The Effects of a School Development Program on Self-Concept

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School improvement programs are often assessed in terms of their effect on school climate and education outcomes. The School Development Program (SDP) of the Yale Child Study Center has been shown to have a positive influence on those two factors. We also recognize the importance of positively influencing students' affective, intra-personal, and motivational states, such as their self-evaluations. The present study examined the effects of the SDP on multiple dimensions of students' self-concepts. The Piers Harris Self-Concept Scale was administered to 174 fourth and sixth graders, half of whom attended SDP schools and half control schools. Significant positive changes in self-concept were observed among the SDP students but not among the control students. Program students also showed significantly higher self-concepts on post-test measures when compared to normative samples.

INTRODUCTION

The effectiveness of the Yale Child Study Center School Development Program (SDP) has been well documented with regard to its positive effect on school climate [1], student behavior [2], and student academic performance [3]. A positive, sensitive, and caring school climate is generally viewed as providing the contextual supports essential to the development of a healthy self-concept among students. In particular, students' self-concepts of their school status and intellectual abilities are believed to be affected significantly by the level of sensitivity and responsiveness to their psychoeducational needs [4,5,6]. On the other hand, students' self-evaluations are believed to influence their school adjustment, behavior, and academic performance [7,8,9].

The model that seems to emerge from a close examination of the relationship between school context, self-concept, and performance outcomes is one in which students' self-evaluations occupy a mediating postion between changes in school climate and changes in behavior and achievement. School climate changes are defined to include: improved attitudes by students and staff; more supportive and caring environments; and improved relationships among staff, between staff and administrators, and between school and parents. This model is depicted in Fig. 1. School improvement programs, such as the SDP, effect positive changes in self-concept, resulting in improved performance outcomes. There is feedback loop in which performance outcomes affect students' self-concepts, which in turn affect school climate, possibly resulting in program adjustment. Performance outcomes may also directly affect program implementation and school climate.

Abbreviations: MANCOVA: multiple analysis of covariance MHT: Mental Health Team PP: Parents Program SDP: School Development Program SPMT: School Planning and Management Team

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Previous reports on the School Development Program have focused mainly on its influence on school climate and performance outcomes and not on the program's effectiveness with regard to enhancing students' self-evaluations. The present paper is intended to address this issue by examining the program's effects on students' self-concepts.

THE SCHOOL DEVELOPMENT PROGRAM

Philosophy

The School Development Program (SDP), which was first introduced in 1968 to two elementary schools in New Haven, has not only survived but has experienced significant growth and expansion to other school districts as a result of its demonstrated effectiveness in bringing about positive changes in schools. The foundation of the SDP is its child development and human growth perspective, which takes into account the psychosocial preparation and readiness of educationally disadvantaged children for school. It emphasizes the role of teachers and administrators in helping children to progress successfully through critical developmental pathways.

All children, prior to entering school, are part of a social network. The social network includes the family, church, community and other individuals, and groups with whom the child comes into regular contact. This social network exerts a strong influence on the child's psychosocial and cognitive readiness for school. Children whose social networks are not integrated into the mainstream and dominant culture are not immersed in the values and ways of that culture and are ill-prepared to function within the parameters of the school, which reflect mainstream society.

The task of the school, then, is to assist students from disadvantaged backgrounds (marginal social networks) to adjust to the requirements of the school culture. This task is accomplished when school staff and parents interact in a mutually respectful way.

The SDP perspective identifies five developmental pathways that all children must negotiate to be successful in school and in society. These pathways include (1) cognitive-academic, (2) social-interactive, (3) emotional, (4) moral, and (5) speech and language.

The child whose primary social network is marginal is likely to be less developed along these pathways than other children. This situation occurs not because the child's primary network is inferior to the more mainstream social network, but because it may be significantly different. Children imitate, identify with, and internalize values and behaviors that they are exposed to in their primary social networks. School administra-
tors, teachers, psychologists, social workers, counselors, and other significant adults in the school become new objects of imitation, identification, and internalization.

Because there is a potential for conflict between the values and standards of behavior of home and school, the child may be at increased risk for self-depreciation, frustration, and failure. Therefore it is important that school personnel be sensitized to the unique circumstances and developmental needs of culturally different children and be able to facilitate their psychoeducational development.

The needs for school reorganization, collaborative leadership, training, and adequate teacher preparation to address the needs of educationally disadvantaged children cannot be overemphasized. Comer [14] noted:

Most teachers and administrators are not trained to organize and manage schools in ways that support the overall development of students. Nor does their training enable them to analyze, much less solve, the social misalignment problems of children from outside the mainstream. The first step toward improving the education of these [educationally disadvantaged] children then, is to induce teachers colleges and schools of education to focus on student development. Teachers who invest time in training will have an incentive to use what they have learned. The efforts of individuals will not be enough; the entire staff of a school must embrace new ways of thinking [p. 48].

Components

The major components of the School Development Program are: (1) School Planning and Management Team (SPMT), (2) Mental Health Team (MHT), and (3) Parents Program.

The School Planning and Management Team (SPMT) is the central organizing body in the school. It is led by the principal and includes teacher and parent representatives. Its major function is to develop and monitor a comprehensive school plan which includes academic, social, and staff development goals.

The Mental Health Team (MHT) component is designed to address global school climate issues and individual student and staff concerns. It includes staff members with child development and human relations skills and training such as social workers, psychologists, school counselors, special education teachers, and school nurses.

The Parents Program (PP) involves parents at all levels of school life. They participate in planning and decision making. Parents become equal partners with school faculty in the education of their children. By including parents, the dissonance that non-mainstream students experience as they attempt to make the adjustment from one environment to the other is reduced. By involving parents, schools provide continuity in the socioeducational lives of children and strengthen the support from key adults who promote healthy development.

The three components come together to create a good school climate. The school becomes a well-functioning social system where the developmental needs of students can be addressed. All students need to develop a sense of adequacy and efficacy. Their search for an identity intensifies as they develop. Their aggressive energies need to be channeled into constructive forms of activities. For example, many children benefit from cooperative and collaborative activities, including participation in community-based projects. Such involvement increases resistance to negative and destructive influences in their proximal social environment.
The SDP, then, is viewed as an effective socioeducational intervention that can have a positive influence on the life paths of all children and especially those of educationally disadvantaged youth. One possible positive outcome for students is the improvement of their self-concepts.

Self-concept has been defined as the perceptions that people hold of themselves, involving their feelings, attitudes, and knowledge, concerning their abilities, skills, social acceptability, and appearance, and is viewed as a multidimensional construct [10,11,12,13]. A more extensive discussion of the SDP is provided by Comer [14,15].

PURPOSE

The present study is part of a larger study which was conducted to determine the effects of the SDP on students’ self-evaluation. Specifically, we set out to determine whether or not the program had significantly differential gender and grade-level effects on specific dimensions of children’s self-concept. In the larger study, SDP intervention, gender, and grade-level main effects were examined, as were two- and three-way interactions. The present report focuses on the main effects observed for SDP intervention.

METHOD

Sample

The subjects for the study included 174 school children in grades four and six. The students were randomly selected from four schools, two of which were selected to use the School Development Program, and two control schools, which were not using the program. The schools were all located in low-income neighborhoods and were matched by achievement status (grade equivalent scores on the California Achievement Test), socioeconomic status (as measured by percentage of students receiving free lunches), and attendance patterns. Of the 174 students in the sample, 87 were in program schools and 87 in control schools.

Students were randomly selected from each school, using a stratified procedure, with gender and grade level serving as stratification variables. The number of students from each school represented in the sample was based on the total number of students in grades four and six at each school. Ninety students were in the fourth grade and 84 in the sixth grade. There were 85 males and 89 females. A demographic profile of the sample is presented in Table 1.

The fourth and sixth grades were selected because of the level of literacy required to complete the instrument and because they represent critical stages of psychoeducational development in these children.

Study Design

A pre-post, quasi-experimental design was employed. Students in experimental and control schools were pre-tested on self-concept during the first weeks of the fall semester prior to the implementation of the School Development Program. The same students were post-tested on the same measure of self-concept at the end of the school year in June.
TABLE 1
Demographic Profile of Sample from SDP (Experimental) and Non-SDP (Control) Schools

| Matching Variables          | SDP Schools |          | Control |          |
|-----------------------------|-------------|----------|---------|----------|
|                             | n = 87      | n = 87   |         |          |
|                             | A           | B        | C       | D        |
| **Gender**                  |             |          |         |          |
| Male                        | 21          | 21       | 21      | 22       |
| Female                      | 22          | 23       | 22      | 22       |
| **Race**                    |             |          |         |          |
| African-American            | 43          | 44       | 43      | 44       |
| **Achievement Status**      |             |          |         |          |
| At grade level              | 9           | 11       | 12      | 13       |
| Below grade level           | 34          | 33       | 31      | 31       |
| **Socioeconomic Status**    |             |          |         |          |
| Free and reduced lunch      | 43          | 44       | 43      | 44       |
| **Grade Level**             |             |          |         |          |
| 4                           | 22          | 23       | 22      | 23       |
| 6                           | 21          | 21       | 21      | 21       |

Instrument

Self-concept was measured by the Piers-Harris Self-Concept Scale [16]. The scale is divided into six dimensions: (1) behavior, (2) intellectual and school status, (3) physical appearance and attributes, (4) anxiety, (5) popularity, and (6) happiness and satisfaction. The scale has been used widely and has a reported retest reliability coefficient of .65 for a ten-week individual among fourth and sixth graders. Correlations between the Piers-Harris and other self-concept measures range between .32 and .68.

Procedure

The School Development Program was introduced into the two experimental schools in September of the school year. Prior to implementation, randomly selected samples of students in each of the two experimental and two control schools were pre-tested on the Piers-Harris Self-Concept Scale. The control and experimental schools were closely monitored to determine whether chance events or other special curricular or other programs had positive or negative effects.

At the end of the school year, the Piers-Harris Self-Concept Scale was readministered to students in control and experimental schools. Pre- and post-test administrations of the Piers-Harris Self-Concept Scale were conducted in small group settings. The testing was conducted by graduate students who were not aware of the School Development Program status of the schools and therefore of the treatment status of the students being tested. They were thus blinded to the experimental and control conditions.

Analysis

Data analysis consisted of Multiple Analysis of Covariance (MANCOVA) with mean post-test scores on the six self-concept scales as dependent variables, intervention status, gender, and grade level as independent variables, and mean pre-test scores on the six self-concept dimensions as covariates. The MANCOVA procedure controlled
for pre-test differences between experimental and control students, making significant post-test differences more attributable to the presence of the intervention program. In addition, pre- and post-test total self-concept mean scores were compared with normative data for a national sample of fourth and sixth graders.

**RESULTS**

The only results presented here are: (1) the School Development Program’s main effects on six self-concept dimensions and on total self-concept and (2) comparisons between the study sample and a normative sample on total self-concept.

**School Development Program Main Effects**

A significant multivariate effect on all of the six dimensions combined was observed, $F(6,155) = 169.4 < .001$. Univariate $F$ tests indicate significant program effects on each of the six dimensions, and on total self-concept. These results are summarized in Table 2.

**Comparisons with Normative Data**

Significant differences were found between normative mean total self-concept scores and: SDP fourth grade post-test scores in favor of SDP students; SDP sixth grade pre-test scores in favor of the normative group; and SDP sixth grade post-test scores in favor of SDP students. There were also differences in the control group sixth grade pre-test scores in favor of the normative group, and control group sixth grade post-test scores in favor of the normative group. These results are summarized in Table 3.

**DISCUSSION**

The school is unique in its potential to be a source of institutional support for children under stress. In order to realize this potential, schools must be adequately empowered. This requisite is especially true given the various needs and expectations of the children who collectively constitute a mosaic of psychoeducation diversity. The
failure of schools to respond to the psychological and developmental needs of children, and in particular non-mainstream minority children, may be contributing to the unacceptably high levels of school dropout and school failure among this group. For many of these children, daily stresses prove to be emotionally and mentally debilitating, as evidenced by the low pre-test self-concept scores in this study. Such intrapsychic turbulence may interfere with their ability to focus attention and concentrate on academic tasks without supports that are structured into the learning environment.

It is becoming increasingly apparent that the school's mission needs to be reconceptualized. This new mission could include the provision of protective mental health services that may serve to insulate and fortify poor children against the deleterious social experiences which many of them encounter daily. SDP is an intervention that can help schools become more responsive to the mental health and psychosocial needs of children. Self-concept is an important and widely recognized central component of children's psychosocial development. Piers [16] noted: "...self-concept serves an important organizing function and plays a key role in motivation" (p. 44). Educators ought to be concerned about the influence that schools have on the self-concept of children.

The results of the present study indicate that SDP was effective in fostering positive self-concept among students on all six dimensions. The significant effects observed serve to corroborate the view that, even given the multifaceted and specialized nature of the self-concept, an intervention approach that is ecological and holistic in nature can have wide-ranging positive effect.

The results of the comparative analysis with the normative data seem to underscore the importance of a sensitive and responsive school environment in enhancing the self-concepts of school children even beyond expected levels. The findings demonstrated that at both the fourth and sixth grade levels, program children's self-concepts were increased to levels significantly higher than those of the normative groups, whereas control students' self-concepts were not. Sixth graders in the control group maintained significantly lower self-concepts than the normative group. The significant differences in pre-test scores between the normative group and in both study groups at the sixth grade might reflect the acute sensitivity of pre-adolescent children to negative conditions in the school environment, thus underscoring the need for intensified efforts at that stage of children's psychoeducational development.

The essential features of the School Development Program which may have contrib-
uted to the significant enhancement of children’s self-concepts include: (1) an emphasis on sensitivity to child development issues in schools, (2) responsiveness to the individual socioeducational needs of students, (3) caring and supportive adults, (4) collaborative and respectful working relationships among staff as a model of appropriate interaction for students, (5) a mental health team approach to addressing global school issues and individual students’ and staff concerns, and (6) active involvement of parents in every aspect of the life of the school.

The positive findings reported in this study ought not to be construed as evidence that the SDP is a panacea for the ills that confront children in all public schools. Although it seems unlikely, other non-school factors may have influenced the findings. These results must be interpreted within the limited context in which they were observed; that is, one school district with dedicated and committed teachers and school-based mental health professionals who believed that they could make a difference. Therefore, credit should not be attributed entirely to the SDP mechanisms but mainly to the people who took those mechanisms and made them work.

As indicated earlier, gender and grade-level differences were examined in a second part to this study, and the results are currently being analyzed. There are several other questions for possible future investigations which were inspired by the results reported here. These questions include:

1. Would the same or similar findings be obtained using different measures of self-concept?
2. Could the observed positive effect be replicated at higher grade levels?
3. Would similar results be obtained from this intervention among a more nationally representative sample of public school students?
4. What are the longitudinal self-concept profiles of SDP and non-SDP student cohorts from elementary through high school?

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