT4	.00	.00	NT4	.13	.35	
	NT5	.25	.46	NT5	.00	.00	
	NT6	.00	.00	NT6	.38	.52	
	NT7	.08	.28	NT7	.04	.20	
V2-IIAP2. Negative teacher judgment	Lower	.71	.46	Upper	.44	.50	3.04*
	NT1	.50	.53	NT1	.63	.52	
	NT2	1.00	.00	NT2	.13	.35	
	NT3	.25	.46	NT3	.50	.53	
	NT4	.75	.46	NT4	.25	.46	
	NT5	1.00	.00	NT5	.63	.52	
	NT6	.63	.52	NT6	.63	.52	
	NT7	.75	.44	NT7	.42	.50	

Table 29. (cont'd.)

TXGXS

Variable		$\bar{X}$	SD		$\bar{X}$	SD	F
V2-IIAH3. Teacher response due to student personality	BM	.04	.20				5.09***
	Lower	.09	.28	Upper	0	0	
	NT1	.25	.50	NT1	0	0	
	NT2	.50	.58	NT1	0	0	
	NT3	0	0	NT3	0	0	
	NT4	0	0	NT4	0	0	
	NT5	0	0	NT5	0	0	
	NT6	0	0	NT6	0	0	
	NT7	0	0	NT7	0	0	
	IND	.01	.12				
	Lower	.03	.17				
	NT1	0	0	NT1	0	0	
	NT2	0	0	NT2	0	0	
	NT3	.25	.50	NT3	0	0	
	NT4	0	0	NT4	0	0	
	NT5	0	0	NT5	0	0	
	NT6	0	0	NT6	0	0	
	NT7	0	0	NT7	0	0	

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 30. Student Understanding of Teacher Behavior. Summary of Significant Results of Analyses of Variance, Interactions, Vignette 3.[1]

Variables		$\bar{X}$	SD		$\bar{X}$	SD	F
TXG							
V3-IIAM1 Primary	BM	.68	.47	IND	.83	.38	4.88*
focus: instructional	Lower	.46	.51	Lower	.75	.44	
	Upper	.89	.32	Upper	.91	.28	
V3-IIAP1 Positive	BM	.39	.49	IND	.42	.50	5.80*
judgment about	Lower	.34	.48	Lower	.56	.50	
student	Upper	.44	.50	Upper	.28	.45	

* = p<.05, ** = p<.01, *** = p<.001

Table 31. Means and Standard Deviations for Student Perception of Hypothetical Student Vignette 1 (V1), Vignette 2 (V2), Vignette 3 (V3).

Item	V1		V2		V3	
IIBA: Locus of Causality, first	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
IIBA1 Internal	40	49	56	50	52	50
IIBA2 External	35	48	26	44	38	49
IIBA3 Interactive	25	44	18	39	10	31
IIBB: Stability of Causal Factors						
IIBB0 Can't rate	01	12	03	17	04	18
IIBB1 Long term	24	43	32	47	53	50
IIBB2 Short term	55	50	37	48	22	41
IIBB3 Both	20	40	29	45	22	42
IIBC: Physical Causality						
IIBC0 No	88	32	89	32	94	23
IIBC1 Yes	12	32	11	32	06	23
IIBD: Nature of External Causes						
IIBD0 None mentioned	50	50	60	49	56	50
IIBD1 Student a "victim" of external factors	09	29	05	22	20	40
IIBD2 Indirect control	40	49	29	46	20	40
IIBD3 Environmental assault	09	29	08	27	04	20
IIBD4 Other	02	14	02	14	01	12
IIBE: Nature of Internal Causes						
IIBE0 None mentioned	37	48	29	45	21	41
IIBE1 Product of birth	25	44	43	50	56	50
IIBE2 Product of behavior, desires	43	50	44	50	38	49
IIBE3 Other	06	23	03	17	03	17
IIBF: Nature of Interactive Causes						
IIBF0 None mentioned	62	49	77	43	83	37
IIBF1 Expectation effects	01	12	0	0	0	0
IIBF2 Interaction of student and teacher	06	24	04	20	08	28
IIBF3 Modeling effects	29	46	17	37	06	24
IIBF4 Other	03	17	04	20	03	17

Table 31. (cont'd.)

	V1		V2		V3	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
IIBG: Intentionality						
IIBG0 Can't rate	01	08	0	0	0	0
IIBG1 Intentional	50	50	51	50	15	36
IIBG2 Thoughtless	01	08	01	08	01	12
IIBG3 Unintentional	44	50	42	50	81	39
IIBG4 Qualified response	04	20	06	23	03	17
IIBH: Reasons for Intentional Behavior						
IIBH0 Not applicable	47	50	45	50	82	39
IIBH1 Self indulgence	42	50	43	50	16	37
IIBH2 Self protection	02	14	01	08	0	0
IIBH3 Aggression	04	18	08	27	01	08
IIBH4 Habit	02	14	02	14	01	08
IIBH5 Other	06	23	06	23	01	12
IIBI Change Possibility						
IIBI0 Can't rate	0	0	0	0	0	0
IIBI1 Yes	91	29	85	36	85	35
IIBI2 No	06	23	09	29	08	28
IIBI3 Qualified response	04	18	07	26	06	24
IIBJ: Facilitating Change						
IIBJ0 Can't rate	06	24	12	33	10	30
IIBJ1 Internal controls	75	44	66	48	67	47
IIBJ2 External controls	07	26	14	35	08	27
IIBJ3 Interaction	12	33	11	31	17	37
IIBK: Change Not Possible						
IIBK0 Can't rate	96	20	90	30	91	29
IIBK1 Internal factors	04	18	08	28	07	26
IIBK2 External factors	01	12	01	12	02	14
IIBL: Change Strategy						
IIBL0 Can't rate	06	23	15	36	11	32
IIBL1 Prescriptive	57	50	42	50	79	41
IIBL2 Proscriptive	08	28	13	34	01	08
IIBL3 Both	28	45	29	46	09	29
IIBM: Generalization of Change						
IIBM0 Can't rate	06	24	13	33	10	30
IIBM1 Global	48	50	25	43	56	50

Table 31. (cont'd.)

		V1		V2		V3	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
IIBM2	Specific	46	50	63	49	35	48
IIBN:	Stability of Behavior: Past						
IIBN0	Can't rate	0	0	02	15	01	12
IIBN1	Stable	33	47	33	47	36	48
IIBN2	Unstable	59	49	57	50	55	50
IIBN3	Sporadic	05	22	04	20	04	18
IIBN4	Qualified	04	18	03	17	04	18
IIBO:	Stable of Behavior: Future						
IIBO0	Can't rate	01	08	02	14	0	0
IIBO1	Future stability	35	48	36	48	31	46
IIBO2	Future instability	32	47	34	48	39	49
IIBO3	Qualified	33	47	28	45	31	46
IIBP:	Reasons for Continual Behavior						
IIBP0	Can't rate	43	50	38	49	55	50
IIBP1	No desire	41	49	41	49	16	37
IIBP2	Unable due to self	06	23	09	28	10	30
IIBP3	Unable due to others	04	20	06	23	10	30
IIBP4	Unable due to interactions of self and other factors	08	27	07	26	09	28
IIBQ:	Reasons for Cessation of Behavior						
IIBQ0	Can't rate	45	50	48	50	32	47
IIBQ1	Self control	19	39	13	34	28	45
IIBQ2	Other control	26	44	34	47	19	39
IIBQ3	Interaction of self and other factors	12	32	06	23	20	40
IIBR:	Globality						
IIBR0	Can't rate	01	08	0	0	0	0
IIBR1	Situation specific	37	48	35	48	44	50
IIBR2	Generalized	63	49	65	48	56	50
IIBS:	Nature of Generalization						
IIBS0	Can't rate	37	48	36	48	46	50
IIBS1	Parallel places	17	37	09	29	07	26
IIBS2	Other places	52	50	59	49	44	50
IIBS3	Parallel activities	02	14	04	18	10	30

Table 31. (cont'd.)

		V1		V2		V3	
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
IIBS4	Other activities	15	36	10	30	10	31
IIBS5	Parallel persons	01	08	01	08	0	0
IIBS6	Other persons	08	28	06	24	04	18

Table 32. Student Perceptions of Hypothetical Student. Summary of Analyses of Variance, Main Effects Due to Grade Level, Vignette 1.[1]

Variable	Lower $\bar{X}$	Lower SD	Upper $\bar{X}$	Upper SD	F
V1-IIBA2 Locus of causality: First choice: external	.50	.50	.19	.40	17.06***
V1-IIBA3 Locus of causality: First choice: interactive	.14	.35	.36	.48	9.58**
I V1-IIBD0 No external causes of behavior mentioned	.40	.49	.60	.49	6.91**
V1-IIBD2 External cause: Indirect control	.50	.50	.29	.46	7.71**
V1-IIBE1 Internal cause: Product of birth	.39	.49	.11	.32	17.89***
V1-IIBE2 Internal cause: Product of behavior/desire/ habit	.35	.48	.51	.50	3.94*
V1-IIBF0 No interactive causes of behavior mentioned	.76	.43	.47	.50	13.59***
V1-IIBF3 Interactive cause: Modeling effects	.18	.39	.40	.49	8.38**
I V1-IIBJ3 Facilitating change: interaction of internal, external	.07	.26	.17	.38	3.83*
VI-IIBK1 Change not possible due to internal factors	.07	.26	.00	.00	5.39*

Table 32. (cont'd.)

Variable	Lower $\bar{X}$	Lower SD	Upper $\bar{X}$	Upper SD	F
[I]V1-IIBN1 Past stability	.49	.50	.17	.38	21.79***
V1-IIBO2 Future instability	.42	.50	.21	.41	6.60**
V1-IIBO3 Future stability: Qualified responses	.21	.41	.44	.50	10.49**
[I]SV-1IIBD Sum of external locus of causality	.74	.69	.46	.60	8.15**
SV-1IIBF Sum of interactive locus of causality factors	.25	.47	.54	.53	11.63***

[1]* = p .05, ** = p .01, *** = p .001

[I]indicates variable involved in an interaction

Table 33. Student Perceptions of Hypothetical Student. Summary of Analyses of Variance, Main Effects Due to Grade Level, Vignette 2.[1]

Variable	Lower $\bar{X}$	Lower SD	Upper $\bar{X}$	Upper SD	F
V2-IIBB2 Short term causes of behavior	.28	.45	.46	.50	5.04*
V2-IIBD2 External locus of causality: Indirect control	.38	.49	.21	.41	5.62*
V2-IIBE1 Internal locus of causality: Product of birth	.57	.50	.29	.46	12.02***
V2-IIBF0 No interactive causes of behavior mentioned	.83	.38	.69	.46	12.02***
V2-IIBF3 Interactive locus of causality: Modeling effects	.14	.35	.19	.40	3.90*
V2-IIBG1 Intentional behavior	.57	.50	.44	.50	4.19*
V2-IIBO2 Future instability	.44	.50	.24	.43	6.82**
V2-IIBO3 Future stability: Qualified response	.15	.36	.40	.49	13.50***
V2-IIBP4 Future stability due to interaction of self, other factors	.00	.00	.14	.35	10.24**
V2-IIBQ1 Future instability due to self control	.07	.25	.19	.39	4.69*
V2-IIBQ2 Future instability due to other control	.44	.50	.23	.43	5.39*

Table 33. (cont'd.)

Variable	Lower $\bar{X}$	Lower SD	Upper $\bar{X}$	Upper SD	F
[1]SV2-IIBD Sum of external causal factors	.53	.63	.35	.48	4.33*
SV2-IIBF Sum of interactive causal factors	.17	.38	.33	.53	4.98*

[1]* = p<.05, ** = p<.01, *** = p<.001

Table 34. Student Perceptions of Hypothetical Student. Summary of Analyses of Variance, Main Effects Due to Grade Level, Vignette 3.[1]

Variable	Lower $\bar{X}$	Lower SD	Upper $\bar{X}$	Upper SD	F
V3-IIBA1 Locus of causality: First choice: Internal	.43	.50	.51	.49	4.66*
V3-IIBA2 Locus of causality: First choice: External	.50	.50	.25	.44	9.00**
V3-IIBD0 No external causes of behavior mentioned	.43	.50	.69	.46	10.26**
V3-IIBD2 External locus of causality: Indirect control	.31	.46	.10	.30	12.31***
V3-IIBI3 Possibility of change: Qualified response	.01	.12	.11	.32	5.80*
V3-IIBL1 Change strategy Prescriptive	.69	.46	.89	.32	8.36**
V3-IIBO2 Future instability	.47	.50	.31	.46	4.63*
V3-IIBO3 Future instability Qualified response	.18	.39	.43	.50	9.74**
V3-IIBQ3 Future instability due to interaction of self, other factors	.11	.32	.24	.43	3.86*
SV3-IIBS2 Behavior generalized to activities	.10	.30	.31	.49	8.33**
SV3-IIBD Sum of external causal factors	.60	.55	.32	.50	9.05**

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 35. Student Perceptions of Hypothetical Student. Summary of Results of Analyses of Variance, Main Effects and Interactions Associated with Sex Differences, Vignette 1.[1]

Variable		$\bar{X}$	SD		$\bar{X}$	SD	F
V1-IIBC0. No physical causes mentioned	Males	.83	.38	Females	.93	.26	4.72*
GXS							
V1-IIBD1 External cause: student a victim of others	Lower	.08	.28	Upper	.10	.30	4.56*
	M	.06	.23	M	.17	.38	
	F	.11	.32	F	.03	.17	
V1-IIBL1 Prescriptive change strategy	Lower	.60	.49	Upper	.54	.50	4.87*
	M	.47	.51	M	.58	.50	
	F	.72	.45	F	.50	.51	
V1-IIBL3 Both prescriptive and proscriptive change strategies	Lower	.22	.42	Upper	.33	.47	4.50*
	M	.31	.47	M	.28	.45	
	F	.14	.35	F	.39	.49	
V1-IIBM2 Situation specific change	Lower	.43	.50	Upper	.40	.50	4.29*
	M	.28	.45	M	.58	.50	
	F	.58	.50	F	.39	.49	
V1-IIBP1 Future stability: No desire to change	Lower	.32	.47	Upper	.40	.49	8.61**
	M	.22	.42	M	.56	.50	
	F	.42	.50	F	.25	.44	
V1-IIBQ2 Future instability: other control	Lower	.22	.42	Upper	.24	.43	4.37*
	M	.25	.44	M	.11	.32	
	F	.19	.40	F	.36	.49	

Table 35 (cont'd.)

Variable		$\bar{X}$	SD		$\bar{X}$	SD	F
TXS							
V1-IIBE0 Internal causes: none mentioned	BM	.36	.48	IND	.38	.49	5.68*
	M	.43	.50	M	.29	.46	
	F	.25	.44	F	.43	.50	
SV1-IIBE Sum of internal causes	BM	.76	.66	IND	.71	.62	6.35**
	M	.68	.67	M	.86	.65	
	F	.89	.63	F	.61	.58	
V1-IIBI1 Change possible	BM	.89	.32	IND	.93	.26	4.14*
	M	.91	.29	M	.82	.39	
	F	.86	.36	F	1.00	.00	
V1-IIBL1 Prescriptive change strategy	BM	.51	.50	IND	.63	.49	6.20*
	M	.41	.50	M	.71	.46	
	F	.68	.48	F	.57	.50	

* = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 36. Student Perception of Hypothetical Student. Summary of Results of Analyses of Variance, Main Effects and Interactions Associated with Sex Differences, Vignette 2.[1]

Variable		$\bar{X}$	SD		$\bar{X}$	SD	F
GXS							
V2-IIBP1 Future	Lower	.32	.47	Upper	.39	.49	4.25*
stability: no de-	M	.28	.45	M	.47	.51	
sire to change	F	.36	.49	F	.31	.47	
V2-IIBQ2 Future	Lower	.38	.49	Upper	.46	.50	5.63*
instability: other	M	.31	.47	M	.56	.50	
control	F	.44	.50	F	.36	.49	
TXS							
V1-IIBP1 Future	BM	.36	.48	IND	.35	.48	6.63**
stability: No de-	M	.30	.46	M	.50	.51	
sire to change	F	.46	.51	F	.25	.44	

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 37. Student Perception of Hypothetical Student. Summary of Results of Analyses of Variance, Main Effects and Interactions Associated with Sex Differences, Vignette 3.[1]

Variable		$\bar{X}$	SD		$\bar{X}$	SD	F
V3-IIBR2 Generalized behavior	Male	.72	.45	Female	.39	.49	19.79***
SV3-IIBS1 Behavior generalized to other places	Male	.68	.58	Female	.33	.50	15.81***
TXS							
SV3-IIBE Sum of internal causes	BM	.90	.63	IND	1.03	.63	4.14*
	M	.98	.63	M	.89	.57	
	F	.79	.63	F	1.11	.65	

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 38. Student Perceptions of Hypothetical Student. Summary of Analyses of Variance, Main Effects Due to Teacher Socialization Style, Vignette 1.[1]

Variable	Behavior Modification $\bar{X}$	SD	Inductive $\bar{X}$	SD	F
V1-IIBG3 Unintentional behavior	.57	.50	.31	.46	10.76**
V1-IIBG4 Intentionality: Qualified response	.00	.00	.08	.28	5.50*
V1-IIBH1 Intentional behavior due to self indulgence	.31	.46	.53	.50	8.38**
V1-IIBN3 Sporadic past behavior	.00	.00	.10	.30	7.81**

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 39. Student Perceptions of Hypothetical Students. Summary of Analyses of Variance, Main Effects Due to Teacher Socialization Style, Vignette 2.[1]

Variable	Behavior Modification $\bar{X}$	SD	Inductive $\bar{X}$	SD	F
[I]V2-IIBA2 Locus of causality: First choice: External	.33	.47	.19	.40	4.58*
V2-IIBE2 Internal causality factors: Product of behavior/ desire/habit	.32	.47	.56	.50	8.48**
V2-IIBG1 Intentional behavior	.41	.50	.61	.49	4.19*
V2-IIBG3 Unintentional behavior	.54	.50	.31	.46	7.45**
V2-IIBH1 Intentional behavior due to self indulgence	.31	.47	.54	.50	9.21**
V2-IIBJ3 Facilitating change through interaction of internal, external	.04	.20	.17	.38	6.06*
V2-IIBM1 Change possible and global	.17	.38	.32	.47	4.99*
V2-IIBO3 Future stability: Qualified response	.18	.39	.38	.49	8.17**

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 40 Student Perceptions of Hypothetical Students. Summary of Analyses of Variance, Main Effects Due to Teacher Socialization Style, Vignette 3.[1]

Variable	Behavior Modification $\bar{X}$	Behavior Modification SD	Inductive $\bar{X}$	Inductive SD	F
V3-IIBP4 Future stability: Change not possible due to interaction of self, external factors	.03	.18	.13	.34	5.13*

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 41 Student Perception of Hypothetical Student. Summary of Analysis of Variance, Main Effects Due to Student Level of Adjustment, Vignette 1.[1]

Variable	UA $\bar{X}$	UA SD	HYP $\bar{X}$	HYP SD	LA $\bar{X}$	LA SD	T-O $\bar{X}$	T-O SD	SH $\bar{X}$	SH SD	S-O $\bar{X}$	S-O SD	NPS $\bar{X}$	NPS SD	F
V1-IIBB3 Reference to both long and short term causal factors	.06	.25	.19	.40	.13	.34	.19	.40	.44	.51	.44	.51	.13	.33	3.06*

Table 42. Student Perception of Hypothetical Student. Summary of Analysis of Variance, Main Effects Due to Student Level of Adjustment, Vignette 2.[1]

Variable	UA $\bar{X}$	UA SD	HYP $\bar{X}$	HYP SD	LA $\bar{X}$	LA SD	T-O $\bar{X}$	T-O SD	SH $\bar{X}$	SH SD	S-O $\bar{X}$	S-O SD	NPS $\bar{X}$	NPS SD	F
V2-IIBA2 Locus of causality: First choice: External	.31	.48	.44	.51	.44	.51	.25	.45	.31	.48	.06	.25	.19	.39	2.17*
V2-IIBD0 No external causes of behavior mentioned	.56	.51	.25	.45	.50	.52	.81	.40	.56	.51	.69	.48	.67	.48	2.44*
V2-IIBD2 External causal factors: Indirect	.25	.45	.63	.50	.44	.51	.19	.40	.31	.48	.19	.40	.21	.41	2.65*

Table 42. (cont'd.)

Variable	UA $\bar{X}$	UA SD	HYP $\bar{X}$	HYP SD	LA $\bar{X}$	LA SD	T- O $\bar{X}$	T- O SD	SH X	SH SD	S-O X	S-O SD	NPS X	NPS SD	F
SV2IIBS2 Generalization of behavior to other activities	.13	.34	.06	.25	.00	.00	.00	.00	.13	.34	.31	.48	.19	.39	2.55*
SV2IIBS3 Generalization of behavior to other persons	.06	.25	.06	.25	.13	.34	.00	.00	.19	.40	.19	.40	.00	.00	2.36*
SV2IIBD Sum of external locus of causality factors	.50	.63	.88	.62	.50	.52	.19	.40	.56	.73	.31	.48	.33	.48	3.21**

* = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 43. Student Perception of Hypothetical Student. Summary of Analyses of Variance, Interactions, Vignette 1.[1]

Variables			$\bar{X}$	SD		$\bar{X}$	SD	F
TXG								
V1-IIBG1	Intentional behavior	Lower	.57	.50	Upper	.43	.50	3.83*
		BM	.56	.50	BM	.25	.44	
		IND	.58	.50	IND	.61	.50	
V1-IIBL2	Proscriptive change	Lower	.07	.26	Upper	.10	.30	6.52**
	strategies	BM	.06	.23	BM	.19	.40	
		IND	.08	.28	IND	.00	.00	
V1-IIBM1	Global change	Lower	.46	.50	Upper	.49	.50	4.55*
		BM	.61	.49	BM	.47	.51	
		IND	.31	.47	IND	.50	.51	
V1-IIBM2	Situation specific	Lower	.43	.50	Upper	.49	.50	10.24***
	change	BM	.22	.42	BM	.53	.51	
		IND	.64	.49	IND	.44	.50	
V1-IIBN1	Stable past behavior	Lower	.49	.50	Upper	.17	.38	4.99*
		BM	.61	.49	BM	.14	.35	
		IND	.36	.49	IND	.19	.40	
V1-IIBN2	Unstable past behavior	Lower	.46	.60	Upper	.71	.46	11.65***
		BM	.33	.48	BM	.83	.38	
		IND	.58	.50	IND	.58	.50	

Table 43. (cont'd.)

Variable		$\bar{X}$	SD		$\bar{X}$	SD	F
V1-IIBO1 Future stability of behavior	Lower	.36	.48	Upper	.33	.47	7.33**
	BM	.47	.51	BM	.22	.42	
	IND	.25	.44	IND	.40	.50	
SV1-IIBS2 Generalized to other places	Lower	.17	.38	Upper	.18	.39	4.43*
	BM	.19	.40	BM	.08	.28	
	IND	.14	.35	IND	.28	.45	
SV1-IIBD Sum of external causes	Lower	.74	.69	Upper	.46	.60	3.99*
	BM	.56	.61	BM	.47	.61	
	IND	.92	.73	IND	.44	.61	

TXS		$\bar{X}$	SD	UA $\bar{X}$	UA SD	HYP $\bar{X}$	HYP SD	LA $\bar{X}$	LA SD	T-O $\bar{X}$	T-O SD	SH $\bar{X}$	SH SD	S-O $\bar{X}$	S-O SD	NPS $\bar{X}$	NPS SD	F
V1-IIBF2 Student behavior result of ability or character	BM	.08	.28	.00	.00	.38	.52	.13	.35	.00	.00	.00	.00	.00	.00	.08	.28	2.31*
	IND	.04	.20	.00	.00	.00	.00	.00	.00	.13	.35	.00	.00	.13	.35	.04	.20	
V1IIBL1 Prescriptive change strategies	BM	.51	.50	.50	.53	.25	.46	.88	.35	.38	.52	.50	.53	.88	.35	.42	.50	3.19**
	IND	.63	.49	.38	.52	.75	.46	.50	.53	.50	.53	.88	.35	.38	.52	.75	.44	
V1-IIBL3 Both prescriptive and proscriptive change strategies	BM	.28	.45	.13	.35	.38	.52	.00	.00	.38	.52	.38	.52	.00	.00	.42	.50	2.48*
	IND	.28	.45	.38	.52	.25	.46	.38	.52	.38	.52	.13	.35	.50	.53	.17	.38	
V1-IIBN1 Stable past behavior	BM	.38	.49	.63	.52	.13	.35	.50	.53	.25	.46	.25	.46	.63	.52	.33	.48	2.59
	IND	.28	.45	.13	.35	.38	.52	.13	.35	.50	.53	.50	.53	.25	.46	.21	.41	

Table 43.(cont'd.)

Variables		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	F
V1-IIBQ2 Future in-	BM	.25	.44	.38	.52	.25	.46	.13	.35	.38	.52	.25	.46	.13	.35	.25	.44	2.23*
stability: Other	IND	.21	.41	.13	.35	.13	.35	.38	.52	.00	.00	.38	.52	.63	.52			
control/environmental forces																		
SV1-IIBS1 Behavior	BM	.69	.60	.38	.52	.75	.71	.88	.35	.75	.71	.50	.53	.75	.89	.75	.53	3.04*
generalized to para-	IND	.68	.65	1.13	.35	1.25	.71	.38	.52	.63	.74	.75	.71	.63	.74	.46	.51	
llel places																		
GXS																		
V1-IIBJ3 Facilitat-	Lower	.07	.26	.00	.00	.25	.46	.00	.00	.13	.35	.13	.35	.13	.35	.00	.00	2.44*
ing change through	Upper	.17	.38	.50	.53	.25	.46	.00	.00	.00	.00	.13	.35	.00	.00	.21	.41	
interaction of internal and external																		

TGS		$\bar{X}$	SD		X	SD	F
V1-IIBD0 External causes for	Lower	.40	.49	Upper	.60	.49	2.48*
behavior not given	BM	.50	.51	BM	.58	.50	
	NT1	.50	.58	NT1	.50	.58	
	NT2	1.00	.00	NT2	.25	.50	
	NT3	.25	.50	NT3	.50	.58	
	NT4	.50	.58	NT4	.50	.58	
	NT5	.00	.00	NT5	.75	.50	
	NT6	.50	.58	NT6	.50	.58	
	NT7	.58	.51	NT7	.75	.45	

Table 43. (cont'd.)

Variables		$\bar{X}$	SD		X	SD	F
V1-IIBDO (cont'd.)	IND	.31	.47	IND	.61	.49	
	NT1	.50	.58	NT1	.75	.50	
	NT2	.25	.50	NT2	.50	.58	
	NT3	.00	.00	NT3	.75	.50	
	NT4	.25	.50	NT4	.50	.57	
	NT5	.25	.50	NT5	.00	.00	
	NT6	.00	.00	NT6	1.00	.00	
	NT7	.50	.52	NT7	.67	.49	
SV1-IIBS1 Behavior generalized	Lower	.74	.63	Upper	.64	.61	2.74*
to parallel places	BM	.72	.61	BM	.67	.59	
	NT1	.50	.58	NT1	.25	.50	
	NT2	1.25	.50	NT2	.25	.50	
	NT3	.75	.50	NT3	1.00	.00	
	NT4	.50	.58	NT4	1.00	.82	
	NT5	.50	.58	NT5	.50	.58	
	NT6	1.00	1.15	NT6	.50	.58	
	NT7	.67	.49	NT7	.83	.58	

Table 43 . (cont'd.)

Variables		$\bar{X}$	SD		$\bar{X}$	SD	F
SVI-IIBS1 (cont'd.)	IND	.75	.65	IND	.61	.64	
	NT1	1.25	.50	NT1	1.00	.00	
	NT2	1.00	.82	NT2	1.50	.58	
	NT3	.25	.50	NT3	.50	.58	
	NT4	1.00	.82	NT4	.25	.50	
	NT5	1.00	.82	NT5	.50	.58	
	NT6	.50	.58	NT6	.75	.96	
	NT7	.58	.51	NT7	.33	.49	
SVI-IIBD Sum of external causes for student behavior	Lower	.74	.69	Upper	.46	.60	3.59**
	BM	.56	.61	BM	.47	.61	
	NT1	.75	.96	NT1	.50	.58	
	NT2	.00	.00	NT2	.75	.50	
	NT3	.75	.50	NT3	.50	.58	
	NT4	.50	.58	NT4	.75	.96	
	NT5	1.25	.50	NT5	.25	.50	
	NT6	.50	.58	NT6	.75	.96	
	NT7	.42	.51	NT7	.25	.45	

Table 43. (cont'd.)

Variables		$\bar{X}$	SD		X	SD
SVI-IIBD (cont'd.)	IND	.92	.73	IND	.44	.61
	NT1	.50	.58	NT1	.25	.50
	NT2	1.25	.96	NT2	.50	.58
	NT3	1.25	.50	NT3	.25	.50
	NT4	1.00	.82	NT4	.50	.58
	NT5	.75	.50	NT5	1.25	.50
	NT6	1.50	.58	NT6	.00	.00
	NT7	.67	.78	NT7	.42	.67

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 44. Student Perception of Hypothetical Student. Summary of Analyses of Variance, Interactions, Vignette 2.[1]

Variables		X	SD		X	SD	F
TXG							
V2-IIBD3 External: Student	Lower	.08	.28	Upper	.07	.26	4.61*
victim of environmental assault	BM	.06	.23	BM	.14	.35	
	IND	.11	.32	IND	.00	.00	

Variables				UA		HYP		LA		T-O		SH		S-O		NPS		
		X	SD	X	SD	X	SD	X	SD	X	SD	X	SD	X	SD	X	SD	F
V2-IIBA1 Internal causal	BM	.51	.50	.75	.46	.13	.35	.50	.53	.50	.53	.38	.52	.88	.35	.50	.51	2.26*
factors	IND	.60	.49	.63	.52	.63	.52	.50	.53	.63	.52	.75	.46	.38	.52	.63	.49	
V2-IIBA2 External causal	BM	.33	.47	.25	.46	.75	.46	.38	.52	.25	.46	.63	.52	.00	.00	.25	.44	3.09**
factors	IND	.19	.40	.38	.52	.13	.35	.50	.53	.25	.46	.00	.00	.13	.35	.13	.34	
V2-IIBL1 Prescriptive	BM	.40	.49	.75	.46	.00	.00	.50	.53	.38	.52	.25	.46	.75	.46	.33	.48	2.52*
change strategies	IND	.44	.50	.50	.53	.63	.52	.57	.53	.50	.53	.38	.52	.13	.35	.42	.50	
GXS																		
V2-IIBG1 Intentional	Lower	.57	.50	.50	.53	.63	.52	.38	.52	1.00	.00	.50	.53	.88	.35	.42	.50	2.97**
behavior	Upper	.46	.50	.17	.41	.38	.52	.25	.46	.38	.52	.50	.53	.50	.53	.63	.49	
V2-IIBH1 Intentional:	Lower	.46	.50	.38	.52	.50	.53	.50	.53	.63	.52	.38	.52	.88	.35	.29	.46	2.47*
due to self-indulgence.	Upper	.40	.49	.33	.52	.25	.46	.38	.52	.13	.35	.38	.52	.38	.52	.58	.50	

Table 44 . (cont'd.)

Variables		$\bar{X}$	SD		$\bar{X}$	SD	F
TGS							
SV2-IIBS2 Generalized to other places	Lower	.15	.36	Upper	.11	.32	3.10**
	BM	.17	.38	BM	.17	.38	
	NT1	.50	.58	NT1	.00	.00	
	NT2	.00	.00	NT2	.00	.00	
	NT3	.00	.00	NT3	.00	.00	
	NT4	.00	.00	NT4	.00	.00	
	NT5	.25	.50	NT5	.00	.00	
	NT6	.50	.58	NT6	.50	.58	
	NT7	.08	.19	NT7	.33	.49	
	IND	.14	.35	IND	.06	.23	
	NT1	.00	.00	NT1	.00	.00	
	NT2	.25	.50	NT2	.00	.00	
	NT3	.00	.00	NT3	.00	.00	
	NT4	.00	.00	NT4	.00	.00	
	NT5	.00	.00	NT5	.25	.50	
	NT6	.00	.00	NT6	.25	.50	
	NT7	.33	.49	NT7	.00	.00	

Table 44. (cont'd.)

Variables		$\bar{X}$	SD		$\bar{X}$	SD	F
SV2-IIBD Sum of external causes discussed.	Lower	.53	.63	Upper	.35	.48	2.32*
	BM	.58	.65	BM	.42	.50	
	NT1	.00	.00	NT1	.75	.50	
	NT2	1.25	.50	NT2	.75	.50	
	NT3	.50	.58	NT3	.25	.50	
	NT4	.25	.50	NT4	.00	.00	
	NT5	1.25	.96	NT5	.50	.58	
	NT6	.25	.50	NT6	.25	.50	
	NT7	.58	.51	NT7	.42	.51	
	IND	.47	.61	IND	.28	.45	
	NT1	1.00	.82	NT1	.25	.50	
	NT2	.75	.96	NT2	.75	.50	
	NT3	.75	.50	NT3	.50	.58	
	NT4	.25	.50	NT4	.25	.50	
	NT5	.25	.50	NT5	.25	.50	
	NT6	.75	.50	NT6	.00	.00	
	NT7	.17	.39	NT7	.17	.39	

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 45. Student Perception of Hypothetical Student. Summary of Analyses of Variance, Interactions, Vignette 3.[1]

TXG

Variables		$\bar{X}$	SD		$\bar{X}$	SD	F
V3-IIBB1 Long term causal	Lower	.46	.50	Upper	.60	.49	5.06*
factors	BM	.36	.49	BM	.69	.47	
	IND	.56	.50	IND	.50	.51	
V3-IIBB2 Short term causal	Lower	.26	.44	Upper	.17	.38	4.48*
factors	BM	.31	.47	BM	.06	.23	
	IND	.22	.42	IND	.28	.45	
V3-IIBD2 External factors:	Lower	.31	.46	Upper	.10	.30	6.62**
Indirect control	BM	.42	.50	BM	.06	.23	
	IND	.19	.42	IND	.14	.35	
V3-IIBE0 Internal factors:	Lower	.25	.44	Upper	.17	.38	4.96*
None mentioned	BM	.36	.49	BM	.14	.35	
	IND	.14	.35	IND	.19	.40	
V3-IIBG1 Intentional behavior	Lower	.21	.41	Upper	.10	.30	8.00**
	BM	.31	.47	BM	.03	.17	
	IND	.11	.32	IND	.17	.38	
V3-IIBG3 Unintentional behavior	Lower	.78	.42	Upper	.85	.36	7.47**
	BM	.67	.48	BM	.92	.28	
	IND	.88	.32	IND	.78	.42	

Table 45. (cont'd.)

Variable		$\bar{X}$	SD		$\bar{X}$	SD	F
V3-IIBG3	Lower	.78	.42	Upper	.85	.36	
	BM	.67	.48	BM	.92	.28	
	IND	.88	.32	IND	.78	.42	
V3-IIBH1 Intentional: Due to	Lower	.19	.40	Upper	.13	.33	8.49**
self indulgence	BM	.31	.47	BM	.06	.23	
	IND	.08	.28	IND	.19	.40	
V3-IIBJ1 Facilitating change	Lower	.72	.45	Upper	.63	.49	4.96*
through internal controls	BM	.78	.42	BM	.50	.50	
	IND	.67	.48	IND	.75	.44	
V3-IIBJ3 Facilitating change	Lower	.07	.26	Upper	.26	.44	5.39*
through an interaction of in-	BM	.00	.00	BM	.33	.48	
ternal and external controls	IND	.14	.35	IND	.19	.40	

GXS		X	SD	UA $\bar{X}$	UA SD	HYP X	HYP SD	LA X	LA SD	T-O X	T-O SD	SH $\bar{X}$	SH SD	S-O X	S-O SD	NPS $\bar{X}$	NPS SD	F
V3-IIBJ2 Facilitating change	Lower	.08	.28	.13	.35	.25	.46	.13	.35	.00	.00	.25	.46	.00	.00	.00	.00	2.41*
through external controls	Upper	.07	.26	.00	.00	.00	.00	.00	.00	.13	.35	.00	.00	.25	.46	.08	.28	

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 46. Means and Standard Deviations, Student Reactions to Hypothetical Student, Vignette 1 (V1), Vignette 2 (V2), Vignette 3 (V3).

Variable	V1 $\bar{X}$	V1 SD	V2 $\bar{X}$	V2 SD	V3 $\bar{X}$	V3 SD
Quality of Student Affect						
IICA0 Affect not reported	.12	.33	.06	.25	.11	.32
IICA1 Positive	.16	.37	.11	.31	.59	.49
IIAC2 Neutral	.10	.30	.04	.19	.09	.29
IIAC3 Negative	.45	.50	.68	.47	.11	.31
*IIAC4 Can't rate	.18	.39	.14	.35	.11	.31
Property of Reported Affect						
*IICB0 Can't rate	.36	.48	.23	.42	.28	.45
IICB1 Sympathy	.14	.35	.11	.31	.57	.50
*IICB2 Empathy	.01	.08	.00	.00	.01	.12
IICB3 Self interest	.50	.50	.68	.47	.14	.35
Intensity of Reported Affect						
*IICC0 Can't rate	.13	.34	.08	.27	.13	.33
IICC1-3 Apathetic - very concerned	2.48	.76	2.66	.59	2.44	.74
Respondent Behavior						
*IICD0 Can't rate	.01	.08	.01	.08	.02	.14
IICD1 Does not respond	.39	.49	.34	.47	.38	.49
IICD2 Unable to respond	.09	.28	.04	.20	.09	.29
*IICD3 Instrumental to help	.01	.08	.01	.08	.03	.17
IICD4 Acts in behalf of student	.43	.50	.49	.50	.49	.50

Table 46. (cont'd.)

Variable	$\bar{X}$ V1	SD	$\bar{X}$ V2	SD	$\bar{X}$ V3	SD
IICD5 Acts counter to student interests	.16	.36	.22	.42	.04	.18
Effectiveness of Respondent Behavior						
*IICE0 Can't rate	.47	.50	.36	.48	.48	.50
IICE1-3 Effective-harmful	1.57	.82	1.62	.85	1.25	.57
Respondent Motivation						
*IICF0 Can't rate	.28	.45	.21	.41	.25	.44
IICF1 Altruistic	.17	.38	.11	.32	.56	.50
IICF2 Self interest	.59	.51	.68	.47	.21	.43
Group Behavior						
*IICG0 Can't rate	.03	.17	.03	.17	.03	.17
IICG1 Does not act	.36	.48	.31	.46	.40	.49
IICG2 Unable to respond	.06	.23	.03	.17	.03	.17
IICG3 Instrumental help	.00	.00	.01	.12	.03	.17
IICG4 Acts in behalf of student	.43	.50	.44	.50	.45	.49
IICG5 Acts counter to student's interest	.19	.39	.25	.43	.11	.31
Effectiveness of Group Behavior						
*IICH0 Can't rate	.48	.50	.40	.49	.45	.50
IICH1-3 Effective-harmful	1.75	.93	1.75	.94	1.53	.80
Group Motivation						
*IICI0 Can't rate	.32	.47	.29	.46	.33	.47
IICI1 Altruistic	.15	.36	.05	.22	.47	.50
IICI2 Self interest	.55	.50	.66	.48	.21	.41

Table 46. (cont'd.)

Variable	V1 $\bar{X}$	V1 SD	V2 $\bar{X}$	V2 SD	V3 $\bar{X}$	V3 SD
Student Group Comparison						
*IICJO Can't rate	.04	.20	.06	.23	.04	.20
IICJ1-3 Similar-Opposites	1.68	.69	1.60	.75	1.38	.62
Summary Perception						
*IICKO Can't rate	.02	.14	.04	.19	.01	.12
IICK1-5 Student's attitude toward school very positive--very negative	3.61	.99	3.56	1.05	3.66	.86

*Deleted from further analyses

Table 47. Student Reaction to Hypothetical Student. Summary of Significant Results of Analyses of Variance, Main Effects Due to Grade Level, Vignette 1.[1]

Variable	Lower $\bar{X}$	Lower SD	Upper $\bar{X}$	Upper SD	F
[I]V1-IICA2 Student affect: neutral	.04	.20	.15	.36	6.18**
V1-IICB3 Affect quality: self interest	.40	.49	.58	.50	5.30*
V1-IICD5 Respondent acts counter to student's interests	.24	.43	.07	.26	8.80**
V1-IICE1 Effectiveness of respondent behavior	1.82	.91	1.30	.62	4.28*
V1-IICF1 Respondent motives: altruistic	.11	.32	.22	.42	3.78*
V1-IICG4 Group acts in behalf of student	.33	.47	.51	.50	4.59*
V1-IICK1 Summary perception	3.74	.95	3.49	1.03	5.90*

[1] * = p<.05, ** = p<.01, *** = p<.001

[I] indicates variable also involved in any interaction

Table 48. Student Reaction to Hypothetical Student. Summary of Significant Results of Analyses of Variance, Main Effects Due to Grade Level, Vignette 2.[1]

Variable	Lower $\bar{X}$	Lower SD	Upper $\bar{X}$	Upper SD	F
V2-IICA1 Student affect: positive	.15	.36	.06	.23	4.61*
V2-IICA2 Student affect: neutral	.00	.00	.07	.26	6.11*
[I]V2-IICF2 Respondent motives: self interest	.58	.50	.77	.42	5.79*
V2-IICG1 Group does not act	.44	.50	.18	.39	9.58**
V2-IICG4 Group acts in behalf of student	.25	.44	.63	.49	24.08***
V2-IICI2 Group motives: self interest	.55	.50	.77	.42	7.30**

[1] * = p<.05, ** = p<.01, *** = p<.001

[I] indicates variable also involved in any interaction.

Table 49 Student Reaction to Hypothetical Student. Summary of Significant Results of Analyses of Variance, Main Effects Due to Grade Level, Vignette 3.[1]

Variable	Lower $\bar{X}$	Lower SD	Upper $\bar{X}$	Upper SD	F
V3-IICA1 Student affect: positive	.50	.50	.68	.47	3.94*
V3-IICA2 Student affect: neutral	.04	.20	.14	.35	5.13*
V3-IICA3 Student affect: negative	.17	.38	.04	.20	5.40*
V3-IICB1 Affect quality: sympathy	.47	.50	.66	.48	4.52*
V3-IICB3 Affect quality: self interest	.21	.41	.07	.26	5.73*
V3-IICD1 Respondent does not act	.47	.50	.28	.45	6.42**
V3-IICF1 Respondent motives: altruistic	.44	.50	.68	.47	9.20**

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 50 Student Reaction to Hypothetical Student. Summary of Significant Results of Analyses of Variance, Main Effects and Interactions Associated with Sex Differences, Vignette 1.[1]

Variable			$\bar{X}$	SD		$\bar{X}$	SD	F
V1-IICA2	Neutral affect	Males	.13	.36	Females	.04	.20	7.33**
V1-IICF1	Respondent motives: altruistic	Males	.11	.32	Females	.23	.42	4.18*
GXS								
V1-IICF2	Respondent motives: self interest	Lower M	.54	.50	Upper M	.63	.52	4.37*
		M	.53	.51	M	.80	.47	
		F	.56	.50	F	.46	.51	
TXS								
V1-IICD1	Respondent does nothing	BM	.35	.48	IND	.44	.50	4.33*
		M	.28	.45	M	.57	.50	
		F	.46	.51	F	.35	.48	
V1-IICJ1	Comparison of respondent and group reactions (1=identical, 3=conflicting)	BM	1.58	.79	IND	1.63	.72	4.11*
		M	1.47	.74	M	1.71	.76	
		F	1.75	.84	F	1.58	.70	

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 51 Student Reaction to Hypothetical Student. Summary of Significant Results of Analyses of Variance, Main Effects and Interactions Associated with Sex Differences, Vignette 2.[1]

Variables		$\bar{X}$	SD		$\bar{X}$	SD	F
TXS							
V2-IICG4 Group	BM	.42	.50	IND	.46	.50	5.41*
acts on behalf of	M	.33	.47	M	.52	.51	
student	F	.57	.50	F	.43	.50	
V2-IICJ1 Compari-	BM	1.35	.79	IND	1.66	.81	8.10**
son of respondent	M	1.58	.85	M	1.46	.79	
and group reac-	F	1.00	.54	F	1.79	.80	
tions (1=identi-							
cal, 3= conflict-							
ing)							

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 52. Student Reactions to Hypothetical Student. Summary of Analyses of Variance, Main Effects and Interactions Associated with Sex Differences, Vignette 3.[1]

Variable			$\bar{X}$	SD		$\bar{X}$	SD	F
V3-IICA1	Positive affect	Male	.51	.50	Female	.67	.47	4.87*
V3-IICA2	Neutral affect	Male	.14	.35	Female	.04	.20	3.93*
V3-IICC1	Intensity of reported affect (1=apathetic, 3=very concerned)	Male	1.94	1.11	Female	2.32	1.00	4.90*

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 53. Student Reaction to Hypothetical Student. Summary of Results of Analyses of Variance, Main Effects Due to Teacher Socialization Style, Vignette 1.[1]

Variable	Behavior Modification $\bar{X}$	SD	Inductive $\bar{X}$	SD	F
V1-IICI1 Altruistic motivation	.08	.28	.21	.41	4.07*
I V1-IICI2 Self interest motives	.68	.47	.43	.50	10.09**

Table 54. Student Reactions to Hypothetical Student. Summary of Results of Analyses of Variance, Main Effects Due to Teacher Socialization Style, Vignette 2.[1]

Variable	Behavior Modifiation $\bar{X}$	SD	Inductive $\bar{X}$	SD	F
V2-IICC1 Apathetic/unaware	2.70	.49	2.63	.68	4.99*
V2-IICF2 Self interest motives	.77	.42	.58	.50	5.79*
V2-IICI1 Altruistic motivation (group)	.01	.12	.09	.28	3.99*
V2-IICI2 Self interest motives (group)	.73	.45	.59	.50	3.93*
V2-IICJ1 Responses essentially the same	1.35	.79	1.66	.81	5.31*

[1] * = p<.05, ** = p<.01, *** = p<.001

I indicates variable also involved in interaction.

Table 55. Student Reactions to Hypothetical Student. Summary of Results of Analyses of Variance, Main Effects Due to Student Level of Adjustment, Vignette 2.[1]

Variable	UA $\bar{X}$	UA SD	HYP $\bar{X}$	HYP SD	LA $\bar{X}$	LA SD	T-O $\bar{X}$	T-O SD	SH $\bar{X}$	SH SD	S-O $\bar{X}$	S-O SD	NPS $\bar{X}$	NPS SD	F
V2-IICA3 Negative-rejecting	.69	.48	.69	.48	.60	.51	.44	.51	.81	.40	.50	.52	.79	.41	2.23*
I V2-IICB3 Self interest	.63	.50	.63	.50	.53	.52	.50	.52	.81	.40	.56	.51	.83	.38	2.83**
V2-IICC1 Apathetic/unaware	2.50	.89	2.75	.45	1.87	.99	2.25	1.24	2.69	.79	2.06	1.24	2.66	.67	3.24*
I V2-IICD5 Respondent acts counter to student's interest	.19	.40	.50	.52	.06	.25	.13	.34	.38	.50	.25	.45	.17	.38	2.52*
I V2-IICE1 Effective	.81	1.17	1.75	1.13	.75	.68	.75	.93	1.56	1.21	1.19	1.17	.81	.82	3.60**

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$
I indirectly involved in interaction

Table 56. Student Reactions to Hypothetical Student. Summary of Results of Analyses of Variance Main Effects Due to Student Level of Adjustment, Vignette 3.[1]

Variable	UA $\bar{X}$	UA SD	HYP $\bar{X}$	HYP SD	LA $\bar{X}$	LA SD	T-O $\bar{X}$	T-O SD	SH $\bar{X}$	SH SD	S-O $\bar{X}$	S-O SD	NPS $\bar{X}$	NPS SD	F
[I]V3-IICF2 Respondent motives: Self interest	.06	.25	.19	.40	.06	.25	.19	.40	.19	.40	.50	.52	.23	.48	2.18*
V3-IICI2 Group motives: self interest	.06	.26	.19	.40	.06	.25	.25	.45	.13	.34	.50	.52	.23	.43	2.16*

[1] * = p<.05, ** = p<.01, *** = p<.001

[I] indicates variable also involved in interaction

Table 57 Student Reactions to Hypothetical Student. Summary of Results of Analyses of Variance, Interactions, Vignette 1.[1]

TXG

Variable		$\bar{X}$	SD		$\bar{X}$	SD	F
V1-IICB1 Sympathy	Lower	.17	.38	Upper	.11	.32	4.19*
	BM	.06	.23	BM	.11	.32	
	IND	.28	.45	IND	.11	.32	
V1-IICD4 Respondent acts	Lower	.39	.49	Upper	.46	.50	6.93**
him/herself	BM	.31	.47	BM	.58	.50	
	IND	.47	.51	IND	.38	.44	
V1-IICI2 Self interest	Lower	.58	.50	Upper	.51	.50	4.23*
motives	BM	.78	.42	BM	.56	.50	
	IND	.39	.49	IND	.47	.51	

* = p<.05, ** = p<.01, *** = p<.001

Table 57 (cont'd.)

TXS		X̄	SD	UA X̄	UA SD	HYP X̄	HYP SD	LA X̄	LA SD	T-O X̄	T-O SD	SH X̄	SH SD	S-O X̄	S-O SD	NPS X̄	NPS SD	F
Variable																		
V1-IICA1 Positive	BM	.13	.34	.13	.35	.00	.00	.13	.35	.00	.00	.13	.35	.25	.46	.17	.39	2.75*
protective	IND	.20	.40	.13	.35	.50	.53	.00	.00	.50	.53	.13	.35	.25	.46	.08	.28	
V1-IICA2 Neutral-	BM	.07	.26	.13	.35	.00	.00	.00	.00	.13	.35	.13	.35	.13	.35	.04	.21	2.83**
indifferent	IND	.13	.34	.00	.00	.50	.53	.29	.49	.13	.35	.13	.35	.13	.35	.00	.00	
V1-IICA3 Negative-	BM	.52	.50	.13	.35	.75	.46	.63	.52	.50	.53	.75	.46	.25	.46	.57	.51	2.60*
rejecting	IND	.38	.49	.38	.52	.13	.35	.14	.38	.13	.35	.38	.52	.25	.46	.67	.48	
V1-IICB1 Sympathy	BM	.08	.28	.13	.35	.00	.00	.13	.35	.00	.00	.13	.35	.13	.35	.09	.29	2.64*
	IND	.20	.40	.13	.35	.50	.53	.00	.00	.50	.53	.13	.35	.25	.46	.08	.28	
V1-IICI2 Self interest	BM	.68	.47	.63	.52	.63	.52	.75	.46	.50	.53	.88	.35	.38	.52	.78	.42	2.77*
motives	IND	.43	.50	.75	.46	.50	.53	.25	.46	.50	.53	.13	.35	.63	.52	.38	.42	

Table 57. (cont'd.)

TGS		X	SD		X	SD		X	SD		X	SD	F
V1-IICD4 Respondent	Lower	.39	.49				Upper	.47	.50				2.74*
act him/herself	BM	.31	.47	IND	.47	.51	BM	.60	.50	IND	.34	.48	
	NT1	.25	.50	NT1	.25	.50	NT1	.50	.58	NT1	.25	.50	
	NT2	.25	.50	NT2	.00	.00	NT2	.75	.50	NT2	.50	.58	
	NT3	.50	.58	NT3	.50	.58	NT3	.50	.58	NT3	.33	.58	
	NT4	.25	.50	NT4	1.00	.00	NT4	.75	.50	NT4	.00	.00	
	NT5	.25	.50	NT5	.75	.50	NT5	.50	.58	NT5	.25	.50	
	NT6	.25	.50	NT6	.00	.00	NT6	.00	.00	NT6	.75	.50	
	NT7	.33	.49	NT7	.58	.51	NT7	.82	.40	NT7	.33	.49	
V1-IICI2 Self interest	Lower	.58	.50				Upper	.52	.50				2.56*
motives	BM	.78	.42	IND	.39	.49	BM	.57	.50	IND	.47	.51	
	NT1	.50	.58	NT1	.75	.50	NT1	.75	.50	NT1	.75	.50	
	NT2	1.00	.00	NT2	.25	.50	NT2	.25	.50	NT2	.75	.50	
	NT3	.75	.50	NT3	.50	.58	NT3	.75	.50	NT3	.00	.00	
	NT4	.25	.50	NT4	.50	.58	NT4	.75	.50	NT4	.50	.58	
	NT5	1.00	.00	NT5	.00	.00	NT5	.75	.50	NT5	.25	.50	
	NT6	.50	.58	NT6	.25	.50	NT6	.25	.50	NT6	1.00	.00	
	NT7	1.00	.00	NT7	.42	.51	NT7	.55	.52	NT7	.33	.49	

Table 58. (cont'd.)

Variable		$\bar{X}$	SD	UA $\bar{X}$	UA SD	HYP $\bar{X}$	HYP SD	LA $\bar{X}$	LA SD	T-O $\bar{X}$	T-O SD	SH $\bar{X}$	SH SD	S-O $\bar{X}$	S-O SD	NPS $\bar{X}$	NPS SD	F
TXG																		
V2-IICB3 Self interest	Upper	.57	.50	.50	.53	.25	.46	.38	.52	.25	.46	.75	.46	.63	.52	.79	.41	2.67*
	Lower	.80	.40	.75	.46	1.00	.00	.71	.49	.75	.46	.88	.35	.50	.53	.87	.34	
TXS																		
V2-IICB3 Self interest	BM	.73	.45	.88	.35	.50	.53	.75	.46	.63	.52	.88	.35	.50	.53	.83	.39	2.63*
	IND	.63	.49	.38	.52	.75	.46	.29	.49	.38	.52	.75	.46	.63	.52	.83	.38	

TGS		$\bar{X}$	SD		$\bar{X}$	SD						
V2-IICD5 Respondent acts counter to student's interest	Lower	.24	.43				Upper	.21	.41			
	BM	.25	.44	IND	.22	.42	BM	.23	.43	IND	.19	.40	2.37*
	NT1	.25	.50	NT1	.00	.00	NT1	.25	.50	NT1	.25	.50	
	NT2	.50	.58	NT2	.50	.58	NT2	.25	.50	NT2	.75	.50	
	NT3	.00	.00	NT3	.00	.00	NT3	.00	.00	NT3	.25	.50	
	NT4	.00	.00	NT4	.00	.00	NT4	.50	.58	NT4	.00	.00	
	NT5	1.00	.00	NT5	.00	.00	NT5	.25	.50	NT5	.25	.50	
	NT6	.25	.50	NT6	.50	.58	NT6	.25	.50	NT6	.00	.00	
	NT7	.08	.29	NT7	.33	.49	NT7	.18	.40	NT7	.08	.29	

Table 58 (cont'd.)

TGS		$\bar{X}$	SD		$\bar{X}$	SD		$\bar{X}$	SD		$\bar{X}$	SD	F
V2-IICE1	Effectiveness	Lower 1.79	.90					Upper 1.45	.79				
		BM 1.95	1.00	IND	1.64	.79		BM 1.43	.82	IND	1.53	.77	2.47*
		NT1 2.00	1.41	NT1				NT1 1.67	1.15	NT1	2.00	1.41	
		NT2 2.67	.58	NT2	2.33	.58		NT2 1.67	1.15	NT2	2.00	.82	
		NT3 1.00	.00	NT3	1.50	.71		NT3 1.00	.00	NT3	1.50	.71	
		NT4 1.00	.00	NT4	1.33	.58		NT4 1.75	.96	NT4			
		NT5 3.00	.00	NT5	1.00	.00		NT5 1.50	1.00	NT5	2.00	1.41	
		NT6 1.67	1.15	NT6	2.33	1.15		NT6 1.67	1.15	NT6	1.00	.00	
		NT7 1.40	.89	NT7	1.50	.76		NT7 1.22	.67	NT7	1.14	.38	

* = p<.05, ** = p<.01, *** = p<.001

Table 59 Student Reactions to Hypothetical Student. Summary of Results of Analyses of Variance, Interactions, Vignette 3.[1]

Variable	TXG	$\bar{X}$	SD		$\bar{X}$	SD	F
V3-IICD2 Respondent not allowed to do anything	Lower	.07	.26	Upper	.11	.32	4.18*
	BM	.11	.32	BM	.06	.24	
	IND	.03	.17	IND	.17	.38	
V3-IICD4 Respondent acts him/herself	Lower	.38	.49	Upper	.61	.49	8.53**
	BM	.19	.40	BM	.66	.48	
	IND	.56	.50	IND	.56	.50	
V3-IICG4 Group acts themselves	Lower	.34	.48	Upper	.56	.50	8.09**
	BM	.26	.44	BM	.71	.46	
	IND	.42	.50	IND	.42	.50	
V3-IICI1 Altruistic motivation	Lower	.35	.48	Upper	.59	.50	9.55**
	BM	.26	.44	BM	.74	.44	
	IND	.44	.50	IND	.44	.50	
V3-IICI2 Self interest motives	Lower	.23	.42	Upper	.20	.40	4.07*
	BM	.31	.47	BM	.14	.36	
	IND	.14	.35	IND	.25	.44	

* = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 59. (cont'd.)

TXS		UA		HYP		LA		T-O		SH		S-O		NPS		F
		$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	
Variable																
V3-IICC1 Apathetic/unaware	BM	2.13	1.01	2.50	1.07	2.50	.93	1.63	1.06	1.13	.99	2.50	1.07	1.38	.92	2.52	.59	2.53
	IND	2.14	1.13	1.38	1.30	2.25	1.39	2.00	1.07	2.63	.74	2.25	1.17	2.00	1.41	2.25	.99	
V3-IICD1 Respondent does nothing	BM	.41	.50	.38	.52	.63	.52	.38	.52	.38	.52	.63	.52	.63	.52	.22	.42	2.24
	IND	.35	.48	.63	.52	.00	.00	.38	.52	.38	.52	.25	.46	.38	.52	.38	.49	
V3-IICE1 Effective	BM	1.30	.64	1.40	.89	1.00	.00	1.50	.71	1.80	1.10	1.50	.71	1.00	.00	1.15	.38	2.90**
	IND	1.21	.52	1.00	.00	1.25	.46	1.20	.45	1.00	.00	1.43	.79	2.00	1.41	1.08	.28	
V3-IICF1 Altruistic motivation	BM	.52	.50	.75	.46	.38	.52	.50	.53	.38	.52	.38	.52	.63	.52	.57	.51	4.06***
	IND	.60	.49	.38	.52	1.00	.00	.63	.52	.75	.46	.75	.46	.00	.00	.63	.49	

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 60 Student Self Comparison With Hypothetical Students. Frequencies, Means and Standard Deviations, Vignette 1 (V1), Vignette 2 (V2), Vignette 3 (V3).

Value	V1 Freq.	V1 %	V2 Freq.	V2 %	V3 Freq.	V3 %
1	1	1	1	1	1	1
2	0	0	0	0	1	1
3	1	1	0	0	1	1
4	0	0	0	0	1	1
5	4	3	2	1	1	1
6	3	2	2	1	2	1
7	2	1	0	0	2	1
8	1	1	0	0	3	2
9	3	2	1	1	2	1
10	10	7	11	8	12	8
11	18	13	18	13	19	13
12	10	7	3	2	3	2
13	4	3	4	3	5	3
14	5	3	8	6	5	3
15	7	5	7	5	7	5
16	7	5	4	3	2	1
17	7	5	5	3	11	8
18	10	7	8	6	6	4
19	10	7	18	13	13	9
20	40	28	51	36	46	32
$\bar{X}$	14.94		16.08		15.26	
SD	4.75		4.36		4.85	

Table 61. Student Self Comparison with Hypothetical Students. Summary of Significant Results of Analyses of Variance, Main Effects Due to Grade Level.[1]

Vignette (V)	Lower Level $\bar{X}$	SD	Upper Level $\bar{X}$	SD	F
Student Self Comparison with Underachiever, V1	16.21	4.90	13.69	4.28	11.15***
Student Self Comparison with Hyperactive Student V2.	16.79	4.53	15.39	4.10	4.29*
Student Self Comparison with the low achiever, V3	16.13	4.97	14.40	4.61	5.09*

[1] * = p<.05, ** = p<.01, *** = p<.001

* = p<.05, ** = p<.01, *** = p<.001

Table 62 Student Self Comparison with Hypothetical Students. Summary of Significant Results of Analyses of Variance, Main Effects Due to Student Level of Adjustment.[1]

Vignette	UA $\bar{X}$	UA SD	HYP $\bar{X}$	HYP SD	LA $\bar{X}$	LA SD	T-O $\bar{X}$	T-O SD	SH $\bar{X}$	SH SD	S-O $\bar{X}$	S-O SD	NPS $\bar{X}$	NPS SD	F
Student Self Comparison with the low achiever, Vignette #3	12.94	6.40	13.88	5.06	12.44	5.62	17.13	3.36	14.25	4.54	17.25	4.09	16.52	3.86	3.64**

[1] * - $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 63 Student Self Comparison with Hypothetical Students. Summary of Results of Analyses of Variance, Interactions with Sex Differences.

Variable		Behavior Modification			Induction		
		$\bar{X}$	SD		$\bar{X}$	SD	F
V3-Self comparison		15.28	5.05		15.24	4.69	5.60*
with low achiever	Males	16.40	4.12	Males	14.32	5.25	
	Females	13.57	5.88	Females	15.82	4.26	

[1] * = p<.05, ** = p<.01, *** = p<.001

Table 64. Student Rankings of Hypothetical Students. Frequencies and Percents.

Variable	UA f	UA %	HYP f	HYP %	LA f	LA %
Liking Ranking:						
First choice	.20	.14	.12	.08	1.11	.78
Second choice	.60	.43	.59	.42	.21	.15
Work Preference						
First choice	.30	.21	.22	.15	.91	.64
Second choice	.62	.43	.57	.40	.24	.17

Table 65 Student Rankings of Hypothetical Students. Summary of Results of Analyses of Variance, Main Effects Due to Grade Level.[1]

Rank	Upper $\bar{X}$	Upper SD	Lower $\bar{X}$	Lower SD	F
Work: First Choice, Low Achiever	.73	.45	.54	.50	6.50**

Table 66. Student Rankings of Hypothetical Students. Summary of Results of Analyses of Variance, Main Effects Due to Teacher Socialization Style.

Rank	Behavior Modification X	Behavior Modification SD	Inductive X	Inductive SD	F
Work: Second Choice, Hyperactive	.27	.45	.53	.50	12.03***
Work: Second Choice, Low Achiever	.25	.44	.08	.28	9.01**

Table 67 Student Rankings of Hypothetical Students, Summary of Results of Analyses of Variance, Interactions

Rank		$\bar{X}$	SD		$\bar{X}$	SD	F
TXG							
Work: Second Choice	Lower	.39	.49	Upper	.40	.49	
Hyperactive	BM	.34	.48	BM	.19	.40	
	IND	.44	.50	IND	.61	.49	4.41*

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 67 (cont'd.)

G X N		$\bar{X}$	SD		$\bar{X}$	SD	F
Liking: Second	Lower	.19	.40	Upper	.11	.32	2.49*
Choice, Low Achiever	NT1	.13	.35	NT1	.25	.46	
	NT2	.50	.53	NT2	.00	.00	
	NT3	.00	.00	NT1	.00	.00	
	NT4	.43	.53	NT4	.00	.00	
	NT5	.25	.46	NT5	.25	.46	
	NT6	.17	.41	NT6	.13	.35	
	NT7	.09	.29	NT7	.13	.34	

Table 68. Student Rankings of Hypothetical Students. Summary of Results of Analyses of Variance, Main Effects Due to Sex Differences.[1]

Variable	Males $\bar{X}$	Males SD	Females $\bar{X}$	Females SD	F
Liking: First choice					
Underachiever	.23	.42	.06	.23	8.90**

* = p<.05, ** = p<.01, *** = p<.001

Table 69 Means and Standard Deviations for Student As Teacher Role Play.[1]

Variable	$\bar{X}$	SD
V1: Student Role Play with underachiever	1.72	.66
V2: Student Role Play with hyperactive student	1.85	.73
V3: Student Role Play with low achiever	1.85	.78

[1] Where 1 = identical, 2 = similar, 3 = conflicting

Table 70 Student as Teacher Role Play. Summary of Significant Results of Analyses of Variance, Main Effects Due to Grade Level.[1]

Variable	Lower $\bar{X}$	Lower SD	Upper $\bar{X}$	Upper SD	F
V2: Student Role Play with hyperactive student (where 1 = identical, 3 = conflicting)	1.73	.76	1.97	.68	4.21*

[1] * = $p<.05$, ** = $p<.01$, *** = $p<.001$

Table 71. Means and Standard Deviations of Student Responses to the School Stress Scale.

Event	Degree of Stress $\bar{X}$	Degree of Stress SD	Frequency of Experience $\bar{X}$	Frequency of Experience SD
1. Giving a class report	2.50	1.49	1.90	1.00
2. Moving to a new school	3.54	1.58	1.91	.98
3. Answering wrong	3.27	1.39	2.21	.95
4. Sent to the principal	4.40	1.12	1.43	.86
5. A poor report card	4.15	1.19	1.64	.88
6. Teacher disappointed with you	3.69	1.19	1.90	.88
7. Made fun of in class	4.01	1.37	1.95	1.04
8. Have to miss recess to make up work	3.43	1.41	1.76	.99
9. Going to the board	1.95	1.40	1.94	.96
10. You're having a bad day and the teacher wants to see your parents	4.20	1.28	1.52	.89
11. Doing poorly on a test	3.78	1.31	1.83	.92
12. Forgetting your homework	3.21	1.49	1.75	.89
13. Hard to learn something new	3.15	1.44	2.07	1.00
14. Have to sit alone	3.13	1.64	1.46	.85
15. Reading out loud	2.35	.154	2.32	1.14
16. Noisy classroom	3.99	1.31	2.87	1.10
17. Caught cheating	4.30	1.13	1.45	.89