### DOCUMENT RESUME

BD 140 523	EC 100 861
AUTHOR TITLE	Dederick, Warren E.; And Others Interpersonal Values of Intellectually Gifted Adolescent Females: Single-Sex or Co-Education?
FUB CATE NOTE	Apr 77 18p.; Paper presented at the Annual Meeting of the American Educational Research Association (New York, New York, April 1977)
EDRS PRICE DESCRIPTORS	MP-\$0,83 HC-\$1.67 Plus Postage. Adolescents; *Age Differences; *Coeducation; Exceptional Child Research; *Females; *Gifted; *Personal Values; Secondary Education; *Sex Differences; Student Attitudes; *Womens Education

### AESTRACT

Interpersonal values of over 800 intellectually gifted adolescent females were studied for differences (1) between co-educational and all-girl settings, (2) between themselves and gifted adolescent boys, (3) between younger and older girls in all-girl settings, and (4) between themselves and national norms of adolescent girls. Six values were surveyed: support, conformity, recognition, independence, benevolence, and leadership. Findings revealed that gifted girls, value benevolence more and leadership less than gifted boys but do hot differ on the other values; that gifted girls in single-sex classes do not indicate different values than do gifted girls in co-educational classes; that gifted older girls value independence more than do gifted younger girls; and that gifted girls value support, independence, and leadership more and conformity and benevclence less than high school girls in general. (Author)

### ABSTRACT

Interpersonal Values of Intellectually Gifted Adolescent Females:

Single-Sex or Co-Education? \*

WARREN E. DEDERICK, Ed.D.

Brooklyn College of the City University

of New York

JUDITH G. DEDERICK, Ph.D.

and

THIS DOCUMENT HAS BEEN REPRO-DUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGIN-ATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRE-

EDUCATION POSITION OF POLICY

OFF

U S DEPARTMENT OF HEAL EDUCATION & WELFARE NATIONAL INSTITUTE OF

EDUCATION

ICIAL NATIONAL INSTITU

,

SUE ROSENBERG ZALK, Ph.D. Hunter College of the City University

of New York

Interpersonal values of intellectually gifted adolescent females are studied for differences (1) between co-educational and all-girl settings, (2) between themselves and gifted adolescent boys, (3) between younger and older girls in all-girl settings, and (4) between themselves and national norms of adolescent girls. Six values are surveyed: Support, Conformity, Recognition, Independence, Benevolence, Leadership. Findings reveal: (1) the gifted girls value Benevolence more and Leadership less than gifted boys but do not differ on the other values, (2) gifted girls in single-sex classes do not indicate different values than do gifted girls in co-educational classes, (3) gifted older girls value Independence more than do gifted younger girls, and (4) gifted girls value Support, Independence, and Leadership more and Conformity and Benevolence less than high school girls in general.

\*Presented at the annual conference of the American Educational Research Association, New York City, April 5, 1977.

Interpersonal Values of Intellectually Gifted Adolescent Females:Single-Sex or Co-Education?

WARREN E. DEDERICK, Ed.D., Brooklyn College of the City University of New York, JUDITH G. DEDERICK, Ph.D., and SUE ROSENBERG ZALK, Ph.D., Hunter College of the City University of New York

### OBJECTIVES:

This research is concerned with investigating the effects of introducing male students into a previously all-girls' high school for the gifted. The focus is on the interpersonal values of high-ability adolescent girls. The gradual introduction of co-education in Hunter College High School has presented an opportunity to study matched groups of girls in uncontrived co-educational and all-girls' classes. The purpose of this study was to measure (1) any value differences that may be a function of whether the setting is co-educational or all-girls, (2) any value differences between the gifted girls and gifted boys, (3) any value differences between younger and older gifted girls, and (4) any differences between these girls and female high school students in general that may be a function of their giftedness and/or their placement in all-girls or co-educational classes.

The null hypothesis of this study is that there are no significant differences between the interpersonal values of gifted adolescent girls as a function of: (1) whether or not they are educated in co-educational or allgirls settings, (2) their intellectual giftedness (as compared to a norm group of female high school students), (3) their sex (as compared to gifted adolescent males in co-educational settings) and (4) their age.

The interpersonal values that were examined include Support, Conformity, Recognition, Independence, Benevolence, and Leadership (See Method section.)

### BACKGROUND

Our society's traditional sex roles suggest that some values are more appropriate for females, some are more suitable for males, and others are acceptable for members of both sexes. Theoretically, establishing values is central to the period of adolescence: the adolescent's major developmental task is to define his or her adult identity, and personal values are at the core of that identity. (Erikson, 1968) Values which are traditionally associated with femininity include being nurturant, conforming, dependent, non-competitive, and deferential to males. Females whose values are markedly different from these risk social censure in a variety of forms, including being socially isolated and being considered "unfeminine" (See, for example, Maccoby, 1963.)

Dederick, Demerick, Zalk (page two)

Contemporary adolescent females are faced with a conflict between the traditional female sex role and the still new role and associated values of the "liberated" woman. For intellectually gifted adolescent females, the conflict is all the more severe because the goal of achievement, both in school and in later life, is accomplished more frequently by those people--both male and female--who are independent, non-conforming, self-assertive, and competitive. The gifted young woman, it seems, must choose between being highly achievementoriented and accepting the resulting social rejection and personal anxiety; on the one hand, or choosing not to develop her intellectual potential, on the other. There is ample evidence that many, if not most, females choose the more traditional sex role and its values, and as a result are underrepresented in the more intellectually demanding roles of our society.

If intellectually gifted females are to be encouraged to develop to their full potentials, it is important to support their development of values consistent with that goal. Such values might include independence and nonconformity. Some research with collegé students suggests that women in highly selective colleges do indeed hold such values (Langland, 1961; Goldsmith, 1969). At the same time, those women indicated that they valued receiving social support very highly, a finding consistent with Horner's (1972) hypothesis that gifted women are fearful of succeeding because they anticipate negative consequences, especially in the social sphere.

If intellectually gifted women are to be encouraged to value achievement and, interpersonal behaviors which support intellectual mastery, it is unclear whether they should be in educational settings which include only female students, whether they should be in coeducational schools, or whether the presence or absence of males is irrelevant to the question. The related research on this question is contradictory. Many studies have shown that women's performance declines on a broad range of tasks when they are competing directly with men. At the same time, Maccoby and Jacklin (1974) suggest, in a broad review of the literature, that females see school achievement as noncompetitive and thus not threatening to their femininity. Yet another area of research (Norman, 1966) suggests that gifted adolescents' values are<sup>6</sup> highly similar to their parents' values. For instance, both value independence highly and place conformity very low in the value hierarchy. This would suggest that values are learned from parents and are not influenced by the peer group. Studies of the relationship between coeducation and fear of success in high school and college reviewed by Tresemer (1976) are contradictory also. Altogether, the question whether adolescent females would develop different values when going to a coeducational school than they would in an all-girls school is still unresolved. The present research was designed to throw some light on it by studying the values of intellectually gifted students in a high school in transition from an all-girls to a coeducational school.

### Dederick, Dederick, Zalk (page three)

METHOD

The Survey of Interpersonal Values by Leonard V. Gordon (1976) was administered to all Hunter College High School students, grades 7-11, in May, 1975. Subsequently, the 7th grade students who enrolled in September, 1975, were also surveyed in June, 1976.

The interpersonal values surveyed by the instrument are the following:

- 1. <u>Support</u>. Being treated with understanding and encouragement, being given kindness and consideration.
- 2. <u>Conformity</u>. Doing what is socially correct, following regulations closely, doing what is accepted and proper, being a conformist.
- 3. <u>Recognition</u>. Being looked up to and admired, being considered important, attracting favorable notice, achieving recognition.
- Independence. Having the right to do whatever one wants, being free to make own decisions, being able to do things in own way.
- 5. <u>Benevolence</u>. Doing things for others, sharing with others, . helping the unfortunate, being generous.
- 6. <u>Leadership</u>. Being in charge of others, having authority over others, being in a position of leadership or power.

(Definitions of values are from the Survey manual, Gordon, 1976.)

See Table 4 for SIV norms for high school girls.

Subjects 1976 Grade 7 80 girls 82 boys (all co-ed classes) 52 girls (co-ed classes) 1975 Grade 7 104 girls (all-girls classes) Grade 8 163 girls (all-girls' classes) Grade 9 164 girls (all-girls classes) Grade 10 164 girls (all-girls classes) Grade 11 86 girls (all-girls classes) (Comparison national norms were taken from the test manual.)

#### DATA SOURCE

' The study was conducted at Hunter College High School, New York City. This is a laboratory school of Hunter College, CUNY, staffed by teachers employed by the New York City Board of Education. The students at the high school come from all boroughs of the city. There are approximately 1,000 students enrolled.

The present circumstances at the high school are unique and lend themselves directly to this study. Hunter High is a school of intellectually gifted students who are admitted by examination. Students are admitted in grade 7 only and there is a very low attrition rate. Traditionally Hunter High has been an all-girls school. By court order, it is now becoming coeducational. Boys were first admitted to the 7th grade in September, 1975. Therefore, there are presently coeducational 7th and 8th grades and all-girl classes in grades 9-12. In four more years, the school will be entirely coeducational. This phenomenon of gradual coeducation yields a remarkable opportunity for research into a number of variables related to the interpersonal values of gifted adolescent girls.

Dederick, Dederick, Zalk (page four)

### RESULTS

Two-tailed t-tests were employed to compare the responses to the Survey of Interpersonal Values. These comparisons were done for each of the six - interpersonal values surveyed.

1. <u>Comparison of expressed values of intellectually gifted female 7th</u> <u>graders and intellectually gifted male 7th graders</u>. Analysis of these data revealed significant differences in the value of Benevolence (t=4.20,  $p_{<}.001$ ) and Leadership (t=5.03,  $p_{<}.001$ ). (See Table 1.) Thus, the girls expressed a greater need to be benevolent than did the boys (means of 18.03 and 13.95 respectively), and valued Leadership significantly less than did the boys (9.70 and 14.41 respectively). The Survey of Interpersonal Values was constructed so that the scales are as independent as possible, while still using a forced-choice format. The intercorelation between Benevolence and Leadership scores is reported to be approximately -.40 (Gordon, 1976, p. 4). Equally important is the finding that no differences were reported between the males and females in the values of Support, Conformity, Independence, and Recognition.

2. <u>Comparison of gifted female 7th graders in coeducational and all-girls</u> <u>classes</u>. The intellectually gifted 7th grade girls who took the SIV in 1975 and 1976 revealed no significant differences is interpersonal values as a function of being in coeducational classes or all-girls classes. (See Table 2.)

3. <u>Comparison of younger gifted females to older gifted females</u>. Scores of the gifted female students at Hunter High School in grades 8 and 11 were compared. (These two groups were chosen because the girls in Grade 8 were the youngest group with no high school coeducational experience, and since most Hunter High students graduate after Grade 11, that was the oldest age group with sufficient population for comparison.)

The analysis revealed no significant differences between the interpersonal values of the younger and older students in five of the six areas. The only difference was in Independence. The older girls valued Independence more highly (mean, 20.55) than did the younger girls (mean, 18.82) (t=2.15, p $\gamma$ .05). (See Tablé 3.)

4. <u>Comparison between gifted females in all-female classes and</u> <u>heterogeneously grouped females in coeducational classes</u>. The intellectually gifted Hunter female students in Grades 9-11 were combined because (1) they were in all-girl classes and (2) they were closest in age to the norm group. The norm group, taken from the SIV manual, represents heterogeneously grouped females in coeducational classes, Grades 9-12.

## Dederick, Dederick, Zalk (page five)

Data analysis revealed that the only interpersonal value on which these two groups did <u>not</u> differ was Recognition. The groups differed on all of the other scales. The gifted females expressed greater valuing of Support (t=13.03,  $p \angle .001$ ), Independence (t=17.61,  $p \angle .001$ ), and Leadership (t=4.18,  $p \angle .001$ ) than did the norm group. In contrast, the gifted females valued Conformity (t=25.82, p < .001) and Benevolénce (t=8.02, p < .001) <u>less</u>. (See Table 4.)

It is striking to note, in addition, that the value of Independence is ranked far higher by Hunter girls than by any norm group representing a broader cross-section of females. Similarly, Conformity is ranked markedly lower. (See Gordon, 1976, Norms Tables.)

Dederick, Dederick, Zalk (page six)

DISCUSSIÓN

A primary concern in the education of academically gifted young women is the question of whether or not their interpersonal values are affected by the presence of young men in their educational setting. And if their values are affected, is the influence of males a positive or negative factor? These issues are under continuing investigation as Hunter High School becomes gradually co-educational. To date it can be reported that the gifted seventh grade girls indicated no significant difference in their interpersonal values whether or not they were in classes with boys. Will there be differences when they are older? This longitudinal research project will attempt to find some answers.

That the gifted seventh grade girls valued Benevolence more and Leadership less than did their male counterparts is consistent with national norms. However, the older girls at Hunter High (Grades 9-11) valued Leadership more and Benevolence less than did the heterogeneous group of girls in the national sample." Will the latter continue to be true when the upper grades of Hunter High become co-educational? Again, this remains to be learned.

It is equally important that the values of the seventh grade boys and girls did <u>not</u> differ in four of the six areas -- Support, Conformity, Independence and Recognition. Perhaps this means that the interpersonal values of gifted young men and women are not very different in many ways and that the presence or young men in their classes will not affect most of the values that gifted girls hold.

Parenthetically, it was surprising to note the strong need for social support among both boys and girls at Hunter as indicated by their consistently high Support scores. This may be a signal of the stresses provided by the label "gifted /"

Stein's study (1972) showed that interpersonal values of high school students varied according to sex, grade in school, and the occupational group of pavents. She also found that adolescents' interpersonal values were in the process of change during their high school years. Her study dealt with a heterogeneous male and female population. This study compared the variation between sexes in the seventh grade and found some differences (above). However, when the values of gifted eighth grade girls in all-girl classes were compared to those of gifted eleventh grade girls, they were similar in five of the six areas. Only in one area was there a difference -- a significant increase in their valuing of Independence. Whether or not these circumstances will continue in a co-educational setting is yet to be determined.

Finally, the difference in values between the gifted upper-grade girls in all-girls classes and the girls in the coed heterogeneous national sample is remarkable. It is important to remember that two key variables are confounded here. There is no way to know if the differences resulted from the groups' intellectual differences (gifted vs. heterogeneous), from differences between co-educational and all-girls classes, or both. The Hunter girls valued Support, Independence, and Leadership more highly and Conformity and Benevolence less highly. These gifted girls entered their school through a highly competitive examination. Is it possible that these characteristics are necessary for both men and women to compete and succeed -- or especially for women? Will these

## Dederick, Dederick, Zalk (page seven)

same characteristics pertain when the upper grades of Hunter High are co-educational?

Perhaps this study raises more questions than it answers. But the tentative answers that have emerged are provocative, and the framework to answer further questions has been built.

### References ...

Erikson, E.H. Identity: Youth and Crisis. New York: Norton, 1968.

Goldsmith, J. "Comparison of Values of Reed College Students by Sex." (1969) In L.V. Gordon, <u>The Survey of Interpersonal Values</u>. Chicago: Science Research Associates, 1976. P. 23.

- Gordon, L.V. <u>The Survey of Interpersonal Values</u>. Chicago: Science Research Associates, 1976.
- Horner, M. "Toward An Understanding of Achievement Related Conflicts in Women." Journal of Social Issues, 1972, 28, 157-174.
- Langland, L. "Gifted Student Program." Unpublished report. University of California, Los Angeles Counseling Center. March 1961.
- Maccoby, E.E. "Women's Intellect." In S.M. Farber and R.H.L. Wilson (Eds.) The Potential of Women. New York: McGraw-Hill, 1963.
- Maccoby, E.E. and Jacklin, C.N. <u>The Psychology of Sex Differences</u>. Stanford, Cal.: Stanford University Press, 1974.
- Norman, R.D. "The Interpersonal Values of Parents of Achieving and Non-Achieving Gifted Children." Journal of Social Psychology, 1966, <u>64</u>, 49-57.
- Stein, S.L. "Changes in Personal and Interpersonal Values by Sex and Occupational Group in Grades 9-12." Journal of Educational Research, 1972, 66, 135-141.

Tresemer, D. "The Cumulative Record of Research on 'Fear of Success.'" <u>Sex Roles</u>: A Journal of Research, 1976, 2, 217-235.

# TABLE 1

# SURVEY OF INTERPERSONAL VALUES (Administered June, 1976)

# Mean Scores and (Standard Deviations) of Intellectually Gifted Females

Grade	Sex	N * Support	Conformity	Recognition	Independence	Benevolence	Leadership
7	Female	80 20,29 (4.63)	10.50 (6.21)	12.06 (4.35)	18.96 (5.59)	18.02 (6.14)	9.70 (5.45)
/* · · ·	Male	82 18.95 (4.93)	10.58 (6.80)	13.38 (4.62)	18.39 (6.49)	13.95 (6,21)	14.41 (6.39)
•							· ·
	. Difference	1.34	.08	1.32	.57	4.07	4.71
•	Value of t	ns	ns	ns	ns .	4.20*	5.08*
•	•	)			,		· ·

**\***p **<**.001

11

## TABLE 2

## SURVEY OF INTERPERSONAL VALUES (Administered May 1975 and June 1976)

Mean Scores and (Standard Deviations) of Intellectually Gifted Fetelles

Year	Grade	Sex	Setting	N	Support	Conformity	Recognition	Independence	Benevolence	Leadership	. ~
1976	3	Female	Co-ed	80	20.29 (4.63)	10.50 (6.21)	12.06 (4.35)	18.96 (5.59)	18.02 (6.14)	9.70 (5.43)	
1975	7	Female	Co-ed	52	19.98 (5.09)	11.00 (6.44)	10.94 (4.46)	18.50 (5.92)	19.25 (5.85)	9.75 (5.01)	
1975	7	·Female	All- girls	104	19.46 (4.99)	10.86 (6.71) -	12.14 (4.13)	17.69 (5.67)	18.43 (6.30)	10.86 (5.73)	
			`			•			*		• :
2		Conceptual de la concep	of P	rence	.83 ns	.50 ns	1.20	<u>1.27</u> ns	1.23 ns	<u>1.16</u> ns	

\*p∠.05 Because the 1976 data contradicted the 1975 data, it was decided that this difference probably occurred by chance.

13

# , TABLE' 3

# SURVÉY OF INTERPERSONAL VALUES - (Administered May 1975)

## Mcan Scores and (Standard Deviations) of Intellectually Gifted Females

•	Grade	Sex	Setting	N	Support	Conformity	Recognition	Independence	Benevolence	Leadership
•	8 ·	Female	all-girls	163	20.45 (4.92)	8.60 (6.11)	12.55 (4.97)	18.82 (6.34)	17.26 (5.45)	11.61 (5.91)
	11	Female	all-girls	86. *	20.74 (4.88)	7.12 (5.22)	12.20 (4.78)	20.55 (5.37)	16.36 (5.50)	12.53 (5.59)

Difference	.29	1.48	.35	1.73	.90	. 92
, Value of t	ns	ns	ns	2.15*	ns .	ns
	8				- '	
*						

\*p < .05

15

# TABLE 4

## SURVEY OF INTERPERSONAL VALUES: HUNTER HIGH SCHOOL AND NORM GROUP

		• · · ·		Mear	1 50	cores and	(Stand	ard Devia	tions)	· · · ·	· ·	
Grades	Sex	Achievement/ Setting	N	Support		Conformit	yJ.	Recognit	ion	Independence	Benevolence	Leadership
9-11	Female	Gifted all-girls	414	20.78 (4.36)		7.22 (5.29)	,	12.35 (4.52)	·	20.9 (5.68)	16.40 (5.56)	11.9 (5.56)
9-12	Female	Heterogeneous co-ed	1629*	17.3 (5.0)	*	16.0 (6.4)		12.4 (4.9)	.4	14 <sup>°</sup> .7 (6.6)	19.0 (6.0)	10.6 (5.7)
•						•						
•		1 Difference Value of t	.*	3.48		8.78	۶.	.05	·	<u>6.2</u> - 17.61**	2.6	1.3
		• •				•						

Mean Scores and (Standard Deviations)

\*Norm from SIV manual

\*\*P. < .001