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ABSTRACT

The seven Barber Scales of Self-Regard assess levels of normal development in seven separable components of an integrated self-concept. The purpose of this study was to find out if males or females develop more quickly in a Scale or the Scales, or do the two sexes develop at a comparable rate. The sample included 173 children from middle class families across the country. Computer analysis included programs for correlation matrices and contingency tables. From the printouts, it was possible to compute means and standard deviations for all males and females. The same procedure was followed for male and female three year olds, four year olds, and five year olds. The further step was taken of computing the statistic between males and females for each age grouping. It did not appear that the sex of child had an appreciable influence on mothers' ratings on the Scales of Self-Regard. (RC)

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Does Sex of Child Make a Difference in Mother's Ratings of the
Barber Scales of Self-Regard for Preschoolers?

Lucie W. Barber

Introduction

The seven Barber Scales of Self-Regard assess levels of normal development in seven separable components of an integrated self-concept (Barber '76). Technical aspects of the Scales have been reported (Barber '76). The possibility of sex differences in development as assessed by the several Scales was raised, but evidence did not warrant the assumption of differences in data from a 1974 field test (Barber and Peatling 1976). Now, with data from a 1975 field test, there is a new opportunity to inspect for sex differences. Do females or males develop more quickly in a Scale or Scales, or do the two sexes develop at a comparable rate? The purpose of this study is to seek an answer to such a question. If there are such sex differences, it would be important to know for parents, nursery school teachers, family life educators, counselors and the like, so that expectations of a child can be adjusted appropriately.

Procedure

The sample of 173 children came from middle class families spread across the United States. All children attended an Episcopalian preschool program. Fifteen schools were involved, two of which were Day Care programs. The sample is fully described in a study by Barber, Cernik and Barton (1975).

Computer analysis included programs for correlation matrices and contingency tables. From the printouts, it was possible to compute means

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and standard deviations for all males and all females. The same procedure was followed for 3 year olds (male and female), 4 year olds (male and female) and 5 year olds (male and female). The further step was taken of computing the t statistic between males and females for each age grouping.

Results and Discussion

Product moment correlation coefficients between sex and scale point are zero order for each and every Self-Regard Scale.

Figure 1 displays in graph form the mean scores for all males and all females across the seven Scales of Self-Regard. The n for males shifts from Scale to Scale because of rejected data. However, the graph pictures the sexes as being very close on all of the Scales. The graph resembles a similar graph with data from a smaller 1974 field test (Barber and Peatling '76) except that the 1975 graph suggests less difference.

The reason t tests were not computed for total male vs. total female will be seen upon inspection of Table 1. When one inspects the means age by age, it is apparent that one sex has a higher mean than the other sex at one age level but that the advantage is reversed or means are the same at another age level on some of the Scales. Thus, t tests for total male vs. total female might becloud the issue of age level differences.

The means in Table 1 are all based on mothers' ratings because the reliability of mothers' ratings has been demonstrated (Barber '76). Table 1 is sectioned in such a way as to divide 3, 4 and 5 year old children and provide the reader with means, standard deviations, t's and probability level for each age group for each Scale. The total n = 171 because one two year old was dropped and data for 2 males was rejected because of questions about specific age.

There are no statistically significant t statistics at the .05 or .01 level of probability in Table 1. There are two significant t's at better than

the .10 level. However, in each case, given the degrees of freedom, the t's fall much closer to $p = .10$ than $p = .05$. These two t tests indicate that there is some possibility that:

1. Four year old females rate higher than four year old males on the Scale "Dealing with Frustrations."
2. Five year old males rate higher than five year old females on the Scale "Completing Tasks."

Sex differences should continue to be studied with the Scales of Self-Regard, particularly with other samples. However, at the present time, with middle class samples, at least, it does not appear that sex of child has an appreciable influence on mothers' ratings on the Scales of Self-Regard.

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- Barber, L.W. and J. H. Peatling. A Manual for the Barber Scales of Self-Regard. Schenectady, N.Y. Character Research Press, 1976.

TABLE 1

SEX DIFFERENCES AT AGE LEVELS FOR SELF REGARD SCALES - t TESTS
1975 FIELD TEST DATA

	Purposeful Learning of Skills	Completing Tasks	Coping with Fears	Children's Responses to Requests	Dealing with Frustrations	Socially Acceptable Behavior	Developing Imagination in Play
<u>3 Years</u>							
males n=20	m= 3.2 sd= .77	m= 2.9 sd= .85	m= 3.4 sd= .83	m= 3.0 sd= .79	m= 3.2 sd= .99	m= 3.2 sd= 1.0	m= 3.2 sd= 1.2
females n=17	m= 3.1 sd= .86	m= 3.2 sd= .73	m= 3.4 sd= .87	m= 2.9 sd= 1.0	m= 2.8 sd= .81	m= 3.2 sd= 1.0	m= 3.4 sd= 1.1
t=	.3571	1.032	.2000	.3125	1.021	.1667	.2747
p=	ns	ns	ns	ns	ns	ns	ns
<u>4 Years</u>							
males n=35	m= 3.7 sd= .52	m= 3.7 sd= .64	m= 4.1 sd= .68	m= 3.2 sd= .99	m= 3.3 sd= .74	m= 3.7 sd= .99	m= 4.2 sd= .86
females n=30	m= 3.6 sd= .50	m= 3.8 sd= .71	m= 3.9 sd= .83	m= 3.5 sd= .94	m= 3.8 sd= .53	m= 4.0 sd= 1.0	m= 4.4 sd= .81
t=	.2143	.8235	1.0588	1.231	1.7109	1.04	1.15
p=	ns	ns	ns	ns	.10	ns	ns
<u>5 Years</u>							
males n=33	m= 4.2 sd= .68	m= 3.9 sd= .70	m= 4.4 sd= .75	m= 3.8 sd= .76	m= 4.0 sd= .85	m= 4.3 sd= .69	m= 4.5 sd= 1.03
females n=36	m= 4.2 sd= .70	m= 3.6 sd= .72	m= 4.3 sd= .70	m= 3.7 sd= .76	m= 4.0 sd= .77	m= 4.4 sd= .59	m= 4.6 sd= .87
t=	.08945	1.72	.8169	.8182	.3529	.1765	.5905
p=	ns	.10	ns	ns	ns	ns	ns

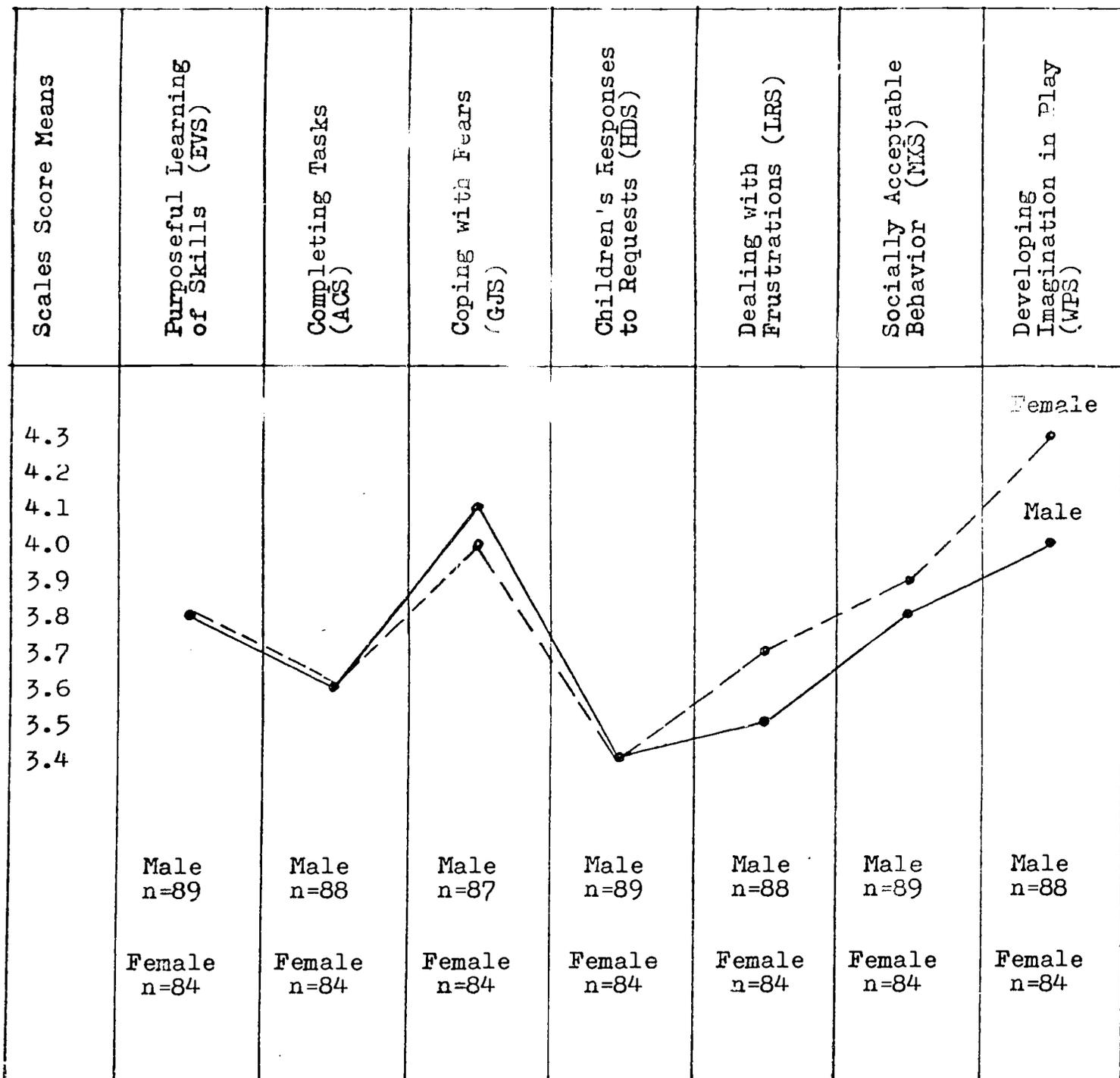


Fig. 1 Mean Scores on Seven Scales of Self Regard
By Total Males and Total Females
In 1975 Field Test Data

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OBJECTIVITY OF PARENTS' RATINGS FOR THEIR PRESCHOOL CHILD ON THE
BARBER SCALES OF SELF-REGARD: A PILOT STUDY OF RELIABILITY

Lucie W. Barber

The Barber Scales of Self-Regard for Preschoolers were developed as assessment devices for parents (Barber '75a). The seven scales enable parents to get a "picture", as it were, of where their child is developmentally in total self-concept. The comprehensive theory (Peatling and Tiedeman '74) upon which the scales are based allow self-concept, as a global construct, to be subdivided into the seven identifiable and measurable components (Barber '75b).

The Self-Regard Scales have several uses. Since each scale has five scale points which describe normal development from immature self-concept towards positive self-concept that is possible in the preschool years, the scales are educational devices. They are educational for parents and students of early childhood development. The scales, as rated by parents, also allow nursery and kindergarten professionals to examine the goals of their school. The development of positive self-concept in children before they enter formal schooling may well be an important nursery-kindergarten school goal in the prevention of school problems, as well as a worthy contribution to children's total future.

The scales, as rated by parents, can also be an aid to family life counselors and therapists. Profiles of ratings on the seven scales pinpoint strengths and weaknesses in a child's development. Such profiles can be used by therapists as a strategy to counsel parents in parenting skills for their particular child (Barber & Cernik 1975, Barber & Peatling 1975).

Much research is needed in order to validate the seven scales. Such research has been and is under way. This research will be reported in subsequent articles. The purpose of this article is to attack the knotty problem of parents' objectivity/subjectivity. Can parents rate their own child without personal bias? Are the Self-Regard Scales reliable measurement devices?

In an initial field test of 448 ratings by parents on two or more scales, good fortune supplied a very small but extremely interesting subsample. This

subsample occurred in a day care center in a New York city where parents (or a solo parent) work full time and children are cared for in the center from early morning to late afternoon. Teachers, all of whom were trained and certified, expressed an opinion that they "knew" the children better than the parents. Several wished to rate the children being rated by parents. Thus, for five of the seven scales, multiple ratings were available.

The possibility of reliability as measured by split half estimates or alternate forms of the scales simply does not exist. Thus the only reliability measure available is presented by multiple administrations. The scales themselves have qualities of being ordinal. Therefore a rank order correlation coefficient as a reliability estimate seemed appropriate.

These coefficients are reported in Table I.

TABLE I

Estimated Reliability for Five Scales of Self-Regard
(Based on Parent and Teacher Ratings of Same Child)

Scale Titles	Number of Matched Ratings	Reliability Coefficients
Developing Skills for a Purpose	14	.978
Coping with Fears	14	.972
Dealing with Frustrations	14	.958
Socially Acceptable Behavior	12	.923
Developing Imagination in Play	10	.824

High coefficients, particularly with such a low n, seem to suggest that the Scales of Self-Regard exhibit an almost remarkable degree of reliability, at least with this subsample. Differences between parent and teacher ratings had to be slight in order to result in such high reliability. This brings up another interesting finding.

Where there were differences in the matched ratings, the parent rated higher than the teacher in 16 instances, while the teacher rated higher than the parent in 17 instances. This lack of bias, either one way or the other, is evidence of parents' ability to rate their child objectively. It should be pointed out that the

previous statement must be based on the assumption that the teachers are objective. The estimates of reliability reflected in the rho coefficients must be based on this same assumption. However, the assumption is, perhaps, warranted in light of the fact that all teachers involved were trained and certified for preschool teaching in the State of New York.

In conclusion, it is probably safe to say that parents can be objective about rating their child on the Barber Scales of Self-Regard, at least on the five scales so far tested. The scales are nonthreatening because they present only the normal sequence of development. There are no "right" or "wrong" answers, thus no reason to be other than objective. Further reliability studies are under way with a larger, national sample of parent-teacher ratings. Results will be reported at a later date.

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PROFILES OF SEVEN COMPONENTS OF SELF-IMAGE IN
PRESCHOOL CHILDREN

P>

Lucie W. Barber and Helen C. Cerrick

The seven Barber Scales of Self-Regard for Preschool Children derive from the Peatling-Tiedeman model of personality (Barber, 1975). The scales allow parents to rate their child's developmental level for seven components of Self-Regard (Self-Image). Reliability and validity have been reported (Barber & Peatling, 1975). Research is continuing to further inspect these technicalities. The purpose of this article is to address the question of variability of individual children across all seven components of Self-Regard.

Complete sets of rated scales for 42 children were available as a result of an initial field test. These sets had been rated by volunteer parents. Sixteen of these parents had children enrolled in nursery schools or a day care center in the area of Schenectady, New York. The rest of the parents were or had been affiliated in some way with the Union College Character Research Project and came from widely separated geographical areas of the United States. The children ranged from two years of age to five years old.

All 42 profiles will be displayed for the reader's inspection. However, there is an important, theoretical measurement distinction to be made in order for profiles to be properly interpreted. Each scale has five scale points which are arranged in sequence from Scale Point #1, least mature, to Scale Point #5, most mature. Thus, a #3, for example, is equivalent across scales in only one way: on all seven scales #3 is a kind of mid-point for the particular developmental sequence described in a scale. The affirmation that scales do, in fact, describe developmental sequences has been supported by correlation coefficients for scale point and age at statistically significant levels of .01 or .05 for each and every scale (Barber & Peatling, 1975). Younger preschoolers tend to be rated at lower scale points, while older preschoolers tend to be rated at higher scale points. However, the coefficients by no means explain all of the variance.

With these precautions in mind, the reader can view the 42 profiles of individual children. The numbers 1 - 7 across the top of each figure indicate the

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7. Developing Imagination in Play

The vertical numbers 1 - 5 indicate scale points from 5 (most mature) to 1 (least mature). The profiles are arranged by age: first two-year-olds, then three-year-olds, four-year-olds, and finally, five-year-old children.

Two Year Old Male ID24976

1 2 3 4 5 6 7

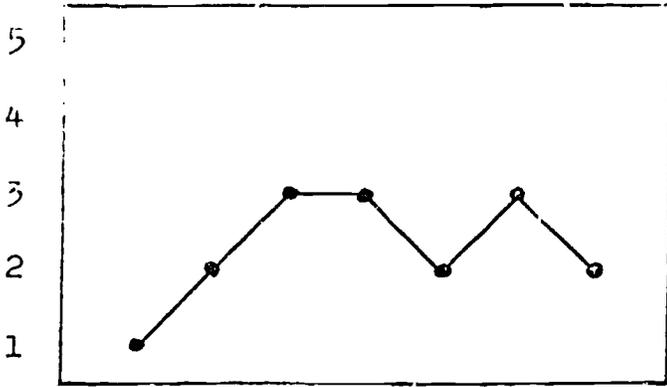


Figure 1

Two Year Old Male ID01961

1 2 3 4 5 6 7

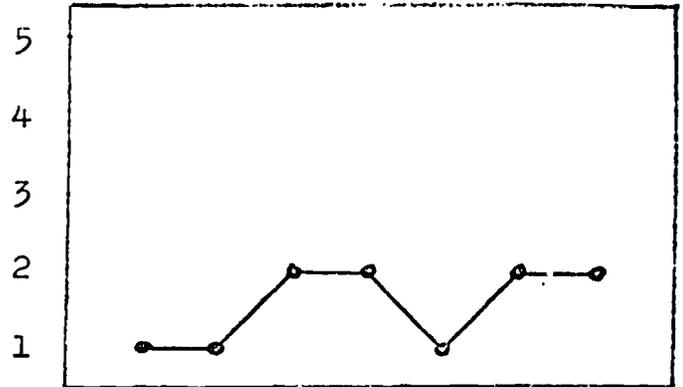


Figure 2

Two Year Old Male ID21954

1 2 3 4 5 6 7

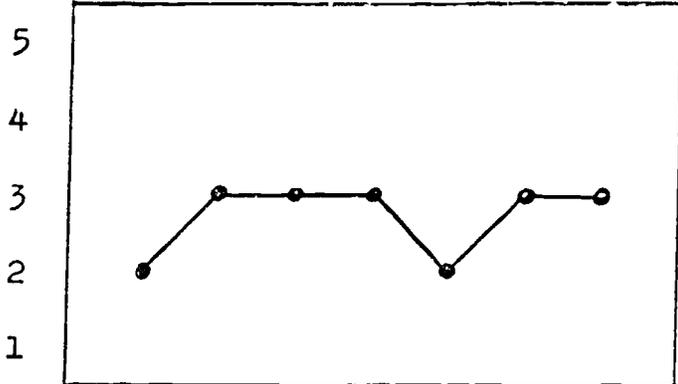


Figure 3

Two Year Old Male ID24976F

1 2 3 4 5 6 7

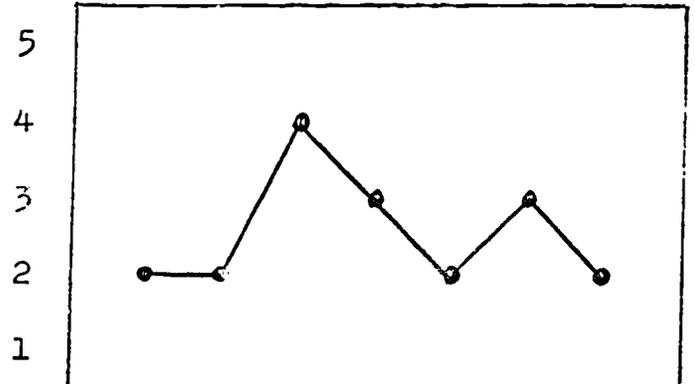


Figure 4

Two Year Old Female ID20454

1 2 3 4 5 6 7

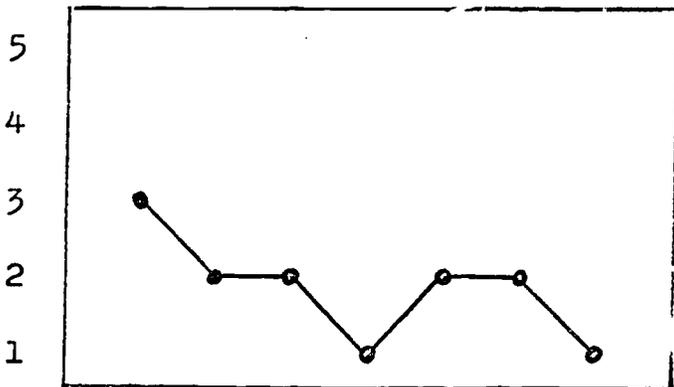


Figure 5

Two Year Old Female ID26660

1 2 3 4 5 6 7

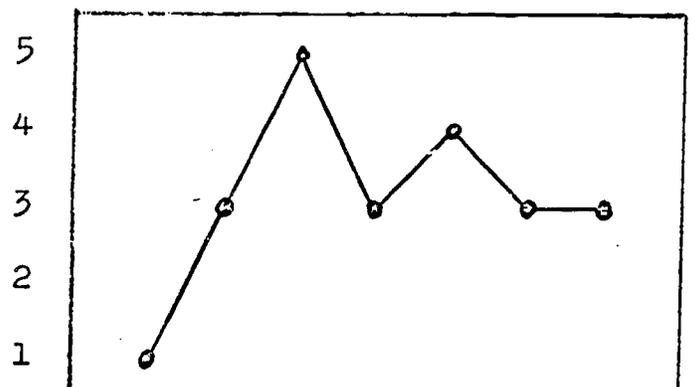


Figure 6

Two Year Old Female ID20387

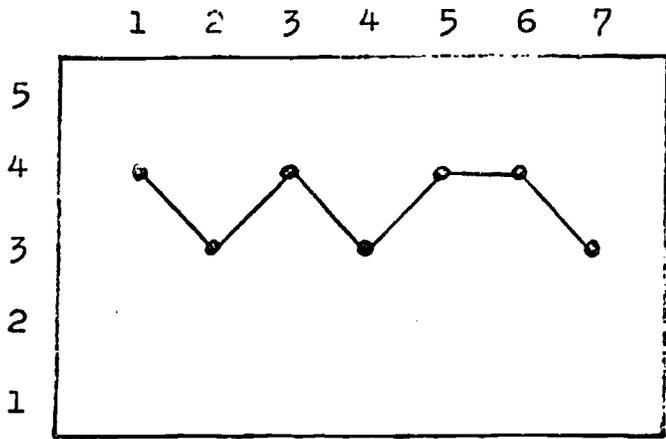


Figure 7

Two Year Old Female ID24274

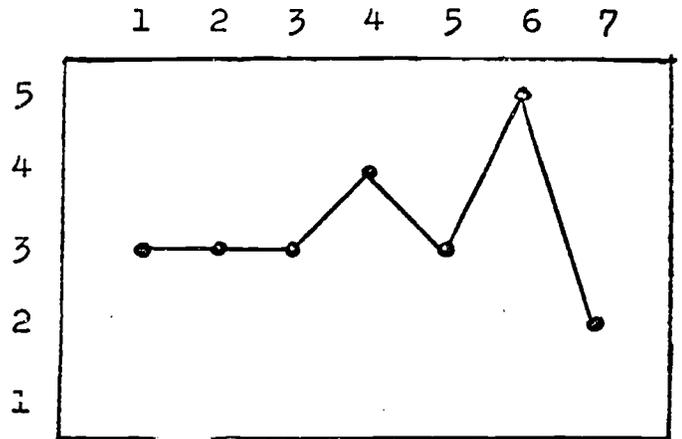


Figure 8

Three Year Old Male ID25043

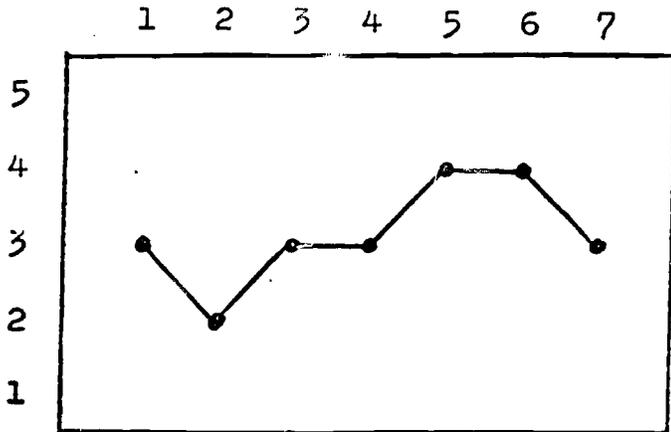


Figure 9

Three Year Old Male ID25951

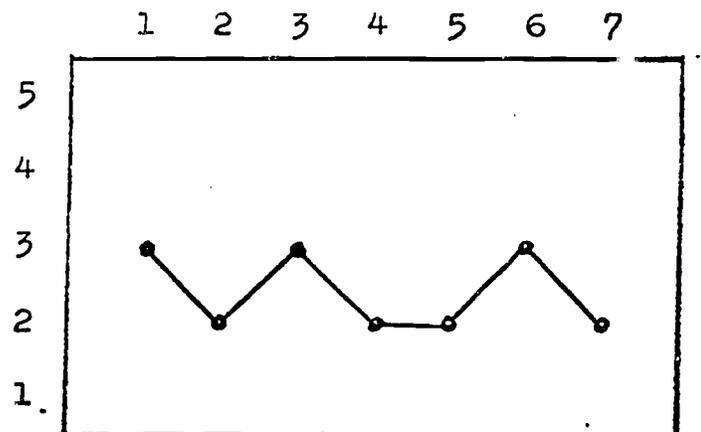


Figure 10

Three Year Old Male ID02954

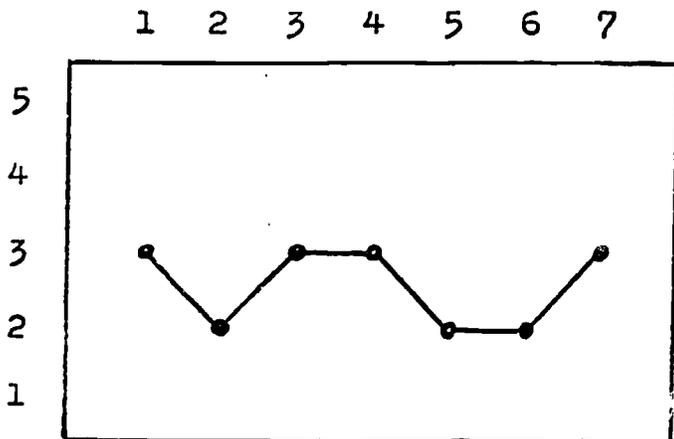


Figure 11

Three Year Old Male ID20661

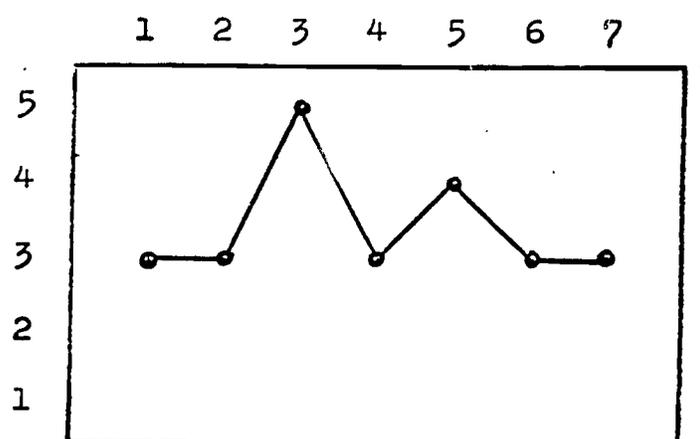


Figure 12

Three Year Old Male ID01100

1 2 3 4 5 6 7

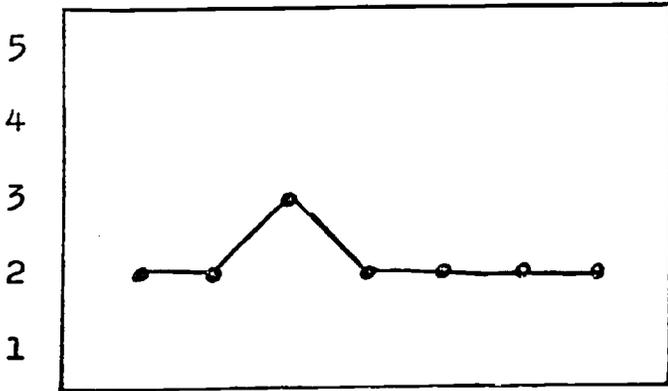


Figure 13

Three Year Old Male ID21380

1 2 3 4 5 6 7

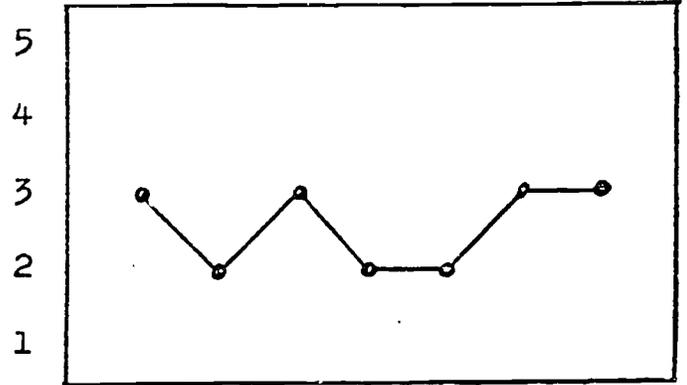


Figure 14

Three Year Old Male ID21176

1 2 3 4 5 6 7

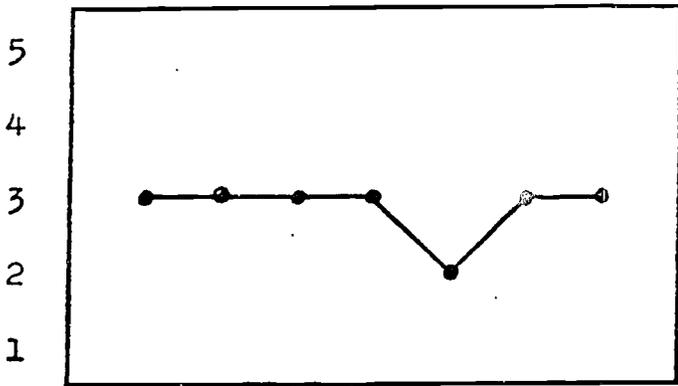


Figure 15

Three Year Old Male ID20845

1 2 3 4 5 6 7

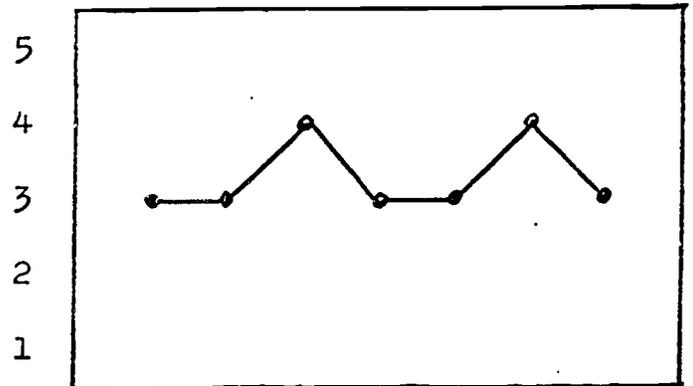


Figure 16

Three Year Old Female ID03153

1 2 3 4 5 6 7

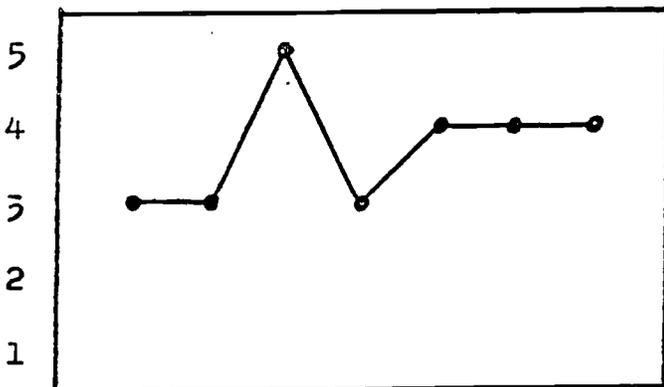


Figure 17

Three Year Old Female ID02161

1 2 3 4 5 6 7

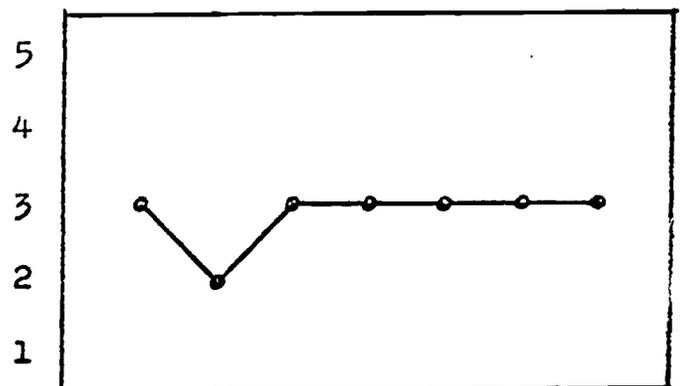


Figure 18

Three Year Old Female ID00755

1 2 3 4 5 6 7

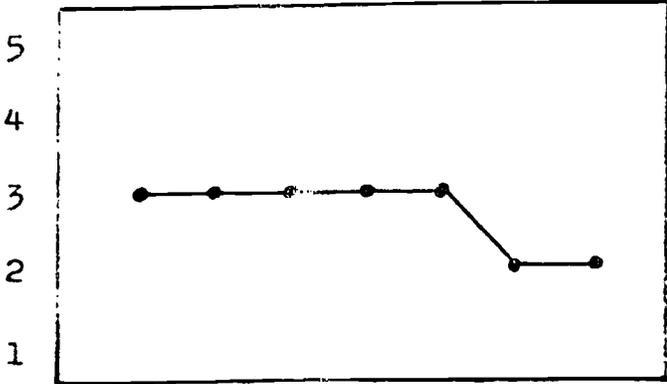


Figure 19

Three Year Old Female ID25784

1 2 3 4 5 6 7

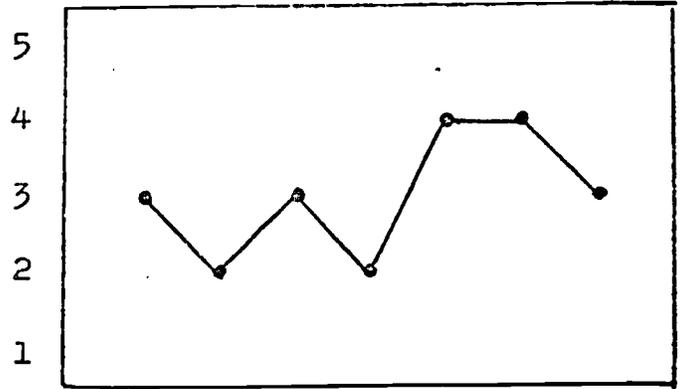


Figure 20

Four Year Old Male ID23000

1 2 3 4 5 6 7

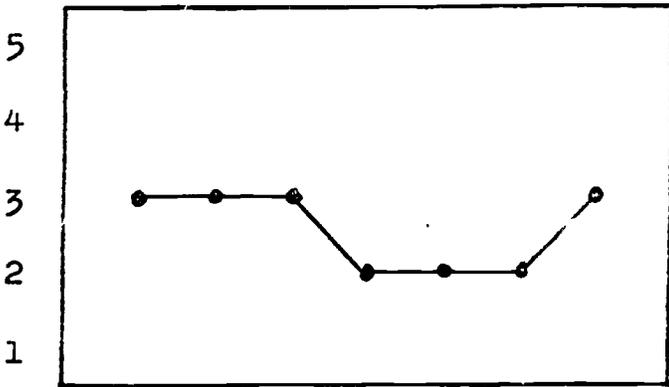


Figure 21

Four Year Old Male ID24185

1 2 3 4 5 6 7

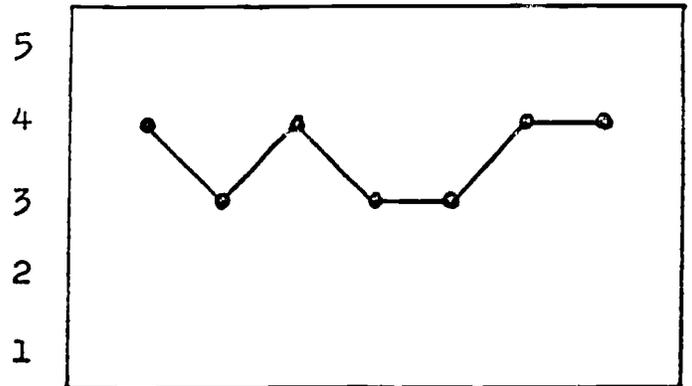


Figure 22

Four Year Old Male ID25667

1 2 3 4 5 6 7

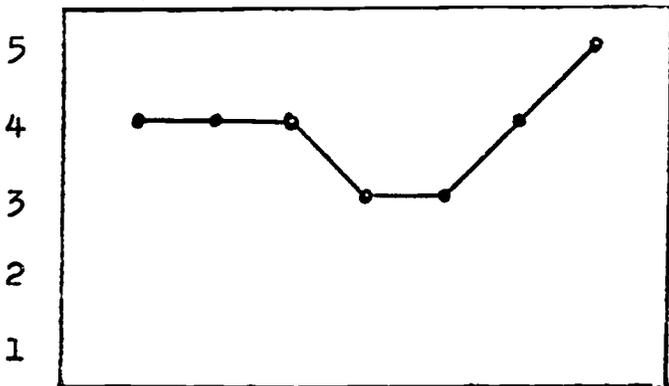


Figure 23

Four Year Old Male ID26017

1 2 3 4 5 6 7

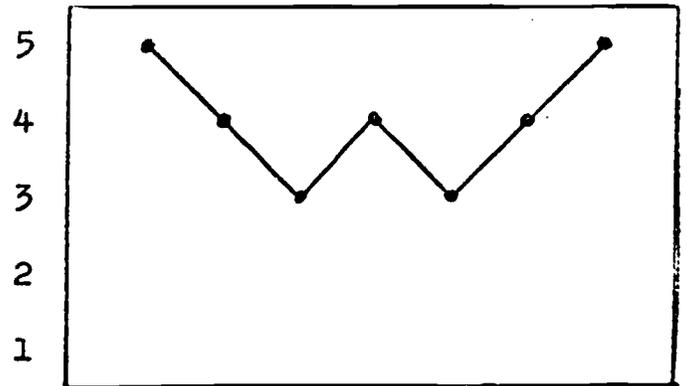


Figure 24

Four Year Old Male ID21758

1 2 3 4 5 6 7

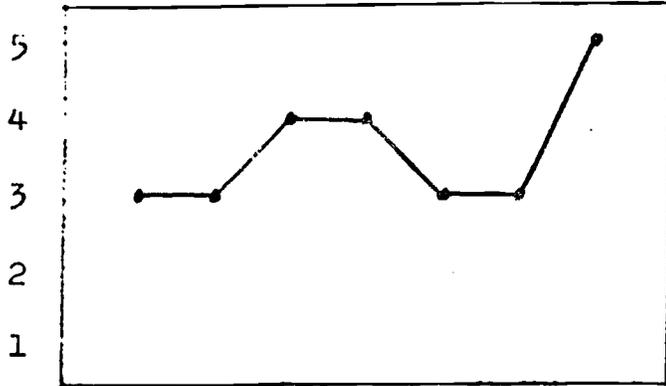


Figure 25

Four Year Old Male ID10146

1 2 3 4 5 6 7

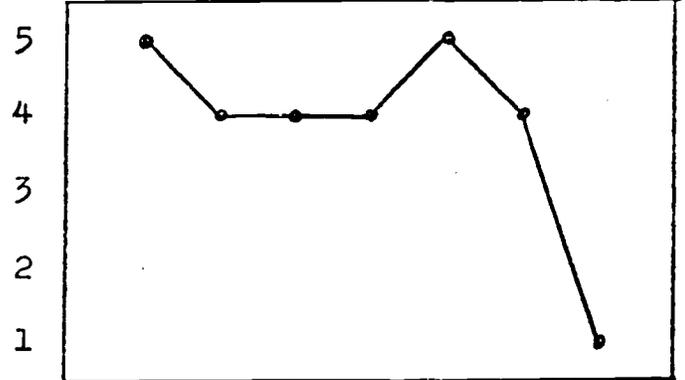


Figure 26

Four Year Old Male ID12657

1 2 3 4 5 6 7

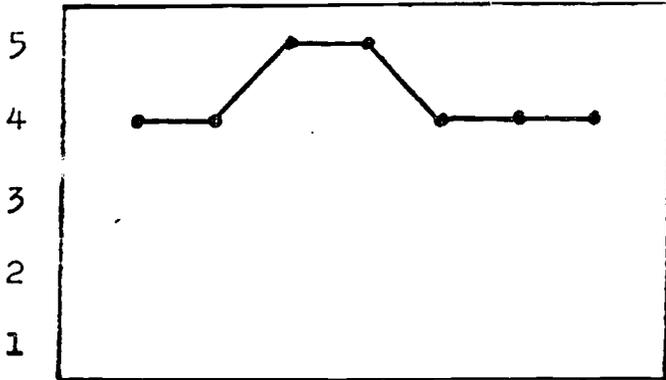


Figure 27

Four Year Old Male ID20964

1 2 3 4 5 6 7

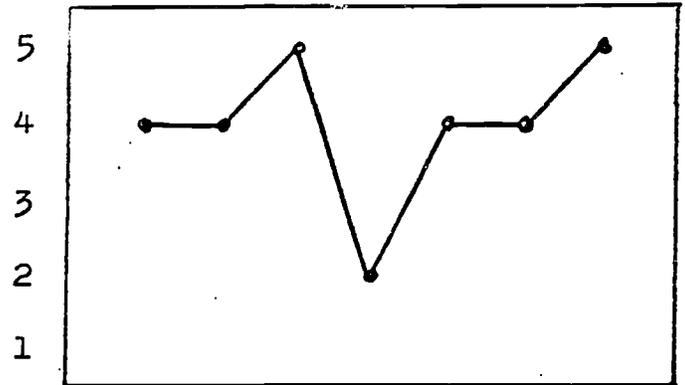


Figure 28

Four Year Old Female ID00855

1 2 3 4 5 6 7

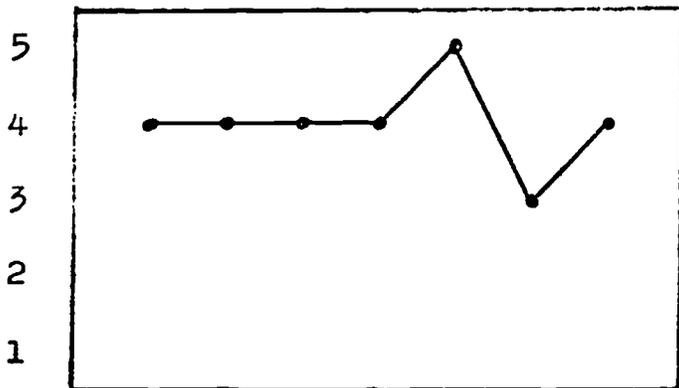


Figure 29

Four Year Old Female ID00450

1 2 3 4 5 6 7

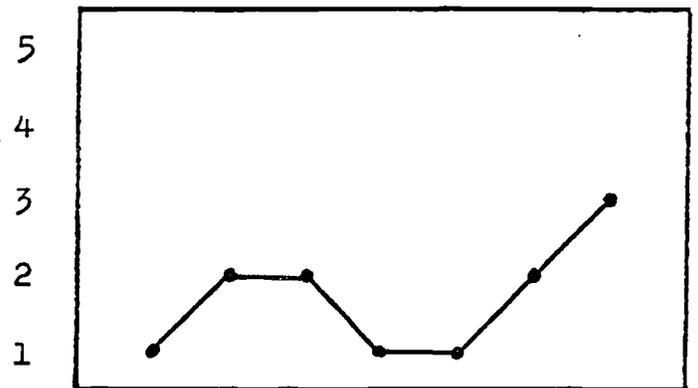


Figure 30

Four Year Old Female ID24085

1 2 3 4 5 6 7

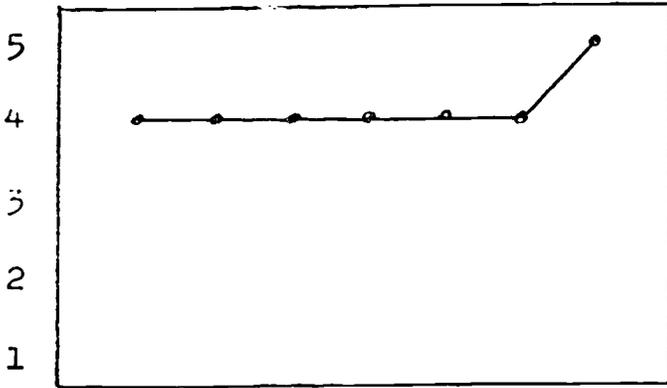


Figure 31

Four Year Old Female ID02755

1 2 3 4 5 6 7

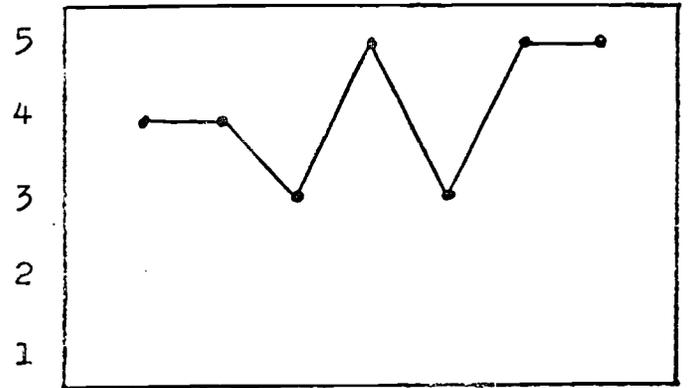


Figure 32

Four Year Old Female ID02885

1 2 3 4 5 6 7

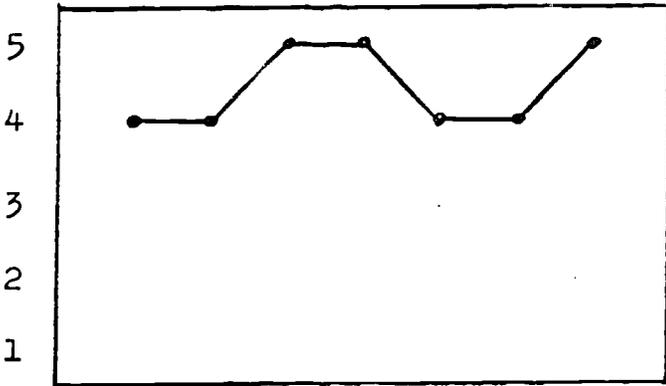


Figure 33

Five Year Male ID00359

1 2 3 4 5 6 7

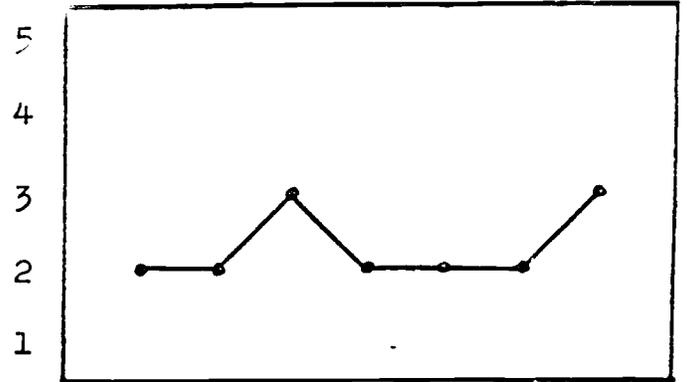


Figure 34

Five Year Old Male ID01364

1 2 3 4 5 6 7

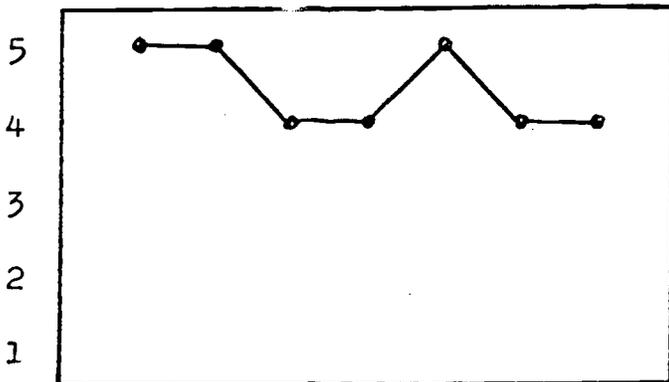


Figure 35

Five Year Old Male ID22855

1 2 3 4 5 6 7

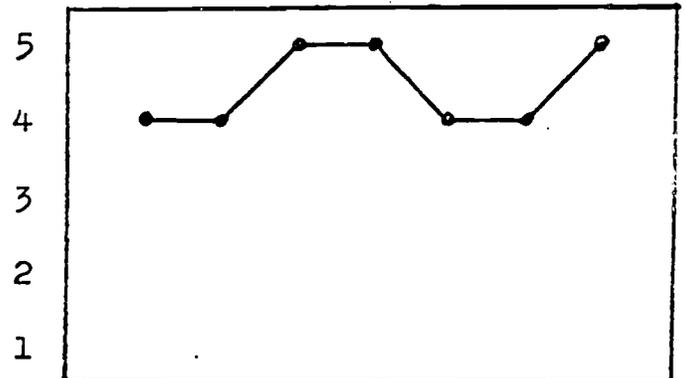


Figure 36

Five Year Old Male ID26157

1 2 3 4 5 6 7

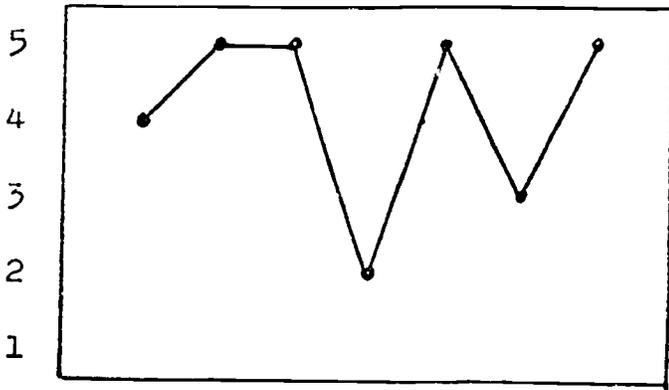


Figure 37

Five Year Old Female ID24455

1 2 3 4 5 6 7

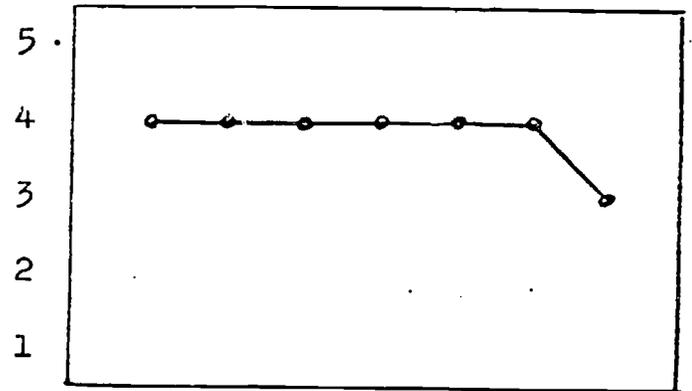


Figure 38

Five Year Old Female ID22660

1 2 3 4 5 6 7

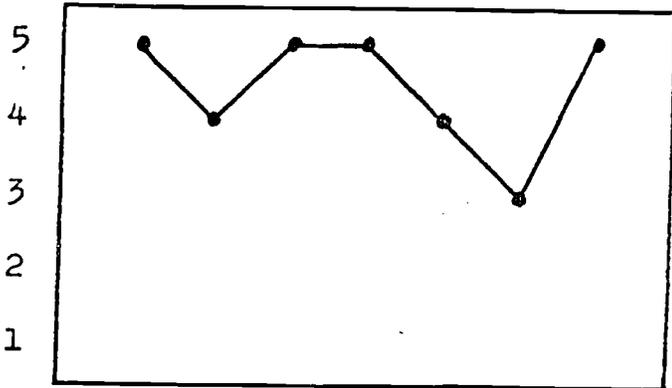


Figure 39

Five Year Old Female ID02091

1 2 3 4 5 6 7

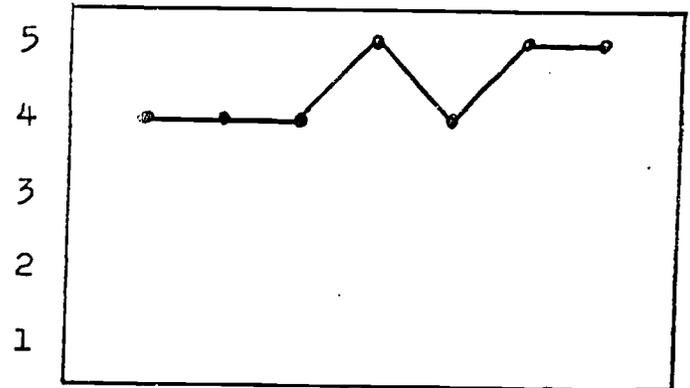


Figure 40

Five Year Old Female ID02655

1 2 3 4 5 6 7

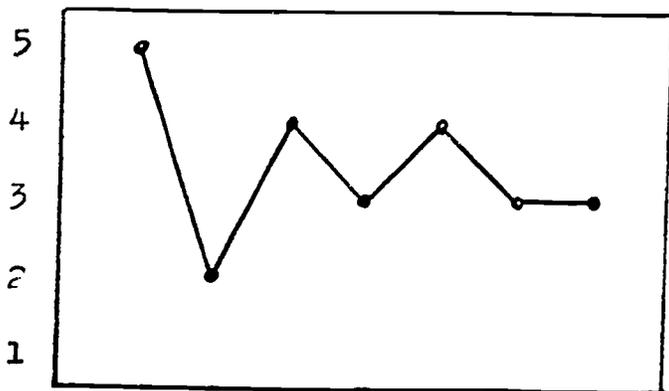


Figure 41

Five Year Old Female ID22374

1 2 3 4 5 6 7

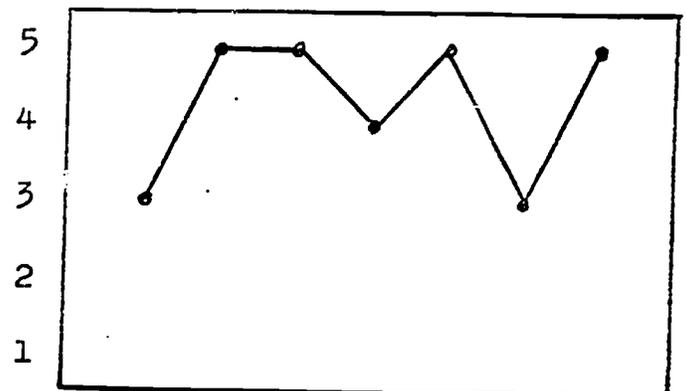


Figure 42

DISCUSSION

The first impression from the profiles is, perhaps, confusion. The 42 children are different. Yet there are similarities as one might expect, for example, for age levels. Similarities and dissimilarities can be inspected more closely by looking at three major characteristics: level, variability and shape (Helmstadter, 1964).

1. Level. Level is the average height of a graph. There are 22 levels represented in the 42 profiles; 9 of these levels apply to only one child, 7 levels include two children, 5 levels include three children, while four children share the remaining level. Generally, levels increase with age as expected. However, there are exceptions such as Fig. 34, a five-year-old boy whose profile level is the same as for Fig. 1, a two-year-old boy. Another exception is Fig. 7, a two-year-old female, where the level is above a mid-point between Scale Point 3 and 4. The reader will encounter other exceptions to the age level trend such as Fig. 21 and Fig. 41.
2. Variability. A straight line profile indicates no variability. There are none of these among the 42 profiles. A profile with many peaks and valleys shows a great deal of variability. A variability index was computed by simply counting movement across the scales either up or down a scale point or a scale points. For example, the variability index for Fig. 19 is 1 while for Fig. 37 it is 11. Twenty-six of these children have variability indices of 1, 2, 3, or 4. There are 10 profiles at index 4, 8 profiles at 3, 5 profiles at 2, and 3 with a variability index of 1. The other 16 profiles show even more variability. There are 3 profiles for each of these indices: 5, 7, and 8. Six profiles have an index of 6 and there is one profile with an index of 11. No relationship between age or sex for amount of variability is evident, although small n's may obscure such relationships.
3. Shape. When level and variability have been accounted for, there remain differences in shape which represent patterns of variation. Figures 14 and 22 have the same shape but at different levels. Figures 25 and 36 might be

the same shape if there were a Scale Point #6 for the seventh Self-Regard Scale on Fig. 36. However, again, these two profiles are at different levels. There are no other shapes that are the same, with one exception. Figure 33 (a four-year-old female) and Figure 36 (a five-year-old male) are the same shape, level and variability. It is truly exceptional to find identical profiles in a set of 42, when one realizes that 5^7 (number of scale points raised to the power represented by number of scales) equals 78,125 possible combinations. This finding of one set of identical profiles out of 42 cases may be meaningful or merely a fluke occurrence which intrigues and tantalizes. The particular children still differ in age and sex.

CONCLUSION

The 42 profiles of parent ratings on the seven Self-Regard Scales are a graphic demonstration that while children in some ways are similar, they are also dissimilar. This suggests that a Self-Regard profile provides a way of picturing a child in something approximately like that child's unique state of Self-Regard. For all those, such as parents, educators, therapists and counselors, who are concerned about dealing with children as individual persons, rather than merely examples of some relatively simple typology, the Self-Regard profiles should prove of real benefit.

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GEOGRAPHICAL AREA AND THE BARBER SCALES OF SELF-REGARD
FOR PRESCHOOL CHILDREN

Lucie W. Barber

Introduction

The research question addressed in this study is: Do the seven Scales of Self-Regard assess similarly in all parts of the country? Other papers in this series report on reliability, validity, etc. of the Scales (see references). In other studies, location of subjects (as indicated by the first number of zip codes) has not appeared to influence the use of the Scales. This paper describes a more detailed analysis of the problem.

Method

The sample for the 1975 field test of the Self-Regard Scales was deliberately set up so that a wide distribution of geographical locations would be represented. Through the cooperation of the National Association of Episcopalian Schools, representation from six of the ten zip code areas was obtained. The remaining four areas were represented in a 1974 field test.

The seven Self-Regard Scales were constructed for parents rating their own preschool child. Mothers have been demonstrated to be the most reliable raters. Although ratings by fathers and by preschool teachers were obtained, this study is confined to mother ratings. Table I displays the number of mothers, each of whom rated a child on all seven Scales, and the zip code area from which the mothers originated. Frequencies are also expressed in percentages of the total sample.

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Table I - Origin of Mothers Rating the Self-Regard Scales in the 1975 Field Test

Zip Code	n Mothers	%
2 MD, WV, VA, NC, SC	12	6.9
3 TN, MS, AL, GA, FL	37	21.4
6 NB, KS, MO, IL	11	6.3
7 TX, OK, AR, LA	37	21.4
8 ID, WY, NV, UT, CO, AZ, NM	24	13.9
9 WA, OR, CA, AK, HI	52	30.1
Total	173	

In the analysis of data, use was made of the California Biomedical Program for Correlation with Item Deletion. The 79 x 79 matrix contains cross correlations for mother ratings on the Self-Regard Scales and various demographic variables including chronological "Age of Child" and "Zip Code" of family. "Age of Child" was the only variable that correlated significantly, $p \leq .05$, with mother rating on every Self-Regard Scale in both the 1974 and 1975 data. This was an expected finding because the Self-Regard Scales were constructed as developmental Scales.

Although "Zip Code" and rating did not correlate significantly, in the 1975 data "Age of Child" and "Zip Code" did ($r = -0.16$, $p \leq .05$). This negative relationship would indicate that as geographical location moves west, age of child tends to decrease. Since age of child is so consistently related to Scale ratings, the decision was made to partial out age in order to more thoroughly examine the relationship between rating and geographical origin. The following formula was used in the computations:

$$r_{12.3} = \frac{r_{12} - (r_{13} \cdot r_{23})}{\sqrt{(1 - r_{13}^2)(1 - r_{23}^2)}}$$

Where r_{13} is the coefficient for Rating and Age

r_{12} is the coefficient for Rating and Zip Code

r_{23} is the coefficient for Zip Code and Age

Results

Table II displays coefficients before and after partialing out age of child.

Table II - Original and Partialled Product Moment Correlation Coefficients for Mother Rating, Age of Child and Zip Code

	Rating & Age r_{13}	Rating & Zip Code r_{12}	Zip Code & Age r_{23}	Age Partialled Out $r_{12.3}$
Self-Regard Scale				
Purposeful Learning of Skills	.51	-.05	-.16	-.0353
Completing Tasks	.36	-.11	-.16	-.0569
Coping with Fears	.44	-.09	-.16	-.0227
Children's Response to Requests	.34	-.15	-.16	-.1006
Dealing with Frustrations	.48	-.03	-.16	-.0525
Socially Acceptable Behavior	.49	-.05	-.16	-.0322
Developing Imagination in Play	.43	-.04	-.16	-.0320

With the exception of the Scale "Children's Response to Requests," all coefficients become zero order. The coefficient -.10 for "Children's Response to Requests" is nonsignificant, $p = .05$, $n = 173$.

The collection of data and the analysis for the 1974 field test differed from the 1975 field test enough so that coefficients Scale by Scale for Zip Code were not available. Parents completed between 2 and 7 of the Self-Regard Scales. Therefore, frequencies for any one Scale varied from

52 to 73. The total number of Scales received was 448. Table III displays the origin of Scales by Zip Code.

Table III - Origin of Self-Regard Scales from 1974 Sample

Zip Code	Number of Scales
0 ME, NH, VT, MA, RI, CT, NJ, VI, PR	36
1 NY, PA, DE	282
2 TN, MS, AL, GA, FL	07
4 MI, IN, OH, KY	43
5 MT, ND, SD, MN, WI, IA	21
7 TX, OK, AR, LA	46
8 ID, WY, NV, UT, CO, AZ, NM	1
9 WA, OR, CA, AK, HI	6
No information	6
Total	<u>448</u>

For this distribution of Scales, regardless of particular Scale, some relevant results can be reported. With all Scales combined, the analysis provided the following two product moment correlation coefficients.

Zip Code and Scale Rating -.02517

Zip Code and Age of Child -.00752

Zip Code does not appear to relate to either rating or Age of Child in the 1974 sample.

Conclusions

The findings in this study lend strong support to the contention that geographical location does not affect ratings on the seven Barber Scales of Self-Regard for Preschool Children. The implication is that the Scales "work" all across the United States.

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Xeroxed copies of these studies may be obtained for the cost of reproduction and mailing, 10¢ a page (minimum \$1.00).

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VARIATIONS AMONG INDIVIDUAL PRESCHOOL CHILDREN
IN THE DEVELOPMENT OF SELF-CONCEPT

Lucie W. Barber

Introduction

The principal purpose for developing the Self-Regard Scales was to provide instruments for assessing levels of development for individual children. With such devices in hand, educational interventions can be geared to help the child at that child's level of development. This assessment-based educational procedure is a long-dreamed-of goal, particularly for those educators striving for individualized instruction. At the preschool level, parents probably are the ideal teachers of an individual, their own child. The Barber Scales of Self-Regard are intentionally constructed for a parent or parent surrogate. Eventually, it is our hope to have educational materials available. These materials will help a parent, once having rated a child, to work with that child toward a next higher scale point or level of development.

It has been a consistent finding in three field tests of the Self-Regard Scales that age and scale points are related (Barber & Peatling '75; Barber & Cernik '75). However, it has also been a consistent finding that the range of scale points for any age is extensive. It is the purpose of this article to report the latest findings on range for the 1975 field test. (For a thorough description of this sample see Barber, Cernik & Barton '75).

Results

Table I displays means and standard deviations for the mother ratings on each of the Self-Regard Scales. Since there was only one two year old in the sample, essentially we are looking at averages for three, four and five year old children.

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Table I - Means and Standard Deviations for Mother Ratings of Self-Regard Scales

	<u>Means</u>	<u>s. d.</u>	<u>n</u>
Purposeful Learning of Skills	3.7616	0.7845	172
Completing Tasks	3.5872	0.7862	172
Coping with Fears	4.0117	0.8471	171
Children's Responses to Requests	3.4162	0.9706	173
Dealing with Frustrations	3.5930	0.8968	172
Socially Acceptable Behavior	3.8728	0.9977	173
Developing Imagination in Play	4.1570	1.0727	172

In contrast, Table II displays the ranges or ratings by age level for each of the seven Scales. The statistical range is found in parentheses.

Table II - Ranges of Mother Ratings on Seven Scales of Self-Regard by Age Levels

<u>Self-Regard Scale</u>	<u>3 Yr. Olds n=37</u>	<u>4 Yr. Olds n=65</u>	<u>5 Yr. Olds n=69</u>
Purposeful Learning of Skills	1-5 (4)	2-5 (3)	2-5 (3)
Completing Tasks	1-4 (3)	2-5 (3)	2-5 (3)
Coping with Fears	2-5 (3)	2-5 (3)	3-5 (2)
Children's Responses to Requests	1-5 (4)	2-5 (3)	2-5 (3)
Dealing with Frustrations	1-5 (4)	2-5 (3)	2-5 (3)
Socially Acceptable Behavior	1-5 (4)	2-5 (3)	3-5 (2)
Developing Imagination in Play	1-5 (4)	2-5 (3)	1-5 (4)

Discussion

Table I with means and standard deviations would lead to the belief that for each one of the five point Scales of Self-Regard there must be a fair amount of variability by individual children. However, the extremes in ranges displayed in Table II are perhaps more than expected. Generally, the ranges are greater than found in the 1974 field test with a subsample of 39 children (Barber & Peatling '75).

The results demonstrate that, although age and scale point are related for the total sample, there are individual children who vary. There are 3 year old children rated 1 and some rated as high as 5. Four and five year olds on most Scales range from 2 to 5. Just because children are a particular age does not mean that they are all at the same developmental level on the Self-Regard Scales. This implies that they should be treated or taught not at some mythical age level but at their own level of development. With the Scales of Self-Regard, each child's level can be assessed. This makes possible educational intervention to match the child so that normal, step by step, progress can be made. Such progress does not demand more than should be expected of the child. This assessment-based educational procedure holds much higher promise of success than the more standard procedure of assigning children to curriculum by age level.

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USABILITY BY RATERS OF THE BARBER SCALES OF SELF-REGARD FOR PRESCHOOL CHILDREN

Lucie W. Barber and Kimberly Barton

Introduction

The Barber Scales of Self-Regard for Preschool Children are explained and described in two sources (Barber, '75a; Barber & Peatling, '75). The description of the sample for a 1975 field test is given in the first (Barber, Cernik & Barton, '75) of a series of papers to which this study belongs. The purpose of this study is to probe into the question of whether or not raters have difficulties rating children on the Self-Regard Scales. Two sources of evidence were available: open-ended comments and whether actual ratings were made or omitted.

Each of the seven Self-Regard Scales used in the 1975 field test had spaces for comments by the rater. The rater was given the opportunity to comment, or not, on (a) ease or difficulty in rating, (b) what they got out of working with the Scale, and (c) if they had any suggestions for improvement. Of the total sample of 177 children rated by at least one parent, there were 173 sets of seven ratings by a mother, 53 sets rated by a father and 130 teacher ratings on sets of the seven Scales. Theoretically, these numbers indicate that 2492 Scales with comments could have been encountered if each and every Scale had a comment added.

This was far from the case. One reason was that a rater of seven Scales often commented on only one of the Scales intending the comments to apply also to the other six. A few raters did comment on more than one Scale in the set of seven, but the comments were not necessarily confined to that Scale. Thus, analysis Scale by Scale was impossible. The following methodology was devised as most appropriate given the available data.

Methodology

As Scales were received, whenever one was encountered with open-ended statements, those statements were typed on a card and coded for identification. Cards were separated into three groups: mother, father and teacher. Three judges independently performed a content analysis on each group seeking empirical

categories. The next step was agreement on a standard set of categories and their definitions. Frequencies within these categories were arrived at independently by the three judges. The charts that follow will show agreement by three judges and, in parentheses, by two judges. The frequency of any one card was entered in whatever category or categories deemed appropriate.

As completed Scales were received from the 15 schools involved, they were recorded. Whenever a Scale had no rating or more than one rating, note was made of such an occurrence.

Results

Of the 173 mothers who rated the seven Scales, all except 2 rated each and every Scale at one Scale point. Two mothers (.1% of mothers) each rated one Scale at two Scale points (.02% of Scales).

Of the 53 fathers, all fathers except 3 rated each and every Scale at one Scale point. Again, these 3 fathers (.5% of fathers) rated at two Scale points on one Scale (.8% of Scales).

There were three Scales for two children which a teacher failed to rate at all. This is .3% of all Scales returned by teachers.

From open-ended data, there were only 223 statements (cards) totally. 58 mothers wrote 149 statements. 115 mothers made no comments. 8 fathers wrote 16 statements while 45 fathers wrote nothing.

Of the teachers from the 10 schools where teachers rated Self-Regard Scales, a teacher from 9 of these schools wrote at least one statement. There were 58 teacher statements.

The following table displays the results of content analysis of mother statements. Frequencies are given first where 3 judges agreed; then, in parentheses, where 2 judges agreed on additional cases. Neither the number of statements or the number of mothers add to a meaningful total because of overlap in assigning statements to categories.

Table I - Mother Comments on Self-Regard Scales

<u>Category</u>	<u>Descriptions</u>	3 judges agreed;() 2 judges agreed	
		<u>No. Statements</u>	<u>No. Mothers</u>
1. Easy	The word "easy" or comment clearly indicating ease	29 (0)	10 (0)
2. Parent benefited	Learned about child & child development. Gained insights in helping child progress	12 (5)	7 (4)
3. Difficult	The word or comment clearly indicating difficulty	17 (3)	13 (2)
4. Child vacillates	Shows behaviors at more than one Scale point. Wants more Scale points	20 (3)	16 (3)
5. Criticisms of Scales	Disagrees with concepts, examples, descriptions or format	9 (2)	8 (2)
6. Other*		14	9

* "other" - includes comments about particular children and helpfulness or non-helpfulness of examples and descriptions. There were 9 such categories; one (explanation why child not rated higher) contained 3 statements by 3 parents. The rest contained either 2 or 1 statements by 2 or 1 parents.

Father Comments

Only 8 fathers made comments. The same categories used for mother comments were employed. There were only two categories of the six where a greater number than one father made statements. Three fathers wrote 4 statements in the "difficult" category, while 5 fathers wrote 8 statements in the "child vacillates" category. There were no statements in the category "Criticisms of Scales".

Teacher Comments

Table II displays the results for teachers. The categories differ somewhat from categories for parents. Again, categories with very low frequencies were collapsed into an "Other" category in order to highlight categories more relevant to the Scales themselves.

Table II - Teacher Comments on Self-Regard Scales

<u>Category</u>	<u>Description</u>	<u>No. Statements</u>	<u>No. Teachers</u>
1. Easy	Easy, boring, got nothing out of it	11 (1)	3
2. Difficult	The word "difficult" or clear evidence teacher had difficulty	15 (3)	6
3. Geared to Parents	Examples not for school behaviors	9 (3)	6
4. Child vacillates	Vacillates, borderline	11 (1)	3
5. Could not rate	Could not rate, no points fit. Did not rate	3 (0)	2
6. Other*		11 (11)	6

* "other" - includes 4 categories: insights about child (1), wants Scales for teachers (3), comment about child (6) and irrelevant to Scales (1).

Discussion

One could say that 223 statements out of a possible 2492 statements (9%) indicates that Scales were rated with so little difficulty that raters saw little reason to comment. This would not be entirely honest because, as indicated in the introduction, there were raters whose comments on one Scale intended these comments to apply to two or more of the set of seven Scales.

It can be said that a greater proportion of mothers (33-1/2%) made any comments than did fathers (15%). Mothers who did comment averaged 2.57 statements and fathers averaged 2 statements each. 90% of the schools contributed statements by teachers at the average rate of 6.44 statements per school. The meaning of these comparisons does indicate differences between mothers, fathers, and teachers in their response to any opportunity to write in their own comments. However, it still does not approach an evaluation of the Scales themselves.

Perhaps an inspection of number of persons commenting per category in the tables will be more helpful. Such an inspection indicates very low frequencies for any particular category. The largest frequency, 16 mothers for the "child vacillates" category, is still only 9% of the sample of mothers. All other percentages for all other parent categories are either the same or in most cases lower. In other words, comments either pro or con were not representing many parents.

It is interesting to note that there were no statements concerning the amount of time required to complete a Self-Regard Scale. If parents objected to spending time, at least they did not give us any evidence. In a 1974 field test there were 448 completed Scales, but only 19 of these had open-ended comments. One Scale bore the comment, "This one was quick and easy -- 10 minutes maximum". In preliminary testing of the Scales, 12 parents were asked to record the amount of time required to complete a Scale. The average time reported was 9-1/4 minutes. Based on this evidence, we allotted 15 minutes for completing a Scale at a workshop for 114 participants. Although criticism was encouraged, no criticism on time was encountered. It appears safe to say that 15 minutes is ample time for completing a Self-Regard Scale.

The results from the 1975 field test suggest that teachers had more mixed reactions to the Scales. Although frequencies for teachers are small when translated into % of the total of 10 schools, a different picture appears. Thirty %, teachers from 3 schools, commented that Scales were easy, but that they were boring and teachers learned nothing. Could it be that these teachers either know the child exceedingly well and/or are well-versed in developmental levels? Teachers from 6 schools (60%) had difficulty with the Scales. The categories "Geared to Parents", "Child Vacillates" and "Could not rate" may be part of the explanation for the difficulty. Could it be that these teachers with only school behaviors to observe found Scales that were purposefully written for parent assessment beyond their ken?

These questions are raised not only because of the results in this study, but because of clues suggested in other studies with the 1975 field test on the Self-Regard Scales (Barber, '75b; Barber, '75c). It would appear that the Scales are more difficult for teachers than for parents, at least in this sample.

As far as parents are concerned, the extremely low frequency of parents commenting adversely coupled with the overwhelming frequency of returned Scales with one Scale point chosen for a child strongly supports the contention that parents can readily use the Self-Regard Scales to rate their child. This evidence duplicates the results in the 1974 field test.

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NORMATIVE DATA FOR THE BARBER SCALES OF SELF-REGARD FOR PRESCHOOL CHILDREN

Lucie W. Barber and Helen C. Cernik

Introduction

Since normative data are hopefully provided for any assessment device, that data will be provided for the Barber Scales of Self-Regard for Preschool Children in this paper. The Scales were found to correlate with age in a previous field test (Barber & Peatling '75) and in this 1975 field test (Barber & Cernik '75a). This is to be expected since each Scale describes a normal developmental sequence of 5 levels. Thus, data will be reported by age level. Although the variable of child's sex has not been found to correlate at statistically significant levels with any of the Scales (Barber & Peatling '75; Barber '74) there was a clue in a 1974 field test that sex differences might exist at least with some of the Scales. Therefore, in this 1975 field test, the variable sex was inspected for norms by age level for each sex.

Lest norms take on greater importance than is warranted, let it be emphasized immediately that the seven Scales of Self-Regard are intended to identify the developmental level of individual children so that educational intervention can match a child's level of maturation. However, norms can be useful to preschool teachers in assessing attainment of goals in a class. Norms can also be helpful to professionals for identifying those children with extreme deviations from norms so that appropriate help may be given.

Procedure

The norms are expressed first as age level means of scale point ratings. The means were computed from contingency tables in the computer analysis using the University of California Biomedical Program for such tables. Mother ratings are used throughout because in the interjudge reliability study (Barber '75a) mother ratings were deemed most accurate. Also, the frequency of mother ratings is greatest.

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There were 172 mother ratings on all Scales available in the 1975 sample. This sample is described in the first (Barber, Cernik & Barton '75) of a series of papers reporting studies on the Self-Regard Scales with the 1975 sample. Briefly, the sample represents middle to upper middle class families distributed across the country. The children attended an Episcopal school, either at the nursery or kindergarten level. These means are reported by age level, regardless of sex.

Next, means were recalculated to include the ratings available from a 1974 field test. This was done in order to increase sample sizes. It was also done in order to combine different samples. The 1974 sample had a much wider range in family income and education of parents. It included some 2 year old children (the 1975 sample had only one 2 year old). The 1974 children did not attend an Episcopal school. Geographical areas not represented in the National Sample were represented in the 1974 field test.

In order to better understand the age level means as norms, the modes, by age level, were found from the contingency tables. This was done for the combined samples.

Finally, age level means for scale points were calculated by sex. This data was available only for the 1975 sample. Significant differences of means between sexes at each age level were tested by analyzing for the t statistic.

Results

Figure 1 graphs the age level means of Scale ratings across the seven Scales for the 1975 sample. The 2 year level is omitted because a mean cannot be calculated when $n = 1$.

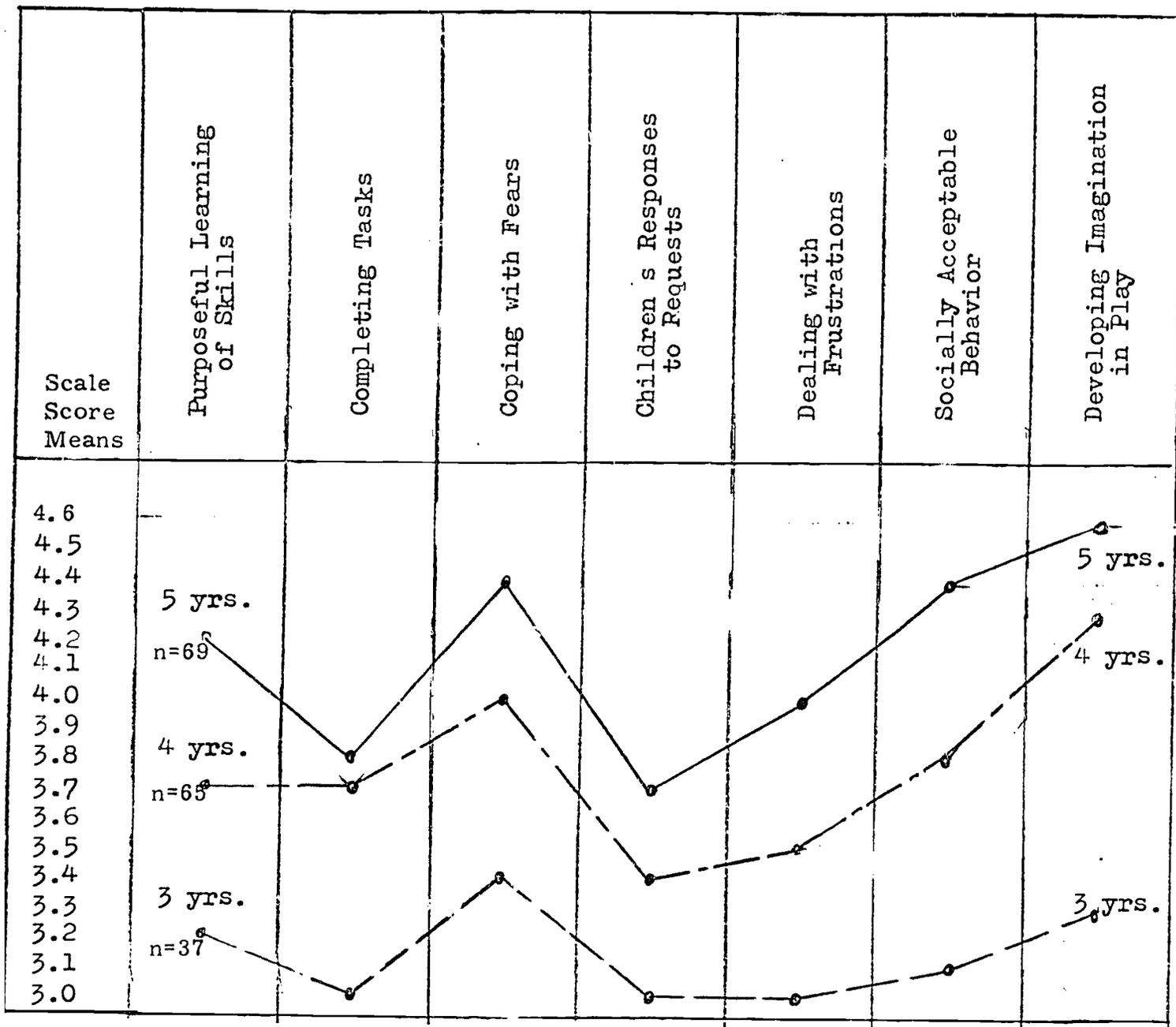


Figure 1 - Age Level Means of Self-Regard Scales Ratings for the 1975 Sample

The results of recalculating age level means for the combined samples are shown in Figure 2.

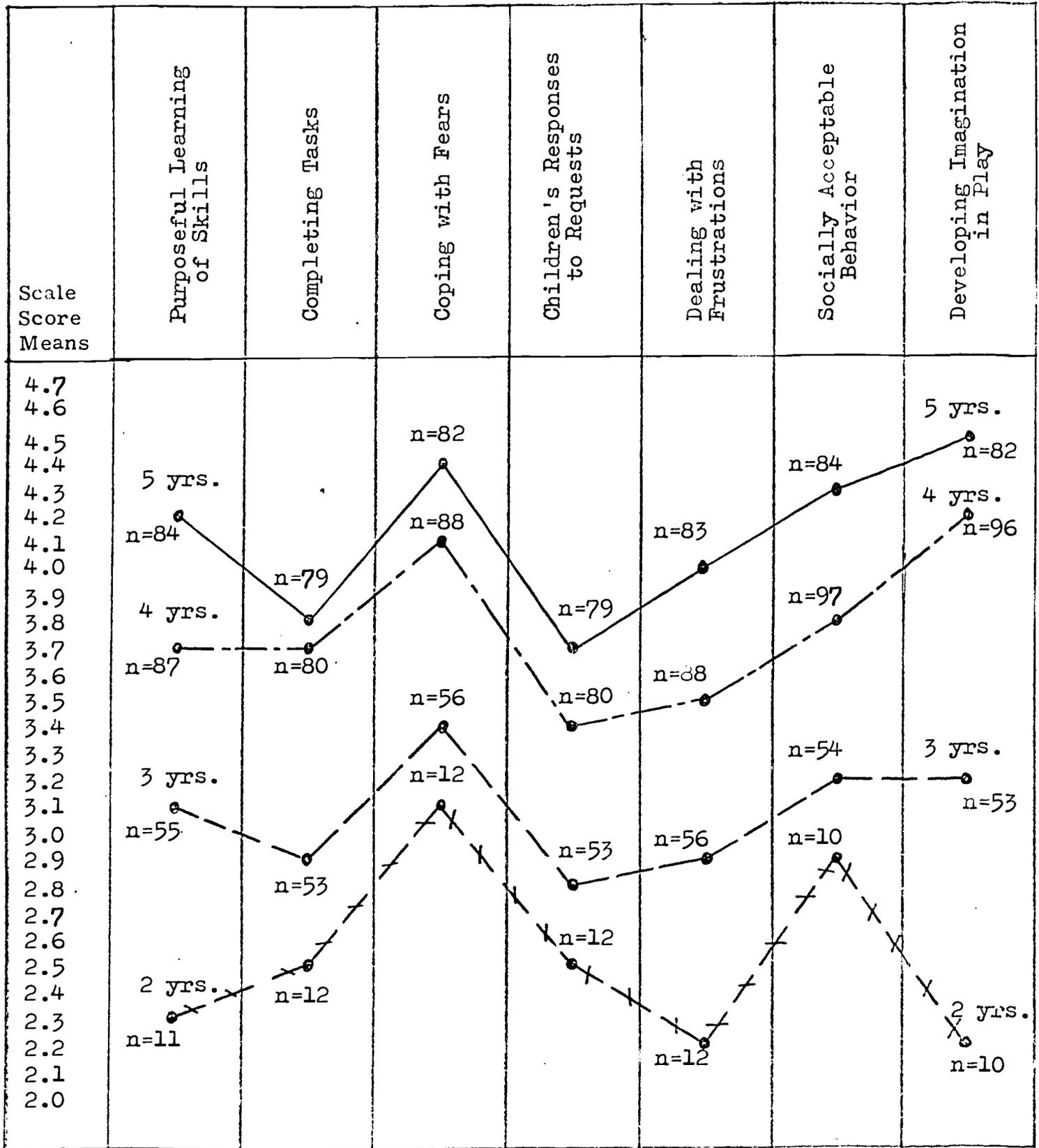


Figure 2 - Age Level Means of Self-Regard Scales Ratings for the Combined 1974 and 1975 Samples

The reason the n differs for age levels and for Scales in Figure 2 rests with requests made to parents in the 1974 sample. Mothers rated two or three Scales, then were asked if they wished to rate other Scales also. Some did ask for more, some did not.

Table I displays the age level means in table form for the ease of some readers who prefer tables.

Table I - Age Level Means of Self-Regard Scale Ratings for the Combined 1974 and 1975 Samples

Age of Child	Purposeful Learning of Skills	Completing Tasks	Coping with Fears	Children's Responses to Requests	Dealing with Frustrations	Socially Acceptable Behavior	Developing Imagination in Play
2 years	2.3 n=11	2.2 n=12	3.1 n=12	2.5 n=12	2.2 n=12	2.9 n=10	2.2 n=10
3 years	3.1 n=55	2.9 n=53	3.4 n=56	2.9 n=53	2.9 n=56	3.2 n=54	3.2 n=53
4 years	3.7 n=87	3.7 n=80	4.1 n=88	3.4 n=80	3.5 n=88	3.8 n=97	4.2 n=96
5 years	4.2 n=84	3.8 n=79	4.4 n=82	3.7 n=79	4.01 n=83	4.3 n=84	4.5 n=82

The results for norms by modes are displayed in graph form in Figure 3 and by table in Table II. In reading Table II the Scale titles and ages for each Scale are found in the two left-hand columns. Scale points are headings for the remaining columns. Where there are numbers in these columns, the Scale point title represents the mode. In reading the table merely follow the first example found. For the Scale "Purposeful Learning of Skills", the mode is at Scale point 2 where out of a total n for 2 year olds of 11, 5 children were rated 2. This was the highest frequency for 2 year old children.

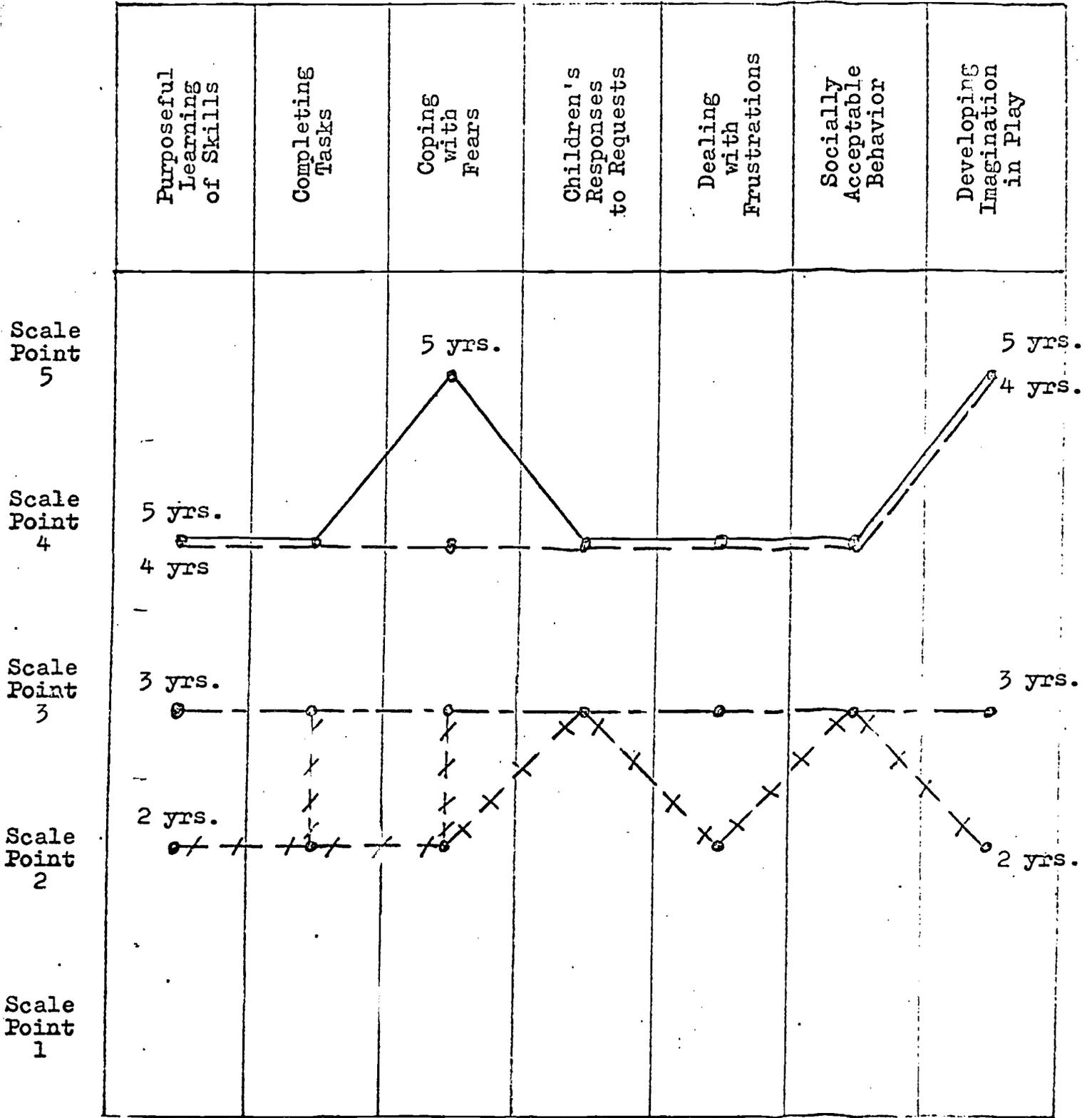


Figure 3. Age Level Modes of Self-Regard Scales Ratings for the Combined 1974 and 1975 Samples

Table II -- Modes of Scale Points by Age for 1974 and 1975 Samples (Mother's Ratings)

Scale	Scale Point Age	Scale Point 1	Scale Point 2	Scale Point 3	Scale Point 4	Scale Point 5
Purposeful Learning of Skills	2 yrs.		5 n=11			
	3 yrs.			35 n=55		
	4 yrs.				52 n=87	
	5 yrs.				50 n=84	
Completing Tasks	2 yrs.		5 n=12	5 n=12		
	3 yrs.			24 n=53		
	4 yrs.				49 n=80	
	5 yrs.				49 n=79	
Coping with Fears	2 yrs.		4 n=12	4 n=12		
	3 yrs.			34 n=56		
	4 yrs.				42 n=88	
	5 yrs.					40 n=82
Children's Responses to Requests	2 yrs.			6 n=12		
	3 yrs.			24 n=53		
	4 yrs.				39 n=80	
	5 yrs.				37 n=79	
Dealing with Frustrations	2 yrs.		6 n=12			
	3 yrs.			21 n=56		
	4 yrs.				43 n=88	
	5 yrs.				43 n=83	
Socially Acceptable Behavior	2 yrs.			5 n=10		
	3 yrs.			20 n=54		
	4 yrs.				36 n=97	
	5 yrs.				38 n=84	
Developing Imagination in Play	2 yrs.		6 n=10			
	3 yrs.			22 n=53		
	4 yrs.					47 n=93
	5 yrs.		42			58 n=82

The last results to report are the age level means of Scale ratings for male and female children and the t analysis. Although correlation coefficients for Scale ratings and sex have been consistently non-significant in both the 1974 field test (Barber '74, Barber & Peatling '75) and the 1975 field test (Barber & Cernik '75b) for every Self-Regard Scale, the refinement of analysis by age level of each sex could reveal differences. Table III displays these findings.

Table III - Age Level Means of Self-Regard Scale Ratings by Sex and Age for the 1975 Sample

TITLES OF SELF-REGARD SCALES

Ages of Children	Purposeful Learning of Skills	Completing Tasks	Coping with Fears	Child's Responses to Requests	Dealing with Frustrations	Socially Acceptable Behavior	Developing Imagination in Play
3 Year Old Males (n=20)	3.2	2.9	3.35	3.0	3.15	3.15	3.15
3 Year Old Females (n=17)	3.11	3.17	3.41	2.94	2.82	3.17	3.41
4 Year Old Males (n=35)	3.68	3.65	4.11	3.20	3.25 xx	3.71	4.17
4 Year Old Females (n=30)	3.7	3.8	3.93	3.50	3.83	3.96	4.4
5 Year Old Males (n=33)	4.18	3.94 x	4.46	3.84	4.03	4.33	4.45
5 Year Old Females (n=36)	4.16	3.64	4.27	3.66	3.97	4.36	4.58

xx t is significant at the .01 level
 x t is significant at the .05 level

Only two differences between means were found to be statistically significant. All other differences were non-significant.

Discussion

The differences between means of scale points for male and female children of ages 3, 4 and 5 years reveal that for the 1975 sample, at least, there are practically no sex differences for any of the Scales of Self-Regard. The two statistically significant differences that were found (Table III) suggest further research, such as partialling out demographic variables that were found to correlate significantly with scale point on the two Scales involved, in order to report a more refined analysis of sex differences. However, at the present time it would appear that mother ratings on the seven Self-Regard Scales differentiate only minimally on sex in the 1975 sample.

Inspection of Figure 1 and comparison with similar data from the 1974 data (Barber & Peatling '75) suggests that age-wise scale point means are rather similar particularly on the Scales "Coping with Fears" and "Dealing with Frustrations". The greatest differences are found in comparing the two samples on "Socially Acceptable Behavior" and "Developing Imagination in Play" where the means for 3, 4 and 5 year olds in the 1975 sample are all somewhat higher than for the 1974 sample. On the remaining Scales it is only the 1974 sample's 3 year olds who are noticeably lower than the 1975 sample's 3 year olds.

These differences reflect, perhaps, differences in samples. Thus the recalculations of means combining the two samples (Figure 2) represent the latest available age level norms based on means of mother scale point ratings for the Self-Regard Scales.

Lest the reader become too enamored by means as norms, it is well to take into consideration the modes. The modes allow one greater understanding of what any particular mean represents. For example, on

the Scale "Coping with Fears", the mean for 5 year olds is 4.4 but the mode is 5.0. The frequency is approximately 50% of the n, meaning that the other 50% must be quite spread out at other scale points. In fact, the range for 5 year old children is 3-5 in the 1975 sample (Barber '75b) and 3-5 in the 1974 sample (Barber & Peatling '75).

The graph in Figure 3 of modes by age levels dramatizes the differences in norms by modes as compared to norms by means in Figure 2. Most three year olds (mode norms) are rated at scale point 3 on all Scales, although the average three year old (mean norms) has a profile across Scales that displays variability. At each age level the profile differs according to the normative criterion chosen.

Summary

Normative data by age level means for both sexes and for each sex in the 1975 field test of the Self-Regard Scales has been presented. Evidence for sex differences was found in only two instances and should be studied further. At the present time, it would appear reasonable to present norms by age regardless of sex. The most current normative data, which combines results from the 1974 and 1975 field test, is presented by means and by mode.

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RELIABILITY OF THE BARBER SCALES OF SELF-REGARD FOR PRESCHOOL CHILDREN

Lucie W. Barber

Introduction

The seven Self-Regard Scales assess developmental levels of seven separable components of the global construct -- positive Self-Regard at the preschool level (Barber, '75; Barber, '74a). The Scales were intentionally constructed for parents, rating their own child, on the assumption that parents know their preschool child better than anyone else. Because of the developmental nature of the Scales (Barber & Peatling, '75), test-retest reliability and split-half reliability are without meaning. The only reliability estimate deemed appropriate is interjudge reliability; that is, mother-father, mother-teacher, father-teacher.

In a 1974 field test, there was a very small subsample where mother and teacher had rated the same child (Barber, '74b). The rho coefficients were exceedingly high. It is the purpose of this article to report results on an extension of the interjudge methodology with a much larger sample.

Methodology

The sample in the 1975 field test is described in the first of a series of papers (Barber, Cernik & Barton, '75). This 1975 sample came from nursery and kindergarten schools for children 2-5 years of age. The schools were asked to supply mother, father and teacher ratings on the seven Self-Regard Scales for each child that a school contributed to the total sample of 177. Many of the schools were able to comply with this request.

In the computer analysis of the data, product moment correlation coefficients were available for pairings of judges and are reported here.

Results

The results displayed in Table I were unexpected.

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Table I - Product Moment Correlation Coefficients for Pairings of Judges on the Seven Self-Regard Scales

Self-Regard Scale	<u>Mother-Father</u>		<u>Mother-Teacher</u>		<u>Father-Teacher</u>	
	<u>n</u>	<u>Coefficient</u>	<u>n</u>	<u>Coefficient</u>	<u>n</u>	<u>Coefficient</u>
Purposful Learning of Skills	49	.62342**	126	.46065**	48	.23963
Completing Tasks	48	.36187**	127	.30378**	48	.20720
Coping with Fears	48	.39037**	124	.34715**	47	.34155*
Children's Responses to Requests	48	.46011**	127	.25032**	48	-.01050
Dealing with Frustrations	48	.49014**	125	.26227**	47	.18786
Socially Acceptable Behavior	48	.53530**	127	.37548**	48	.39283**
Developing Imagination in Play	48	.59796**	127	.41741**	48	.33942*

** $p \leq .01$

* $p \leq .02$

All other coefficients are n. s., $p > .05$

Although Table I gives statistically significant coefficients in many cases, for purposes of reliability these results are hardly any reason for delight. Remembering the very high reliability estimates found in the 1974 field test and the fact that they came from a day care center, data was available to test a "parent surrogate" hypothesis. A parent surrogate is defined here as a teacher who spends from 8-1/2 to 9-1/2 hours a day, 5 days a week, with a child and presumably knows

that child very well. Most of the schools in the sample identified that teachers spent only 3 hours a day on the average with the children. However, two schools were identified where the criterion was met:

1. A school in Illinois where teachers spent 8-1/2 hours a day, 5 days a week with the children 3-5 years of age.
2. A school in Colorado where teachers spent 9-1/2 hours a day, 5 days a week with 3 and 4 year olds.

Table II displays the rho correlation coefficients for mother-teacher ratings for these two schools plus the 1974 field test day care center in New York which runs 9 hours a day, 5 days a week for 2-5 year old children.

Table II - Estimated Reliability for Seven Scales of Self-Regard Based on Mother-Day Care Center Teacher Ratings of Same Child

	Illinois School		Colorado School		New York School	
	<u>n</u>	<u>rho</u>	<u>n</u>	<u>rho</u>	<u>n</u>	<u>rho</u>
Self-Regard Scale						
Purposeful Learning of Skills	11	.945	10	.973	14	.978
Completing Tasks	11	.941	10	.982	0	---
Coping with Fears	10	.993	10	.973	14	.972
Children's Responses to Requests	11	.896	10	.877	0	---
Dealing with Frustrations	11	.873	10	.939	14	.958
Socially Acceptable Behavior	11	.906	10	.909	12	.923
Developing Imagination in Play	11	.909	10	.921	10	.824

With the exception of the New York school, where there were no matched pairs for two of the Scales and where the last Scale "Developing Imagination in Play" had a lower coefficient than was found for the other two schools, the results from all three day care centers are remarkably similar. The data from the three schools were combined and rho coefficients recalculated in order to increase sample numbers and give reliability estimates representing widely separated schools geographically and enter in representation of 2 year old children.

Table III - Estimated Reliability for the Seven Scales of Self-Regard Based on
Mother-Day Care Center Teacher Ratings of Same Child

<u>Scale</u>	<u>n</u>	<u>Rho</u>
Purposeful Learning of Skills	35	.996
Completing Tasks	21	.999
Coping with Fears	34	.995
Children's Responses to Requests	21	.971
Dealing with Frustrations	35	.992
Socially Acceptable Behavior	33	.990
<u>Developing Imagination in Play</u>	<u>31</u>	<u>.988</u>

Discussion

These rather startling results allow for the reporting of four quite different reliability estimates from higher bound to lower bound reliabilities. The remarkable degree of agreement between mother and day care center teachers suggests that they know the child better than any other combination in the sample. This explains why only mother ratings are dealt with in many of the subsequent studies concerning the Self-Regard Scales. The n for mothers' ratings is greatest and their high reliability with day care center teachers supports an assumption that mothers' ratings are accurate.

The results displayed in Table I suggests an important factor with educational implications. It appears that different adults perceive individual children almost as different children. This is most strongly indicated for father-teacher. One implication is that teachers who are with a child short periods of time should be aware in their contacts with parents that these perceptual differences exist. Another implication is that preschool teachers who wish to learn about and help their students, at least in the socio-emotional realm, would do well to incorporate all the help they can from mothers. Mothers' ratings on the Self-Regard Scales can be an invaluable aid to preschool teachers.

Fathers, of course, should not be overlooked. In this sample some 94% of the fathers worked full time outside the home. The results in Table I

indicate a substantial degree of agreement with mothers on rating the Self-Regard Scales. At the same time the coefficients indicate a proportion of disagreement. In other samples, where fathers spend more time with their children and place high priority on a close relationship with their children, results would, no doubt, be different. Teachers can be sensitive to parents perceptual differences by requesting both parents to rate their child on the Self-Regard Scales. Teachers and parents themselves can benefit from this procedure.

In conclusion, while perceptual differences in adults viewing preschool children existed, in this sample when interjudge reliability estimates were based on ratings by two adults who presumably know the child best, coefficients in the high .90's for each and every Self-Regard Scale were found.

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X75-82

DEVELOPMENTAL SCALES OF SELF-REGARD FOR PRESCHOOL CHILDREN

Lucie W. Barber and Helen C. Cernik

Introduction

The Barber Scales of Self-Regard were constructed in such a way as to assess a child's level in a developmental sequence (Barber '75a). On each of the seven Scales, scale point 1 describes the least mature level and scale point 5 describes the most mature level. The scale points in between describe the levels leading to the maturation potentially possible for a preschooler.

Maturation, even in an attitude (positive Self-Regard), is commonly associated with chronological age. In a previous field test in 1974, correlation coefficients were computed for mother ratings on Self-Regard Scales and age of the child. The probability level of the coefficients for six of the Scales was at .01 and for the seventh Scale at .05 (Barber & Peatling '75).

Table I displays the results from the 1975 field test. A full description of this field test and the sample is available (Barber, Cernik, & Barton '75).

Table I - Product Moment Correlation Coefficients for the Two Variables -- Scale Point and Chronological Age

<u>Self-Regard Scale</u>	<u>n</u>	<u>Coefficient</u>	<u>Level of Significance</u>
Purposeful Learning of Skills	171	.51065	<.01
Completing Tasks	171	.36018	<.01
Coping with Fears	170	.43812	<.01
Children's Responses to Requests	172	.33590	<.01
Dealing with Frustrations	171	.48110	<.01
Socially Acceptable Behavior	172	.48532	<.01
Developing Imagination in Play	171	.43362	<.01

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Again, results do indicate a relationship between mother rating of her child and child's age for all seven Self-Regard Scales. This supports the contention that the Scales are developmental and adds evidence for the content validity of the Scales.

Another way of demonstrating the developmental claim made for the Scales is to inspect average scores, or means, by age level. Table II presents this evidence, again using mother ratings.

Table II - Age Level Scale Point Means Found in the 1975 Field Test of the Self-Regard Scales

<u>Self-Regard Scale</u>	<u>3 Yr. Olds</u>		<u>4 Yr. Olds</u>		<u>5 Yr. Olds</u>	
	<u>mean</u>	<u>n</u>	<u>mean</u>	<u>n</u>	<u>mean</u>	<u>n</u>
Purposeful Learning of Skills	3.162	37	3.697	66	4.164	67
Completing Tasks	3.027	37	3.788	66	3.791	67
Coping with Fears	3.378	37	4.015	66	4.363	66
Children's Responses to Requests	2.973	37	3.358	67	3.746	67
Dealing with Frustrations	3.000	37	3.515	66	4.045	67
Socially Acceptable Behavior	3.162	37	3.821	67	4.358	67
Developing Imagination in Play	3.270	37	4.258	66	4.552	67

The results demonstrate for each Scale that 4 year old means are higher than 3 year old means and 5 year old means are higher than means for 4 year old children.

Neither the correlation coefficients nor the means accounts for variability among individual children. Variability is dealt with in another study (Barber '75b). The reasons for coefficients to vary Scale by Scale

is also unexplained. The reason may be the Scales themselves; some are more closely related to age than others. However, when the coefficients from this 1975 sample are compared to the coefficients from the 1974 field test, there is some evidence for another explanation.

Table III displays the rank order for the seven Scales by size of coefficient. Rank 1 is assigned to the highest coefficient, Rank 2 to the next highest, while Rank 7 represents the lowest coefficient.

Table III - A Comparison of Rank Orders of Self-Regard Scales Based on Size of Coefficients Between Ratings and Child's Age

<u>Scale</u>	<u>1974 Field Test</u>	<u>1975 Field Test</u>
Purposeful Learning of Skills	1	1
Completing Tasks	4	6
Coping with Fears	5	4
Children's Responses to Requests	6	7
Dealing with Frustrations	2	3
Socially Acceptable Behavior	7	2
Developing Imagination in Play	3	5

These differences may reflect differences in the two samples. There were 11 two year olds in 1974 and only 1 in 1975. Whereas the 1974 sample included children not attending any preschool class, all 177 children in the 1975 field test were students in a nursery or kindergarten school. Perhaps group exposure accounts for a higher relationship between age and Scale point for "socially acceptable behavior". It is this Self-Regard Scale where the large difference in rank order occurs.

Age level means are remarkably similar between the two samples, although there are five comparisons where the difference is 4/10 of a Scale point. This may only be a reflection of size of sample, much larger in the 1975 field test III than in the previous test where $n = 39$.

The fact remains, however, that in both field tests a relationship between rating and child's age that was statistically significant was found for all seven Scales which supports the contention that the Self-Regard Scales are developmental.

Since the Scales were intended to assess development levels, any evidence that the Scales are, in fact, developmental supports the content validity of the Self-Regard Scales.

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ADDITIONAL EVIDENCE FOR THE OBJECTIVITY OF MOTHERS' RATINGS
ON THEIR PRESCHOOL CHILD'S SELF-REGARD

Lucie W. Barber

Introduction

The seven Barber Scales of Self-Regard for Preschool Children were deliberately constructed in such a way as to avoid the common sources of error in any rating scale (Helmstadter '64, Cronbach '60). Each Self-Regard Scale has five scale points. Each scale point has a title and general description plus four examples of actual children's behaviors to illustrate the scale point. Thus, ambiguity error is reduced to a minimum.

Generosity or leniency error is held to a minimum because the Scales describe a sequence of normal developmental levels. There are no right or wrong, good or bad choices for the rater to make.

The halo effect and proximity errors are reduced because raters are instructed to rate no more than two Scales at any particular time, with time intervening before attempting more Scales. There is evidence to suggest that the halo effect and proximity errors are, in fact, at a minimum. Forty-two profiles of ratings by mother across the seven Scales for same child revealed no straight line profiles but rather a great amount of variability (Barber & Cernik '74).

The error of central tendency would seem to be at a minimum because of the developmental nature of each Scale. Evidence is on hand that range in ratings is extreme even though normative data might suggest otherwise (Barber & Cernik '75, Barber '75a).

There is very strong evidence that only persons knowing the child extremely well can be reliable raters on the Self-Regard Scales (Barber '75b). The reliability coefficients between ratings of mother and a day care center teacher who is with the child 8-1/2 to 9-1/2 hrs. a day, five days a week are in the high 90's for every Scale. The coefficients between ratings of mother and father, mother and teachers in general, and father and teachers in general decrease for the Scales in that order.

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The Self-Regard Scales were intentionally constructed for parents. The behaviors in the illustrations describe behaviors observed in the home. The intention sprang from our desire to gradually develop assessment-based curricular materials for parents' use in the home. In the preschool years parents can be, with help, the most effective educators of their own children either in secular education (Barber '75c) or in religious education (Barber '74) when the educational goals concern attitude or character education.

Once having identified the parent (more accurately the mother, at least from present data) as the most reliable rater of the Self-Regard Scales along with a day care center teacher, the remaining constant error in Scales to be considered is judges' bias. It is to that problem that this particular study is addressed. The question can be rephrased to ask, "Can mothers be objective in rating their own child?" To be sure, the second question about teacher's objectivity can be raised; however, trained teachers are generally assumed to be objective about their students whereas more doubt appears to be generated about mothers.

Methodology

The reader will recall the extremely high estimates of reliability for mother - day care center teacher ratings on all seven of the Self-Regard Scales. A simple procedure was followed. In the few instances where mother and teacher differed, the frequency of teachers rating the child higher than the mother was recorded, as well as the frequency of mothers rating the child higher than the teacher. This was done for each of the Scales and each of three subsamples from the 1974 and 1975 field tests (Barber '75b). Finally, the totals across samples for each Scale were recorded, as were the totals across Scales.

Results

The results are displayed in Table I.

Table I - Frequencies of High Raters on the Self-Regard Scales for Three Day Care Centers

	<u>Colorado</u>		<u>Illinois</u>		<u>New York</u>		<u>Totals</u>	
	<u>Teacher High</u>	<u>Mother High</u>						
Purposeful Learning of Skills	1	1	1	3	3	1	5	5
Completing Tasks	2	1	2	2	-	-	4	3
Coping with Fears	1	4	3	5	2	5	6	14
Children's Responses to Requests	5	3	5	4	-	-	10	7
Dealing with Frustrations	4	3	4	3	2	8	10	14
Socially Acceptable Behavior	6	3	6	3	5	3	17	9
Developing Imagination in Play	3	4	1	5	5	2	9	11
	22	19	22	25	17	19	61	63

No matched pairs were available for two Scales from the New York sample.

Discussion

The results of comparing such widely separated samples suggest that slight differences do occur between samples which may be a reflection of the sample itself, or may be the particular children involved in the low n

for any one school for any one Scale. The totals across samples suggest little or no bias on the part of mothers except for the Scale "Coping with Fears." Perhaps mothers observe fewer fears in the home environment than teachers in school where school adds new fears for the child. Yet even for this Scale 6 teachers rated the child higher than the mother. The difference in totals for "Socially Acceptable Behavior" tend toward teachers rating higher than mothers. Perhaps many children are on their best behavior, so to speak, at school and let down a bit at home. However, again there were still 9 mothers who rated their child higher than did the teacher.

The totals across Scales for each school and particularly the totals for all schools for all Scales (61-63) suggest there is remarkably little evidence of bias for either teachers or mothers. It seems safe to say that results to date suggest that parents are objective when rating their child on the Barber Scales of Self-Regard for Preschool Children.

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ADDITIONAL EVIDENCE OF SEPARABILITY OF COMPONENTS ASSESSED
BY THE BARBER SCALES OF SELF-REGARD

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Introduction

The seven Scales of Self-Regard are based on a model which indicates that the personality element "Self" is constituted of seven, separable and measurable components (Barber '75a). This study addresses itself to the separability of the components assessed by the seven Scales. Other studies (Barber & Peatling '75; Barber '75b; Barber & Cernik, '75a; Barber, '75c; Barber, Cernik & Barton, '75a) report on measurability (reliability and validity).

In a previous field test the question of separability was studied (Barber, '74). The results supported the contention that the Scales do have independence one from another. That previous study was replicated with the present sample. In addition, the relationship of mother's rating of each Scale to mother's rating of every other Scale was inspected.

A degree of relationship between Scales would be expected since they each measure a component of the same global construct. Relationships between ratings across all seven Scales and specific demographic variables would not be expected very often if the Scales measure separable components.

Methodology

The sample for this study comes from the 177 subjects in the 1975 sample. This sample is fully described in another paper (Barber, Cernik & Barton, '75b). There were 172 children whose mothers rated their child on the seven Self-Regard Scales. Mothers' ratings were used in this study because they appear to be the most reliable raters for whom sufficient data is available (see Barber, '75b).

Correlation coefficients between mothers' ratings on Self-Regard Scales and demographic variables were produced in the computer analysis

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using the University of California's Biomedical Program for Correlation with Item Deletion. The punch "0" was coded for absence of a rating on a Scale and was deleted.

The demographic variables for this study were the following: "Sex of Child", "Sunday Church School Attendance", "Nursery or Day Care Attendance", "Kindergarten Attendance", "Number of Children in Family", "Income of Family", "Zip Code", "Age of Mother", "Education of Mother", "Mother's Work", "Age of Father", "Education of Father", "Father's Work", and "Number of Parents in the Home".

Results

The correlation coefficients for mother's ratings on the Self-Regard Scales are found in Table I.

TABLE I
Product Moment Correlation Coefficients
Between Self-Regard Scales as Rated by Mothers

	Purposeful Learning of Skills	Completing Tasks	Coping with Fears	Children's Responses to Requests	Dealing with Frustrations	Socially Acceptable Behavior	Developing Imagination in Play
Purposeful Learning of Skills	.34208 n=172	.40731 n=171	.33674 n=172	.48477 n=172	.52216 n=172	.40611 n=172	
Completing Tasks		.40836 n=171	.46133 n=172	.34925 n=172	.36010 n=172	.51415 n=172	
Coping with Fears			.40238 n=171	.32575 n=171	.34224 n=171	.35548 n=171	
Children's Responses to Requests				.45533 n=172	.47525 n=173	.40285 n=172	
Dealing with Frustrations					.59738 n=172	.34645 n=172	
Socially Acceptable Behavior						.42209 n=172	

Table II displays the average correlation coefficients for each Scale.

Table II - Average Correlation Coefficients for Each of the Seven Self-Regard Scales with the Other Six Self-Regard Scales

<u>Title of Scale</u>	<u>Average Coefficient</u>
Purposeful Learning of Skills	.41661
Completing Tasks	.40588
Coping with Fears	.37359
Children's Responses to Requests	.42231
Dealing with Frustrations	.42649
Socially Acceptable Behavior	.45329
Developing Imagination in Play	.40786

The overall average coefficient is .41515.

The correlations of mother's ratings on Self-Regard Scales and demographic variables are reported in Table III. Only the coefficients statistically significant are reported. All other coefficients were zero order or non-significant, $p > .05$.

Table III - Correlations Between Mother's Ratings on Self-Regard Scales and Demographic Variables Where Coefficients were Statistically Significant

Self Regard Scale	Attend Kind.	N Children in Family	Income	Age of Mother	Age of Father	Work of Father
Purposeful Learning of Skills	.329** (n=172)			.163** (n=171)	.235** (n=170)	.155* (n=172)
Completing Tasks	.230** (n=172)					
Coping with Fears	.217** (n=171)		.170* (n=169)		.178* (n=170)	
Children's Responses to Requests	.202** (n=173)					
Dealing with Frustrations	.228** (n=172)	.160* (n=171)				
Socially Acceptable Behavior	.343** (n=173)		.178* (n=170)			
Developing Imagination in Play	.258** (n=172)				.170* (n=170)	

** - Statistically significant at or below the .01 level of probability

* - Statistically significant at or below the .05 level of probability

"Age of child" and the Scales of Self-Regard is reported in another study (Barber & Cernik '75a). In that study, significant coefficients at the .01 level of probability were found for every Scale between "Age" and scale point. In order to hold the influence of "Age" constant, partial correlation coefficients were computed. Results drastically reduced the number of coefficients listed in Table III as statistically significant. Table IV displays the results.

Table IV - Partial Correlation Coefficients for Table III:
Age of Child Partialled Out

Self-Regard Scale	Attend Kind.	N Children in Family	Income	Age of Mother	Age of Father	Work of Father
Purposeful Learning of Skills	.082			.123	.189*	.105
Completing Tasks	.050					
Coping with Fears	-.017		.146		.133	
Children's Responses to Requests	.025					
Dealing with Frustrations	-.033	.144				
Socially Acceptable Behavior	.109		.157*			
Developing Imagination in Play	.042				.124	

* - statistically significant at or below the .05 level of probability

Only two statistically significant coefficients remain.

Discussion

As expected, each Scale relates to every other Scale. While coefficients are statistically significant, not one of them accounts for more than 36% of the variance. The overall average coefficient accounts for only approximately 18% of the variance. This evidence indicates that while there is a

relationship between Self-Regard Scales, the degree of relationship is low enough to suggest that each Scale measures a substantial amount of separable component not measured by any of the other Scales.

Correlations between Self-Regard Scale ratings and demographic variables would not be expected if each Scale measures a separable component of Self-Regard.

Table III displays the statistically significant coefficients that were found. The unexpected result found in Table III is that kindergarten attendance correlates with every Self-Regard Scale. If the child attends kindergarten, there is a tendency for the child to be rated higher on Self-Regard than if the child does not attend kindergarten. In the description of the sample (Barber, Cernik & Barton '75b), it was pointed out that the children were drawn from Episcopal schools across the United States. In the previous field test where children were not from Episcopal schools, the variable "Attends Kindergarten" did not correlate significantly with any of the seven Scales. Is there something about Episcopal school kindergartens that relates to self-regard?

It should be pointed out, of course, that the correlation for scale point and "Attends Kindergarten" may be a reflection of age. Of the children attending kindergarten, five were 4 years old and 39 were 5 year olds. Since age and scale point correlate significantly for all seven Scales, in order to be more certain about the effect of Episcopal kindergartens, the age variable was partialled out. With age controlled, not one significant coefficient is found. It would appear that "Attends Kindergarten" does not influence ratings on the Self-Regard Scales. This is not surprising in light of the fact that the Scales are illustrated by behaviors in the home, not in kindergarten class.

The eight remaining coefficients in Table III are reduced to two when "Age of Child" is partialled out. The remaining two relationships are

(1) "Purposeful Learning of Skills" with "Age of Father" and (2) "Socially Acceptable Behavior" with "Income". These relationships should be studied further. Interestingly, neither one of the two was found in the 1974 data. Neither coefficient accounts for more than .036 of the variance and may be an artifact of the particular sample.

The 1974 study led to the conclusion that separability of the components measured by the seven Self-Regard Scales was supported. The results of this study, with the much larger 1975 sample, add even stronger support to the contention that components are, indeed, separable. It would appear that each Self-Regard Scale measures something not measured by any other Scale.

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