

## Academic Importance: Differences Among Adolescents Grouped by Class Placement and Rank within Placement

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This study compared groups of adolescents on the self-concept aspect of academic importance. Participants consisted of sixth, seventh, and eighth graders placed in general education classes or special day classes and designated by their teachers as either high- or low-achieving. Student self-reports, teacher reports, and school records were examined using a between groups MANOVA design. The results showed that the high-achieving adolescents placed in general education had the highest score on academic importance. The students in special day class settings designated as high-achieving had the lowest scores. Possible reasons for these findings are discussed.

### Importance of Self-Concept in the History of Special Education

Throughout the history of special education, those concerned with children with learning problems have not focused solely on cognitive outcomes, but have expressed concerns regarding affective and social outcomes as well. In the early 20th Century, students with academic weaknesses were removed from the regular classroom and enrolled in ungraded classes to prevent continued failure in both academic achievement and social situations in the belief that these failure experiences had consequences for children, particularly in the way they viewed themselves. The idea that students would benefit from academic successes in ungraded classes also led to the belief that they would then feel better about themselves; thus, their self-esteem would be improved.

Likewise, the efficacy studies conducted in the 1950s and early 1960s focused on academic achievement and social and personal adjustment (Guskin & Spicker, 1968). Sociometric techniques revealed that students with cognitive deficits benefited socially in self-contained classrooms because their low social skills resulted in rejection and neglect by peers in regular classes. In several studies, it was determined that students with low IQs enrolled in regular classes were seldom selected as friends by nondisabled peers (Johnson, 1950; Johnson & Kirk, 1950).

However, concern over the possible negative impact of labeling and segregation of students on the basis of their cognitive abilities has moved educators toward the current trend of mainstreaming. Gottlieb captured the anticipated social benefits of mainstreaming with the term "the contact hypothesis" (Gottlieb, 1981), which predicts that increased interaction between disabled and nondisabled children will prove to nondisabled students that there is nothing to fear from students with disabilities and that through contact with them, nondisabled students will learn that they (i.e., those with low cognitive skills) are just as likable as nondisabled children. Increased contact was also anticipated to result in increased acceptance of students with disabilities. Unfortunately, Gottlieb's (1981) review of research on the impact of mainstreaming led him to conclude the exact opposite. The more the nondisabled children became familiar with disabled children, the less accepting the nondisabled were of the children with mental retardation.

Originally, the three anticipated beneficial outcomes of mainstreaming articulated by Gottlieb included the following: increased peer acceptance and decreased peer rejection, positive social interactions between disabled and nondisabled children, and the modeling of

appropriate social behaviors of nondisabled children by disabled children. All of these outcomes are directly related to a child's self-concept which again illustrates the importance that self-concept has had throughout the history of special education when placements have been evaluated in terms of whether the child feels better about himself/herself. However, the benefits anticipated by proponents of mainstreaming have not been realized (Gresham, 1982).

Another service delivery model that is being employed in several school districts is full inclusion. In its more extreme form, advocates for this model argue that general education classes are the best place to educate *all* students. The anticipated benefits mentioned by proponents of full inclusion are primarily, if not exclusively in the areas of peer acceptance, self-concept, and social skills (Fuchs & Fuchs, 1994; MacMillan, Gresham, & Forness, 1996).

Despite the many changes in the way that children with disabilities have been educated, one outcome that has been continually mentioned as an important consideration has been the impact of the placement/treatment on self-concept. Self-concept has been defined as "a person's perception of himself" (Shavelson, Hubner, & Stanton, 1976, p. 411). These perceptions are influenced by significant others as well as specific experiences in one's environment. "One's perceptions of himself are thought to influence the ways in which he perceives himself" (Id.).

Currently, the challenge is to continue to develop basic academic skills for children with disabilities while battling their increasingly lowered self-concept based on the new placement alternatives: mainstreaming and full inclusion.

### Primary Objective

The primary objective of this research was to systematically determine differences in the importance of academics in general and special education settings among four groups of adolescents: low-achieving adolescents in special day classes, high-achieving adolescents in special day classes, low-achieving adolescents in general education, and high-achieving adolescents in general education. Specifically, the four groups of adolescents were operationalized by class placement as well as by the teacher rating on the Social Skills Rating System-Teacher Form (Gresham & Elliott, 1990) academic competence scale. Differences on the dimension of self-concept related to the importance of academics among these four groups based on class placement and rank within placement were investigated.

The four groups of adolescents were specifically created to first capture the differences between those who are labeled as special education students and those who are in the general education program. Second, there was interest in the effects of rank within placement (low-achieving and high-achieving) as an important variable because it clarifies the relative standing of the students in both programs. By identifying a student's class placement and rank within that placement, it was anticipated that it would reveal how the experiences of being either the "best" or "worst" student in a particular setting can influence self-concept.

### Methods and Procedures

This study took place in two middle schools in one of the largest elementary districts in California. This district is located in a suburban area with a large number of low-income families of minority descent.

## Participants

### Teachers

Thirteen teachers readily agreed to participate by allowing the principal investigator to utilize two class periods over a two-week period of time. Overall, the study utilized seven teachers of special education (mild/moderate special day class programs), two teachers from the lowest track of general education, and two teachers from the highest track of general education.

### Students

The entire sample ( $N = 145$ ) consisted of 72 males (50%) and 73 females (50%). There were 37 sixth grade students (26%), 64 seventh grade students (44%), and 44 eighth grade students (30%). Nineteen percent of this sample was White ( $n = 28$ ) while just six percent ( $n = 8$ ) of the sample was Black. The majority of the adolescents in this sample ( $n = 109$ ) were Hispanic (75%) (See Table 1).

Table 1

Gender and Ethnicity of Participants by  
Class Placement and Rank Within Placement

		Class Placement	Class Placement	Rank Within Placement	Rank Within Placement
		Percent n	Percent n	Percent n	Percent n
Variable	Level	General Education	Special Day Class	High-Achieving Achieving	Low- Achieving
Gender	Male	24.14 35	25.52 37	24.14 35	25.52 37
	Female	27.59 40	22.76 33	26.21 38	24.14 35
Ethnicity	White	8.97 13	10.34 15	8.28 12	11.03 16
	Black	3.45 5	2.07 3	4.14 6	1.38 2
	Hispanic	39.31 57	35.86 52	37.93 55	37.24 54

### Sampling Procedures

An attempt was made to select equal numbers of participants from both general and special education. Stratified random sampling was also used in order to secure equal numbers of males and females in both settings. Because of the district's high proportion of Hispanic students (over 70%), ethnicity was not used as a basis for stratification.

### Special Education Sample Selection

A total of ninety-nine students classified as having learning disabilities and placed in seven special day class programs for the 1999-2000 school year were solicited for participation in this study. A total of sixty-one students were enrolled at the first school, with thirty-eight students at the second. Of these, seventy students were given parental permission to participate in the study. This group was stratified by gender.

Once parental permission was obtained, the seven special day class teachers completed the Social Skills Rating System – Teacher Form (SSRS-T) for each of their students, and based on the academic competence subscale, the students were designated as either low-achieving or high-achieving.

A total of thirty-nine students in special day classes, using the SSRS-T, were rated by their teachers as low-achievers whereas thirty-one students were rated by their teachers as high-achievers. Therefore, this group of seventy special day class students was divided according to their relative standing within the special day class as two groups differentiated by their rank within placement as either low-achieving or high-achieving.

### General Education Sample Selection

Teachers from four classes in the lowest track and highest track of general education were asked to rate their students on the academic competence portion of the SSRS-T. Results were determined in the same manner as for the special education sample selection.

#### Lowest Track

Within the lowest track of students in general education, fifty-five out of one hundred eight students were rated by two teachers as being among either the lowest 10% of the class or the lowest 20% of the class on the academic competence subscale of the SSRS-T. The fifty-five students who scored twenty-six or lower on this measure were selected as the low-achieving general education group.

Of fifty-five students in the general education program who had been rated by their teachers as low-achieving, only thirty-three parents (60%) submitted signed consents.

#### Highest Track

Teachers who teach in the highest track rated their students on the academic competence portion of the SSRS-T. Forty-two students were rated to be within the middle 40% to highest 10% on the academic competence portion of this assessment tool which constituted a score of twenty-seven points or higher.

Parents of all forty-two students agreed to have their children participate in this investigation.

As a result, the sample group of students included, in effect, the lowest-achieving adolescents from the entire general education population as well as the highest-achieving students in general education. Additionally, the majority of the adolescents in the high-achieving general education sample participated in the Gifted and Talented Education (GATE) program during the 1999-2000 school year.

In summary, a total of 196 students were selected to participate in this study. The investigators received a 74% rate of cooperation overall.

Table 2

Number and Rank Within Placement of Students Invited to Participate

Group	Males	Females	Total
Low-Achieving Special Day Class	21	18	39
High-Achieving Special Day Class	16	15	31
Low-Achieving General Education	16	17	33
High-Achieving General Education	19	23	42

#### Assessment Tool

Developed by Gresham, Elliott, and Evans in 1992, the *Student Self-Concept Scale* (SSCS) is a 72-item multidimensional measure of self-concept. It is norm-referenced and provides a reliable method of measuring the self-concept of children and adolescents in grades 3-12. The SSCS documents perceived confidence in performing, perceived importance of performing, and perceived confidence in the likelihood of outcomes from performing specific behaviors influencing the development of self-concept (Gresham, Elliott, & Evans, 1992).

### Statistical Analyses

#### Experimental Design

The experimental design for this study was a between-group 2 X 2 (class placement X rank within placement) mixed model. This design allows for measurement of the dependent variables between groups based on class placement and rank within placement. This is a mixed model design that produces main effects for class placement (two levels) and rank within placement (two levels). It also produces the following interaction: class placement X rank within placement.

### Results

Self-concept of the adolescent groups was analyzed to determine if there were differences between the groups based on their class placement and rank within placement on the dependent variable of academic self-concept importance. Analyses were performed using the SAS package of computer programs for statistical analysis.

#### Preliminary Steps

##### Inspection of the Correlation Matrix

First, relationships among the dependent variables were explored by examining the correlation matrix (presented in Table 3).

Table 3

Correlations Among the Dependent Variables

	SC_AC	SC_SO	IMP_AC	IMP_SO	AS_LONE
SC_AC	1.00				
SC_SO	0.77	1.00			
IMP_AC	0.62	0.53	1.00		
IMP_SO	0.38	0.46	0.74	1.00	
AS_LONE	-0.41	-0.47	-0.34	-0.32	1.00

Note: N = 145.

As expected, there was a moderate to high correlation between the two subscales of self-concept confidence in the areas of academics and social self-concept ( $r = 0.77$ ). There was also a moderate to high correlation between the two subscales of self-concept importance in the areas of academic and social self-concept ( $r = 0.74$ ).

Multivariate and Univariate Results: Academic Importance

An ANOVA using the academic importance subscale on the SSCS was performed to test for the differences between the four groups of adolescents based on class placement (general education or special education), rank within placement (low-achieving or high-achieving), and the possibility of an interaction between the two (class placement X rank within placement).

The two-way interaction of class placement by rank within placement was statistically significant, approximate  $F(1,144) = 10.30, p < .01$ . Tukey's HSD test revealed a significant interaction among the groups. Significant differences were found among students by both class placement and rank within placement. The scores of the students designated as high-achieving and placed in general education were the highest indicating that this group found academics to be most important ( $M=118.12, SD=14.88$ ). The group which found academics least important were the adolescents ranked as high-achieving in special day classes ( $M=102.52, SD=16.27$ ).

Discussion and Implications

This study addressed several key issues within the field of special education that were expected to extend and improve upon previous research. First, this investigation was conducted with adolescents. The majority of studies concerned with the self-concepts of students in special education have focused on young children at, or near, the time they are initially placed. There have been very few studies that have looked at adolescent self-concept relating to the academic importance domain of self-concept. Next, this investigation used a multidimensional view of self-concept that is currently supported by the literature (Gresham, Elliott, & Evans-Fernandez, 1993). In addition, the outcome measures utilized in the current study were statistically stable and reliable (Gresham et al., 1993). Lastly, based on the relatively large sample size in this investigation (N = 145) and representativeness of the sample, the results are generalizable to students in similar school districts. Most importantly,

this investigation determined significant differences in the importance of academics between four distinct groups of adolescents in our public education system.

### Academic Importance

A statistically significant interaction was found among the groups of adolescents on academic importance by class placement and rank within placement. Students in the general education program who had been rated as high-achieving by their teachers scored the highest on the academic importance scale. This is not a surprising finding because it would be expected that they are diligent about academic work; therefore, they would also find it important to their success. Because of higher academic achievement which could mean higher intelligence, these students might be more perceptive than any of the other adolescent groups. It is likely that they fully understand the relevance of academics and their importance to success in life.

It is interesting that the group of adolescents in special day classes who were designated as high-achieving did not find academics to be important. One possible explanation for this finding could be that the students who were rated as high-achieving in special day class settings were more capable of seeing that they had previously failed academically when compared with the low-achieving group in that same class placement. The low-achieving group of students in special day class placements may have failed to comprehend the importance of academics. Since it is possible that this group of high-achieving adolescents in special day class settings is perceptive enough to realize the importance of academics, they may use it as a defense by rating it as unimportant. Thus, the high-achievers in special day class settings may have made a conscious effort to search for other areas besides academics to rate as important. Educators should focus on the strengths of this group of adolescents since they do achieve well academically compared to others in their same class placement. The importance of academics should be reiterated to them so they can continue to achieve at the highest level possible.

Interestingly, one group which found importance in academics was the group of students rated as low-achieving by their teachers and also placed in special day classes. Based on the literature, it is likely that this group is the least capable group in both academics and social skills. However, they found academics to be relatively important. One interpretation of this finding could be that despite the fact that students in these categories had the lowest academic self-concepts, they still felt that academics were important. Could this be because they were unaware of their severe deficits in this area and still hope to achieve well academically? Overall, one could speculate that the special day class students rated as low-achieving lacked perceptiveness and did not realize how poorly they perform.

### Summary

In sum, there were significant differences between the four groups of adolescents on the importance of academics. Students in the high-achieving group of general education felt that academics were important which was a reasonable expectation based on their past academic successes. Meanwhile, the students in the special day class placements who were rated as high-achieving felt that academics were not important and are in need of remediation to help them focus on their relative strengths in relation to their standing within their class placement. In addition, teachers in special day classes may focus more on social skills, functional skills, and job skills as well as other nonacademic areas to help students in their program compensate for deficits in academic areas. Therefore, students placed in special day class settings may not be taught to focus as intently on academics as the students in general education.

## Study Constraints

It is important to note some of the logistical constraints that may have had an impact on the results. The selection of students based on the requirement that parental consent be obtained before a child is assessed may be considered a possible limitation for this type of an investigation. Parents who give their consent to have their children participate tend to be parents of the higher-achieving students. For example, when looking at the high-achieving group of adolescents in the general education population of this study, the vast majority of parents readily gave consent for their children to be assessed. Several parents who had specific questions or who needed more information about the study called the principal investigator. This was the easiest sample to acquire. In contrast, the special day class students were relatively difficult to gain parental consent for as were the group of students who were designated as low-achieving in the general education population. The low-achieving adolescents in general education were even given extra time in an attempt to gain more participation. However, the extra time did not seem to make a difference as no new participants were acquired. Overall, with a study such as the current one, it is common practice that the parents of higher-achieving students give parental consent more readily. This could influence results because of the possibility of a systematic bias in those for whom consent was secured.

Overall, this study explored an important area of research that, with few exceptions, has been largely ignored in the literature. Therefore, future research with adolescents on self-concept must continue to address issues confronted in this study.

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