SOME STUDENTS ARE TOUGHER TO TEACH:

DIFFERENTIAL TEACHER EFFICACY AND EXPECTATIONS FOR STUDENT BEHAVIORAL CLUSTERS

by

ANNE PIERCE WINSOR

(Under the Direction of Roy P. Martin)

ABSTRACT

A teacher's sense of efficacy and his or her expectations for individual students may be associated with student educational risk. This study examined the relationship between teachers' perceptions of efficacy and expectations for student outcomes for individual students representing seven different behavioral profiles comprising a comprehensive behavioral typology. Results indicated that as a student's academic and social behaviors were rated as more problematic and maladaptive, teacher efficacy and expectation scores for that student decreased. Responses on teacher interviews suggested that teachers are aware of their lack of efficacy and lower expectations for behaviorally challenging students. Future research efforts might address teacher training to equip teachers with skills and experiences that facilitate working with challenging students as well as student interventions that target maladaptive behaviors.

INDEX WORDS: Teacher Efficacy, Teacher Expectations, Educational Risk, Behavioral Typology, Project ACT Early

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# DEDICATION

To Mark, for an apparently endless supply of love, humor, and patience.

To Mom and Dad, for installing in me a life-long love of learning

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As my professors become my colleagues, I wish to recognize the support and friendship of my mentors: Dr. Jean Baker, Dr. Randy Kamphaus, Dr. Andy Horne, Dr. Roy Martin, and Dr. Bonnie Cramond. I pray that my future work adequately reflects the time and effort you have graciously expended in my development as a scholar, researcher, and practitioner.

Thank you to Project A.C.T. Early, the Principal Investigators, the teachers and students, who gave me the research opportunity of a lifetime.

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# CHAPTER 1

## INTRODUCTION

"I just don't know what I'm going to do. Every year, my first grade class has more and more of these kids. They don't seem to care about right or wrong, they don't care about adult approval, they are disruptive, they can't read and they arrive at school absolutely unprepared to learn. Who are these kids?...I used to think I was a good teacher. I really prided myself on doing an outstanding job. But I find I'm working harder and harder, and being less and less effective..."

Elementary teacher, Atlanta, GA (Barr & Parrett, 2001, pg 1)

Over the last two decades, the national demand for educational reform has created interest in factors contributing to effective (Barr & Parrett, 2001; Hamre & Pianta, 2001). Teachers' perceived sense of efficacy and their expectations for their students have emerged as salient variables in studies of teacher beliefs and practices that predict student outcomes. For the many students experiencing early academic, social-emotional, and behavioral problems, lower teacher efficacy and expectations may exert a powerful influence that places those students at greater risk for educational underachievement and failure.

Schools have been charged with the broad mission of creating safe and effective learning environments in which an increasingly diverse student population is expected to acquire the requisite skills to succeed in school and beyond. Schools are important "ecological" social systems experienced by virtually all children in the United States and to which important future outcomes are inextricably tied (Bronfenbrenner, 1979, 1989). Early success within these complex, interactive systems exerts an effect on the child's future school experience and success

(Baker, 1998; Pianta & Stuhlman, 2004; Pianta & Walsh, 1996). While successful adaptation to school in the primary grades doesn't guarantee success in later schooling, an inability to adapt virtually ensures future failure (Slavin, 1999; Slavin & Madden, 2001). Students spend a third or more of each day at school so, not surprisingly, many adaptation difficulties experienced by children are manifested in the school context. Research has demonstrated that early student behavioral difficulties are associated with underachievement, attendance problems, referrals, suspensions, drop-out, as well as later employment difficulties and higher incarceration rates (Barr & Parrett, 2001; National Assessment of Educational Progress, 1991). Many children are entering school with a variety of behavioral problems associated with social, emotional, motivational, and learning difficulties that challenge educational professionals seeking to "meet the needs of each child" (Castro-Blanco, 2000). In considering these difficulties in concert, Kamphaus and Frick (1996) estimated that approximately 21% to 47% of school children could be classified as behaviorally "at-risk" for poor adaptation to school. Similarly, 8% of the public school population was estimated at "high risk" for persistent personal and social behavioral difficulties across the life span (Blechman, Prinz, & Dumas, 1995).

The broad behavioral diversity of students in public school classrooms has placed difficult demands on teachers. Most general education classrooms are comprised of a wide continuum of student abilities, skills, and behaviors that challenge teachers' ability to address the academic and social-emotional needs of each student as well as to effectively manage the learning environment (Barr & Parrett, 2001; Jenkins, Pious, & Jewell, 1990). Concern for the range of student behavioral needs and, in particular, the management of difficult student behavior constitutes a frequent response by teachers on interviews and surveys (Beyer, 1998; Phi Delta Kappan, 1997; Waldron & McLeskey, 2000). Understandably, teachers may not feel

efficacious in their professional relationships with behaviorally challenging students, which in turn may affect their expectations for their students' accomplishments.

Teacher efficacy has been conceptually couched in self-efficacy theory, a component of Bandura's (1977, 1986, 1997) social cognitive learning framework in which self-referent thought mediates between a person's knowledge/experience and his actions. In other words, self-evaluation of capability to successfully perform an activity influences an individual's motivation and subsequent behavior. Teacher efficacy addresses teachers' beliefs about their ability to positively impact student performance (Parajes, 1996). Research has shown relationships between teachers' sense of efficacy and important educational variables, including student academic achievement and motivation (Midgley, Feldlaufer, & Eccles, 1989; Rosenholtz, 1989), classroom management beliefs (Soodak & Podell, 1996), teacher willingness to adopt innovative curriculum and strategies (Guskey, 1988), time spent on specific subject areas (Tschannen-Moran, Hoy, & Hoy, 1998), commitment to teaching (Coladarci, 1992), and referral rate for special education (Podell & Soodak, 1993).

Previous studies examined teacher efficacy as a global or general construct. Self-efficacy theory, however, posited that efficacy is specific to context or task (Bandura, 1997; Parajes 1996; Ross, Cousins, & Gadalla, 1996). Because children learn in the context of relationships with others (Baker, 1998; Pianta & Stuhlman, 2004; Pianta & Walsh, 1996), teacher practices may affect a positive or negative relationship through interactions with their students (Birch & Ladd, 1997). Teaching young students involves interpersonal contact that can be both intensive and extensive (Hamacheck, 1995; Pianta & Walsh, 1996) However, teachers are often inadequately trained or experienced in the student behavioral needs of present-day public classrooms. This can result in the application of inappropriate strategies or development of dislike/avoidance for some

students as well as conflict-laden relationships with others (Fantuzzo, McWayne, & Bulotsky, 2003; Scruggs & Mastropieri, 1996). Ironically, forging a positive, supportive learning relationship with the very students who require it most may be difficult for teachers, contributing to the mounting educational risk of these challenging students. Therefore, it may be uninformative to assess general levels of teacher efficacy if the assessment doesn't adequately characterize a teacher's ability to teach and manage students with difficult learning and behavioral needs (Rich, 1993).

Teacher expectations for student outcomes have constituted a related construct also shown to impact student performance. With the impetus of Rosenthal and Jacobson's (1968) research on the self-fulfilling prophecy, several studies have since demonstrated that teachers' expectations for their students can positively or negatively affect student achievement, motivation, and beliefs about the saliency and relevance of school (Jussim, 1989; Smith, Jussim, & Eccles, 1999; Snyder, 1992). As teachers developed intuitive theories (expectations) about their students, they differentially treated students according to these expectations, to which students reacted in expectancy-confirming ways.

Additional perceptually biased processes contributing to the construction and maintenance of teacher expectations for students include self-enhancement (Luper, Clark, & Hutcherson, 1990) and sustaining effects (Good & Brophy, 1993). Self enhancement operates to build and protect self esteem as individuals tend to inflate their contributions to successful events and downplay their influence on unsuccessful events. For teachers, this involves taking personal credit for student achievement but assigning external blame for student failure (Luper et al., 1990). Sustaining effects act as perceptual stabilizers, perpetuating established expectations and making them somewhat resistant to change. Therefore, if a teacher decides early in the school

year that a student is difficult, he or she will tend to view subsequent student behavior through the "difficult student" lens even when behavioral improvement occurs (Good & Brophy, 1993). Both self enhancement and sustaining effects motivate teachers to modify their classroom practices with individual students, increasing engagement with those that make them feel successful and distancing from others who do not.

While studies have examined the effects of teacher expectations for certain groups of students based on gender (Sadker, Sadker, & Klein), race (Contreras, & Lee, 1990), and special education designation (Patterson, Capaldi, & Bank, 1991), research has neglected to examine teacher expectations across the diversity of student behaviors represented by the general education classroom.

The importance of relationships of teacher efficacy and expectations with student behavioral diversity is central to redefining educational risk. A comprehensive typology of student behaviors based on teacher ratings of normal, adaptive, and problematic behaviors observed in elementary-level classrooms (Kamphaus, Huberty, DiStefano, & Petoskey, 1997) was used in the research study Addressing the Context of Teaching Early (Project ACT Early; Horne, Baker, & Kamphaus, 1996; Baker, Kamphaus, & Horne, 1999). ACT Early researchers conceptualized educational risk based on a population of students considered “at-risk” using traditional risk indicators of poverty and minority status. More than half of the low SES minority elementary students were rated by their teachers as average or well-adapted to the demands of the school experience (low educational risk). That is, many children with traditional risk indicators demonstrated average to good educational outcomes. Studies of resiliency and adaptation reported similar findings (Baker & Lacey, 2003; Doll & Lyon, 1998, Elias, 1997; Masten, 1994). These findings have indicated that failure to learn and adapt does not simply

reside within children but is the result of the complex, ongoing interface between children and their contexts, which includes schools and teachers. So, while students with traditional risk factors are more likely to approach school with heightened individual vulnerability, research has suggested that the kinds and quality of transactions between the students and their school, particularly their teachers, was more indicative of educational risk (Sameroff & Fiese, 1989). With approximately 40% of elementary students exhibiting some problematic learning and/or social behaviors (defined as moderate to high educational risk) in the school context (Kamphaus, Huberty, DiStefano, & Petoskey, 1997), a significant number of students may not have established a positive, productive interface with their school context and teachers, which is a recognized risk factor (Doll & Lyon, 1998, Elias, 1997; Masten, 1994). Additionally, preliminary research suggested that the effects of continued maladaptive interactions with teachers and school context are cumulative, indicative of escalating educational risk (Milstien, Golaszewski, & Duqutte, 1984; Stuhlman & Pianta, 2002). Project ACT Early (Horne, Baker, & Kamphaus, 1996; Baker, Kamphaus, & Horne, 1999) proposed a theoretical population-based model of risk hierarchy founded in student behavior. It suggests that unique clusters of adaptive and problematic academic and social-emotional behaviors place students at relative educational risk; educational risk increases as problematic behaviors become more serious and numerous.

Rationale and Hypotheses

The literature on the importance of teacher efficacy as an influential educational variable impacting student performance is long standing and well-established (Parajes, 1996; Tschannen-Moran, Hoy, & Hoy-Woolfork, 1998). However, previous research was focused on assessing general or composite teaching efficacy, which lacked the specificity to inform how teacher efficacy with individual students might contribute to educational risk, particularly for students

already considered to be high risk. To examine this potential relationship, a comprehensive range of elementary students' behavior as rated by their classroom teachers in grades first through fifth was clustered into seven behavioral clusters or types. Using the ACT Early Project's hierarchy of educational risk, each behavioral cluster was assigned a theoretical level of risk: low, moderate, or high. The behavioral clusters and risk levels were compared to teachers' ratings of their efficacy for working with each of their students. It was hypothesized that a significant, negative relationship exists between the level of student behavioral risk and teacher ratings of efficacy. In other words, as behavioral risk increased for students, teachers' reported efficacy with those students was expected to decrease.

The impact of teacher expectations has also been extensively researched (Jussim, 1986; Smith, Jussim, & Eccles, 1999). However, previous research on teacher expectations for student outcomes did not address expectations for individual students, nor did it include the behavioral range representative of regular education classrooms. To examine this potential relationship, the elementary students' behavior clusters were assigned the same theoretical level of risk: low, moderate, or high. The behavioral clusters and risk levels were compared to teachers' ratings of their expectations for each of the students. A significant, negative relationship was hypothesized between the level of student behavioral risk and teacher ratings of expected outcomes for those students. That is, as behavioral risk increased for students, teachers' reported expectations for each student's academic and behavioral outcomes would decrease.

Bandura (1986) posited that the constructs of self-efficacy and expectations for outcomes were not synonymous but significantly related. His theory stated that personal judgments concerning ability to successfully complete an action should reasonably contribute to personal

expectations for outcomes. Therefore, a strong positive relationship between teacher efficacy and expectations for student outcomes is hypothesized.

Previous research involving teacher comments and survey responses to inquiries about the task of teaching elementary students have reflected a consistent frustration and increasing concern for difficult student behavior (Barr & Parrett, 2001; Beyer, 1998; Phi Delta Kappan, 1997; Waldron & McLeskey, 2000). The present study included a structured teacher interview, conducted concurrently with the teacher efficacy and expectations ratings, to provide teacher voice on the presence of behaviorally challenging students and issues of managing behavioral diversity in elementary classrooms.

Thus, the current study attempted to fill a theoretical gap in educational research. By focusing at the individual student level for teacher expectation and efficacy assessment, this study extends the research to provide a more meaningful understanding of educational risk through the relationship between student behavior and teachers' sense of efficacy and their expectations for student outcomes. Application of the research findings suggest meaningful reform in teacher training experiences and practices as well as child assessment for early educational risk.

# CHAPTER 2

## REVIEW OF RELATED LITERATURE

The demand for educational reform and evidence-based school interventions has created interest in factors that contribute to effective classrooms, particularly for students at risk. Teachers' sense of efficacy and their expectations for student outcomes have emerged as variables considered having potential impact on instructional effectiveness and student management. The purpose of this study is to examine differences in teacher efficacy with and expectations for students presenting different types of behavioral profiles across five grade levels in elementary schools. Further, the study explores the classroom experiences of teachers working with behaviorally at-risk students by employing a mixed paradigm methodology. This chapter reviews research supporting this investigation: teacher efficacy, teacher expectations for student outcomes, student behavioral typology, the association between behavioral risk and educational outcomes, and merging methodological orientations to enhance data meaningfulness.

### Teacher Efficacy

Almost three decades ago, studies of innovative educational intervention programs by the RAND Corporation included two items on an extensive evaluation questionnaire (Armor, Conroy-Oseguera, Cox, King, McDonnell, Pascal, et al, 1976). Using the early social learning work of Rotter (1966) as a theoretical foundation, the RAND researchers designed these two items to address whether teachers attributed control of student reinforcement primarily to themselves or the environment: "If I try really hard, I can get through to even the most difficult

or unmotivated students," and "When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment." Results indicated that teachers' perceptions of their teaching ability and the general teachability of students, as measured by these two items, was strongly related to differences in students' reading achievement gains as well as the amount of project goals achieved.

The powerful and intriguing results of the RAND studies provided the initial basis for the conceptualization of teacher efficacy. For more than 27 years, research on teacher efficacy has demonstrated significant relationships to several salient educational outcomes including student achievement and motivation (Rosenholtz, 1989), student motivation and achievement-related beliefs (Midgley, Feldlaufer, & Eccles, 1989), teacher adoption of innovative curriculum and strategies (Guskey, 1988), time spent on certain subject areas and supervisor ratings of teacher competency (Tschannen-Moran, Hoy, & Hoy, 1998), increased willingness to work with students experiencing learning and behavioral difficulties and fewer referrals of those students for special education (Meijer & Foster, 1988; Podell & Soodak, 1993), and classroom and student management beliefs (Woolfolk, Rosoff, & Hoy, 1990; Soodak & Podell, 1996). In fact, teacher efficacy appeared to be one of the few teacher characteristics that reliably predicted teacher practice and student outcomes (Ross, 1994).

Researchers in psychology and education have generally conceptualized teacher efficacy around Bandura's (1977, 1986, 1997) social learning construct of self-efficacy and personal agency. He defined self-efficacy as a cognitive process by which a person constructs beliefs about his or her capacity to perform and complete future actions successfully. These beliefs pertained not to the actual skills one had but to the judgements of what one could do with those

skills. Accordingly, individuals who judged they would be successful on tasks were more likely to be so; they would adopt more challenging goals, expend substantial effort in pursuit of these goals, persist in the face of obstacles, develop coping strategies for managing associated affective states, and exercise some control over events that affect them. Conversely, individuals who believed they would not be successful would avoid expending effort because failure was both counterproductive and threatening to self-esteem (Ross, Cousins, & Gadalla, 1996; Schunk, 1981). Not surprisingly, teachers' ratings of efficacy were highly correlated with teacher job satisfaction (Chaplain, 1995; Evans, 1998) and were the strongest predictor of teacher commitment and attrition (Coladarci, 1992) as well as burnout and retention (Cockburn, 2000). Smylie (1988) reported that classrooms with higher proportions of low-achieving students had a negative effect on teacher efficacy. As testament to the impact of teacher efficacy on teacher outcomes, a national teacher shortage exists today, despite record graduation rates from American colleges of education, (Barr & Parrett, 2001), evidence suggesting that many novice and tenured teachers feel unprepared for the realties of modern classrooms (U.S. Department of Education, 2002)

Teaching efficacy addresses teachers' beliefs about and confidence in their ability to perform actions that impact student performance. Bandura (1986, 1997) posited that these beliefs are constructed from the integration of four principal sources of information: *direct mastery experiences* which serve as indicators of capability and are the most significant contributors to self-efficacy, *vicarious experiences* which may alter efficacy beliefs through the observation of and comparison with others, *verbal/social persuasion* such as inservices or mentoring experiences, and the *physiological and affective feedback* that accompany these experiences. Hoy's research (2000) on changes in teaching efficacy over time supported Bandura's position

that efficacy is most malleable early in the learning phase of skill acquisition, thus the pre-service and student teaching phase as well as the first years of teaching are critical to the development of teaching efficacy. Several studies have shown that teacher efficacy is more likely to increase during pre-service training or student teaching (Housego, 1990; Hoy & Woolfolk, 1990) and become more stable and resistant to change with increasing service status (Guskey & Passero, 1993; Moore & Esselman, 1992). Research has demonstrated that teacher efficacy may be enhanced through relevant, high quality inservice training or continuing education (Stein & Wang, 1988; Ross, 1994).

To improve on the validity and reliability of the RAND two-item scale, Gibson and Dembo (1984) developed a 30-item scale; when subjected to factor analyses, this scale yielded two factors consistent with the RAND items. They labeled the first factor *personal teaching efficacy* (PTE), assuming it to be synonymous with self-efficacy. They labeled the second *teaching efficacy*, as it was thought to represent general or collective outcome expectancies. Subsequently, this factor was renamed as *general teaching efficacy (GTE,* an indicator of how influential teachers as a whole could be). Results of studies using the Gibson and Dembo scale have consistently found PTE and GTE to be independent of each other (Burley, Hall, Villeme, & Brockmeier, 1991; Hoy & Woolfolk, 1993; Soodak & Podell, 1993). While some researchers have continued to use the Gibson and Dembo instrument, many have constructed revised and abbreviated versions (Soodak & Podell, 1993; Woolfolk & Hoy, 1990) that were designed to optimize discriminant validity while retaining comparable reliability.

The biggest challenge for efficacy measurement, however, concerns the appropriate level of specifity. Self-efficacy, including teacher efficacy, is highly context-specific (Bandura, 1993; Parajes, 1999). In order to be meaningful and generalizable, Bandura (1997) stressed that

measures must focus on teachers' sense of competence on a range of specific situations and/or tasks that are representative of their jobs. However, being too specific creates risks for predictive power; that is, it is both easier and more meaningful to predict a set of behaviors than to predict a single, specific behavior. In Ross's (1994) review of 87 empirical studies in academic contexts, virtually all research represented teaching efficacy as a single score, either aggregating a variety of teaching conditions together or narrowly focused on efficacy for teaching a subject area such as science, regardless of the recipients of the instruction.

Teachers have rated difficult student behavior as the main obstacle to instruction as well as an essential reason for leaving the profession (Maag, 2002), yet surprisingly few studies have focused on student behaviors as variables affecting teacher efficacy. Exceptions include Ashton and Webb (1986) and Benz and Bradley (1992), whose research found that teachers varied their efficacy rating responses to classroom vignettes describing different students in different situations, which suggested differential teaching efficacy for different situational contexts. Horne and Socherman (1999), recognizing that teachers were focused on the student behaviors described in the vignettes, examined teacher efficacy with hypothetical behavior profiles. Using an adaptation of their original measure, the Teacher Expectations and Attributions Measure (TEAM; Horne, Socherman, & Dagley, 1996), they directed teachers to rate seven fictional vignettes describing different types of students. The behavioral vignettes were constructed to correspond to the seven typological clusters for the BASC-TRS-C (Kamphaus, et al., 1997). Responses to the E2M demonstrated that teachers reported feeling differentially efficacious with hypothetical students exhibiting hallmark behaviors of the different clusters and expressed differential expectations for those students (Horne & Socherman, 1999). Preliminary results suggested that students with problematic social and/or academic behaviors were a salient focus

for efficacy study as these students may be at greater risk for poor engagement with their teachers when, ironically, they are the students most in need of that important relational connection.

Teacher Expectations

Bandura (1997) emphasized the strong positive relationship between a sense of self-efficacy (e.g., "how able am I to teach this person?") and outcome expectancy (e.g., "with my ability, how successful will this student be?") As one makes efficacy judgements, expectations for certain outcomes are generated (Parajes, 1997; Tschannen-Moran, Hoy, & Hoy, 1998). Although temporally linked, the constructs are not synonymous. Self-efficacy focuses on a current "summing up" of perceived capability, while expectations are more future oriented, taking into account perceived efficacy along with other variables. For teachers, these variables might include the gender, race, age, socioeconomic status, and behavior of students (Taubman, 1996).

Expectations, according to social psychologists (Jones & Harris, 1967; Weiner, 1979), are personal beliefs about how the world operates, formed by attributes assigned by the person. While they may be accurate or idiosyncratic, they act as cognitive "short-cuts," providing a way of quickly understanding people and events. Expectations help predict and explain, sparing the effort and time to evaluate each new situation and giving a sense of control over the environment. Most importantly, they direct behavior choices (Sears, Peplau, & Taylor, 1991). People are reluctant to see expectations demonstrated to be wrong-especially when highly valued or long-held. Thus, there is a tendency to think about people and events in ways that support and maintain expectations in an attempt to keep the world understandable (Darley & Fazio, 1980).

When expectations are accurate, their use supports decision making that is both efficient and correct (Jussim, 1991).

However, expectations can be inaccurate, as with stereotypes in which beliefs fail to represent the majority of the membership of the stigmatized group (Kendrick, Neuberg, & Cialdini, 1999) or when based on minimal or biased information. Acting on inaccurate expectations can have important consequences, resulting in the misjudging of people and situations. In the context of education, teachers' expectations can limit or change the behavior and achievement of students, a phenomenon referred to as the self-fulfilling prophecy (Rosenthal & Jacobsen, 1968; Taubman, 1996).

*Self- fulfilling prophecy* is a term introduced by sociologist Robert Merton (1949) to describe situations in which initially inaccurate expectations lead to actions that cause those very expectations to become realized. Using a classroom example, a teacher has been led to believe that this year's class is composed of students with exceptional academic potential, even though her students do not differ from the students in other classes. Throughout the year, acting on her beliefs concerning her students' potential, the teacher behaves in ways that foster higher achieving students. This scenario formed the basis for the research reported in Rosenthal and Jacobson's (1968) seminal book, *Pygmalion in the Classroom.* The self-fulfilling prophecy study and concept sparked great controversy, in part because of methodological problems (Crano & Mellon, 1978). However, the study alerted educators to the potential positive and negative influence that teachers could unwittingly exert based on their expectations. Subsequently, the study of self-fulfilling prophecy generated a major area of research for social and educational psychologists as well as becoming part of the vernacular (Brophy, 1983; Darley and Fazio, 1980; Jussim, 1986; Rosenthal & Jacobson, 1996). Inaccurate expectations do not always result in self-

fulfilling prophecies. They are more likely to occur when the holders of the expectations possess power in social interactions and when the target defers to this control, as in a boss-employee or teacher-student relationships (Cooper & Hazelrigg, 1988; Smith, Neuberg, Judice, & Biesanz, 1997; Snyder & Hagen, 1995). Recent research suggested that low-power individuals involved in the education system, "at-risk" students who are poor, female, and/or from a minority group may be particularly vulnerable to teachers' expectations (Jussim, Eccles, & Madon, 1995). Additional research suggested that teachers might quickly form negative expectations about student behaviors that deviate from the norm (Glisson & Hemmelgarn, 1998; Good & Brophy, 2002).

Another salient factor influencing teacher expectations is the *self-serving or self-enhancement bias* (actor-observer expectation differences), a bias that can lead to the fundamental attribution error (Luper, Clark, & Hutcherson, 1990; Winter & Uleman, 1984). The fundamental attribution error occurs where an observer attributes another's behaviors to rather stable dispositional factors while attributing their own behavior to situational factors (Ross, 1977; Wiener 1979). It may be cognitively "easier" to attribute behavior to dispositional features of others, because situational factors are not always apparent to or understood by the observer (Gilbert & Malone, 1995; Jones & Nisbett, 1972). Good & Brophy (1972) studied the self-serving bias with success and failure situations in classrooms. When student performance improved, teachers gave more positive ratings to the their own efforts than to the student's (a situational or environmental attribution). Poor student performance was often viewed as due to genetics, the effects of poverty, or motivation (a trait or stable attribute). Self-enhancement or self-serving bias enhances and protects teachers' self image/self esteem and contributes to self-efficacy. That is, teachers are more likely to interpret student success as reflecting their own teaching abilities and effort. However, when students fail to achieve, teachers view this as

potentially damaging to their sense of self and are more likely to seek external factors that "interfered" (e.g., "bad kid, bad environment") (Rolison & Medway, 1985). Therefore, problem behavior in the classroom is frequently viewed as a more stable, enduring feature rather than context-specific. Continued teacher experiences of failure and frustration over periods of time can lead to beliefs of inevitable helplessness and a lowered sense of self-efficacy (Bandura, 1986).

An additional related expectancy effect operates when teachers form initially accurate estimates of a student's behavior or ability, as many teachers automatically do early in the school year. Referred to as *sustaining effects* (Good & Brophy, 1993), these phenomena come into play when expectations remain unchanged in the face of change (i.e., improvement). The opportunity to encourage and support student achievement and positive behavior choices may be lost in such circumstances (Good, 1987). These expectation factors have been studied and applied to classrooms, particularly as they affect student achievement, management, and motivation (Good & Brophy 1993, Hamachek, 1995; Miller & Ross, 1975).

Results from the E2M, mentioned previously, demonstrated that teachers reported holding differential expectations for the hypothetical students of the seven vignettes Horne & Socherman, 1999). Together, teacher expectation research underscores the significant influence of teachers on student development of school related skills and behaviors as well as on their judgments of efficacy with their students.

Behavioral Typology: A Person-oriented, Dimensional Approach

To study the contributions of teacher variables to omnibus constructs such as risk, adaptation, and resiliency in school children or to understand the relationship of student behavior to teacher variables, it is both logical and necessary to address the entire range of student

behavior. A behavioral typology can provide an inclusive system for classifying students into sub-types composed of individuals who share similar configurations of behavioral attributes that are distinct from other configurations. For the study of behavioral psychology, a typology would function as taxonomic systems do for other fields of science, facilitating the basic goals of description, prediction, and explanation (Robins, John, & Caspi, 1998). Behavioral typologies traditionally have been the focus for temperament research involving young children and infants (Caspi & Silva, 1995; Thomas & Chess, 1977). In contrast, the focus of behavioral research pertaining to school-aged children and adolescents, until recently, has been primarily "variable-centered," with a focus on identifying and understanding variables constituting a particular dimension of behavior usually associated with psychopathology or maladjustment (e.g., scores on a measure of depression or ADHD) (DeLuca, Rourke, & Del Dotto, 1991; Glutting, McGrath, Kamphaus, & McDermott, 1992).

Previous efforts to define and study behavior in schools have primarily concentrated on diagnostic syndromes based on, for example, the Individuals with Disabilities Education Act (IDEA) or the Diagnostic and Statistical Manual of Mental Disorders (4th ed.) (American Psychiatric Association, 1994). These lines of research typically address problematic behavior measured by dichotomous variables; the student either does or does not have a recognized disorder (Fergusson & Horwood, 1995). However, dichotomous classification systems fail to identify sub-clinical or sub-syndromal ('developing") conditions which may constitute or contribute to functional impairments that place students at risk for poor adaptation or failure (Cantwell, 1996). Researchers and educators have not yet acquired an adequate understanding of the full range of student adaptive behavior, misbehavior, or psychopathology. Consequently, this has lead to a failure to study the full and continuous range of student behavior as a contribution

to the ecology of schooling and ignores the largest contributor, that of normal or average behavior (Kamphaus & Frick, 1996; Kazdin, 1995).

In contrast to the variable approach, a person-oriented dimensional approach to a typology of student behavior attempts to account for behaviors along several dimensions simultaneously while being sensitive to "amount" (e.g., frequency and intensity) of behavior. Presenting naturally occurring behavior as multivariate profiles promotes a fuller understanding of the range and complexity of child behavior (Meehl, 1995; Speece & Cooper, 1991) and provides greater predictive validity (Fergusson & Horwood, 1995). The dimensional approach, in other words, includes all students: those with no presenting problems, those who have demonstrated adaptive skills, sub-syndromal children who exhibit problem behaviors but do not meet the threshold set by diagnostic criteria, and children whose behaviors satisfy the criteria for mental health diagnoses or educational disability (Kamphaus & Frick, 1996).

Constructing a meaningful typology, therefore, requires a behavior measurement instrument designed to assess multiple dimensions of behavior including so-called "problem behaviors" (clinical and sub-syndromal levels) as well as adaptive behaviors or competency-related skills that mediate risk factors (Coie et al., 1993; Doll & Lyon, 1998). Kamphaus, Huberty, DiStefano, and Petoskey (1997) subjected the national normative sample for the Teacher Rating Scale for Children of the Behavior Assessment System for Children (BASC-TRS-C; Reynolds & Kamphaus, 1992) to cluster-analytic methods. The BASC-TRS-C is a widely used, teacher-rated child behavior assessment instrument designed to represent a comprehensive range of problem and adaptive behaviors. Teachers have been found to provide useful and reliable information about student adaptive and problem behaviors in school settings (Kamphaus & Frick, 1996). The normative data were collected for 1,227 six- to eleven-year-old

children at 116 site representing various regions of the United States. A two step clustering process, following recommendations of Blashfield and Aldenderfer (1988), began with a hierarchical agglomerative method for identifying cluster centroids. The second step employed an iterative clustering method in which the centroids were provided an initial cluster assignment of students, then continued to reassign cases in an iterative fashion to optimize the cluster solution (e.g., minimize within-cluster variance). The cluster analyses yielded seven distinct dimensional clusters of child behavior: (1) Well Adapted, (2) Average, (3) Disruptive Behavior Problems-Severe, (4) Learning Problems, (5) Physical Complaints and Worry, (6) General Problems-Severe, and (7) Mildly Disruptive Behavior Problems (Kamphaus, et al., 1997).

Cluster 1 was labeled *Well Adapted* due to the significant presence of adaptive skills (means of all four Adaptive scales at or above 1 standard deviation from the mean) and the absence of behavior or learning problems. Representing nearly one-third of the national sample (34%), this cluster was the largest of the seven. The racial/ethnic makeup of this cluster was very similar to the 1993 U.S. census population statistics.

Cluster 2, labeled *Average*, appeared to have few deviations from the normative mean and represented almost one-fifth of the population (19%). The gender distribution was approximately 50/50. Cluster 1 and Cluster 2 together accounted for over half (53%) of the sampled population, suggesting that majority of children in this age range were free from behavior problems and had some adaptive resources.

Cluster 3, *Disruptive Behavior Problems-Severe*, resembled what has been referred to previously as “Disruptive Behavior Disorder” (Frick et al., 1991). Externalizing scale mean scores met or exceeded those for a sample of children with conduct disorder, behavior disorder, and ADHD (Reynolds & Kamphaus, 1992). In addition, this cluster demonstrated significant

adaptive behavior deficits and elevations on internalizing scales including Depression. This cluster consisted of 8% of the sample population and was predominately male (78%). The majority of these students were White (57%), but both the African-American (30%) and Hispanic (10.7%) student populations were over-represented. Approximately 20% of these students were classified as eligible for special services.

Cluster 4, *Learning or Academic Problems*, characterized the learning disability population with additional significant deficits in adaptive skills. This cluster comprised 12% of the national sample. Again, the majority were males (60%), and the cluster was over-represented by African-American students (30%). Approximately 13% of these students were classified as eligible for special services.

Cluster 5, labeled *Physical Complaints and Worry,* exhibited internalizing problems of a mild nature (non-clinical) and was characterized primarily by somatic complaints and secondarily by symptoms of anxiety and worry. This cluster was dominated by females (60%) and comprised 11% of the sample population.

Cluster 6*, Severe Psychopathology,* renamed *General Problems-Severe*, constituted 4% of the sample population. It was dominated by males (67%) and incorporated children with multiple diverse problems including unusual or psychotic thought processes and impaired adaptive skills. Students from this cluster resembled children from the validation sample of the BASC (Reynold & Kamphaus, 1992) who had been diagnosed by school personnel as emotionally disturbed. Only 18% of this cluster had been classified as eligible for special services.

Cluster 7, *Mildly Disruptive Behavior Problems*, differed from Cluster 3 by mild elevations for Aggression and Hyperactivity subscales only, and cluster members exhibited normal adaptive skills. Consisting of 12 % of the sample, members were mostly male (70%).

The cluster process has been replicated with other large student populations with similar results (DiStefano, Kamphaus, Horne, & Winsor, 2003; Kamphaus, Petoskey, Cody, Rowe, Huberty, & Reynolds, 1999). The present study was designed to assess teacher efficacy and teacher expectations for individual students representing the range of student behaviors in the classroom. Student behavior ratings were collected from teachers using the BASC-TRS-C and student behavior was clustered using the typology suggested by Kamphaus et al. (1997) to examine if variables associated with classrooms relate to student behavioral typologies and can be useful for description of risk status and prediction of salient educational outcomes.

Behavioral Risk Associated with Educational Outcomes

The statistics associated with traditional indicators of risk are staggering. At least 17 % of the 49 million children in American public schools live in poverty; children from impoverished urban communities representing “niches of high risk” that, in addition to poverty, include exposure to high rates of community violence, inadequate access to healthcare, and unstable family structures (Pianta & Walsh, 1996). One in five children and adolescents meet the diagnostic criteria for one or more mental illnesses listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM IV: American Psychiatric Association, 2000; U.S. Department of Health and Human Services, 1999). Research has shown that disastrous outcomes are of much higher probability when multiple risk factors interact (Schorr & Schorr, 1989). For example, two studies (McPartland & Slavin,1990; Slavin & Madden, 1989) identify low achievement (measured as reading more than one or more grades level below current grade), teacher-reported

behavior problems, poor attendance, retention in grade, and attending schools with large numbers of poor students as factors closely related to the drop out rate. By third grade, these combined factors can predict with fair reliability which students will drop out and those that will remain through graduation. However, Sinclair and Ghory (1987) caution against the rigid application of these traditional predictors for educational risk. Over-reliance on these factors sets up limited or negative expectations for student success and ignores the potential positive, mediating influence that schools can exert. Indeed, approximately half of students who exhibit traditional risk indicators demonstrate average or better educational outcomes. Findings like these increase awareness that educational risk and failure to learn does not simply reside within children. Instead, risk is a function of the complex interface between children and their contexts, including schools (Baker, Horne, & Kamphaus, 1999; Doll & Lyon, 1998; Masten & Coatsworth, 1998). For some at-risk students, school provides a supportive, facilitative context that mediates risk; for others, school appears to exacerbate risk. This ecological systems approach suggests an evolving definition of educational risk by recognizing that any student who performs marginally or poorly regardless of economic status, gender, ethnicity, or family history is at-risk. Without ignoring more traditional risk indicators, this approach suggests examining current observable behavior in the classroom context through ongoing behavioral assessment to identify and understand early school adaptation difficulties.

To assess educational risk means recognizing that academic difficulties co-occur with externalizing behaviors such as conduct /behavioral problems as well as internalizing behaviors such as worry and somatic complaints (Eccles, Wigfield, & Schiefele, 1998). Therefore, a definition of behavioral adaptation and risk for school would need to be broad and comprehensive, inclusive of the range of student behaviors. Dryfoos (1990) estimated that 25%

of U.S. 10-17 year-olds are behind in grade level, while Weist (1997) observes that roughly 13% of school aged children experience moderate to severe social-emotional- behavioral problems that significantly interfere with functioning at school. Many of these students show pattern of declining academic motivation, achievement, school engagement, and behavior as they progress through school (Eccles, Midgley, & Adler, 1984).

Additionally, assessing educational risk recognizes the continuous and bi-directional influence between children and context (Bronfenbrenner, 1979; Sameroff, 1975), especially the role that teachers play in shaping behavioral outcomes of students. Schools influence development because their characteristics affect children's appraisals of the school environment which, in turn, affect school-related cognitions and, ultimately, school-related behavior. Reciprocally, student behavior then influences teacher beliefs, cognitions, and practices (Baker, Derrer, Davis, Dinklage-Travis, Linder & Nicholson, 2001; Roeser, Eccles, & Strobel, 1998). Many professions involve interactions with others that are relatively brief and transitory. Teaching young students, on the other hand, involves interpersonal contact that can be both intensive and extensive, where the effects of the interactions are cumulative (Hamacheck, 1995). Indeed, an elementary teacher's day may involve more than 1000 interpersonal exchanges with his/her students, emphasizing the interactive needs of the students and the social nature of the classroom (Jackson, 1968; Pianta, 1999). Therefore, teachers serve as important monitors of children's behavior and adjustment (Reynolds & Kamphaus, 1992; Verhulst, Koot, & Van der Ende, 1994). Teachers have opportunity to observe many students frequently over a significant period of time in a context that is different from those of other raters (e.g., parents). Yearly classes of children allow teachers to construct a normative perspective of the skills and behaviors of their students. Children making adequate behavioral adjustment to school use developmentally

appropriate social skills with peers and adults, exercise emotional regulation, demonstrate academic skill, and readily adapt to transitions. As students deviate from this normative frame of reference, teachers are aware.

This study uses a model of risk and adaptation proposed by the research project Addressing the Context of Teaching Early (Project ACT Early; Horne, Baker, & Kamphaus, 1996; Baker, Kamphaus, & Horne, 1999). The model addresses a broad definition of child behavior using a comprehensive range of adaptive, internalizing, externalizing and academic/learning related behaviors present in classrooms. Using the previously described behavioral typology based on the BASC-TRS-C (Kamphaus, Huberty, DiStefano, & Petoskey, 1997), Project ACT Early researchers developed a theoretical model of educational risk associated with each of the behavior clusters (see Figure 2.1), based on the presence or absence of adaptive and problematic behavior, the probable "goodness of fit" between the child and the school context, and the amount of intervention/support services that school children with combinations of skill or behavior deficits might require (Adelman & Taylor, 1998).

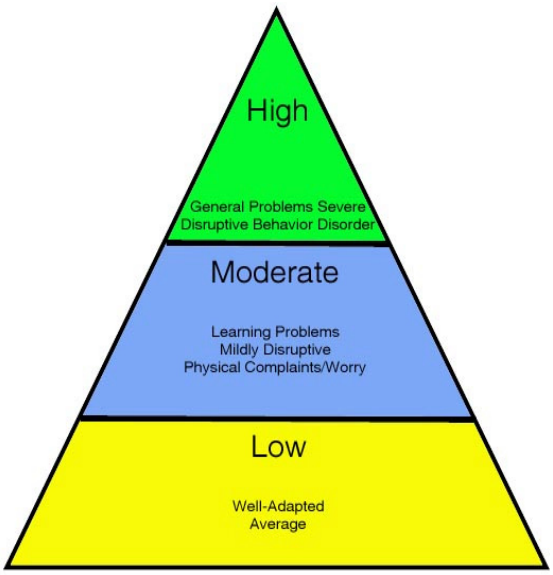


Figure 2.1 - Project ACT Early Theoretical Model of Educational Risk

The ACT Early model is supported by a similar mental health risk model for young school children proposed by the Primary Mental Health Project (PMHP; Cowen, Hightower, Pedro-Carroll, Work, Wyman & Haffey, 1996). The PMHP model also uses three levels to designate severity of adjustment problems ("adjusted, at risk, and identified," p. 84) that parallel the low, moderate, and high risk levels of the ACT Early model, although the PMHP's orientation focused strictly on mental health contributors to school failure, whether defined educationally or behaviorally. The ACT Early model highlights the overall educational risk for students, regardless of whether they have been "identified" as diagnostically problematic. As findings by Rowe (2002) demonstrated, less than 30% of ACT Early children designated as moderate to high educational risk based on teachers' ratings of behavior qualified for or received supplemental services (e.g., special education); therefore, diagnostic identification didn't factor into the risk assignment of each student.

Mixed Model Methodology: A Tale of Two Paradigms

No one method is promoted as THE best approach to educational research; much depends on the phenomena of interest and the questions they raise (Creswell, 1994). To address the complexity of educational phenomena, this investigation embraces the recent emergence and acceptance of mixed model methodologies in which both quantitative and qualitative methods are employed. Research methods are merely tools to facilitate understanding of phenomena (Morse, 1991). Because quantitative and qualitative methods emanate from different epistemological perspectives and training preferences, they often have been represented as an oppositional dichotomy (Onwuegbuzie, 2002). Quantitative methods employ deductive designs in which variables and hypotheses representative of an *a priori* theory are chosen and remain fixed throughout a study. While imposing structural and statistical controls, data and subsequent

results are typically numerical with the intent to develop generalizations of relationship or cause-and-effect that contribute to existing theory. Qualitative methods, on the other hand, use inductive designs in which context-rich/context-dependent information is collected from naturalistic ("uncontrolled") environments. Data are composed of words that, when aggregated and coded, result in emerging categories of richly descriptive information that leads to theory formation (Creswell, 1994). However, both paradigms, in seeking valid explanations of phenomena through rigorous application of established methods, can be used in complementary ways, making the most efficient use of paradigmatic features as well as resources such as time, materials, and access to subjects. Much *in situ* quantitatively based educational research is quasi-experimental due to the use of small sample sizes and intact groups of subjects (nonrandom samples) as well as the presence of numerous variables that are difficult to control in a dynamic system. All these factors pose potential problems for validity (Wiersma, 1995). A companion qualitative study, using the intact groups as a purposeful or theoretical sample, provide supportive data that may clarify validity issues.

Grant and Fine (1992) provide several examples of combined designs to demonstrate the utility of a hybrid approach; in each example, expansion and elaboration through multiple data sources and methods add depth and breadth to findings that generally mirror the natural complexity of individuals embedded in dynamic social contexts like schools. Integrating multiple data sources and methods, a process known as triangulation (Creswell, 1994), can minimize bias inherent in individual sources of data. Triangulation is defined as a dense aggregation of data where the outcomes may be convergence or contradiction, either of which are informative.

Grounded theory, one of five traditional to qualitative inquiry; focuses on individuals who have participated in the process central to the phenomena of interest (e.g., teaching young

students with diverse behavioral characteristics) and uses theoretical sampling (e.g., elementary level teachers in public schools) to target knowledgeable informants (Creswell, 1998). Data collection methods consist primarily of one-to-one phenomenological interviews in which the researcher acts as the key instrument, asking guiding questions constructed to focus on specific experiences in the context of the informant's work. Participants respond with thoughts, perspectives, affective reflection, and narrative based in their experiences. This data collection process is much like a purposeful conversation for eliciting richly detailed information that provides contextual-related personal, social, and political insights to the phenomena about which participants have knowledge and salience (Merriam, 1998).

The goal of grounded theory is to generate sufficient accounts of relevant behavior, affect, and thoughts to establish meaningful patterns (Creswell, 1998). Through a systematic coding process, researchers use these patterns to form core categories that, in turn, cluster into themes around the central phenomenon. Strauss and Corbin (1990) recommend 20-30 interviews to saturate categories and to extract significant statements that act as exemplars of the themes. The three-stage coding process (Creswell, 1998) begins with *open coding*- scrutinizing interviews and field notes, line by line, segmenting the narrative to produce concepts that characterize the data. These code concepts are provisional and interpretation is tentative. Coding is "grounded" in the data, starting the open inquiry without assumption of any variable until it emerges as relevant, that is it "earns its way" into grounded theory. The next stage*, axial coding*, is an assembling process in which, through intense analysis of the preliminary coded concepts, data are organized around a category "axis" demonstrating cumulative evidence of relationships between the data. Lastly, *selective coding* systematically codes for parsimonious core themes, the

story line which describes these data and can act as guide to future theoretical sampling and new data collection.

As hybrid methodological approaches have become popular, questions around standards of quality have been raised, primarily from quantitative researchers trained to attend to reliability and validity issues (Onwuegbuzie, 2002). These concerns have lead to the emerging work in verfication, synonymous with internal integrity, credibility, and trustworthiness. Eisner (1991) promotes internal and external triangulation to supply the weight of evidence, or structural corroboration, from multiple informants to provide verification. Creswell (1998) suggests member checks for credibility and consensual validation (i.e., asking the teachers to review their interviews), seeking agreement among competent others or peer review, and discriminant sampling looking for examples that support or refute the evidence.

A Dominant-Less Dominant mixed model (Creswell, 1994) is a hybrid approach appropriate for this study's research objectives. The overall design is theoretically driven by a traditional quantitative design methodology of hypothesis testing while incorporating a complementary qualitative design using a grounded theory approach to describe and elaborate. A dominant-less dominant model involves the simultaneous use of qualitative/quantitative methods and tools with limited interaction of data sources during the collection stage, but findings are interwoven in the interpretation process.

# CHAPTER 3

## METHOD

The focus of this study was to examine the efficacy and expectation perceptions of elementary teachers working with behaviorally diverse student populations. Data for this study were collected as part of the ACT Early Project (Addressing the Context of Teaching; Horne, Baker, & Kamphaus, 1996; Baker, Kamphaus, & Horne, 1999). The project was a research study funded by grants through the Institute for At-Risk Children, Office of Educational Research and Improvement (OERI), U.S. Department of Education (grants R306F60158, R305T990330). The ACT Early project was originally initiated as a three-year grant (ACT I) designed to investigate behavioral characteristics of children at educational risk in kindergarten through second grade. A subsequent grant, acquired in 1999, extended research for three additional years (ACT II) and one extension year (ACT III), to include fourth and fifth grades so that the longitudinal sample would contain students and teachers who had participated for four or more years. The primary objectives of ACT I, II, and III focused on the documentation of individual, interactional, and ecological contributors to behavioral risk and adaptation for students. The objectives required the collection of student behavioral and academic data and student climate surveys, as well as teacher measures of school and classroom climate, instructional styles and strategies, and interviews addressing teaching issues.

## Participants

Data comprising the sample for this study were collected in the fourth year of the ACT Early Project and consisted of students from first to fifth grade during school year 1999-2000. Regardless of participation in other years, each student or teacher was represented only once in the data set, reflecting their behavior and perceptions during this one school year.

The sample was drawn from regular education classes of three public elementary schools from a school district located in a small, southeastern city (population of approximately 100,000). The participating school district of 10,800 students has a large at-risk population. As one indicator of educational risk, the district reports a high school completion rate of 57% (the district definition of completion rate is the percent of students who graduate in four consecutive years). The school district student population is composed of 70% minority students with more than 60% of the district's students qualifying for free or reduced lunch rate, an indicator of significant poverty among students and their families. Each of the participating elementary schools is designated as a school-wide Title 1 program, again indicating both poverty and educational risk. The three schools each received a $1,000 professional development stipend for participation.

### Teachers

Thirty-four elementary level, regular education teachers from first though fifth grade participated in Project ACT Early during the 1999-2000 school year. Teacher participation was voluntary, with a participation rate of 100% for two schools and 70% for the third. Each teacher provided signed consent at the beginning of the school year. Five teachers were African-American, and the other 29 teachers were White. Two-thirds of the teachers had seven or more years teaching experience, while two teachers were completing their first full year. All teachers

were certified by the state of Georgia. Thirteen held bachelor degrees, 16 completed master degrees, and 5 had earned specialist or doctoral degrees; all the degrees were in elementary or early childhood education.

Individual interviews were conducted throughout late fall and early winter of 1999. In spring of 2000, teachers completed behavioral assessments and measures assessing teacher efficacy and teacher expectations for each participating student in their classrooms. Project ACT Early teachers received $200 stipends for their participation during school year 1999-2000.

Students

The 548 participating students represented approximately 70% of the three schools' first through fifth grade, mainstreamed population. Self-contained special education classrooms were not included. In the two schools with 100% teacher participation, student participation was 70% and 71%; at the school with 70% teacher participation, student participation was 68% of those classes. Students took home packets containing information about the research project and the voluntary nature of participation, contact numbers, and consent forms. Return of signed parental consent forms allowed students to complete a climate survey at school and permitted classroom teachers to complete assessment instruments providing behavioral and academic information for each student. Additionally, parental consent allowed the research staff to collect demographic and academic information from student files at the end of the school year. As compensation, all students in a classroom received a pencil following the administration of climate surveys, regardless of participation.

Overall, the student sample was fairly evenly distributed across grade levels: first 21.3%, second 21%, third 20%, fourth 17%, fifth 20.7%. Student ethnic background, recorded from student records, closely matched the distribution for the school district: African-American

56.1%, White (Non-Hispanic) 32.3, Hispanic 7.1%, Asian/Pacific Islander 1.9%, Multi-racial 2.6%. Free or reduced cost lunch status was not available for individual students. However, the three schools had rates of 92%, 70%, and 58% for 1999-2000. Approximately 1 in 5 students were referred by their teachers to school-based Student Support Teams for problematic behavior and/or academic difficulties. Fifteen percent had qualified for and received special education services, primarily through "pull-out" programs using resource rooms. Although not consistently documented in individual student permanent records, schools reported an additional 15% of students qualified for state-supported remedial services which were delivered by a roving (i.e., "shared") teacher or paraprofessional who worked with small groups both in and out of the classroom.

A related observation related to sample distribution and bias concerned the school improvement goals of 1998-1999 (the previous school year) for one participating school; one school-wide goal required the collection of school-wide teacher behavior ratings for each student using the same behavior rating instrument (BASC-TRS-C) as part of Project ACT Early. When processing the school's entire set of rating forms, the district allowed ACT Early staff to compare data for students with parental consent to the pool of students without project consent (no individually identifiable information was used) as an opportunity to examine bias in the Project ACT Early sample. For that school, the results indicated no significant differences between the consent and non-consent student groups on demographic information and BASC-TRS-C score distributions, suggesting that rate of consent return did not bias the student sample (Handfinger, 1998).

## Instruments

The Behavior Assessment System for Children (BASC; Reynolds & Kamphaus, 1992) is a multidimensional approach to assess the behavior of children, ages 4-18. The BASC consists of a series of omnibus behavior rating scales designed to assess several aspects of behavior and personality along both positive (adaptive) and negative (clinical) dimensions. The Teacher Report Scale-Children (TRS-C), designed for students ages 6-11, was the component used in this study.

The BASC Teacher Rating Scale-Child version (TRS-C) was designed to provide a comprehensive measure of adaptive and problem behaviors in the school setting. The TRS-C is composed of 148 behavioral items, each of which is rated for occurrence and frequency using a four-point Likert scale, anchored by 1 (never) and 4 (almost always). The TRS-C is comprised of 10 sub-scales that assess problems in the domains of externalizing problems (i.e., Aggression, Hyperactivity, and Conduct Problems), internalizing problems (i.e., Anxiety, Depression, and Somatization), school problems (i.e., Attention and Learning Problems), and other problems (i.e., Atypicality and Withdrawal). In addition, the TRS-C includes four sub-scales that contribute to an adaptive behavior domain (i.e., Adaptability, Social Skills, Leadership, and Study Skills). Sub-scale scores are reported as T-scores with a mean of 50 and standard deviation of 10.

The BASC Manual (Reynolds & Kamphaus, 1992) reports moderate to high internal consistency for the TRS-C. Sub-scale coefficient alphas range from .76 to .94, with highest reliabilities for the externalizing dimensions of Aggression and Hyperactivity, for the adaptive dimensions of Social Skills and Study Skills, and for the school-related Attention Problems. Sub-scales focused on internalizing behaviors tend to produce lower reliabilities, probably as a consequence of the less overt nature of these behaviors. High test-retest correlations (median

value .91) and interrater reliability coefficients (.7 to .9) suggest that teachers are consistent in their ratings of student behavior and tend to interpret the behavior items in similar ways. Construct validity for the TRS-C is supported, in part, by factor analytic processes that demonstrate construct integrity for the domain of items included in the measure. Additionally, the TRS-C scales have shown concurrent validity with analogous scales from other teacher rating instruments. For example, the Behavioral Symptoms Index composite correlated .92 with the Total Problems composite score of the Teacher's Report Form (TRF; Achenbach, 1991), and the TRS-C Adaptive Skills composite score correlated .75 with the TRF Total Adaptive Functioning score (Reynolds & Kamphaus, 1992). While the comparison correlations are typically high for scales addressing externalizing or school problem behaviors, other rating instruments tend to assess a narrower range of adaptive behaviors (or none at all), resulting in lower correlations (Kamphaus & Frick, 1996).

Behavioral Clusters were previously constructed using the BASC-TRS-C normative sample for students aged 6-11 years (Kamphaus, Huberty, DiStefano, & Petoskey, 1997) and have been validated across several U.S. elementary school populations (DiStefano, Kamphaus, Horne, & Winsor, 2003). Student membership in one of the seven behavioral clusters for this study was determined through a data transformation based on a weighted cluster solution derived from the original clustering analyses. Linear composites of the 14 TRS-C sub-scales were formed in which constant weights, called linear classification functions (LFCs), were applied to the sub-scale T-scores of each student. Results yielded a profile of seven LFC scores for each student who was then assigned to the cluster with which the largest LFC score was associated, a "goodness of fit" match. The seven LFCs used in determining cluster membership each represented one of seven typological behavior clusters: Well-Adapted, Average, Severe

Disruptive Behavior Problems, Learning Problems, Physical Complaints and Worry, General Problems-Severe, and Mildly Disruptive. Refer to Appendix A for the BASC-TRS-C dimensional contributors to each cluster.

The Efficacy and Expectation Measure (E2M; Horne & Socherman, 1999) is an 8-item questionnaire that assesses teacher efficacy (5 items) and teacher expectation for student outcomes (3 items) for each participating student in a teacher's classroom (refer to Appendix B). The E2M uses a Likert response scale, anchored by 1 (highly uncertain/disagree completely) and 5 (highly confident/agree completely). The efficacy items assess the degree to which a teacher feels he or she (a) is capable of helping this student master the material taught; (b) is competent in managing this student's behavior; (c) is capable of supporting this student to be successful; (d) is able to help this student to behave appropriately in class; (e) has the skills to work with this student. Together, these five items constitute the Teacher Efficacy score for that student. The expectancy items assess the degree to which a teacher believes this student will (a) be able to accomplish his goals; (b) be good at learning new skills; (c) carry through on responsibilities. Together, these three items constitute the Teacher Expectation score.

The eight items of the E2M were adapted from the Teacher Efficacy and Attribution Measure (TEAM; Horne, Socherman, & Dagley, 1996). The TEAM was developed to measure teacher efficacy and expectation on "behavioral types" of students. The fictional vignettes describing different types of students were constructed to correspond to the seven typological clusters for the BASC-TRS-C (Kamphaus, et al., 1997). Responses on the TEAM demonstrated that teachers reported feeling differentially efficacious with hypothetical students exhibiting hallmark behaviors of the different clusters and expressed differential expectations for those students (Horne & Socherman, 1999). The eight E2M items were selected from the TEAM to

measure teachers' efficacy and expectations for actual students in their classrooms as opposed to hypothetical students represented by generalized vignettes. Preliminary analyses of internal consistency reliability yielded Cronbach's alpha coefficients of .91 for the Teacher Efficacy composite factor and .94 for the Teacher Expectancy factor. The E2M was designed to be a brief measure administered in concert with the BASC-TRS-C.

Teacher Interviews were conducted with participating teachers from grades one through five. A research group with the assistance of a qualitative research consultant constructed the interview to address the research question, "What is the experience of elementary teachers in behaviorally diverse classrooms?" The interview employs a structured format, consisting of a series of guided open-ended questions (Strauss & Corbin, 1990) that ranged over topics that include positive and negative elements of teaching, classroom management, student behaviors, student diversity, instructional strategies, and stressors (refer to Appendix C). Each interview was conducted by one of four trained doctoral students and ranged from one to two hours in duration, depending on the length of teacher responses to the open-ended items. Interviews were audio-taped and, subsequently, professionally transcribed. Transcripts were analyzed in the preliminary open coding phase in spring 2001 by the author and two other research staff. Field notes and staff comments reflect that the teachers report enjoying the interview process.

## Procedure

### Data collection

Initially, an institutional review board proposal for research with human subjects was submitted and approved prior to the beginning of Project ACT Early II. Additionally, approval for research involving students and teachers was obtained through the participating school

district office. Teachers were recruited through research presentations conducted at fall staff development meetings at each of the schools, where details of their involvement and the voluntary nature of participation were presented. Teachers indicated intent to participate by submitting signed consent.

During the first six weeks of the project year, parents/guardians of students were provided information containing a description of Project ACT Early and details concerning student involvement, the voluntary nature of participation, and contact numbers for additional information. IRB-approved parent consent forms were attached, which when signed and returned to the school, granted permission for their child(ren) to participate in the research. In an effort to recruit from the Hispanic population, Spanish information letters and consent forms were distributed where needed. For a classroom to participate, the minimum return rate for consent was set at 50% of the student classroom population.

Fall/winter 1999

Teachers were individually interviewed from mid-October through January. An interview was scheduled at the teacher's convenience, typically occurring after school. Interviews were conducted by trained graduate student interviewers. Depending on the length of teacher responses to the open-ended items, interviews ranged from one to two hours. Interview sessions were audio-taped.

Spring 2000

Teachers were given packets containing behavioral rating scales and student questionnaires which were completed over a three-week period in April. Teachers completed the Behavioral Assessment System for Children-Teacher Rating Scale-Child version (BASC-TRS-C; Reynolds & Kamphaus, 1992) for each student having parental consent. The BASC-TRS-C is

widely used throughout the school district for the assessment of behavioral and emotional status of children; therefore, participating teachers were familiar with the instrument and required no additional instruction. In concert with the BASC-TRS-C, teachers also completed the Efficacy and Expectation Measure (E2M; Horne & Socherman, 1999), a brief measure where teachers rated their efficacy and expectations for each participating student. Teachers were requested to complete the BASC-TRS-C and E2M for an individual student at the same time to reduce potential time-related variability in ratings. During the second and third weeks of June, following the close of the school year, student record folders were examined for demographic, academic, attendance, and standardized testing information for each student participant.

## Design

### Quantitative Data Questions

A mixed-model ANOVA followed by six planned comparisons of ordered means was used to determine the degree and direction of relationship between teacher efficacy scores and the seven student behavioral clusters. A second mixed-model ANOVA with six planned comparisons of ordered means was used to determine the degree of relationship between teacher expectation for student outcomes scores and the seven student behavioral clusters. The independent variables of student behavioral cluster and grade were fixed factors, and teachers were a random factor, nested within grade level. The dependent variables for the first and second mixed model ANOVAs were teacher mean efficacy scores and teacher mean expectation scores from the E2M, respectively, for each of the seven clusters. To address the overall relationship between teacher efficacy with their students and their expectations for student outcomes, Pearson Product Moment correlations were conducted.

## Hypotheses

Teacher Efficacy

Teacher efficacy scores from the E2M will demonstrate a significant negative relationship by student behavioral cluster in the designated, ordered direction:

Well Adapted /Average >
Physical Complaints & Worry >
Mildly Disruptive >
Learning Problems >
Disruptive Behavior Problems >
General Problems-Severe

Teacher efficacy scores from the Efficacy and Expectation Measure (E2M) will demonstrate a significant negative relationship by composite risk level in the following designated direction:

| LOW RISK | | MODERATE RISK | | HIGH RISK |
|---|---|---|---|---|
| Well Adapted<br>Average | > | Physical Complaints & Worry<br>Mildly Disruptive<br>Learning Problems | > | Disruptive Behavior Problems<br>General Problems – Severe |

These related hypotheses explored teachers' perceived efficacy with students who were individually rated on school-related academic and social emotional behaviors that characterized unique clusters of educational risk as proposed by the Project ACT Early model. The six *a priori* multiple comparisons were designed to test the theoretically established order of cluster efficacy means and to test for significance differences between each cluster efficacy mean. The first comparison examined the mean efficacy differences between Well-Adapted and Average clusters. The second comparison compared the Average cluster means to the Physical Complaints and Worry means. Following the order of the hypotheses, the third comparison was between the efficacy means of the PCW and MDP clusters, the fourth comparison between the

MDP and LP clusters, the fifth between the LP and DBP clusters, and the sixth between the DBP and GP-S clusters. These six multiple comparisons were hypothesized to demonstrate the contribution of the behavioral clusters to specific theoretical risk levels in terms of teacher efficacy through the directionality of efficacy scores associated with the clusters.

Teacher Expectation for Student Outcomes

Teacher expectation for student outcome scores from the E2M will demonstrate a significant negative relationship by student behavioral clusters in the designated, ordered direction:

Well Adapted /Average >
Physical Complaints & Worry >
Mildly Disruptive >
Learning Problems >
Disruptive Behavior Problems >
General Problems-Severe

Teacher expectations for student outcome scores from the Efficacy and Expectation Measure (E2M) will demonstrate a significant negative relationship by composite risk level in the following designated direction:

| LOW RISK | | MODERATE RISK | | HIGH RISK |
|---|---|---|---|---|
| Well Adapted<br>Average | > | Physical Complaints & Worry<br>Mildly Disruptive<br>Learning Problems | > | Disruptive Behavior Problems<br>General Problems – Severe |

These related hypotheses explored the relationship of teachers' perceived expectations for student outcomes and their students who were individually rated on school-related academic and social emotional behaviors that characterized unique clusters of educational risk as proposed by the Project ACT Early model. The six *a priori* multiple comparisons were designed to test the theoretically established order of cluster expectation means and to test for significance differences between each cluster expectation mean. The first comparison examined the mean

expectation differences between Well-Adapted and Average clusters. The second comparison compared the Average cluster means to the Physical Complaints and Worry means. Following the order of the hypotheses, the third comparison was between the expectation means of the PCW and MDP clusters, the fourth comparison between the MDP and LP clusters, the fifth between the LP and DBP clusters, and the sixth between the DBP and GP-S clusters. These six multiple comparisons were hypothesized to demonstrate the contribution of the behavioral clusters to specific theoretical risk levels in terms of teacher expectations through the directionality of expectation scores associated with the clusters.

Relationship between Teacher Efficacy and Expectations for Student Outcomes

Teacher efficacy scores by behavioral clusters will demonstrate a significant positive relationship with teacher expectations for student outcome scores by behavioral clusters. This hypothesis examined the theoretically assumed positive relationship between the constructs of teacher efficacy and expectancy in the elementary school setting.

To minimize the probability of Type I errors, the level of significance was set at .05 for all decisions regarding the rejection of null hypotheses. To minimize the potential for inflated error rate associated with the multiple comparisons, the Dunn method requiring contrasts to be planned *a priori* and incorporating a Bonferroni correction was used to establish an acceptable Type 1 error rate (Glass & Hopkins, 1996).

Qualitative Data Question

How do the public school elementary level teachers contributing behavioral ratings of their students as well as their perceptions of efficacy and expectations for those students describe working with academically and behaviorally challenging students?

Qualitative data was used to supplement, "flesh out," the information derived from the research hypotheses. As qualitative research is inductive or formative by nature, the research question was purposively broad and did not state pre-identified variables as in hypothesis testing; rather, variables emerged from the data. The overall research question addressed the experiences of currently teaching elementary teachers who work in classrooms composed of 18-25 high-risk students representing a diversity of academic and social behaviors. However, the questions and probes on the structured interview were specifically selected to elicit teacher responses related to detailed student behaviors and classroom management challenges in addition to teacher affect and thoughts pertaining to their personal experiences with students exhibiting challenging behaviors. The literature has suggested that many teachers regularly experience these difficult students and struggle to address their needs (Barr & Parrett, 2001; Milstein, Golaszewski, & Duquette,1983; Slavin, 1999). While all teacher responses to interview probes were considered for relevance and thematic support, the following probes were expected to provide the majority of data for this specific focus of this study:

What is the most/least satisfying part of your job?
Why did you become a teacher? What influenced you?
How often do you make instructional accommodations for students? For which ones?
What do you do for classroom management? Describe how you maintain discipline.
How effective are those classroom management strategies for your group of students?
Do you change or modify your management strategies for individual students?
Describe behaviors that are problematic in you classroom.
How many students in your class exhibit these behaviors regularly?
How many students would you describe as seriously disruptive?
What behaviors are those students exhibiting?
What strategies have you tried with these students? What works/doesn't work?
Think of three adjectives that best describe your job as a teacher.

All transcribed interviews were assigned identification numbers. Three members of the research staff coded the transcripts following a training session with the project's qualitative consultant. Interviews were accessed through electronic files where data were organized using Microsoft® Word 98 tables, allowing easy formatting, multiple highlighting, and rapid, flexible re-organization of data.

Coding of data followed a recommended three-stage process (Creswell, 1998; Strauss & Corbin, 1990) Open coding, the first stage, began with five interviews, each representing one of five grades, coded by all three coders to establish initial concordance between the coders (Dey, 1993). Question by question, line by line, *in vivo* codes were extracted from the narrative, "grounded" in the data and compared among coders so that coding method and basic terminology became practiced and uniform. The process of coding was aided by the structured format of the interviews where topical questions guided conversation. The remaining 29 interviews were divided up so that all three schools and all five grade levels were represented in each coder's data assignments. Once all interviews were open coded, each coder's assignments were divided in half and redistributed to one of the other two coders for a second round of open coding for verification (Creswell, 1998). Consistency was high between coders as well as between round one and two of open coding; differences were rare, with any resolved by consensus in research group.

Axial coding, the second phase, was conducted by the three person research team and involved assembling data around a category "axis." For example, across several interview questions, teachers reported stressful characteristics of their jobs; when aggregated, a consistent pattern of relationships emerged related to the time and effort given to disruptive classroom behavior. During this process, statements that appeared particularly descriptive of an emerging

category were highlighted to act as exemplars. Selective coding, the refining stage, involved systematic arrangement of axial categories to form parsimonious core themes.

# CHAPTER 4

# RESULTS

## Teacher Efficacy and Expectations: Quantitative Hypotheses

Significant differences were found between the means of the student behavioral clusters for both the teachers' perceived efficacy and teacher expectations for student outcomes. However, the cluster means and planned comparisons suggested a reordering of the behavioral clusters that introduces a refinement in the proposed model of educational risk (Horne, Baker, & Kamphaus, 1996; Baker, Kamphaus, & Horne, 1999).

The first hypothesis was addressed with a comparison of means conducted through a one-way ANOVA; refer to Table 4.1. The results indicated that the overall relationship between teachers' perceived efficacy represented by the dependent variable of mean efficacy scores on the E2M with student behavioral clusters was significant [$F(6, 541) = 77.79$, $p = .000$]. As expected, ordering of the efficacy scores by the corresponding behavior clusters revealed that teachers' mean efficacy scores decreased with behavior clusters characterized by more problematic behaviors and less adaptive skills. The first comparison, between the clusters Well-Adapted and Average ($t = 3.432$, $p = .001$), demonstrated a significant mean difference; however, it was expected that teachers' efficacy ratings would result in high means for both groups, and thus, support the assumption that the two clusters constituted low educational risk. The mean score for the cluster Physical Complaints and Worry, however, fell between the Well-Adapted and Average clusters and demonstrated no significant difference between either cluster means, suggesting inclusion in the low educational risk level. As predicted, the final comparison of the

two clusters of Disruptive Behavior Problems-Severe and General Problems-Severe resulted in means that demonstrated significantly less perceived teacher efficacy than other clusters, supporting the decision to consider both clusters as high educational risk. To address the issue of small group membership in the General Problems-Severe group, the six a priori planned contrasts between the behavior cluster mean efficacy scores were conducted twice- once, assuming equal variances and then without the assumption of equal variances; results were similar and the order of progressive risk remained the same as described. No grade level teacher efficacy by cluster interactions was found.

Table 4.1 – Teacher Efficacy

| Cluster | N | Mean | Contrast | t | Significance (2-tailed) | |
|---|---|---|---|---|---|---|
| Well Adapted | 149 | 4.9839 | 1 | | | |
| Physical Complaints | 49 | 4.8245 | 2 | 0.23 | .820 | |
| Average | 87 | 4.7080 | 1 | 3.43 | .001 | ** |
| Mildly Disruptive Behavior | 93 | 4.5935 | 3 | 2.20 | .029 | * |
| Learning Problems | 65 | 4.1569 | 4 | 4.53 | .000 | ** |
| Disruptive Behavior Problems | 86 | 3.5651 | 5 | 6.04 | .000 | ** |
| General Problems – Severe | 19 | 3.0737 | 6 | 3.25 | .001 | ** |
| Total | 548 | 4.4726 | | | | |

* $p < .05$ ** $p < .01$

A secondary analysis addressed the second part of the first hypothesis focused on support for the ACT Early model of risk. The results from the ANOVA demonstrated that the mean for

the cluster Physical Complaints and Worries (PCW) fell between Well-Adapted and Average in the Low risk category; thus, a reordered hierarchy of clusters was examined in a post hoc comparison. Results indicated that the revised model of student educational risk was significant in terms of teacher efficacy scores ($t=11.789$, $p = .000$)

The second hypothesis was addressed in a similar manner using a comparison of means conducted through a one-way ANOVA; refer to Table 4.2. These results indicated that the overall relationship between teachers' expectations for student outcomes represented by the dependent variable of mean expectation scores on the E2M with student behavioral clusters was significant [$F(6, 541) = 91.24$, $p = .000$]. As expected, ordering of the expectation scores by the corresponding behavior clusters revealed that teachers' mean expectation scores decreased with behavior clusters characterized by more problematic behaviors and less adaptive skills. The first comparison, between the cluster expectation means for Well-Adapted and Average ($t =3.432$, $p = .001$), demonstrated a significant mean difference; however, it was expected that teachers' expectation ratings would also result in high means for both groups, and thus, support the assumption that the two clusters constituted low educational risk. The mean score for the cluster Physical Complaints and Worry repeated the previous efficacy results, as it fell between the Well-Adapted and Average clusters and demonstrated no significant difference between either cluster means, again suggesting inclusion in the low educational risk. As predicted by the risk model, the final two clusters of Disruptive Behavior Problems-Severe and General Problems-Severe resulted in means that demonstrated significantly poorer teacher expectations for student outcomes than other clusters. The six planned contrasts between the behavior cluster mean expectation scores also were conducted twice- with and without the assumption of equal variances; again, results were similar and the order of progressive risk remained the same as

described above. No grade level teacher expectations by behavioral cluster interactions were observed.

Table 4.2 – Teacher Expectations

| Cluster | N | Mean | Contrast | t | Significance (2-tailed) |
|---|---|---|---|---|---|
| Well Adapted | 149 | 4.9239 | 1 | | |
| Physical Complaints | 49 | 4.5918 | 2 | 0.23 | .815 |
| Average | 87 | 4.3142 | 1 | 6.12 | .000 ** |
| Mildly Disruptive Behavior | 93 | 4.2975 | 3 | 2.26 | .024 * |
| Learning Problems | 65 | 3.3744 | 4 | 7.74 | .000 ** |
| Disruptive Behavior Problems | 86 | 3.1163 | 5 | 2.13 | .034 * |
| General Problems – Severe | 19 | 2.3158 | 6 | 4.28 | .000 ** |
| Total | 548 | 4.1332 | | | |

* $p < .05$ ** $p < .01$

A secondary analysis addressed the second part of the second hypothesis focused on support for the ACT Early model of risk. As with the first hypothesis, the results from the ANOVA demonstrated that the mean for the cluster Physical Complaints and Worries (PCW) fell between Well-Adapted and Average in the Low risk category; thus, a reordered hierarchy of clusters was examined in a post hoc comparison. Results indicated that the revised model of student educational risk was significant in terms of teacher expectations scores ($t=10.098$, $p = .000$)

The third hypothesis explored the relationship between teachers' perceived efficacy for working with behaviorally diverse students and their expectations for those students' future

outcomes. Analyses were conducted through Pearson Product Moment correlations, and were strongly positive, as expected, $r = .785$, $p = .000$ (2-tailed).

Teacher Interviews: Qualitative Data

How do the public school elementary level teachers contributing behavioral ratings of their students as well as their perceptions of efficacy and expectations for those students describe working with academically and behaviorally challenging students?

To explore the experiences of working with elementary students in schools considered at-risk due to poverty, structured interviews were conducted with the teachers. Several questions asked them to reflect on classroom behaviors, management and teaching styles, student accommodations and interventions, as well as their feelings and attitudes about diversity and their teaching careers. Responses were coded, assembled, and some trends emerged that provide preliminary insight to the practical issues of teacher efficacy and expectations for students. In the following passages, numbers in parentheses (e.g., 3rd) following quotation marks indicate the grade level of the teacher making the comment.

First of all, teachers were asked to give three descriptors for their job as teachers. For more than 60% of the teachers, the most common adjective offered was “challenging.” While several teachers mentioned “exciting” and “rewarding,” the second most mentioned descriptor was “tiring” or “exhausting.” As a fourth grade teacher elaborated, “It’s one-third academic, one-third mothering, and one-third social worker-if you expected it to be all academic, you’d be way off!”

The teachers described their motivation for choosing elementary education as a career in optimistic, if somewhat idealistic, terms. More than 75% of the teachers mentioned a desire to work with young children, expecting the job to be “meaningful and rewarding” (4th) and to have

"the potential to change the future, make a real difference" (2nd). In the practical experience of teaching, they report that their students have constituted both the most satisfying and most frustrating parts of their jobs. All teachers mentioned student progress and growth, "seeing the light come on when someone gets it" (1st) or "watching a child blossom and become confident" (3rd) as impressive and satisfying, both personally and professionally. While several teachers counted committee work, paperwork and record-keeping, and a lack of support from parents as unsatisfying elements, most teachers ranked student behavioral issues as the most frustrating and time consuming aspects of their jobs. Many teachers mentioned students who "are disrespectful to teachers and each other" (3rd), " use negative behaviors to where [the teacher] can't conduct class" (4th), "don't care, no responsibility, nothing seems to bother them" (1st), and unmotivated "kids with bad attitudes" (1st, 2nd, 4th).

The teachers describe their classrooms as busy environments with busy kids. As a fifth grade teacher eloquently described, "I feel like one of those wagon trains where I'm trying to hold back the horses and just kind of steer them. They've got so much energy in what they do and directions they want to go in, and I'm trying to keep them in line so we can get it all and still be productive." Many teachers talk about establishing rapport with the majority of their students and working to provide engaging curricular activity, but "it's amazing how just one or a few students can disrupt a whole class" (3rd). Seven teachers reported having two or three disruptive students, while four teachers reported almost half of their students as disruptive; the remaining teachers reported an average of four to six students. All but two of the teachers reported that at least one of these identified students was chronically disruptive. No teacher reported having classes devoid of disruptive students. A frustrated first grade teacher stated, "A severely

disruptive child…can completely stop a classroom. I mean they have the power and ability to keep anything good from happening in the classroom, and that's terrible."

When asked to describe behaviors that interfere with classroom instruction, teachers generated lists, with verbal behaviors being the most common: talking out, not raising hand, interrupting, rude remarks, teasing and name calling, tattling, arguing, threatening, and swearing (listed in order of frequency of occurrence). Physical behaviors included being off-task/inattentive, being out of seat, misuse of personal and others' property, not following directions, hyperactive, non-compliance or defiance, disorganized/unprepared, and pushing or striking others. Problems with weapons were not mentioned. The teachers stated that many of these behaviors were fairly common among students, particularly those behaviors at the head each of the lists. However, what seemed to differentiate the disruptive students from their classmates was the overall frequency and intensity of those disruptive behaviors. These students pose challenging management problems: "[Behavior management is] very effective for those who aren't getting in trouble often; but with those who seem to have trouble with their behaviors, it does not really seem to make a whole lot of difference" (2nd).

Teachers reported feeling less effective with these behaviorally challenging students. All the teachers described using some form of Assertive Discipline (Cantor, 1995) and token economies in their classrooms, which "works fine for 85% of them, but nothing has worked for the other 15% yet" (2nd). "Not a lot works for the long term,…behavior is so erratic, it's so inconsistent that it's just almost impossible to find something that works…" (3rd). Most teachers reported attempts to make classroom accommodations for these students: "…I had to adapt my strategy a bit for some students" (2nd), often in the form of behavioral contracts. Some had reservations about offering different plans: "Good behavior is expected and shouldn't have to be

constantly rewarded" (4th), and "Constantly rewarding them to do behaviors they should be doing by themselves doesn't seem fair to the other students" (3rd). A few teachers, more noticeably of older elementary students, focused blame on the student: "I think if it doesn't work for two children, it may just be those particular children" (4th) and "Some kids remind me of Pavlov's dogs, salivating for a prize" (3rd). Some reflected on the additional time required for designing and implementing accommodations: "Positive reinforcement works but tires you out" (1st). A few teachers realized that they were employing punishment strategies more often and were discouraged: "It gets to where you expect less, my downfall I guess, settle for 'just be quiet' but that's the wrong approach, but you get there…" (3rd) and "Using of out-of-class punishment – it relieves the situation in the room but doesn't do the child much good" (5th). In general, teachers' responses seemed to reflect an ability or desire to recognize and accommodate variability in academic ability and skills more than variability in behavioral ability and skills. However, many expressed an overall concern for needing additional academic and behavioral strategies for the "non-average" student "because you are always going to meet that one child who is going to do things you have never seen before" (1st).

Teachers described many classroom-wide behavior strategies that they felt were successful with most children: assertive discipline techniques (stoplights, clips, charts), positive remarks, privileges, modeling, role playing, discussion, token economies/response cost, time-out, "opportunity room" / in-school suspension, calling parents and notes home. In general, behavior management systems tended to rely on intervention rather than prevention. When asked about the explicit teaching of social skills, conflict resolution, and self-management skills to improve social behaviors, several teachers assigned those teaching tasks as the responsibility of the school counselor. A fourth grade teacher responded, "When I have to deal with feeling type stuff, the

counselor does that." Teachers who felt their management systems were successful and reported fewer disruptive students seemed to purposefully focus on developing positive relationships and a sense of classroom community in the classroom: "They have to know, I still care about you even when you screw up. I'm not going to give up on you…" (5th), "Good relationships improve everything from learning to behavior" (3rd), and "If I have good rapport and relationship with them, it makes them more willing to try, to learn, to want success" (1st).

When the topic of diversity in the classroom was raised, many teachers chose to comment on the disparate behavioral and learning abilities present in their regular education classrooms, in addition to or instead of addressing ethnic or cultural diversity: "Some of them are eighth, ninth grade levels and some are second, third grade level, and you have to find a way to mix them and get them to work together…" (5th), and "There's a very broad range (in my room)-some that test in the 6th percentile and some that test at the 99th percentile" (2nd). Teachers often reflected on the issues of the time, energy, resources, and necessary knowledge needed to adequately address the needs of students who required considerable individual academic and emotional support. Several used the word "overwhelming," and expressed confusion as to why special education services weren't available to aid many of these students.

# CHAPTER 5

# DISCUSSION

It appears that, for a sample of elementary level students deemed at-risk, teachers' sense of efficacy and their expectations for student outcomes are related to student behaviors, both adaptive and problematic. The findings of the present study provides further evidence that teacher efficacy and expectations constitute important classroom variables by demonstrating substantial variability in teacher efficacy and expectations for students with different behavioral patterns. As these behavior patterns represent differing levels of theoretical risk, teacher efficacy and expectations for student outcomes become linked to educational risk. Additionally, the two constructs of teacher efficacy and teacher expectations appear to be highly related, suggesting complementary social-cognitive processes.

The analyses of variance reflected the expected pattern of escalating educational risk, with one exception. For both efficacy and expectation, the mean scores of the cluster Physical Complaints and Worry fell between the Well-Adapted and Average clusters. This suggests that when teachers rate these students' classroom behaviors, they recognize student somatic and anxiety issues, but find these behaviors do not interfere with their ability to teach and interact. These score results may also reflect that students in the PCW cluster demonstrate at least average adaptive behaviors and neglible disruptive behaviors, characteristics of students with anxiety associated with high achievement motivation. Therefore, these students appear to present low educational risk consideration according to the ACT Early model. The change from moderate to low risk consideration does not change the theoretical model of risk so much as it offers a

refinement. In support, the teacher interview data do not reflect difficulty with this type of student; lists of problematic behaviors that concern and frustrate teachers do not include student complaining of physical discomfort or anxiousness. The lack of interaction by grade levels suggest that the application of the constructs of teacher efficacy and expectations and their relationship to educational risk begins as early as first grade and are consistently applied throughout elementary school.

Not surprisingly, teacher efficacy with individual students correlates strongly with their expectations for those students' outcomes, confirming Bandura's (1997) supposition that efficacy and expectations are probably constructed at the same time and exert influence on each other. Due to the nature of correlational data, no causation can be established; one cannot say that teacher efficacy determines the quality of expectations (or vice versa). However, data clearly demonstrate a large amount of shared variance, suggesting that the two constructs are closely aligned as teachers evaluate student academic and social behavior.

The qualitative data collected through interviews with the 34 elementary teachers illustrate the kind of behaviors that teachers find problematic and disruptive in their classrooms. Each teacher reported having at least a few disruptive students. None of the teachers mentioned student worry or complaints of physical symptoms as problematic school behavior. Interestingly, many students in their classes exhibit the disruptive behaviors described by the teachers; what seems to distinguish the highly disruptive students from the others is the frequency and intensity of the behaviors, rather than behavioral act itself. They expressed frustration at the lack of preparation in knowledge and skills for addressing these students, two main contributors to self-efficacy. These teachers are understandably concerned about the interruption of instructional time to attend to behavior that distracts a student and his or her classmates from learning

activities; however, they described implementing intervention strategies far more often than preventive ones. As intervention is implemented, teachers described having a difficult time reinforcing behaviorally challenging students and resort more often to punishment strategies. Often, a confrontational relationship develops between student and teacher establishing a pattern of negative expectations on the part of both. Many of the teachers stated that the explicit teaching of social skills is a separate responsibility belonging to the lone school counselor. They also responded that, with heavy curricular accountability, there is no room for "extras." In support of the literature, many teachers choose to address classroom diversity by discussing the large range of learning abilities represented in a regular education classroom. They felt that class size and diversity of ability levels (in addition to student achievement accountability through yearly testing) prohibit individualizing curriculum to match student needs. Many also indicated that they had not been trained to design and implement individualized curricula.

Limitations of the Study

Inferences made from the current study may be somewhat limited and should take into consideration the sample characteristics and the methodology. Participants were teachers and elementary-aged students from schools in communities with high poverty located in a small city in the Southeast. However, generalizations to similar samples can be posed with a moderate amount of confidence based on the large sample size and its similarity to community characteristics.

Another limitation of this study involves shared method variance, or a confounding source of variance, resulting from using the same rater to provide the data for both the independent variable (behavior clusters based on teacher ratings of student academic and social behaviors) and the dependent variables (teacher-rated efficacy and expectation scores). However,

research has shown teachers to be consistently valid and reliable raters of student school behavior, with teacher ratings being highly predictive of later adjustment (Verhulst, Koot, & Van der Ende, 1994). As perceptions of efficacy and expectations are personally determined by the teachers, the only source of these data would logically come from the teachers.

Another limitation concerns the size of the General Problems-Severe (GPS) cluster, represented by only 3.5% of the sample. In preliminary longitudinal analyses by Project ACT Early researchers (Baker, Kamphaus, & Horne, 1999), the GPS cluster constitutes a small but highly consistent membership of students who demonstrate numerous problems and limited competencies. Despite its small size, the GPS cluster groups children with a unique set of behaviors that place them at highest educational risk and, therefore, must be analyzed as its own cluster.

Qualitative data become "significant" as coded data converge to form a theme. An additional limit of this study is that, for practical purposes, all the teacher statements cannot be exhibited; instead, the researcher chooses certain statements that seem representative or illustrative, the selection of which may represent some amount of bias.

Implications for Future Research and Practice

This study is the first to examine teacher efficacy and expectations at the individual student level and relate the findings to student educational risk. The findings support and extend prior research while addressing the need for establishing meaningfulness of efficacy and expectation assessment through specificity (e.g., for individual students). Future research might address how teacher efficacy and expectations for student outcomes could be practically applied in schools as part of screening for early identification of educational risk. Research should be conducted longitudinally to investigate the consistency of efficacy and expectations for

individual students across different grade levels / teachers and the effects on educational risk status. Research might also investigate whether classes with more high risk students reduce efficacy and expectations for individual students by overextending teacher resources. Lastly, future research could focus on: (1) training for teachers to address improving efficacy and expectations through comprehensive professional development of skills for working with students of moderate to high educational risk, (2) interventions for students that equip them with better academic and social competencies, and (3) whether students exhibiting highest risk for poor educational outcomes are appropriately served by regular education teachers in regular education classes.

Educators and school psychologists should be aware the powerful connection between teacher efficacy, teacher expectations, and student behavior. This research suggests that teachers with low efficacy and low expectations for students may contribute to a student's risk for educational failure. Conversely, students with higher educational risk appear to burden their teachers and may contribute to reduced efficacy. Teacher education programs should consider more pre-service training and mentored experiences that equip teachers with additional skills to interact positively with students presenting with moderate to high behavioral risk. Classes having numerous high risk students could be reduced in size to limit the "overwhelming" and "exhausting" interactions with difficult students. Lastly, using the re-conceptualized definition of risk should prompt educators to re-examine how and to which students specialized school-based resources are allocated, with an emphasis on earliest identification of risk.

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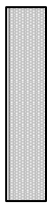
# APPENDICES

# APPENDIX A

## BASC-TRS STUDENT BEHAVIORAL CLUSTERS

The following charts (Figures A.1 through A.7) display the 14 behavioral subscales on the BASC TRS-C (Reynolds & Kamphaus, 1992) that comprise the unique combinations for the seven student behavioral clusters. Subscales, derived through teacher-ratings, represent school-related social and academic problem behaviors as well as adaptive behaviors. Subscale scores are reported as T-scores with a mean of 50, standard deviation of 10. Subscale T-scores falling within $\pm$ 7 points (non-significant) of the mean were omitted to clarify significant behavioral patterns.



School-related problem behaviors subscales:

Disruptive/Externalizing: Aggression, Hyperactivity, and Conduct Problems

Internalizing: Anxiety, Depression, and Somatization

School problems: Attention and Learning Problems

Other problems: Atypicality and Withdrawal

(T-scores $\geq$ 60 or one SD above the mean are considered significantly problematic)

Adaptive behavior subscales: Adaptability, Social Skills, Leadership, and Study Skills

(T-scores $\geq$ 60 or one SD above the mean are considered significantly adaptive; while T-scores $\leq$ 40 or one SD below the mean are considered deficit)

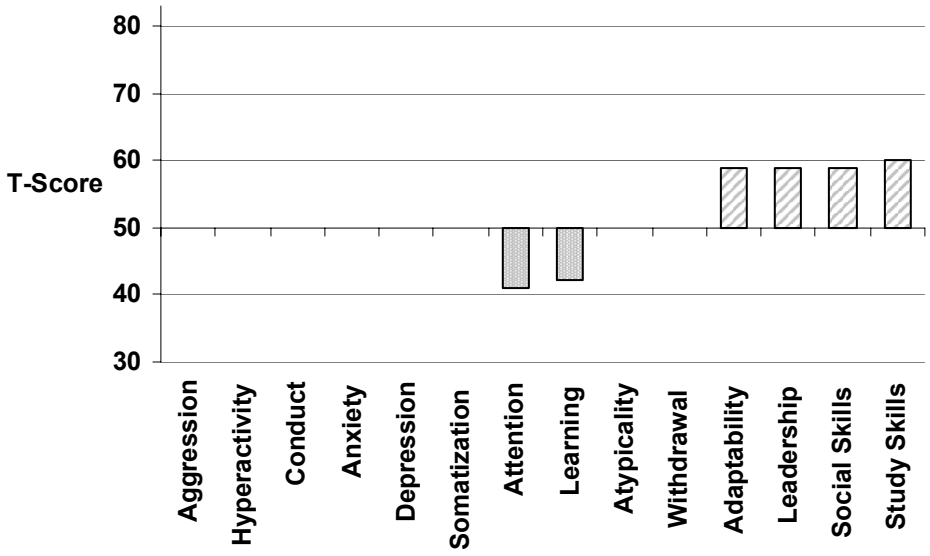



Figure A.1 Cluster 1 Well-Adapted: 34% of population; significant adaptive skills (T-score means for 4 adaptive behavior scales $\geq$ one SD from scale mean of 50) and absence of behavior and/or learning problems.

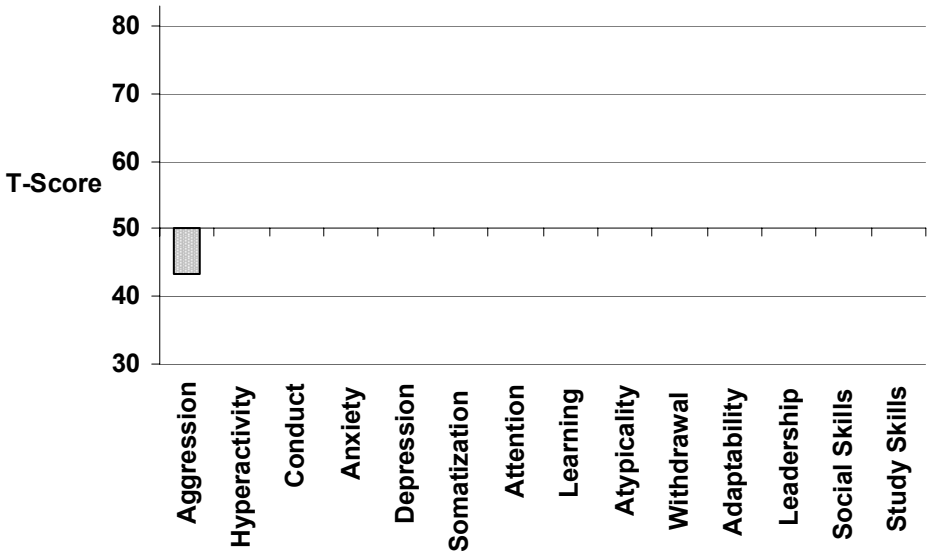



Figure A.2 Cluster 2 Average: 19% of population; average adaptive skills and absence of significant behavior and/or learning problems.

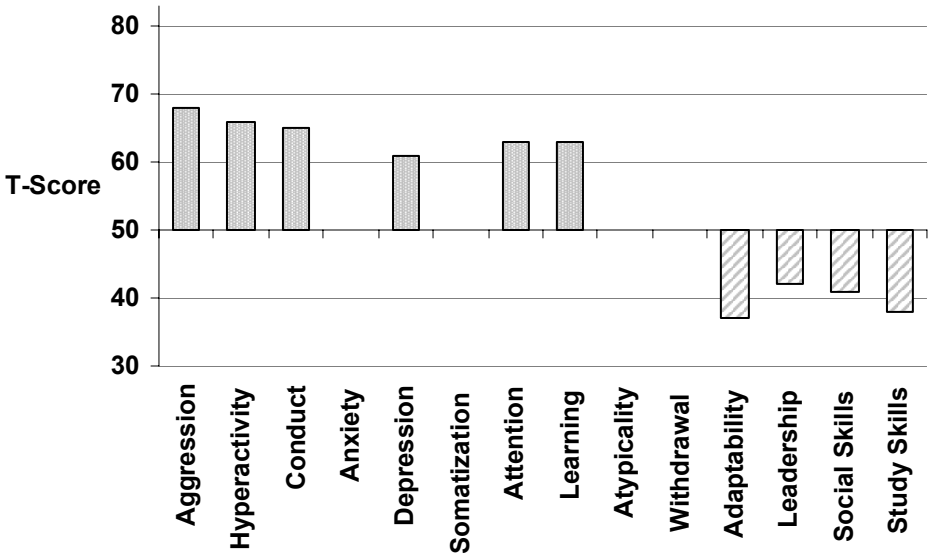



Figure A.3 Cluster 3 Disruptive Behavior Problems: 8% of population; significant behavior and learning problems (T-score means for 6 problem behavior scales $\geq$ one SD from scale mean of 50) and significant deficits in adaptive skills (T-score means for all 4 adaptive behavior scales $\leq$ one SD from scale mean of 50).

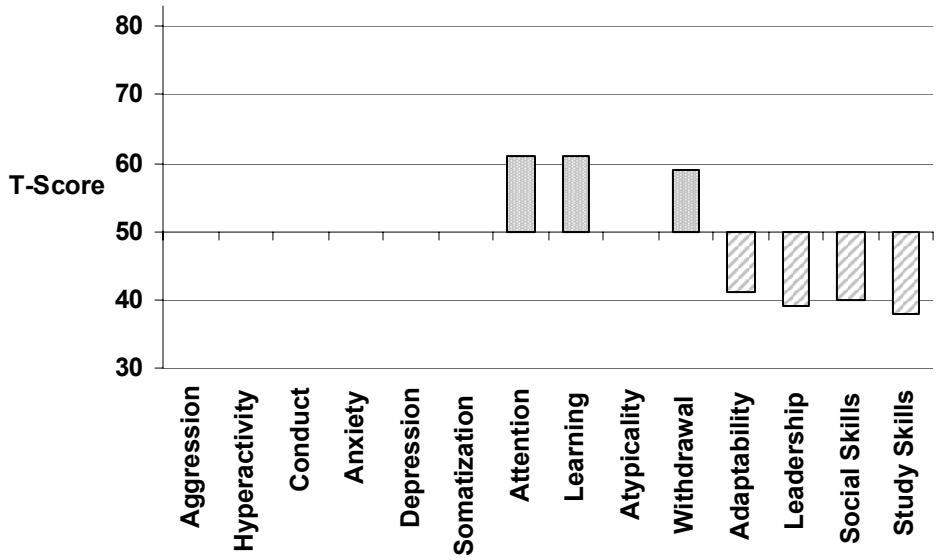



Figure A.4 Cluster 4 Learning Problems: 12% of population; significant learning behavior deficits (T-score means for 3 learning-related scales $\geq$ one SD from scale mean of 50); absence of disruptive behavior problems; significant deficits in adaptive skills (T-score means for all 4 adaptive behavior scales $\leq$ one SD from scale mean of 50).

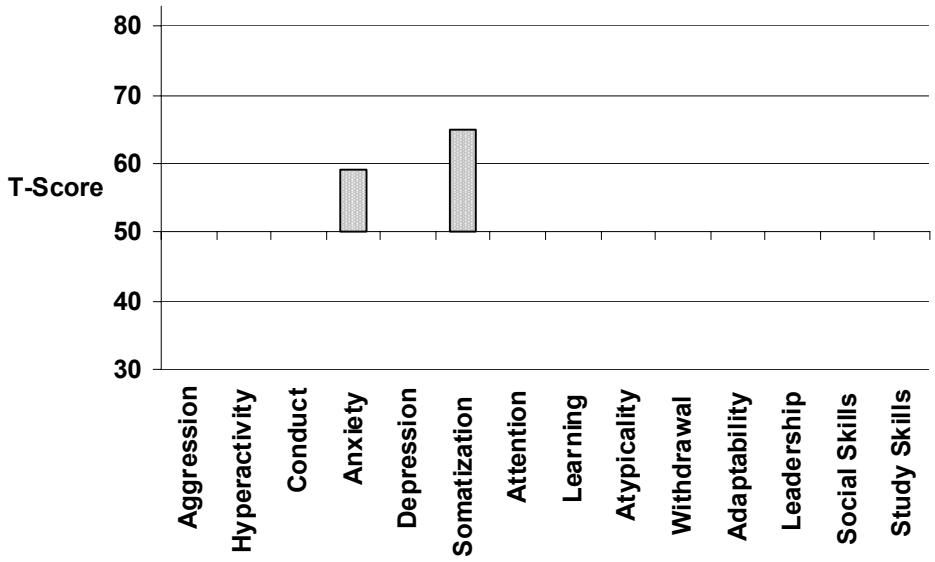



Figure A.5 Cluster 5 Physical Complaints and Worry: 11% of population; one significant behavior problem, Somatization (T-score mean ≥ one SD from scale mean of 50); absence of disruptive behavior problems; average adaptive skills. Somewhat elevated Anxiety subscale.

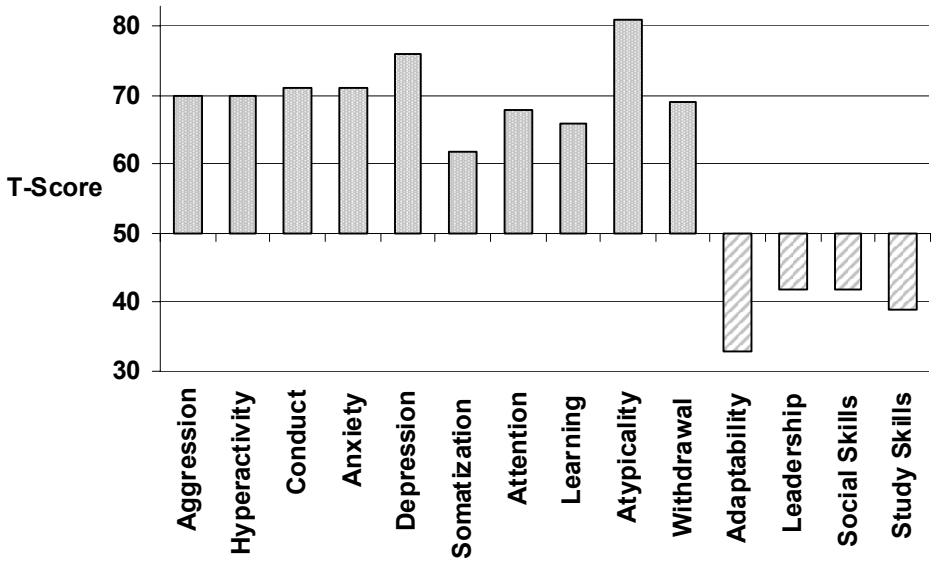



Figure A.6 Cluster 6 General Problems-Severe: 4% of population; significant learning and disruptive behavior deficits (T-score means for 6 learning and disruptive scales $\geq$ two SDs from scale mean of 50; T-score means for other 4 learning and disruptive scales $\geq$ one SD from scale mean of 50); significant deficits in adaptive skills (T-score means for all 4 adaptive behavior scales $\leq$ one SD from scale mean of 50 with Adaptability subscale approaching two SDs below the scale mean of 50).

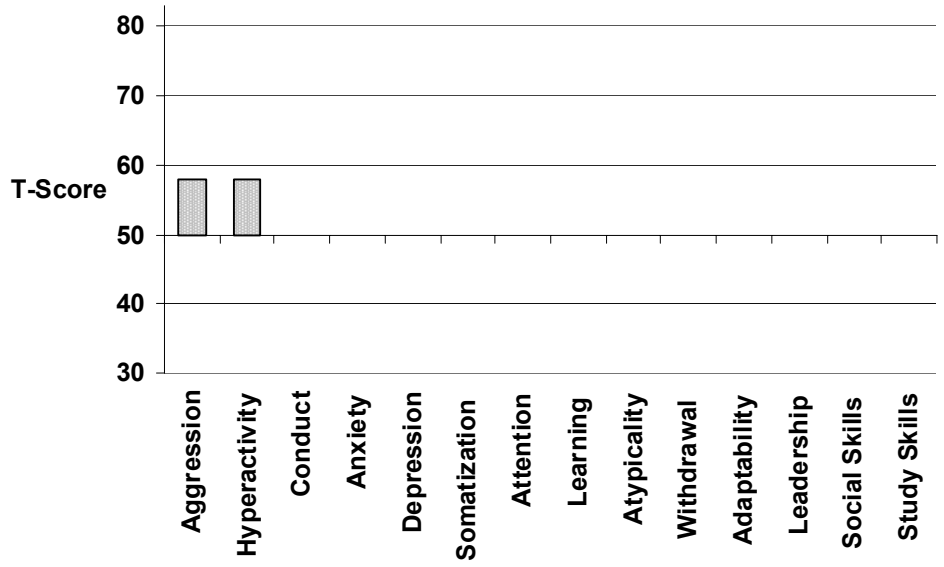



Figure A.7 Cluster 7 Mildly Disruptive: 12% of population; elevated Aggression and Hyperactive subscales but within one SD of scale mean of 50; average adaptive skills.

# APPENDIX B

## EFFICACY AND EXPECTATION MEASURE (E2M)

E2M Teacher-Rated Statements
Efficacy and Expectancy for Student Outcomes

Please indicate the degree to which each of the following statements reflects your expectations for this child. Please "bubble" one choice for each item.

| | Disagree completely | Disagree somewhat | Neutral | Agree somewhat | Agree completely |
|---|---|---|---|---|---|
| 36. This student will be able to accomplish his goals | 1 | 2 | 3 | 4 | 5 |
| 37. This student will be good at learning new skills | 1 | 2 | 3 | 4 | 5 |
| 38. This student will carry through on responsibilities | 1 | 2 | 3 | 4 | 5 |

Please indicate how each of the following statements applies to this child. Please "bubble" one choice for each item.

| | Highly uncertain | Somewhat uncertain | Uncertain | Somewhat confident | Highly confident |
|---|---|---|---|---|---|
| 39. I feel capable to help this student master the material taught this year | 1 | 2 | 3 | 4 | 5 |
| 40. I am certain I can manage this student's behavior | 1 | 2 | 3 | 4 | 5 |
| 41. I feel I can help this student become a successful student | 1 | 2 | 3 | 4 | 5 |
| 42. I feel capable of helping this student behave appropriately in my class | 1 | 2 | 3 | 4 | 5 |
| 43. I have the skills to work with this student | 1 | 2 | 3 | 4 | 5 |

# APPENDIX C

## STRUCTURED TEACHER INTERVIEW

Teacher _____
School _____
Interviewer _____
Date _____

Turn on the tape recorder.

"I would like to audio tape our interview. Is that all right with you?"

"I am interested in your experience as an elementary teacher."

Why did you become a teacher? What influenced you?

How long have you taught?

What is the most satisfying part of your job?

What is the least satisfying part of your job?

What is your overall goal for your students? What is the main accomplishment you desire for your students?

How would you describe your teaching style?

What instructional strategies do you use most with your students? (If the teacher states one, ask if there are others. Ask for an example of any strategy you don't recognize)

How often do you make instructional accommodations for students? For which students?

What do you do for classroom management? Describe how you maintain discipline in your classroom.

On a scale of 1 to 5 (1 is low, 5 is high), rate how effective those classroom management strategies are for the group of students you have in your class. Explain your rating.

Do you change or modify your management strategies for individual students? (If yes, have teacher describe examples)

Describe behaviors that are problematic in your classroom.

How many students in your class exhibit these behaviors regularly?

How many students would you describe as seriously disruptive? What behaviors are those students exhibiting?

What strategies have you tried with these students? (Refer back to the previous question to get specific examples)

What seems to work/ what hasn't worked?

What types of relationships do you try to develop with your students?
What factors are necessary for an effective working relationship with a student?

On a scale of 1 to 5 (1 is low, 5 is high), rate how important your relationship with students is to their success in school. Explain your rating.

In your class, in addition to academic subjects, do you teach **
social skills….
violence prevention…
character development….

Self-management skills such as how to manage feelings, general problem solving, confidence building…

(**If teacher says yes to any, ask for a brief description. Is it a "curricular program" or something they do on their own? How often do they teach it? If on their own,where do they find materials and ideas?)

Does your school offer any school-wide program for social skills, violence prevention, character development, and self-management skills?

What do you enjoy about teaching in classrooms with increasingly diverse populations?

What do you find challenging about teaching in classrooms with increasingly diverse populations?

Think of 3 adjectives that best describe your job as a teacher.

As we finish, is there anything you would like to tell about your experience as a teacher that we did not touch on?