

THE EFFECTS OF THREE SHORT-TERM INTERVENTIONS  
ON DISRUPTIVE SIXTH-GRADERS IN TRANSITION

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## ABSTRACT

### The Effects of Three Short-Term Interventions on Disruptive Sixth-Graders in Transition

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The effects of three short-term intervention programs on chronically disruptive sixth-graders ( $n = 24$ ) were measured during their transition from elementary to middle school. Treatment programs included Multi-faceted Psychological Consultation ( $n = 6$ ), Limited Psychological Consultation ( $n = 6$ ), and Time-Out Class Placement ( $n = 6$ ). A fourth group, Traditional Intervention, was served by existing school staff and was designated as a control group ( $n = 6$ ). Fifth-grade teachers rated subjects' school behavior (Dev-ereaux Elementary School Behavior Rating Scale and Portland Problem Rating Scale) in late spring. Sixth-grade teachers provided both a second prerating early in the fall term and posttest ratings after six weeks of intervention. Parents rated their children's behavior at home (Walker Problem Behavior Identification Checklist) prior to initiation of intervention programs and again at their conclusion. Subjects also rated themselves on self-concept (Piers-Harris Children's

Self-Concept Scale) immediately before and after the treatment period. Results revealed that the most intensive intervention program, Multi-faceted Psychological Consultation, was significantly superior to both other treatment groups and the control group in increasing self-concept of subjects ( $p < .05$ ). No significant differences between groups were found on home behavior ( $p > .05$ ), nor on either of the two measures of behavior in the classroom ( $p > .05$ ). Results are discussed with regard to their comparison to previous research findings and possible causative factors.

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The Effects of Three Short-Term Interventions  
on Disruptive Sixth-Graders in Transition

Children's disruptive classroom behavior represents both a critical problem and a formidable challenge to contemporary educators and psychologists. Larson (1974) laments that schools are required to manage increasing numbers of badly maladjusted children and "there is little question that discipline is far more difficult than ever before" (p. 4). In response to the real and pressing demands of the disciplinary problem, researchers and school administrators have come to view classroom management as "serious business of a high degree of importance" (Austin, 1965, p. 8). Parody (1965) pleads for the development of a demonstrative discipline for use with hard-core, marginal youngsters, cautioning that the problem cannot be minimized. Dreikurs and Cassell (1972, p. 11) express the sentiments of many in saying, "Presently our school system is in a dilemma regarding discipline. . . The controversy cannot be resolved until we give teachers alternate effective techniques for dealing with children who misbehave."

All teachers and school psychologists are acquainted with the problem of disruptive classroom behavior, but there is variation in its definitions. Although the term conjures visions of fighting or similarly dramatic acts, many researchers also consider more subtle behaviors to be disruptive (Gnagey, 1975). Fagen, Long, and Stevens (1975) define disruptive school behavior as behavior which is incompatible with volitional, socially acceptable efforts to master required tasks. They add that such activities as a child's quiet rocking back and forth or staring into space meet the terms of this definition.

Other psychologists advocate use of standardized student behavior rating scales in operationally defining inappropriate school behavior (Cowen, 1978), particularly when objective measures are to be used in research. Whether it is expressed in gross or subtle forms of disturbance, children's disruptive school behavior has dramatically detrimental effects on the child, his peers, and teachers alike (Ryan, 1976).

These negative results of disruption manifest themselves in the child in several ways. Students who engage in a large number of disruptive, off-task behaviors tend to function at a significantly lower level of academic achievement than do their on-task counterparts (Bennett, 1976).

The self-concept of chronically misbehaving children has been found to be significantly lower than that of behaving peers (Shiffler, Lynch-Sauer, & Nadelman, 1977). Some kinds of inappropriate behavior in middle and high school may be precursors of psychotic behavior in adulthood (Bower, 1960).

Not only does the misbehaving child suffer, his presence in a class also reduces the academic performance and productivity of fellow pupils (Horowitz, 1975). Children often express irritation with disruptive peers, complaining vehemently that their antics are distracting and noisy (Jones, 1978).

Perhaps the most glaringly negative effects of disruptive behavior are upon teacher attitude and effectiveness. Teachers of classes containing behaviorally and emotionally maladjusted students tend to substitute corrective behaviors for much of their instructional activity and experience greater fatigue and anxiety than do teachers of well-adjusted children (Amos & Orem, 1967; Wilde, 1974). Fagen, Long, and Stevens (1975) observed that a serious drain on both teacher resources and pupil potential accompanies disruption in the classroom.

On polls of job-related complaints, teachers consistently rank discipline as their most serious problem, ahead

of such critical issues as salary and work load (Amos & Orem, 1967; Howard, 1974). Howard (1974) challenges doubters to "ask any teacher what the biggest difficulty with children is and he or she will almost certainly answer, discipline and classroom control" (p. 81).

Disruptive behavior in schools is considered to be a direct cause for teachers abandoning the profession in record numbers. A survey by the Oregon Education Association reveals that 17% of the state's teachers left after one year. In Tennessee, 11.6% fled the schools, and in Dade County, Florida, 18.5% left teaching (Amos & Orem, 1967). Research indicates that this alarming retreat is prompted primarily by teachers' inability to maintain discipline (Peckenpaugh, 1974).

Rothman (1977) wryly suggests that the eager neophyte teacher flees after finding herself ill-trained to perform the duties of a prison guard. In San Francisco, the president of the Teacher Association charged bluntly that "teachers are sick with fear . . . Lack of classroom control is destroying the teaching profession" (Jones, 1973, p. 1). And a principal in Long Island concurs, "a quiet type of terror is driving us out of the public schools" (Jones, 1973, p. 2).

Estimates of the incidence of disruptive classroom behavior vary from a low of 2% to a more realistic 20% (Waksman, 1978). In a recent poll by the National Education Association, 24% of teachers in large urban schools reported that students had committed violent acts in class during the previous year. Of those polled, 78% viewed discipline as a frequent problem. New York City reported 541 attacks on teachers in 1972 and Detroit teachers reported an average of 25 assaults per month (Jones, 1973).

While estimates of incidence differ, it is known that behavior problems are the consistently leading stimuli for referral of children for psychological services (Larson, 1974). The second most frequent request, for psychological testing, is often prompted by concern about inappropriate behavior (Howard, 1974).

In terms of expenditures, increasingly greater proportions of school budgets are being appropriated for behavior management services. As well as monies for treatment of disruption, millions more are spent to repair or replace property maliciously damaged by maladjusted pupils (Flowers & Bolmeier, 1964).

"Misbehavior," sighed a harried fifth grade teacher, "is like the ocean. Sometimes it recedes and other times it engulfs you, but it never goes away" (Brewer, 1978).

Indeed, current research confirms the educational folklore that certain events or changes can intensify severity and escalate frequency of inappropriate behavior (Cramer, 1977). Observations made of retarded and emotionally disturbed children reveal that the beginning and ending of the school year, periods preceding holidays, and even minor schedule changes correlate with significant increases in off-task behavior (Betten, 1977).

Transition from one school or grade level to another is a particularly potent stressor for children. In keeping with the clinical tenet that change is difficult and often overwhelming to the disturbed child (Lippman, 1962; Shaw & Lucas, 1970), research reveals that transfer from elementary to junior high school coincides with a significant increase in disruptive behavior, particularly during the first four weeks in the new school (Teller, 1975). Gateman's study (1974) of fifth- and sixth-graders concluded that attitudes toward school are lowered significantly upon entrance to middle school.

Several causes for transitionally-related disruption have been postulated. Transitions typically involve transfer from open classroom of elementary school to the middle school's more structured, closed setting. Flynn & Rapoport (1976) report that children are more hyperactive in closed

classrooms. Peak's (1976) investigation found that traditional classrooms, common to junior high schools, promote less peer interaction than do open settings.

Other psychologists view transitional disruptions as a secondary symptom of primary anxiety. Anxiety stimulated by a shift from a familiar situation to a threatening environment is expressed in the form of acting-out or withdrawal (Leffingwell, 1977). Bond (1977) found that as anxiety increases, performance, which requires on-task behavior, decreases.

Differences in physical facilities may also adversely influence transitional adjustment (Cramer, 1977). Middle schools are typically larger and more confusing than are their feeder schools. Additionally, teachers' methods of relating to pupils in traditional, closed classrooms involve primarily teacher activity and punishment, in contrast to those in open settings who advocate student choice and peer involvement (Hochschild, 1976).

Whatever the causes, transitional disruption can have devastating results if not quickly modified. At best, the child's adjustment and academic productivity suffer. At worst and more likely, he may be expelled, suspended, or experience the embarrassment of mandatory transfer. Educators recite a depressing litany of outcomes:

disillusionment and antagonism toward education, negative self-concept, high drop-out rates, gross limitation in basic learning skills (Clark, 1965; Elliot, 1966; Graubard, 1969; Miller, 1970). Such events constitute "a great waste of human potential" (Joint Commission on Student Mental Health, 1974, p. 3).

Many strategies for managing disruptive behavior in schools have evolved. Of these, behavior therapy and its derivatives have emerged as the treatment of choice (O'Leary & O'Leary, 1973; Ryan, 1976). Goodall (1972, p. 53) echoes the sentiments of many in her enthusiastic advocacy, "The advent of behavior modification procedures in the classroom has clearly been one of the most heralded aspects of behavior change agents in the United States!" This behavioral model is typically introduced to schools by consulting psychologists who monitor implementation, commonly as part-time employees. An increasing number of school systems generally define the psychologist's role as that of behavioral consultant (Jolly, 1977), but with variation as to amount and kind of consultation utilized.

A major distinction in behavioral consultation methods concerns the delineation between prevention and intervention. Behavior modification techniques have been most frequently applied to the treatment of problem behaviors after

they are manifested overtly. Recently, their use has generalized to include activity aimed at the prevention of maladjustment. The prevention approach boasts many advocates (Lambert, 1965; Lawrence, 1971; Long, 1972; Sarason, 1976). Austin (1965, p. 40) notes that "the expanding role of public schools makes it necessary to plan preventative programs to deal with behavior." Peckenpaugh (1974, p. 97) adds, "The best cure lies in the practice of preventative discipline."

An alternative approach, used in Oregon schools, is the special classroom in which the disruptive child is placed when he becomes disruptive in regular class. Theoretically based on the behavioral concept of "time-out" (Drabman, 1971), these special classes extract the child from the situation in which disruption occurs, thereby removing both situational cues and positive reinforcement. Though both are rooted in behavioral theory, the special classroom differs from the consultation method in that it requires a full-time teacher with certification in special education (Parr, 1978).

Schools which lack the funding or inclination to adopt these specialized strategies use traditional methods for classroom management. This model relies solely on the resources available within the usual school setting, which

are typically limited to the principal, vice principal, and classroom teacher. Techniques used include suspension, expulsion, reprimand, and corporal punishment.

Although logic dictates that this model is less effective than more innovative strategies, it nonetheless attracts many staunch advocates and practitioners. Rothman (1977) reports that during the 1970-71 school year, 5,358 instances of corporal punishment occurred in Dallas, Texas. In 1973, California recorded 40,000 cases. A teacher is quoted as saying, "Corporal punishment is a strong deterrent . . . More children are injured by fellow students than were ever hurt by teachers" (Larson, 1974, p. 31). An NEA poll (1972) found that 74.2% of teachers responding favored expulsion as a disciplinary measure. Although the traditional method also has bitter critics (Martin & Lauridsen, 1974; Woods, 1975), its zealous proponents remain unchallenged due to dearth of convincing comparative research.

Exhaustive individual studies have been made on special classes and behavioral and consultation techniques (Cruikshank, 1967; Bateman, 1968; Morse, Finger, & Gilmore, 1968). However, scrutiny of professional literature reveals none that are addressed specifically to the behavior problems of children in transition from one school to another. Further, no research has been published which compares differing

behavioral consultation programs, special "time-out" classes, and traditional approaches with any population.

Professionals agree that transitionally-related misbehavior demands brief but intensive behavioral intervention (Loveland, 1978; White, 1978), but their convictions are necessarily based on clinical judgement rather than empirical data. A theoretical analog is noted in clinical literature in the form of "brief psychotherapy" (Updyke, 1976; Patterson, Levene, & Breger, 1977). Many psychotherapists advocate a short-term, intensive approach to disorders. Phobias, situational anxiety, grief (Malan, 1978), and sexual dysfunction (Jacobs, 1977) have proved responsive to such interventions. Gray (1976) successfully treated adolescent depression, and Epstein (1976) reported success in the brief treatment of children's behavior disorders.

These aforementioned pathologies share several characteristics with transitionally-triggered school disruption. Both these maladies and school disruption occur in response to a crisis event and are situationally stimulated. Manifestations are intensely dramatic, and an immediate and favorable response is typically derived from immediate and concentrated intervention.

theoretically applicable to the disruptive behavior of sixth-graders in transition.

Pragmatically, the situational demands and restrictions of the school setting favor these time-limited approaches. The unspoken middle school mandate, "Shape up or ship out," implies immediate behavioral change which is best stimulated by intensive intervention. Secondly, because most schools do not enjoy the luxury of full-time psychotherapists, necessary intervention must be amenable to application by part-time consultants. And budgetary demands dictate equitable rendering of psychological services, discouraging long-term concentration on a single problem area. Thus, short-term strategies meet both theoretical and practical requirements of the proposed research setting.

Although the consultation, special class, and traditional methods are commonly practiced in schools throughout the United States, their effectiveness with disruptive students in transitional settings had not been empirically investigated prior to the present study. The need for analysis of the comparative effectiveness of these approaches is critical (Forbes, 1978).

Taxpayers are demanding massive reductions in spending, prompting schools to seek empirical evidence to justify continued use of all psychological services. The sweeping

mandates of Public Law 94-142 rule that a "free public education in the least restrictive environment" (1977, p. 8) must be provided to educationally handicapped children. Included are children classified as Emotionally Handicapped, one of whose descriptors is, "inappropriate types of behavior. . . under normal circumstances" (1977, p. 11). Hence, the need for proven management methodology is underscored by both public sentiment and the provisions of federal legislation.

#### Purposes and Hypotheses

The purposes of the present study were threefold:

- (1) to evaluate the effects of three treatment programs on the classroom behavior of choronically disruptive sixth-graders in transition from elementary to middle school, as measured by teacher ratings of the children's behavior,
- (2) to determine effects of these treatment conditions on parents' ratings of their children's behavior, and (3) to measure effects of treatment levels upon the subjects' ratings of their own self-concept.

The hypotheses of the study were:

1. There will be no significant differences between groups on children's self-concept ratings.
2. The two teacher ratings of students' behavior will not significantly differ between groups.
3. No significant differences will be observed between groups on parents' ratings of subjects' behavior.

### Method

#### Subjects

Subjects were sixth grade students entering a large middle school in Portland, Oregon in the fall, 1978 semester. All were drawn from elementary feeder schools located in various socio-economic areas of the city. Sixteen fifth grade teachers, two in each of eight feeder schools, were asked to choose the most disruptive children in their respective classes. Those children selected were no younger than 10-1/2 years and no older than 12-1/2 years. Children with significantly-interfering intellectual or physical handicaps were excluded; no exclusions were made on the basis of sex or race. From the resulting subject pool, 24 subjects were randomly assigned to four group conditions of six subjects each.

MeasuresDevereaux Elementary School Behavior Rating Scale

(DESB). The Devereaux Elementary School Behavior Rating Scale (Spivak & Swift, 1967) was used to evaluate type and severity of disruptive behavior as viewed by teachers. It consists of 47 descriptive statements which are individually rated from one to five. A rating of 1 indicates that the described behavior "Never" occurs; 2, "Rarely"; 3, "Occasionally"; 4, "Often"; and 5, "Very Frequently." Eleven factor scores of problem behavior are yielded: Classroom Disturbance, Impatience, Disrespect-Defiance, External Blame, Achievement Anxiety, External Reliance, Comprehension, Inattentive-Withdrawn, Irrelevant-Responsiveness, Creative Initiative, Need Closeness to Teacher.

Raw scores can be converted to standard scores on each of the twelve factors. The instrument has been extensively used in both applied and research settings and enjoys a favorable reputation as an informative and objective measure of school behavior (Hochschild, 1977). Hying (1970) used the Devereaux to measure behavior of educationally handicapped school children and Taylor (1971) found it appropriate in assessing differential effects of direct versus indirect counseling. Spivak, Swift, and Prewitt (1971) used

the DESB in a major study of disturbed behavior in elementary schools.

Littell (1977, p. 69) notes that a major strength of the DESB is the "care with which the items were selected and grouped into the rating scale." The process involved a series of discussions with teachers of both normal and exceptional children, from which a pool of items was derived. After the item pool was used to rate normal and misbehaving children, the data were factor analyzed. Those items which best described factors common to both normal and exceptional children were included in the final form.

The median reliability of the DESB is reported to be .87. Validity is discussed by implication within the authors' description of use of the scale. Statistically significant but characteristically low correlations with measures of achievement and effort are reported. Further, "the DESB is a sophisticated and carefully developed rating scale and a convenient tool in research" (Littell, 1977, p. 69).

Portland Problem Rating Scale (PPRS). The PPRS, developed by Loveland and Waksman (1977), was used as a second measure of the number and severity of inappropriate classroom behavior, both before and after subjects' participation in the experiment. The PPRS was standardized on a

population of 468 school children from grades K-12 in Portland, Oregon who were referred for psychological intervention.

Their teachers were asked to list the children's problem classroom behaviors. Of the resulting total of 143 complaints, 30 emerged as being most frequent. These were behaviorally defined and age norms for both individual item and total score were derived. Inter-rated reliability is .89; test-retest reliability is higher at .94. Validity coefficients range from .85 to .92.

In its present form, the Portland Problem Rating Scale is completed by the classroom teacher. Problem behaviors are ranked on a scale of zero to five, with zero designating "No Problem" and five indicating a "Severe" disturbance. Its checklist format allows rapid but accurate administration and scoring.

Walker Problem Behavior Identification Checklist (WBC). Parents rated their children's behavior using the Walker Problem Behavior Identification Checklist (Walker, 1970), a 50-item measure yielding five factor scores of problem behavior which are easily observed in the home. These include: Acting Out, Withdrawal, Distractability, Disturbed Peer Relations, and Immaturity. As does the Devereaux scale, the Walker scale yields both raw and standard scores.

This measure was derived from doctoral dissertation research completed by Hill M. Walker at the University of Oregon in 1969. The item pool data were collected by abstracting operational, observable statements about behavior problem children. The fifty most frequently identified behaviors were rated by a behavior science panel as to their importance in handicapping adjustment. Differential score weights were then assigned on the basis of the panel's ratings.

Using this scale, 21 teachers of 534 fourth, fifth, and sixth grade teachers were asked to rate their pupils. Of the sample, 46 subjects were identified and matched with a control group for age, grade, and sex. Difference in the means between the disturbed and non-disturbed children was significant at the .001 level. Split-half reliability was .98 and correlation between scores of disturbed subjects and the dichotomous criterion of identification versus non-identification was .68. Item analysis reveals high correlation between individual items and total score.

Piers-Harris Children's Self-Concept Scale (CSCS).

Objective data on subjects' self-concepts were obtained using the Piers-Harris Children's Self-Concept Scale (Piers & Harris, 1963). This 80-item measure was completed by each subject who circled "Yes" or "No" in response to each item.

Examples of these items are: "I am often sad," and "I am an important member of my class." Resulting raw scores may be converted to percentiles or stanines.

The CSCS was standardized on 1,183 children in grades 4-12 in Pennsylvania schools. Test-retest reliability, using rather lengthy two- and four-month intervals, ranged from .71 to .77 and internal consistency from .78 to .93. In his review of the scale, Bentler (1977, p. 124) notes that Piers and Harris achieved "reasonable success" in eliminating correlation with social desirability. He adds, "The authors have not only produced a psychometrically adequate scale. It is also recommended for studies of change in self-concept" (1977, p. 124).

The Piers-Harris Children's Self-Concept Scale has been widely used in academic settings (Grabe, 1976). In separate studies, Guardo (1969) and Creek (1978) found it to be an appropriate measure of self-concept in sixth-graders. Combs (1970) successfully used the CSCS in a comprehensive study of self-concept of fourth-graders. Studying the effects of verbal reinforcement on self-concept, Felker and Thomas (1971) found the Piers-Harris Scale to be a valuable research tool. Harris and Braun (1971) chose the CSCS in their study of black children, citing its lack of racial bias.

Procedure

Subject selection. Subjects were selected from a pool of students entering sixth grade in a large junior high school in Portland, Oregon, who had been selected by their fifth grade teachers as being "highly disruptive." Each teacher was individually interviewed by the experimenter, who demonstrated use of the rating scales and explained selection criteria. Teachers were asked to think carefully about their students and complete the two ratings on each child selected. Rating scales were retrieved one week later. These fifth grade teachers were then instructed to refrain from discussing either the names or ratings of the students with anyone.

The experimenter removed from the pool students who failed to meet age requirements. Children moving from the area were also excluded. Subjects were then randomly assigned to the four treatment levels using a table of random numbers.

After the respective group assignments were made, parents of subjects were contacted by telephone to arrange an interview in their homes. At this meeting, the experimenter explained the study, answered questions, and advised parents of their rights and responsibilities. Parents were asked to sign the Parental Consent Form and to complete the Walker

Problem Behavior Identification Checklist. They were asked not to discuss the study with their child or their child's sixth grade teacher.

Ten days after the beginning of school in the fall, a second series of pre-ratings was completed. The purposes of this were threefold: (1) to detect any maturational effects of summer vacation, (2) to confirm continued presence of disruptive behavior, and (3) to provide an additional measure of disruptive behavior which could be used in comparison with post-treatment ratings.

On the 11th day of the fall semester, sixth grade teachers completed the Devereaux Elementary School Behavior Rating Scale and the Portland Problem Rating Scale on each of the subjects. The subjects completed the Piers-Harris Children's Self-Concept Scale during a free activity period at school.

Treatments began on the 12th day of school, except for the pre-school orientation session which had already been held. Treatments continued for six weeks, after which post-measures were made using the aforementioned rating scales. Expenditure of man-hours for each of the treatments and the control group was monitored by those persons involved in each group.

Administration of treatments. Three treatment levels and one control group were used. Subjects in Group 1, the Multifaceted Psychological Consultation Group, received the most intensive program of treatment, incorporating both intervention and prevention activity. Prevention assumed the form of a group orientation session held one week prior to the beginning of fall semester.

This 1-1/2-hour orientation meeting was held at the new middle school and began with group members seated in a circle in a quiet room. The experimenter introduced herself by name and as "a person who will be helping you to start off successfully in middle school." The experimenter explained that she would be at school two days a week and that the subjects might see her talking with their teachers or in their classrooms.

The school's rules were read and time for questions allotted. Subject were encouraged to discuss the rules, how they differed from those in elementary school, whether they seemed reasonable, and which might be difficult to obey. The experimenter asked group members to think of ways that these rules could be remembered and obeyed, and to write suggestions on a 3 x 5 inch index card for future reference.

The principal and vice principal entered, were introduced, and made brief (3-minute) welcoming statements. They

presented subjects with their fall class schedules and answered questions. A tour of the building followed which included visits to classrooms, the gymnasium, cafeteria, restrooms, and playgrounds. Following the tour, subjects adjourned to the lounge for snacks while the experimenter accompanied individual students through the building again in order of their respective class schedules. After a five-minute period for remaining questions, the orientation session was concluded.

Intervention aspects for Group 1 focused on psychological consultation of a particular type and amount. Two full days of consultation per week were provided by the experimenter. Her activity included scheduled twice-weekly teacher contact, during which individual students were discussed and suggestions for management were given. Content of consultation relied heavily on behavioral contracting which entailed consultant-student contact as the psychologist monitored contractual agreements. Those persons involved in managing behavior of subjects in Group 1 included the consulting psychologist, the teacher as she operated under the psychologist's direction, and the parents. The principal and vice principal were excluded from formal contact with subjects in Group 1 and those students were not sent to the special time-out classroom.

The consultant also conducted one scheduled, 40-minute session of behavioral group counseling per week with subjects in Group 1, held during the last period on Fridays. Emphasis was on positive verbal reinforcement for positive statements, reports of success in the classroom, and expressed willingness to seek appropriate solutions to teacher-student conflict. The psychologist also served as facilitator of peer support and reinforcement for appropriate behaviors.

Parent-consultant contact was most intensive for Group 1. The experimenter telephoned parents of each subject on weekends to discuss the subject's performance during the previous week, emphasizing positive feedback and areas of improvement and offering suggestions for parental follow-up. Weekly written feedback was also provided to parents on a 3 x 5 inch index card which was taken home by the child, signed by parents, and returned the following Monday. The behavior problems rated by teachers as the three most disruptive were listed on each child's card, with a checklist for the teacher to mark "No Problem," "Improved," or "Needs Work."

Treatment Group 2, the Limited Psychological Consultation Group, was restricted to an intervention approach which excluded prevention services of any kind. Psychological

consultation was rendered by the school psychologist in one-half the amount as in Group 1, or one day per week. Consultation was strictly limited to scheduled, once-weekly teacher contact, wherein the psychologist instructed teachers in management techniques and monitored programs but did not personally see the children. Group 2's consultant, like his counterpart in Group 1, was behaviorally oriented and focused on behavior modification technology. However, treatment differed significantly in that Group 2's consultation strictly excluded behavioral contracting.

The psychologist's contacts with parents of children in the Limited Consultation Group (Group 2) was limited to those necessary to meet legal and ethical requirements. In the one instance when a parent requested a meeting to discuss her child, the consultant designated another staff member to provide the requested information. No verbal or written feedback was provided to parents, nor were Weekly Behavior Checklist cards used. Hence, Groups 1 and 2 differed not only in amount of consultation rendered, but also in the use versus non-use of contracting and parental contact.

The Time-Out Class Placement Group, Group 3, assigned subjects to the special time-out classroom on an as-needed basis. They were maintained in regular classes until their

behavior became intolerable as determined by the teacher. Students then placed in the special class remained there for the duration of the class period, where their classwork continued under supervision of the special class teacher. Students sat at a 3-sided carrel and were not allowed to talk or pursue activities other than schoolwork. At the end of the class period, they returned to regular class, there to remain until their behavior again merited temporary placement in the special setting.

Subjects in Group 3 received neither psychological consultation nor preventative services. Their behavior was managed solely by use of the special classroom and its teacher. This teacher's contacts with subjects were unscheduled, determined by referral from the regular classroom. Parents were not routinely contacted and parental contact with the special time-out class teacher was to be avoided. Had any parental inquiries arisen, the principal would have been called upon to answer them but would have provided no disciplinary activity.

Subjects in Group 4, the Traditional Intervention Group, served as controls and received no psychological consultation. Neither were they assigned to the special classroom. Their disruptive behavior was managed by resources and personnel available within the school setting, which

were limited to the principal, vice principal, and regular classroom teacher. No preventative services were provided and subjects received attention only after they committed significant behavioral infractions. Parental contact was made only in response to parents' request and did not involve instructions or suggestions on behavior management.

Techniques used were drawn from traditional methods of child management. For experimental purity, they were operationally limited to suspension, expulsion, conferences, detention after school or during free periods, and corporal punishment. No counseling, time-out, or structured positive feedback was rendered.

It should be noted that although Group 4 served as a control group it was technically a treatment in that the disruptive behavior was attended to. Both ethical considerations and school district policy prevented implementation of research which totally ignored disruptive behavior. However, in the definition of treatment as activity requiring professional personnel or procedures which are outside the realm of usual school activity, Group 4 qualified as a control group. Given restrictions of school policy and ethical demands, the Traditional Intervention program was as close an approximation to a pure control group as possible. Additionally, its inclusion provided valuable and interesting

information on the effectiveness of traditional methods as compared to more specialized procedures. Differences between the four treatment programs are illustrated in Table 1.

Several procedural aspects of the study bear mention. Although the school setting allows the experimenter less latitude than does the laboratory, efforts were made to assure highest possible levels of control. Both parents and fifth grade teachers were instructed not to discuss the study with either the children or other teachers. To control for differences in teacher competency, subjects were randomly assigned to the four sixth grade teachers using a table of random numbers. Although these teachers were aware that a study was being conducted and that they were to strictly follow directions regarding which child received which treatment, they were not given specific information until the research was completed. Hence, probability of contamination was reduced through precautionary measures.

To prevent any possible detrimental effects upon subjects, a prospectus of the study was carefully scrutinized and approved by the Human Research Committee of Texas Woman's University.

Table 1

## Experimental Activities of Treatment Groups

1, 2, and 3 and Control Group 4

Activity	Groups			
	1	2	3	4
Teacher Consulta- tion	Scheduled 2x/week	Scheduled 1x/week	Informal infrequent	Informal infrequent
Outside Consultant	Psycholo- gist	Psycholo- gist	None	None
Child Contact	Scheduled 2x/week contracting	None	Unscheduled supervisory	Unscheduled punitive
Verbal Parent Contract	Scheduled 1x/week therapeutic	Avoided	Incidental nonthera- peutic	None
Written Parent Contact	Scheduled 1x/week	None	None	None
Group Counseling	Scheduled 40 minutes 1x/week	None	None	None
Time Expendi- ture	2 days/ week	1 day/week	5 days/ week	Incidental approximate- ly 2 hrs/ week

A teacher training program was instituted primarily to convey standardized behavior-identification procedures. This program involved a two-hour training session for all sixth-grade teachers. This experimenter-conducted session included the following activities:

1. Introduction. Ten minutes of welcome and discussion of need for training in the use of behavior rating scales and their value in the present research.

2. Types of scales. Twenty minutes discussion of different types of measuring instruments and objective standards for their use in identifying and reporting disruptive behaviors.

3. Examination of rating scales to be used in the present research. Thirty minutes were devoted to close, experimenter-directed scrutiny of the Devereaux Elementary School Behavior Rating Scale and the Portland Problem Rating Scale. Discussion included explanation of directions and emphasis on need for objectivity.

4. Practice in use of rating scales. For 40 minutes teachers practiced administering and scoring the rating scales using as mock subjects teacher-selected pupils from their previous classes. Teachers were instructed to "choose a child from last year's class and complete the rating scale

on his or her behavior. Do not use his or her name, but concentrate on objectively rating the behavior."

5. Questions and answer session. The experimenter then answered questions for ten minutes.

6. Distribution of rating scales. During the remaining ten minutes, teachers received blank copies of the two rating scales used in the present research, with instructions as to deadlines for completion.

### Design and Analysis

Design. A variation of Campbell and Stanley's (1963) pretest-posttest control group design was used. Two premeasures were included for experimental validity. Figure 1 is presented for conceptual illustration.

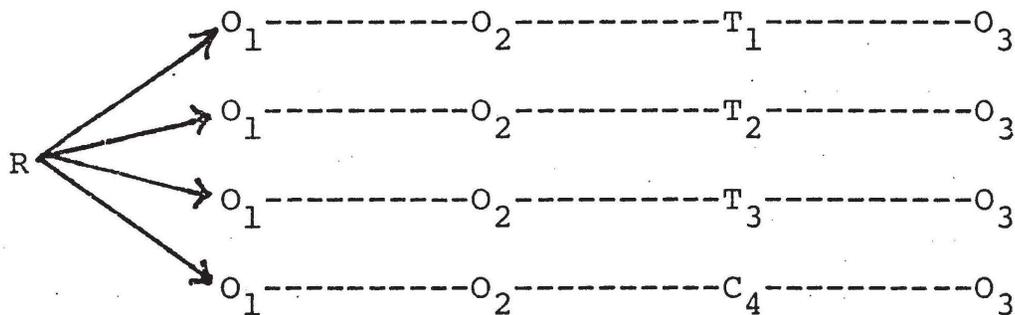


Figure 1. Design schema for treatment groups 1, 2, and 3 and control group 4

The symbols in the schema are defined as:

- R = Random assignment of 24 subjects in the subject pool to the four conditions
- O<sub>1</sub> = Pretest measures administered during the spring semester, three months prior to beginning of O<sub>2</sub> procedures
- O<sub>2</sub> = Pretest measures administered 10 school days after the beginning of fall semester
- T<sub>1</sub> = Treatment Group 1 (Multi-faceted Psychological Consultation)
- T<sub>2</sub> = Treatment Group 2 (Limited Psychological Consultation)
- T<sub>3</sub> = Treatment Group 3 (Time-Out Class Placement)
- C<sub>4</sub> = Control Group 4 (Traditional Intervention)
- O<sub>3</sub> = Posttest measures administered six weeks after initiation of T<sub>1</sub>, T<sub>2</sub>, T<sub>3</sub>, and C<sub>4</sub> procedures

In compliance with Campbell and Stanley's (1963) recommendation, data from all subjects, control and experimental, who completed all measures were utilized to minimize sampling bias. The design provided two pre-measures and one post-measure for evaluating influence of treatment levels on behavior. Random assignment of subjects to the four groups and to the four sixth grade teachers provided control for regression toward the mean and reduced confounding from subject selection.

Statistical analysis. Pretest and posttest comparisons measured monotonic trends for independent samples. Analysis of covariance, using the pre-measures as covariates, provided between-data measures (Glass & Stanley, 1970). Using the Newman-Keuls test, post hoc analyses were performed on significant pairwise comparisons. Alpha level was set at .05.

### Results

The 24 subjects constituting the research sample included 5 females (21%) and 19 males (79%). They ranged in age from 10 years, 10 months to 12 years, 2 months, with the majority (79%) falling between 11 and 11-1/2 years. Nine subjects (38%) had completed fifth grade in the southeast sector of the city, and 7 (29%) had attended mid-eastside city schools. Eight (33%) students were drawn from elementary schools in the northeast area. Most (83%) were natives of the Pacific Northwest (Oregon, Washington, northern California), as compared to 8% who were born in the Southwest. The northeastern and southeastern states were equally represented, with each respectively contributing 4% of the subjects. Caucasians composed 71% of the sample and 29% were Black. Only 2 (8%) of the subjects had no siblings, while 19 (19%) reported having one or more brothers or sisters. Families of 63% included two parents

and single parent families accounted for the remaining 38% (see Table 2).

Table 2

Demographic Information on Subject Sample by Percentages\*

Sex		Female 20.8	Male 79.2	
Age	10.5-11 years 4.2	11-11.5 years 79.2	11.5-12 years 8.3	12-12.5 years 8.3
Location of Elementary School Attended	Southeast City Sector 37.5	Mideast City Sector 29.2	Northeast City Sector 33.3	
Birthplace	Pacific Northwest 83.3	Southwest 8.3	Northeast 4.2	Southeast 4.2
Ethnicity	Caucasian 70.8	Black 29.2	Oriental 0.0	Other 0.0
Siblings	None 8.3	1 or More 91.7		
Family	Single Parent 37.5	2 Parents 62.5		

\*Data obtained from school cumulative records.

Fifth grade teachers identified a subject pool of chronic disrupters and rated each on two pretest measures of classroom behavior (DESB and PPRS) in the spring of 1978. A sample of 24 subjects was randomly drawn and assigned to 4 treatment programs of 6 students each. In mid-September,

a second pre-rating of school behavior, using the same instruments (DESB and PPRS), was administered by sixth-grade teachers. Two additional pretests were performed as measures of dependent variability. Parents rated their children's behavior in the home (WBC) and subjects themselves completed a pretest of self-concept (CSCS).

Following a 6-week treatment period, subjects were posttested on the dependent variables. The entire sample remained intact throughout the study, enabling acquisition of Pretest 1, Pretest 2, and Posttest measures on dependent variables for all 24 subjects.

During the treatment period, 22 subjects and their teachers attended Outdoor School, a 5-day nature study and camping experience. However, treatment programs continued in the wilderness setting with negligible difficulty.

#### Results of Statistical Tests of Hypotheses

The one-way Ancova test revealed that treatment programs significantly differed in effect upon self-concept as measured by the CSCS scores ( $F(3, 19) = 3.80, p < .05$ ) (see Table 3). The null hypothesis of no difference between groups can be confidently rejected. The Newman-Keuls test (see Table 5) indicates that differences between Group 1's adjusted posttest mean and those of Groups 2, 3, and 4 exceed critical range requirements. This Multi-faceted

Psychological Consultation program (Group 1) handily emerges as diverging significantly from other treatment programs. However, pairwise comparisons between adjusted posttest means of all other interventions, exclusive of Group 1, reveal that none reach or exceed critical range requirements.

Table 3

Results of One-way Ancova Test on Piers-Harris Children's Self-Concept Scale Posttest Scores by Treatment Program with CSCS Pretest as Covariate

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	<u>p</u>
CSCS Pretest	1821.23	1	1821.23	67.18	.001
Treatment Program	309.00	3	103.00	3.80	.027*
Residual	515.10	19	27.11		
Total	2645.33	23	115.01		

Table 4

Piers-Harris Children's Self-Concept Scale Pretest,  
Posttest, and Adjusted Mean Scores,  
and Standard Deviations

Group	Pretest	Posttest	Adjusted Means
1	21.67 (15.18)	15.00 (11.97)	14.58
2	20.00 (5.55)	22.00 (8.50)	22.89
3	17.17 (7.47)	18.50 (4.93)	21.61
4	25.67 (14.77)	27.17 (13.86)	23.61

Table 5

Results of Newman-Keuls Test on Children's Self-Concept Scale Adjusted Posttest Means

Levels							
(Ordered by Size of Adjusted Posttest Means)							
	a <sub>1</sub>	a <sub>3</sub>	a <sub>2</sub>	a <sub>4</sub>	r	CR N-K	
A <sub>i</sub>	14.58	21.61	22.99	23.61			
A <sub>1</sub>	14.58	-	7.03*	8.41*	9.03*	4	8.46
A <sub>3</sub>	21.61	-	1.38	2.00	3	7.64	
A <sub>2</sub>	22.99		-	.62	2	6.30	
A <sub>4</sub>	23.61			-	-	-	

\*p < .05

Differences between groups were not found to be significant on either of the teacher ratings of subjects' classroom behavior (DESB or PPRS), dictating acceptance of the null hypothesis of no difference. The one-way Ancova procedure, performed on the DESB posttest scores, indicates that  $p$  does not approach the required level for significance ( $F(3, 18) = .12, p > .05$ ) (See Table 6).

Superficial examination of group means reveals that Group 1's mean of 86.60 is markedly below those of the three other treatment groups, which cluster consistently around an approximate value of 119.00 (See Table 7). Because the treatment program for this group included a pre-school orientation session but other programs did not, the possibility that this might have significantly deflated Pretest 2 scores was explored. A one-way Ancova on Dev-ereaux Pretest 2 scores by treatment program with Pretest 1 scores as the covariate discounted this supposition, yielding a nonsignificant  $F$  of .12 ( $F(1,4) = .12; p > .05$ ) (See Table 8). Therefore, although the group receiving pre-school orientation produced observably lower Pretest 2 scores than did other groups, the between-groups difference did not prove to be significant at the .05 level.

Table 6

Results of One-way Ancova Test on Devereaux Elementary School Behavior Rating Scale Posttest Scores by Treatment Program with DESB Pretests 1 and 2 as Covariates

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	p
DESB Pretest 1	503.93	1	503.93	.654	.429
DESB Pretest 2	21600.66	1	21600.66	28.05	.001
Treatment Program	270.73	3	90.24	.12	.95
Residual	13860.28	18	770.02		
Total	42590.96	23	1851.18		

Table 7

Devereaux Elementary School Behavior Rating Scale Pretest 1, Pretest 2, Posttest, and Adjusted Posttest Mean Scores, and Standard Deviations

Group	Pretest 1	Pretest 2	Posttest	Adjusted Means
1	95.17 (9.62)	90.33 (31.35)	86.60 (38.94)	115.00
2	98.00 (11.35)	124.00 (22.85)	118.67 (39.82)	104.95
3	99.17 (22.04)	120.00 (29.23)	119.00 (29.25)	110.95
4	94.67 (24.25)	118.00 (34.21)	119.17 (59.86)	111.94

Table 8

Results of One-way Ancova Test on Devereaux Elementary  
 School Behavior Rating Scale Pretest 2 Scores by  
 Treatment Program with DESB Pretest 1  
 as Covariate

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	p
DESB Pretest 1	8624.47	1	8624.47	.12	.73
Treatment Program	434789.20	3	144929.73	2.04	.14
Residual	1349919.70	19	71048.40		
Total	1793333.30	23	77971.02		

Treatment group differences measured by the Portland Problem Rating Scale, like those of the DESB, proved to be nonsignificant when analyzed with the one-way Ancova test ( $F(3,18) = .52, p > .05$ ) (See Table 9). The null hypothesis must again be accepted with regard to treatment effects between groups upon subjects' classroom behavior.

As in the case of the DESB, Group 1's second PPRS pretest scores initially appeared to be significantly lower than those of other groups (See Table 10). Again, an additional analysis was applied to discern significant differences between groups on Pretests 1 and 2, occurring possibly as a result of Group 1's orientation session. Results of a one-way Analysis of Covariance, however, failed to detect significant differences ( $F(1, 18) = .14, p > .05$ ) (See Table 11).

Hence, despite gross differences between intervention programs in both type and amount of treatment and specific targeting of school behavior, none emerged as having differentially significant effects upon subjects' classroom behavior. These treatment groups not only failed to yield anticipated dramatic and specific differences in relative effectiveness, but also fell short of even minimal requirements for overall significance at the rather moderate .05 level.

Table 9

Results of One-way Ancova Test on Portland Problem Rating Scale Posttest Scores by Treatment Program with PPRS Pretests 1 and 2 as Covariates

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	p
PPRS Pretest 1	200.42	1	200.42	2.25	.15
PPRS Pretest 2	3766.77	1	3766.77	42.26	.001
Treatment Program	139.98	3	46.66	.52	.672
Residual	1604.47	18	89.14		
Total	11771.33	23	511.80		

Table 10

Portland Problem Rating Scale Pretest 1, Pretest 2, Posttest, and Adjusted Posttest Mean Scores, and Standard Deviations

Group	Pretest 1	Pretest 2	Posttest	Adjusted Means
1	30.83 (17.59)	22.50 (16.82)	16.33 (15.90)	20.14
2	36.33 (8.04)	40.67 (9.95)	36.33 (14.50)	28.45
3	33.33 (18.66)	39.00 (21.75)	40.00 (24.81)	33.94
4	30.00 (18.15)	32.83 (24.91)	34.00 (29.61)	34.16

Table 11

Results of One-way Ancova Test on Portland Problem Rating  
Scale Pretest 2 Scores by Treatment Program with  
PPRS Pretest 1 as Covariate

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	p
PPRS Pretest 1	7951.08	1	7951.08	14.63	.001
Treatment Program	3623.67	3	1207.89	2.22	.12
Residual	11574.75	4	2893.69	5.32	.01
Total	21903.83	23	952.34		

The null hypothesis of no difference between pretest-posttest scores on the Walker Problem Behavior Identification Checklist must also be accepted. The one-way Ancova test (See Table 12) between groups on pretest-posttest scores yielded a nonsignificant  $p$  of .17 ( $F(3, 19) = 1.86$ ,  $p > .05$ ). WBD means displayed in Table 13 confirm that variation among treatment programs was modest, particularly among Groups 2, 3, and 4, which ranged from 18.9 to 21.84.

Table 12

Results of One-way Ancova Test on Walker Problem Behavior Identification Checklist Posttest Scores by Treatment Program with WBC Pretest as Covariate

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	$p$
WBC Pretest	2952.83	1	2952.83	88.07	.001
Treatment Program	186.07	3	62.02	1.86	.172
Residual	637.06	19	33.53		
Total	3775.96	23	164.17		

Table 13

Walker Problem Behavior Identification Checklist Pretest, Posttest, and Adjusted Mean Scores, and Standard Deviations

Group	Pretest	Posttest	Adjusted Means
1	22.17 (8.52)	15.67 (6.86)	14.31
2	20.17 (14.99)	18.33 (18.56)	18.89
3	19.00 (8.58)	20.17 (10.01)	21.84
4	21.67 (17.01)	21.00 (15.56)	20.12

### Discussion

The present study measured the effects of three short-term interventions on chronically disruptive students in transition from elementary to middle school. Despite expectation that massive differences would occur between groups on several dependent variables, only one intervention program proved to be significant. Treatment Group 1 (Multi-faceted Psychological Consultation), the most intensive program of the four, empirically emerged as an effective approach to bolstering self-concept.

Members of Group 1, however, did not generalize their gains in self-concept to include behavioral change. These

subjects failed to differ from their counterparts in Groups 2, 3, and 4 on ratings of school and home behavior.

These results prompt perplexity on several points. Primarily, their inconsistency with previous research findings renders them noteworthy. Both clinical and educational researchers repeatedly report high correlations between positive self-concept and superior adjustment, responsible behavior, and academic achievement (Bentler, 1977).

Conversely, children with poor self-image are actuarially more likely to receive more dismal prognostications and to malfunction behaviorally and academically (Shaw, 1970). Curiously, these profusely-documented relationships were not replicated in the present study. Although the present research was not correlational by design, it is still perplexing that little support was found to either confirm nor imply presence of the typical "positive self-concept/positive behavior diad."

This contradiction stimulates speculation regarding several plausible causalities. Primarily, there is no evidence for dismissing the possibility that these findings are reasonable, albeit rare, results of a unique combination of treatment techniques, subjects and situations. Intervention strategies for Group 1 were both theoretically and pragmatically predicated on the principles of positive reinforcement, a renowned precursor of positive self-concept.

Multiple opportunities to earn positive feedback were mobilized for these subjects. Appropriate behavior was rewarded by a barrage of laudatory statements from Group 1's consultant and group meetings were structured to maximize self-concept. Weekly Behavior Checklist cards to parents not only became intrinsically rewarding to subjects, but also induced parents to provide positive commentary. Further, teachers and school staff were heartily encouraged to openly acknowledge and praise students' responsible behavior.

Mere methodology may not sufficiently account for Group 1's massively-increased self-concept scores in the absence of accompanying increases in appropriate behavior. However, in light of the treatment program's unique and intensely encouraging activities, this apparent inconsistency provokes less dissonance. Because positive self-appraisals were so frequently and enthusiastically reinforced in Group 1, one would predict greater improvement in self-concept than on other measures.

Secondly, the influence of the Hawthorne Effect can neither be verified nor denied in this experimental instance. Zandt's (1972, p. 75) definition of the Hawthorne Effect is particularly applicable and enlightening:

". . . those changes in a research subject's behavior brought on by the extra attention he receives as a participant in a special study rather than by the special qualities of the experimental program. They are usually taken into account by providing control groups with equal attention."

The very nature of Treatment Group 1's intervention program provided a fertile environment for proliferation of such extraneous effects. By definition, treatment for these subjects was manifestly more intensive and frequent than for those in other groups. The consultant and therapeutic activities were patently more visible, possibly exasperating subjects' awareness of being scrutinized or singled out. Further, the compensatory procedure of choice for controlling Hawthorne Effects, providing control groups with equal attention, was prohibited by differential definition of treatment program procedures. While these effects might conceivably inflate self-concept scores, the convincingly significant pretest-posttest differences must nevertheless be considered. In view of their magnitude, the Hawthorne Effect becomes a less likely candidate for total causation.

A third credible hypothesis derives from the observation that the instrument and procedures used to assess self-concept were more straightforward and simplistic than those measuring behavior. The Piers-Harris Children's Self-Concept Scale, with its succinct statements and Yes-No format,

is infinitely less problematical than the numerically-rated and ambiguous DESB. Additionally, self-concept was the sole variable that was assessed directly by the subjects themselves, exposing two sources for influence. Unlike parents' and teachers' ratings of children's behavior, the subjects' CSCS self-report is less vulnerable to subjective interpretation. The expected behavioral change may have indeed occurred in traditional tandem with positive self-concept; it may simply have not been adequately measured because of rater bias or insensitivity of the instruments. Or, alternatively, the self-ratings might have fallen prey to subjects' self-deception, a common event in the use of self-reporting.

These hypotheses gain credibility in view of a glaring and perplexing discrepancy between teachers' uniformly positive comments about subjects' behavior and their diversely negative ratings. During the present study, teachers universally expressed delight in the superior behavior of students in Treatment Groups 1 and 2. Some made impassioned but futile pleas for transfer of particularly annoying members of the third and fourth groups into "the two good groups." Despite these emphatically expressed opinions on comparative group effectiveness, teachers' DESB and PPRS ratings imply a more negative and ambiguous assessment.

Such inconsistencies are suggestive of the "Familiarity Breeds Contempt Phenomenon." This is an informally reported (Loveland, 1978) but nonetheless nettlesome occurrence when teacher ratings (such as DESB and PPRS Pretests 2) must be performed early in the school year. To the researcher's initial but short-lived delight, such pretests may be thoughtful and objective reports of teacher-child interaction. Although reporting may be technically accurate, the brief experience from which it is derived may not be truly representative samples of behavior.

Early ratings may ignore subtly inappropriate behaviors or those which occur explosively but infrequently. Recognition and accurate reporting appear to correlate positively with familiarity and length of association. Hence, posttest ratings may be statistically more negative than pretests because the teacher is more attuned to the child. Though these suppositions are admittedly speculative, they are congruent with raters' behavior in the present study. Posttest forms from three of four teacher-raters were accompanied by unsolicited admissions that, "although behavior is improved, the ratings seem worse because because I know the subjects better nor and can report more things."

An alternative explanation lies in practice effect. Although its influence is believed to be diminutive in the present study, the fact remains that a practice effect may

have been operating to increase number of reported misbehaviors on the posttests.

Nonsignificant comparisons of subjects' home behavior also merit appraisal. The conclusion that differences in treatment had inappreciable effect on home behavior is both logical and entirely plausible. The multifarious parental variability factors, however, bear acknowledgement as possible influences. Though no objective assessment could be obtained, parents of research subjects were observed to vary immensely on such critical factors as literacy and lucidity.

Walker Behavior Checklist ratings are believed to have been powerfully influenced by such factors as religious mandates, parents' appreciation vs. antagonism for academia, variance in tolerance of inappropriate behavior, or degree of emotional investment in having the child "rate good." Like that of all raters, the objectivity of parents is vulnerable to selective memory and primacy and recency effects. Validity can be further threatened, however, in the case of parent ratings because of reduced robustness to subjectivity and projection.

Potentcy of many of the aforementioned contaminants could be diluted via a modified replication of the present study. Conscription of a much larger sample might prove logistically overwhelming for consultants providing intensive intervention, but it is an ineluctable statistical

imperative. Of the several variables which have emerged as possibly intervening factors, the small n is the most likely etiological element for unexplained and unanticipated results. A minimum of 30 subjects per group, or 120 total, is vigorously recommended.

Many nebulous but nagging difficulties can be minimized by procedural modifications. Teacher variability and subjectivity could be eliminated through use of non-school personnel as blind raters. One or both of the school behavior assessment forms (DESB and PPRS) could be supplanted by a simple listing of behaviorally-defined problems. This format lends itself readily to frequency and time-sampling measurement and boasts a narrow range of error.

Use of a more clearly defined measure of home behavior would reduce contaminating influence of parental attitude and disability. A simple frequency count of five or fewer observable and operationally-defined behaviors would be more manageable for parents. A structured training session in behavioral observation and measurement for parents is also suggested. More reliable ratings might be obtained if parents are excluded when they prove to be intellectually or emotionally unable to observe and/or report subjects' behavior.

The statistically-verified discovery that a Multi-factor Psychological Consultation Program positively influences self-concept in disruptive children has merit. Professional and parental recognition of children's self-esteem as a critical component of mental health is increasing (Biffle, 1978). Psychologists seek to empirically isolate factors which directly enhance and nurture self-concept (Bourdene, 1978). In this quest, not only is discovery of effective intervention programs salutary, the identification of nonsignificant or irrelevant techniques also contributes to finer discrimination of the dynamics of self-esteem.

The present study also yielded results which have pertinent implications for future research in middle school settings. Both the statistical and experiential information can be utilized to anticipate and prevent procedural and pragmatic complications. It is hoped that the study will: (a) contribute to the presently meager body of knowledge of transitional disruption, and (b) inspire further pursuit of those empirically elusive but desperately desired "things that work. . . ."

APPENDICES

## Appendix A

### The Devereaux Elementary School Behavior Rating Scale and Its Scoring Key

#### Rating Guide

1. Base rating on student's recent and current behavior. Consider only the behavior of the student over the past month.
2. Compare the student with normal children his age. The standard for comparison should be the average youngster in the normal classroom situation.
3. Base rating on your own experience with the student. Consider only your own impression. As much as possible, ignore what others have said about the student and their impressions.
4. Consider each question independently. Make no effort to describe a consistent behavioral picture or personality. It is known that children may show seemingly contradictory behavior.
5. Avoid interpretations of "unconscious" motives and feelings. As much as possible, base ratings on outward behavior you actually observe. Do not try to interpret what might be going on in the student's mind.
6. Use extreme ratings whenever warranted. Avoid tending to rate near the middle of all scales. Make use of the full range offered by the scales.

7. Rate each item quickly.

If you are unable to reach a decision, go on to the next item and come back later to those you skipped.

8. Rate every question.

Attempt to rate each item. If you are unable to rate a particular item because it is not appropriate to the child in question, or because of lack of information, circle the item number.

You are going to rate the overt behavior of a student. For items 1-26 use the rating scale below. Write your rating (number) for each item in the box to the left of the item number.

- |   |                 |
|---|-----------------|
| 5 | Very Frequently |
| 4 | Often           |
| 3 | Occasionally    |
| 2 | Rarely          |
| 1 | Never           |

---

Compared with the average child in the normal classroom situation, how often does the child...

Rating

Item

- |       |  |
|-------|--|
| _____ | 1. Start working on something before getting the directions straight?  |
| _____ | 2. Say that the teacher doesn't help him enough (i.e., won't show him how to do things, or answer his questions)?  |
| _____ | 3. Bring things to class that relate to current topics (e.g., exhibits, collections, articles, etc.)?              |
| _____ | 4. Tell stories or describe things in an interesting and colorful fashion (e.g., has an active imagination, etc.)? |

<u>Rating</u>	<u>Item</u>
_____	5. Speak disrespectfully to teacher (e.g., call teacher names, treat teacher as an equal, etc.)?
_____	6. Initiate classroom discussion?
_____	7. Act defiant (i.e., will not do what he is asked to do, says: "I won't do it")?
_____	8. Seek out the teacher before or after class to talk about school or personal matters?
_____	9. Belittle or make derogatory remarks about the subject being taught (e.g., "spelling is stupid")?
_____	10. Get the point of what he reads or hears in class?
_____	11. Have to be reprimanded or controlled by the teacher because of his behavior in class?
_____	12. Poke, torment, or tease classmates?
_____	13. Annoy or interfere with the work of his peers in class?
_____	14. Tell stories which are exaggerated and untruthful?
_____	15. Give an answer that has nothing to do with a question being asked?
_____	16. Break classroom rules (e.g., throw things, mark up desk or books, etc.)?
_____	17. Interrupt when the teacher is talking?
_____	18. Quickly lose attention when teacher explains something to him (e.g., becomes fidgety, looks away, etc.)?
_____	19. Offer to do things for the teacher (e.g., erase the board, empty the pencil sharpener, open the door, get the mail, etc.)?

<u>Rating</u>	<u>Item</u>
_____	20. Makes you doubt whether he is paying attention to what you are doing or saying (e.g., looks elsewhere, has blank stare or faraway look, etc.)?
_____	21. Introduce into class discussion personal experiences or things he has heard which relate to what is going on in class?
_____	22. Get openly disturbed about scores on a test (e.g., may cry, get emotionally upset, etc.)?
_____	23. Show worry or get anxious about knowing the "right" answers?
_____	24. Look to see how others are doing something before he does it (e.g., when teacher gives a direction, etc.)?
_____	25. Complain teacher never calls on him (e.g., that teacher calls on others first, etc.)?
_____	26. Make irrelevant remarks during a classroom discussion?

---

For items 27-47 use the rating scale below:

- 7 Extremely
- 6 Distinctly
- 5 Quite a bit
- 4 Moderately
- 3 A little
- 2 Very slightly
- 1 Not at all

---

Compared with the average child in the normal classroom situation, to what degree is the child...

<u>Rating</u>	<u>Item</u>
_____	27. Unable to change from one task to another when asked to do so (e.g., has difficulty beginning a new task, may get upset or disorganized, etc.)?

<u>Rating</u>	<u>Item</u>
_____	28. Oblivious to what is going on in class (i.e., not "with it," seems to be in own "private" closed world)?
_____	29. Reliant upon the teacher for directions and to be told how to do things or proceed in class?
_____	30. Quickly drawn into the talking or noise-making of others (i.e., stops work to listen or join in)?
_____	31. Outwardly nervous when a test is given?
_____	32. Unable to follow directions given in class (i.e., need precise directions before he can proceed successfully)?
_____	33. Sensitive to criticism or correction about his school work (e.g., gets angry, sulks, seems "defeated," etc.)?
_____	34. Prone to blame the teacher, the test, or external circumstances when things don't go well?
_____	35. Able to apply what he has learned to a new situation?
_____	36. Sloppy in his work (e.g., his products are dirty or marked up, wrinkled, etc.)?
_____	37. Likely to know the material when called upon to recite in class?
_____	38. Quick to say work assigned is too hard (e.g., "you expect too much," "I can't get it," etc.)?
_____	39. Responsive or friendly in his relationship with the teacher in class (vs. being cool, detached or distant)?
_____	40. Likely to quit or give up when something is difficult or demands more than usual effort?
_____	41. Slow to complete his work (i.e., has to be prodded, takes excessive time)?

<u>Rating</u>	<u>Item</u>
_____	42. Swayed by the opinion of his peers?
_____	43. Difficult to reach (e.g., seems preoccupied with his own thoughts, may have to call him by name to bring him out of himself)?
_____	44. Unwilling to go back over his work?

---

---

Compared with the average child in the normal classroom situation, to what degree does the child...

- |       |   |
|-------|---|
| _____ | 45. Like to be close to the teacher (e.g., hug or touch the teacher, sit or stand next to teacher, etc.)? |
| _____ | 46. Have difficulty deciding what to do when given a choice between two or more things?                   |
|       | 47. Rush through his work and therefore make unnecessary mistakes?  |

## Scoring Key and Profile

Behavior Factor	Factor Item Raw Scores		Total Raw Scores
1. Classroom Disturbance	11 _____ 12 _____	13 _____ 30 _____	
2. Impatience	1 _____ 36 _____	44 _____ 47 _____	
3. Disrespect- Defiance	5 _____ 7 _____	9 _____ 16 _____	
4. External Blame	2 _____ 25 _____	34 _____ 38 _____	
5. Achievement Anxiety	22 _____ 23 _____	31 _____ 33 _____	
6. External Reliance	24 _____ 29 _____ 32 _____	42 _____ 46 _____	
7. Comprehension	10 _____ 35 _____	37 _____	
8. Inattentive- Withdrawn	18 _____ 20 _____	28 _____ 43 _____	
9. Irrelevant- Responsiveness	14 _____ 15 _____	17 _____ 26 _____	
10. Creative Initiative	3 _____ 4 _____	6 _____ 21 _____	
11. Need Closeness to Teacher	8 _____ 19 _____	39 _____ 45 _____	
Additional Items	27 _____ 40 _____	41 _____	
Grand Total Raw Score			

## Appendix B

### The Portland Problem Rating Scale and Its Scoring Key

Problem Behavior	No Prob- lem 0	Minor 1	2	Mod- erate 3	4	Se- vere 5
Negative self state- ments (self concept)						
Starts classwork too slowly						
Refuses to do classwork						
Insufficient indepen- dent classwork						
Homework not completed						
Not prepared for class (no materials)						
Insufficient academic achievement						
Frequently absent						
Frequently late						
Acts tired or depressed						
Excessive grooming problems						
Interfering drug abuse						
Peer rejection						
Insufficient peer interaction						
Aggressive (physical)						
Aggressive/Threats (verbal)						

Problem Behavior	No Prob- lem 0	Minor 1	2	Mod- erate 3	4	Se- vere 5
Destructive						
Calls out						
Distracts others						
Overactive						
Non-compliance (not minding)						
Negativism (back- talking)						
Temper tantrums						
Stealing						
Rejects many school rules						
Excessive crying						
Excessive fears						
Excessive physical complaints						
Inattentive in class						
Other: _____						
_____						
_____						

Scoring

Assign one point for every item checked in column one (Minor), two points for every item checked in column two, and three points for each check in column three (Moderate). For every check in column four, assign four points, and five points for every item checked in column five (Severe). Total these scores to obtain a Total Raw Score.

High scores indicate higher incidence of problem behavior in school, whereas lower scores suggest fewer problem behaviors.

## Appendix C

### The Walker Problem Behavior Identification

#### Checklist and Its Scoring Key

Read each item carefully and circle either YES or NO according to whether it fits your child's behavior.

- 
- |     |   |     |    |
|-----|---|-----|----|
| 1.  | Complains that others are unfair to him-----                              | YES | NO |
| 2.  | Is tired all the time-----  | YES | NO |
| 3.  | Won't mind without control from parents-----                              | YES | NO |
| 4.  | Gets very upset or mad if things don't go<br>his/her way-----             | YES | NO |
| 5.  | Says nobody understands him/her-----                                      | YES | NO |
| 6.  | Is a perfectionist: has to have everything<br>just right-----             | YES | NO |
| 7.  | Will tear up something he/she has made<br>rather than show it to you----- | YES | NO |
| 8.  | Other children act like he/she is tainted<br>or taboo-----                | YES | NO |
| 9.  | Has problems concentrating for any length<br>of time-----                 | YES | NO |
| 10. | Overactive or restless, squirms around<br>a lot-----                      | YES | NO |
| 11. | Apologizes all the time for his/herself or<br>behavior-----               | YES | NO |
| 12. | Will sometimes fib or lie-----  | YES | NO |

- |     |   |     |    |
|-----|---|-----|----|
| 13. | Doesn't do as well in school as she/he could; grades are below his/her ability-----                       | YES | NO |
| 14. | Disturbs other kids by teasing, picking fights, interrupting-----   | YES | NO |
| 15. | Tries to keep from calling attention to himself-----  | YES | NO |
| 16. | Is suspicious about the way others act toward him, does not trust others-----                             | YES | NO |
| 17. | Gets aches & pains (stomach aches, head aches, vomiting) when faced with change in routine or stress----- | YES | NO |
| 18. | Argues & has to have the last word-----   | YES | NO |
| 19. | If he has a new task, will say, "I can't do it"-----  | YES | NO |
| 20. | Has nervous mannerisms: nail-biting, eye-blinking, etc.-----  | YES | NO |
| 21. | Always rejects school by words or actions----   | YES | NO |
| 22. | Wets the bed-----   | YES | NO |
| 23. | Babbles to himself or says nonsense words----   | YES | NO |
| 24. | Always tries to get attention-----  | YES | NO |
| 25. | Says nobody likes him/her-----  | YES | NO |
| 26. | Repeats one thought, idea, or action over & over-----   | YES | NO |
| 27. | Has temper tantrums-----  | YES | NO |
| 28. | Calls self dumb or stupid-----  | YES | NO |
| 29. | Doesn't take part in group activity or group play-----  | YES | NO |
| 30. | If teased by others, takes it out on somebody or something else-----                                      | YES | NO |

- |     |   |     |    |
|-----|---|-----|----|
| 31. | Moody: depressed & sad one minute, very<br>happy the next-----                        | YES | NO |
| 32. | Won't mind unless threatened with punishment-----                                     | YES | NO |
| 33. | Has nightmares or bad dreams-----   | YES | NO |
| 34. | Says he is lonely or unhappy-----   | YES | NO |
| 35. | If teased by others, always strikes back<br>with anger-----                           | YES | NO |
| 36. | Says something awful is going to happen to<br>him/her-----                            | YES | NO |
| 37. | Has no friends-----   | YES | NO |
| 38. | Has to have approval from someone else for<br>his work-----                           | YES | NO |
| 39. | Physically aggressive to things or people<br>(fights, throws things, lashes out)----- | YES | NO |
| 40. | Criticizes himself/herself too much-----  | YES | NO |
| 41. | Does not finish work-----   | YES | NO |
| 42. | Won't protest if others fight or tease him,<br>just takes it-----                     | YES | NO |
| 43. | Avoids or seems afraid of the opposite sex---   | YES | NO |
| 44. | Sometimes steals things-----  | YES | NO |
| 45. | Doesn't start up relationships with other<br>kids-----                                | YES | NO |
| 46. | Gets mad if told to do something-----   | YES | NO |
| 47. | Cries without any reason-----   | YES | NO |
| 48. | Stutters, stammers, or blocks on saying<br>words-----                                 | YES | NO |
| 49. | Easily distracted from what he's doing by<br>noise or movements of others-----        | YES | NO |

50. Often stares into space and isn't aware of  
his surroundings when doing this-----YES NO

Scoring Key

Item	Score
1	3
2	2
3	1
4	3
5	1
6	2
7	3
8	4
9	1
10	2
11	2
12	1
13	1
14	2
15	1
16	2
17	3
18	1
19	1
20	3
21	1
22	1
23	4
24	1
25	2

Item	Score
26	4
27	2
28	3
29	2
30	2
31	4
32	1
33	1
34	3
35	3
36	1
37	3
38	1
39	1
40	1
41	1
42	3
43	3
44	1
45	4
46	1
47	1
48	1
49	1
50	1

Appendix D

The Piers-Harris Children's Self-Concept  
Scale and Its Scoring Key

I am going to read a set of statements that can be answered either YES or NO. Some of them are true of you and so you will circle the YES. Some are not true of you and so you will circle the NO. Answer every question even if some are hard to decide. There are no right or wrong answers. Only you can tell us how you feel about yourself, so we hope you will mark the way you really feel inside.

On this first page are two sample questions. Circle either YES or NO after I read each one to you.

A. I am a boy.        YES        NO

B. I have a black shirt on today.        YES        NO

Now, turn the page and continue to circle either YES or NO after you read each question.

- 
- |  |     |    |
|--|-----|----|
| 1) My classmates make fun of me.-----      | YES | NO |
| 2) I am a happy person.-----               | YES | NO |
| 3) It is hard for me to make friends.----- | YES | NO |
| 4) I am often sad.-----                    | YES | NO |
| 5) I am smart.-----                        | YES | NO |

- |     |  |     |    |
|-----|--|-----|----|
| 6)  | I am shy.-----   | YES | NO |
| 7)  | I get nervous when the teacher calls on me.--          | YES | NO |
| 8)  | My looks bother me.-----                               | YES | NO |
| 9)  | When I grow up I will be an important person.-----     | YES | NO |
| 10) | I get worried when we have tests in school.--          | YES | NO |
| 11) | I am unpopular.-----                                   | YES | NO |
| 12) | I am well-behaved in school.-----                      | YES | NO |
| 13) | It is usually my fault when something goes wrong.----- | YES | NO |
| 14) | I cause trouble to my family.-----                     | YES | NO |
| 15) | I am strong.-----                                      | YES | NO |
| 16) | I have good ideas.-----                                | YES | NO |
| 17) | I am an important member of my family.-----            | YES | NO |
| 18) | I like being the way I am.-----                        | YES | NO |
| 19) | I am good at making things with my hands.----          | YES | NO |
| 20) | I give up easily.-----                                 | YES | NO |
| 21) | I am good in my schoolwork.-----                       | YES | NO |
| 22) | I do many bad things.-----                             | YES | NO |
| 23) | I can draw well.-----                                  | YES | NO |
| 24) | I am good in music.-----                               | YES | NO |
| 25) | I behave badly at home.-----                           | YES | NO |
| 26) | I am slow in finishing my schoolwork.-----             | YES | NO |
| 27) | I am an important member of my class.-----             | YES | NO |
| 28) | I am nervous.-----                                     | YES | NO |

- 29) I have pretty eyes.-----YES NO
- 30) I can give a good report in front of the  
class.-----YES NO
- 31) In school I am a dreamer.-----YES NO
- 32) I pick on my brother(s) and sister(s).-----YES NO
- 33) My friends like my ideas.-----YES NO
- 34) I often get into trouble.-----YES NO
- 35) I am disobedient at home.-----YES NO
- 36) I am unlucky.-----YES NO
- 37) I worry a lot.-----YES NO
- 38) My parents expect too much of me.-----YES NO
- 39) I usually want my own way.-----YES NO
- 40) I feel left out of things.-----YES NO
- 41) I have nice hair.-----YES NO
- 42) I often volunteer in school.-----YES NO
- 43) I have a pleasant face.-----YES NO
- 44) I sleep well at night.-----YES NO
- 45) I hate school.-----YES NO
- 46) I am among the last to be chosen for games.--YES NO
- 47) I am sick a lot.-----YES NO
- 48) I am often mean to other people.-----YES NO
- 49) My classmates at school think I have good  
ideas.-----YES NO
- 50) I am unhappy.-----YES NO
- 51) I have many friends.-----YES NO

- 52) I am cheerful.-----YES NO
- 53) I am dumb about most things.-----YES NO
- 54) I am good-looking.-----YES NO
- 55) I have lots of energy.-----YES NO
- 56) I get into a lot of fights.-----YES NO
- 57) I am popular with boys.-----YES NO
- 58) People pick on me.-----YES NO
- 59) My family is disappointed in me.-----YES NO
- 60) I wish I were different.-----YES NO
- 61) When I try to make something, everything  
seems to go wrong.-----YES NO
- 62) I am picked on at home.-----YES NO
- 63) I am a leader in games and sports.-----YES NO
- 64) I am clumsy.-----YES NO
- 65) In games and sports I watch instead of play.-YES NO
- 66) I forget what I learn.-----YES NO
- 67) I am easy to get along with.-----YES NO
- 68) I lose my temper easily.-----YES NO
- 69) I am popular with girls.-----YES NO
- 70) I am a good reader.-----YES NO
- 71) I would rather work alone than with a group.-YES NO
- 72) I dislike my brother (sister).-----YES NO
- 73) I have a bad figure.-----YES NO
- 74) I am often afraid.-----YES NO

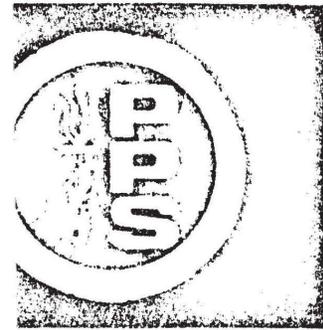
- 75) I am always dropping or breaking things.-----YES NO  
 76) I cry easily.-----YES NO  
 77) I am different from other people.-----YES NO  
 78) I think bad thoughts.-----YES NO  
 79) I can be trusted.-----YES NO  
 80) I am a good person.-----YES NO

Scoring Key

1. No	21. Yes	41. Yes	61. No
2. Yes	22. No	42. Yes	62. No
3. No	23. Yes	43. Yes	63. Yes
4. No	24. Yes	44. Yes	64. No
5. Yes	25. No	45. No	65. No
6. No	26. No	46. No	66. No
7. No	27. Yes	47. No	67. Yes
8. No	28. No	48. No	68. No
9. Yes	29. Yes	49. Yes	69. Yes
10. No	30. Yes	50. No	70. Yes
11. No	31. No	51. Yes	71. No
12. Yes	32. No	52. Yes	72. No
13. No	33. Yes	53. Yes	73. No
14. No	34. No	54. Yes	74. No
15. Yes	35. No	55. Yes	75. No
16. Yes	36. No	56. No	76. No
17. Yes	37. No	57. Yes	77. No
18. No	38. No	58. No	78. No
19. Yes	39. Yes	59. No	79. Yes
20. No	40. No	60. No	80. Yes

For each answer which is different from the answer on the scoring key, give a score of 1. Total these to obtain a total raw score. High total raw scores correlate with low self-concept; lower scores, with high self-concept.

Research in Portland Schools



PORTLAND PUBLIC SCHOOLS

8020 Northeast Tillamook Street / Portland, Oregon 97213

Telephone 1-(503)-255-7210

OFFICE OF THE SUPERINTENDENT - AREA II

May 19, 1978

Ms. Rebekah Bond  
5830 N. W. Cornell Road  
Portland, Oregon 97210

Dear Ms. Bond:

I have taken the opportunity to go over your research proposal in depth and am happy to be able to inform you that it falls within the policies of Area II, Portland, Oregon, Public School System, and therefore, I am authorizing you to go ahead with the research as described in the proposal.

I feel that the research has substantial potential value to the school system in general, and to the specific cluster of schools that will be involved. I further feel that the findings will be of considerable interest to many other school districts that are in the process of planning intervention procedures and policies.

It is my understanding that you have already contacted the school, and other personnel (Dr. Loveland, for instance) who will be involved in the project in one way or another.

If there is any additional service that my office can provide, please feel free to contact us.

Best of luck

Sincerely,

A handwritten signature in cursive script that reads "Dean W. Forbes".

Dr. Dean W. Forbes  
Research/Evaluation Specialist

Appendix F

Parental Consent Form

My child, \_\_\_\_\_, has my permission to participate in the research study conducted at Binnsmeade Middle School by Becky Bond. It has been explained to me that results of my child's performance will be treated with strictest confidentiality and that I may withdraw him/her from the study at any time.

Signed \_\_\_\_\_

Appendix G

Weekly Behavior Checklist Card

Dear Parent, This week your child received the following ratings on behavior in school. Please sign below & return the card to school on Monday.			
Behavior	No Problem	Improving	Needs Work
Week of: _____	Child's Name: _____		
_____	Parent Signature: _____		

Appendix H

Sample Behavioral Contract

I, \_\_\_\_\_, agree to complete at least ten (10) arithmetic problems during the work period of arithmetic class.

I, \_\_\_\_\_, agree to check Bobby's arithmetic problems as soon as he completes at least ten (10) of them during the work period of arithmetic class. I will also spend up to ten (10) minutes helping Bobby to understand any problems he may have missed.

This contract will be binding from \_\_\_\_\_  
to \_\_\_\_\_.

Signed \_\_\_\_\_  
Student

Signed \_\_\_\_\_  
Teacher

Date \_\_\_\_\_  
Consultant

Appendix I

Piers-Harris Children's Self-Concept Scale Pretest  
and Posttest Raw Scores

Group	Subject ID Number	Pretest	Posttest
1	11	47	37
	12	20	16
	13	19	10
	14	6	6
	15	8	4
	16	30	17
2	21	15	32
	22	26	23
	23	22	18
	24	13	8
	25	18	22
	26	26	29
3	31	12	15
	32	21	22
	33	6	10
	34	15	21
	35	24	22
	36	25	21
4	41	35	41
	42	15	19
	43	2	5
	44	43	39
	45	30	35
	46	29	24

Appendix J

Devereaux Elementary School Behavior Rating Scale

Pretest 1, Pretest 2, and Posttest Raw Scores

Group	Subject ID Number	Pretest 1	Pretest 2	Posttest
1	11	108	87	61
	12	91	82	79
	13	104	141	143
	14	88	81	97
	15	83	105	106
	16	97	46	30
2	21	99	121	105
	22	99	107	101
	23	101	120	118
	24	105	141	175
	25	108	159	151
	26	76	96	62
3	31	113	161	143
	32	97	88	70
	33	73	113	121
	34	81	101	113
	35	134	151	154
	36	97	106	113
4	41	141	179	174
	42	93	86	131
	43	79	106	96
	44	96	129	143
	45	86	89	10
	46	73	119	161

## Appendix K

### Portland Problem Rating Scale Pretest 1, Pretest 2, and Posttest Raw Scores

Group	Subject ID Number	Pretest 1	Pretest 2	Posttest
1	11	37	16	7
	12	29	26	18
	13	62	53	46
	14	12	10	7
	15	18	24	18
	16	27	6	2
2	21	37	40	33
	22	50	50	42
	23	35	33	22
	24	30	52	57
	25	39	43	45
	26	27	26	19
3	31	33	40	37
	32	25	25	19
	33	19	23	31
	34	20	19	15
	35	49	51	58
	36	66	76	80
4	41	61	68	56
	42	17	5	10
	43	16	19	12
	44	42	57	64
	45	17	15	0
	46	27	33	62

Appendix L

Walker Problem Behavior Identification Checklist

Pretest and Posttest Raw Scores

Group	Subject ID Number	Pretest	Posttest
1	11	23	11
	12	26	21
	13	15	17
	14	12	6
	15	21	14
	16	36	25
2	21	7	10
	22	24	12
	23	23	10
	24	47	56
	25	10	8
	26	10	14
3	31	33	35
	32	23	23
	33	14	9
	34	20	25
	35	16	20
	36	8	9
4	41	51	50
	42	9	12
	43	21	19
	44	31	25
	45	6	6
	46	12	14

Appendix M

Correlations Between DESB and PPRS  
Pretests 1, Pretests 2, and Posttests

---

DESB Pretest 1 with PPRS Pretest 1

---

Kendall's Tau: .477

Spearman Rho: .705                       $p < .001$

Pearson r: .659

---

DESB Pretest 2 with PPRS Pretest 2

---

Kendall's Tau: .593

Spearman Rho: .789                       $p < .001$

Pearson r: .726

---

DESB Posttest with PPRS Posttest

---

Kendall's Tau: .576

Spearman Rho: .766                       $p < .001$

Pearson r: .740

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REFERENCE NOTES

## Reference Notes

1. Cowen, E. L. Personal communication, April 9, 1978.
2. Jones, W. A. Personal communication, February 3, 1978.
3. Brewer, K. M. Personal communication, February 10, 1978.
4. Betten, L. Variables affecting classroom behavior. Unpublished manuscript, 1978.
5. Jolly, V. Personal communication, July 7, 1978.
6. Long, N. Affadavit to civil action number 1939-71, Peter Mills et al. v. D.C. Board of Education et al., 1972.
7. Parr, T. W. Personnel policies and practices. Unpublished manuscript in preparation, 1978.
8. Loveland, R. J. Behavior management and the teacher. Paper presented at the meeting of the Portland Classroom Teachers' Association, Portland, Oregon, 1978.
9. Waksman, S. J. Classroom intervention techniques. Paper presented at the meeting of the Oregon Psychological Association, Eugene, 1978.
10. White, S. Hints for handling the emotionally handicapped student. Address presented at the meeting of the Emotionally Handicapped Teachers' Association, Portland, Oregon, 1978.
11. Forbes, D. W. Personal communication, June 1, 1978.
12. Harris, S., & Braun, J. R. Self-esteem and racial preference in black children. Paper presented at the meeting of the American Psychological Association, Montreal, 1977.

13. Biffle, K. Applause: Spare the rod, repair the child. Commentary presented at Positive Self-image Workshop, Denison, Texas, 1978.
14. Bourdene, R. H. You can nurture your students' positive self-concepts. Unpublished manuscript, 1978. (Available from R. H. Bourdene, Dallas Independent School District, Dallas, Texas.)

## REFERENCES

## References

- Amos, W. E., & Orem, R. C. Managing student behavior. St. Louis, Mo.: Warren H. Green Company, 1967.
- Austin, D. B. The high school principal and staff deal with discipline. New York: Teacher's College Press, 1965.
- Bagley, W. C. Classroom management. New York: Macmillan Company, 1915.
- Bateman, B. Learning disorders. Review of Educational Research, 1966, 26, 93-119.
- Bennett, R. C. The comparative effects of two reinforcement schedules applied to groups in teaching arithmetic skills. Dissertation Abstracts International, 1974, 34 (12-B), 6206.
- Bentler, P. M. The Piers-Harris children's self-concept scale. In D. K. Buros (Ed.), Mental Measurements Yearbook. Highland Park, N.J.: Gryphon Press, 1972.
- Bond, J. B. Change in anxiety level as a factor in test performance. Alberta Journal of Educational Research, 1977, 23(2), 97-102.
- Bower, E. High school students who later become schizophrenic. Bulletin of the California State Department of Education, 1960, 29, 97-102.
- Campbell, D. T., & Stanley, J. C. Experimental and quasi-experimental designs for research on teaching. In N. L. Gage (Ed.), Handbook of Research on Teaching. Chicago: Rand McNally, 1963.
- Clark, K. Dark ghetto. New York: Harper & Row, 1965.
- Combs, R. G. An investigation of the effect of one-to-one interpersonal relationships on the self-concept and sociometric status of fourth grade students in Cheyenne, Wyoming. Unpublished doctoral dissertation, University of Wyoming, 1970.

- Cramer, R. J. Some effects of school building renovation on pupil attitudes and behavior in selected junior high schools. Dissertation Abstracts International, 1977, 37 (8-A), 4735-4736.
- Creek, R. J. Middle school rationale: The sixth grade component. Unpublished doctoral dissertation, University of Pittsburgh, 1970.
- Cruikshank, W. The exceptional child in the elementary and secondary schools. In W. Cruikshank & G. Johnson (Eds.), Education of exceptional children and youth. Englewood Cliffs, N.J.: Prentice-Hall, 1967.
- Dreikurs, R., & Cassel, P. Discipline without tears. New York: Hawthorne Books, 1972.
- Elliot, D. Delinquency, school attendance, and the dropout. Social Problems, 1966, 13, 307-314.
- Epstein, N. Techniques of brief therapy with children and parents. Social Casework, 1976, 57(5), 317-323.
- Fagen, S. A., Long, N. J., & Stevens, D. J. Teaching children self-control. Columbus: Charles E. Merrill Company, 1975.
- Felker, D. W., & Thomas, S. B. Self-initiated verbal reinforcement and positive self-concept. Child Development, 1971, 42, 1285-1287.
- Flowers, A., & Bolmeier, E. C. Law and pupil control. Cincinnati: W. H. Anderson Company, 1964.
- Flynn, N. M., & Rapoport, J. L. Hyperactivity in open and traditional classroom environments. Journal of Special Education, 1976, 10, 285-290.
- Gateman, W. J. A comparative study of 5th and 6th graders' academic achievement, self-concept, and school attitudes in New Jersey elementary and middle schools. Unpublished doctoral dissertation, University of Nebraska, 1974.
- Glass, G. V., & Stanley, J. C. Statistical methods in education and psychology. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1970.

- Gnagey, W. J. Maintaining discipline in classroom instruction. New York: Macmillan Publishing Company, 1975.
- Goodall, K. Field report: Shapers at work. Psychology Today, 1972, 6(6), 53-138.
- Grabe, M. Big school, small school: Impact of the high school environment. Contemporary Education, 1976, 1(1), 20-25.
- Graubard, P. Children against schools: Education of disturbed and delinquent children. Chicago: Follett Press, 1969.
- Gray, W. Inpatient treatment of depressed young offenders. International Journal of Offender Therapy and Comparative Criminology, 1976, 20, 117-120.
- Guardo, C. J. Sociometric status and self-concept in sixth graders. Journal of Educational Research, 1969, 62(7), 320-322.
- Hochschild, R. M. Teacher rated student maladjustment in open, transitional, & traditional classroom environments. Unpublished doctoral dissertation, University of Oklahoma, 1976.
- Horowitz, L. T. The academic and behavioral effects of a behavior problem child in the public school classroom. Unpublished doctoral dissertation, University of South Carolina, 1975.
- Howard, A. W. Discipline is caring. In K. Larson (Ed.), Discipline in the classroom. Washington, D.C.: 1974.
- Hying, J. A. A comparison of the behavior of elementary level educationally handicapped and educable mentally retarded children as measured by the Devereaux Elementary School Behavior Rating Scale. Unpublished master's thesis, California State College, 1970.
- Jacobs, L. I. The impotent king: Secondary impotence refractory to brief sex therapy. American Journal of Psychotherapy, 1977, 31(1), 97-104.
- Joint Commission on Mental Health of Children. Crisis in child mental health: Challenge for the 1970's. New York: Harper & Row, 1970.

- Jones, J. W. The discipline crisis in the schools. Washington, D.C.: National Student Public Relations Association, 1973.
- Lambert, N. The protection and promotion of mental health in schools. Bethesda, Md.: U.S. Department of Health, Education, & Welfare, Mental Health Monograph #5, 1965.
- Larson, K. Secondary school discipline. In B. H. McKenna (Ed.), Discipline in the classroom. Washington, D.C.: National Education Association Press, 1974.
- Lawrence, M. The mental health team in the schools. New York: Behavioral Publishers, 1971.
- Leffingwell, R. J. Misbehavior in the classroom: Anxiety, a possible cause. Education, 1977, 97(4), 360-365.
- Lippman, H. S. Treatment of the child in emotional conflict. New York: McGraw-Hill Company, 1962.
- Littell, W. M. Review of the Devereaux Elementary School Behavior Rating Scale. In D. K. Buros (Ed.), Mental Measurements Yearbook. Highland Park, N.J.: Gryphon Press, 1972.
- Loveland, R. J., & Waksman, S. The Portland Problem Rating Scale. Copyright, 1977.
- Malan, D. H. The frontier of brief psychotherapy: An example of the convergence of research & clinical practice. New York: Plenum Medical Book Company, 1976.
- Martin, R., & Lauridsen, D. Developing student discipline and motivation. New York: Research Press, 1974.
- Miller, J. Disadvantaged families: Despair to hope. In F. Korten (Ed.), Psychology and the problems of society. Washington, D.C.: American Psychological Association, 1970.
- Morse, W., Finger, D., & Gilmore, G. Innovations in school mental health programs. Journal of Educational Research, 1968, 38, 461-477.
- National Education Association. Student behavior in secondary schools. Washington, D.C.: National Education Association Press, 1972.

- O'Leary, K. D., & O'Leary, S. Classroom management. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1973.
- Parody, O. F. In D. B. Austin (Ed.), The high school principal and staff deal with discipline. New York: Teacher's College Press, 1965.
- Patterson, V., Levene, & Brefer, L. A one-year followup of two forms of brief psychotherapy. American Journal of Psychotherapy, 1977, 31(1), 76-82.
- Peak, B. M. Peer interaction in open concept, moderated open concept, and traditional classroom settings: Its frequency and character. Unpublished doctoral dissertation, University of Montana, 1976.
- Peckenpaugh, A. The teacher and preventative discipline. In B. M. McKenna (Ed.), Discipline in the classroom. Washington, D.C.: National Educational Association Press, 1974.
- Piers, E. V., & Harris, D. B. The Piers-Harris children's self-concept scale. Pittsburgh: The Pennsylvania State University Press, 1963.
- Rothman, E. Troubled teachers. New York: David McKay Company, 1977.
- Ryan, R. G. An evaluation of a program for the modification of disruptive student behaviors. Dissertation Abstracts International, 1976, 36 (11-A), 7309-7310.
- Sarason, S. Psychology in community settings: Clinical, educational, vocational, & social aspects. New York: Wiley & Sons Publishers, 1966.
- Shaw, C. R., & Lucas, A. R. The psychiatric disorders of childhood. New York: Appleton-Century-Crofts, 1970.
- Shiffler, N., Lynch-Sauer, S., & Nadelman, L. Relationships between self-concept & classroom behavior in two informal elementary classrooms. Journal of Educational Psychology, 1977, 69(4), 349-359.
- Siegel, S. Nonparametric statistics for the behavioral sciences. New York: McGraw-Hill Company, 1956.

- Spivak, G., & Swift, M. The Devereaux elementary school behavior rating scale. Devon, Pa.: Devereaux Foundation Press, 1967.
- Spivak, G., Swift, M., & Prewitt, J. Syndromes of disturbed behavior: A behavioral diagnostic system for elementary schools. Journal of Special Education, 1971, 5(3), 269-292.
- Taylor, W. F. Direct vs. indirect intervention in elementary group counseling. Unpublished doctoral dissertation, University of Akron, 1971.
- Teller, H. E. The relationship of parent attitudes with successful integration of hearing-impaired children into regular classrooms. Dissertation Abstracts International, 1975, 36 (2-A), 821-822.
- Updyke, P. R. The relationship between client involvement in psychotherapy evaluation and effectiveness of short-term psychotherapy: A pilot study. Dissertation Abstracts International, 1976, 36 (9-A), 5840-5841.
- Walker, H. M. Walker problem behavior identification checklist. Los Angeles, Cal.: Western Psychological Services, 1970.
- Wilde, E. S. Effects of instructing student teachers in the use of reinforcement techniques for classroom behavior management. Southern Journal of Educational Research, 7(3), 100-113.
- Woods, P. Showing them up in secondary school. In G. Chanan & S. Delamont, Frontiers of classroom research. Sussex, England: NFER Publishers, 1975.
- Zandt, R. M. Studying behavior in natural settings. N.Y.: Holt, Rinehart, Winston, 1972.