

# Characteristics of Giftedness Scale: Research and Review of the Literature

Linda Kreger Silverman  
Gifted Development Center

## Development

The *Characteristics of Giftedness Scale* was originally developed in 1973 after 10 years of teaching and counseling experience with the gifted. In 1978, it was published in the *Colorado Association for the Gifted and Talented Newsletter*. It appeared in the first brochure of the Gifted Development Center (then, the Gifted Child Testing Service) in 1980. The descriptors were selected to meet the following specific criteria:

- (a) representative of the majority of children tested;
- (b) applicable to a wide age range;
- (c) generalizable to children of different socioeconomic backgrounds;
- (d) gender fair;
- (e) easily observed in the home environment;
- (f) brief and clearly worded for ease of interpretation by parents.

The number of characteristics has increased in various versions. An earlier version, called *The Silverman/Waters Checklist for Identifying Gifted Children*, consisting of 16 items, was copyrighted in 1984. Different versions have appeared in *Counseling the Gifted and Talented* (Silverman, 1993), in chapters, professional articles and newspaper articles.

## Research

In 1982, a detailed parent questionnaire was developed for research purposes, containing 60 directed questions and several open-ended questions. A pilot study (Silverman, M. Rogers, & Waters, 1982) was conducted with 16 families (both parents) at a school for the gifted, using similar questions in an open-ended, narrative format. Among the traits that surfaced in the pilot study in a relatively high frequency of cases were *compassion, sensitivity, and high levels of activity*.

For his dissertation, Martin Rogers (1986) compared nearly 100 developmental traits in gifted and average children, using a parent questionnaire with a Likert-type scale. The following characteristics clearly differentiated the development of 38 gifted and 42 average third and fourth graders ( $p < .01$ ):

- rapid learning ability;
- extensive vocabulary;
- good memory;
- long attention span;
- perfectionism;
- preference for older companions;
- sophisticated sense of humor;
- early interest in books;
- ability in puzzles and mazes;
- maturity;
- curiosity;

perseverance;  
keen powers of observation.

These results were reported in the article, "Young Gifted Children: Can Parents Identify Giftedness?" (Silverman, Chitwood, & Waters, 1986). In another study, also reported in this article, parents of all the children who scored in the gifted range indicated that their children manifested at least 13 of the 16 characteristics in the original scale.

In 1988, a presentation at the National Association for Gifted Children (NAGC) 35<sup>th</sup> Annual Convention, entitled, "The Silverman/Waters Checklist: A New Culture Fair Identification Instrument" brought forth numerous requests from school districts to use the instrument. Later, an unpublished study was conducted with 1,000 children whose parents sought assessment at the Center. In this study, 84% of the children whose parents indicated that they fit three-fourths of the characteristics tested above 120 IQ. Another 11% demonstrated superior abilities in some areas, but had weaknesses that depressed their IQ scores below 120.

Karen Rogers, of the University of St. Thomas, conducted a study of 241 exceptionally gifted children (IQ scores 160+) tested at the Gifted Development Center between 1979 and 1995. The children ranged in age from 2.5 to 12.5 years. Their Stanford-Binet (Form L-M) IQs ranged from 160 to 237, with a mean of 170.2. The sample consisted of 112 girls and 129 boys. No gender differences were found in IQ; the mean IQ of the girls was 169.43 and the mean IQ of the boys was 170.71.

The characteristics of giftedness endorsed by the parents were compiled as part of the study. Over 80% of the sample was reported to fit 20 of the 25 characteristics. The following characteristics were endorsed by 90% of the parents of this group of exceptionally gifted children:

*Learns rapidly*  
*Extensive vocabulary*  
*Excellent memory*  
*Reasons well*  
*Curiosity*  
*Mature for age*  
*Sense of humor*  
Keen observation  
*Compassion for others*  
Vivid imagination  
*Long attention span*  
*Ability with numbers*  
Concern with justice, fairness  
*Sensitivity*  
*Wide range of interests*

The following characteristics were endorsed by 80% of the parents:

*Ability with puzzles*  
*High energy level*  
*Perfectionism*  
*Perseverance in interests*  
Questions authority  
*Avid reader*  
*Prefers older companions*

The italicized items were part of the 16-item list of characteristics used from 1979 to 1990. All items from the original list were endorsed by at least 80% of the parents of exceptionally gifted children. The majority of the children were early readers. The mean age at which this sample could sound out new words was 46 months.

Data from the study were reported at the National Association for Gifted Children (NAGC) 44<sup>th</sup> Annual Convention (K. Rogers & Silverman, 1997). Comparisons with other samples were reported at the Wallace Research Symposium in May, 1998 (K. Rogers & Silverman, 1998a) and at the 45<sup>th</sup> Annual Convention of NAGC for the Research Division in November, 1998 (K. Rogers & Silverman, 1998b). Summaries of the studies were published in *Copy Right Magazine*, Limburg, The Netherlands, and in *Young Gifted Kids*, in British Columbia. A synopsis of the findings appears on the Gifted Development Center website: [www.gifteddevelopment.com](http://www.gifteddevelopment.com).

### Use

For 20 years, the *Characteristics of Giftedness Scale* was incorporated into a phone intake interview for all parents who contacted the Gifted Development Center for assessment. Since 1999, as more of our clients are coming to the Center from out-of-state, we now send the *Characteristics of Giftedness Scale* by email. The written responses appear comparable to information gleaned in phone interviews. Parents are asked to give examples of each of the characteristics. Delisle (1992) has found that accuracy of parent checklists improves dramatically when parents are asked to provide anecdotal data about each characteristic endorsed. A teacher version of the instrument has been in use since 1990, and, upon request of the parents, is completed by the child's teacher.

### Review of the Literature

The characteristics in the scale also have been supported by other experimental and clinical studies, and in the professional literature:

1. *Good problem solving/reasoning abilities* (Davidson, 1986; Keating & Bobbitt, 1978; Parkinson, 1990; Sternberg, 1986).
2. *Rapid learning ability* (Bloom, 1982; Hollingworth, 1942; Robinson, Roedell, & Jackson, 1979; Terman & Oden, 1947).
3. *Extensive vocabulary* (Borkowski & Peck, 1986; Lewis, Feiring, & McGuffog, 1986; Loban, 1963; Terman & Oden, 1947).
4. *Excellent memory* (Cohen & Sandburg, 1977; Freeman, 1985; Guilford, Scheuerle, & Schonburn, 1981; Lewis, Feiring, & McGuffog, 1986; Lewis & Michalson, 1985).
5. *Long attention span* (Martinson, 1961; Rogers, 1986; Witty, 1958).
6. *Sensitivity* (Clark, 1988; Strop, 1983; Piechowski, 1991; Roeper, 1982; Tuttle & Becker, 1980; Webb, Meckstroth, & Tolan, 1982).
7. *Compassion for others* (Delp & Martinson, 1974; Lightfoot, 1951; Strang, 1958; Torrance, 1977).
8. *Perfectionism* (Adderholdt-Elliott, 1987; Chamrad & Robinson, 1986; Clark, 1988; Freehill, 1961; J. Gallagher, 1990; Karnes & Oehler-Stinnett, 1986; Kerr, 1991; Manaster & Powell, 1983; Robinson & Noble, 1991; Roedell, 1984; Whitmore, 1980).

9. *Intensity* (Dabrowski, 1972; S.Gallagher, 1985; Piechowski, 1979,1991; Piechowski & Colangelo, 1984; Schetky, 1981; Schiever, 1985; Silverman & Ellsworth, 1980; Whitmore, 1980).
10. *Moral sensitivity* (Boehm, 1962; Drews, 1972; Gross, 1993; Hollingworth, 1942; Martinson, 1961; Munger, 1990; Passow, 1988; Roeper, 1988; Silverman & Ellsworth, 1980; Terman, 1925; Vare, 1979; Ward, 1985).
11. *Strong curiosity* (Bloom, 1982; Cox, 1977; Freeman, 1985; Lewis & Michalson, 1985; Louis & Lewis, 1992; Munger, 1990; Parkinson, 1990; Terman & Oden, 1951).
12. *Perseverant when interested* (Bloom & Sosniak, 1981; Brandwein, 1955; Feldhusen, 1986; Lewis & Michalson, 1985; Tuttle & Becker, 1980).
13. *High degree of energy* (Feldhusen, 1986; Hildreth, 1938; Schetky, 1981; Whitmore, 1980).
14. *Prefers older companions* (Gross, 1989; Freeman, 1979; Hildreth, 1966; Hollingworth, 1931; Lewis & Michalson, 1985; Mann, 1957; O'Shea, 1960; Robinson & Noble, 1991; Terman, 1925; White, 1985).
15. *Wide range of interests* (Cox, 1977; Hitchfield, 1973; Terman & Oden, 1951; Witty, 1958).
16. *Great sense of humor* (Getzels & Jackson, 1962; Hildreth, 1938; Hollingworth, 1926; Shade, 1991; Terman, 1925).
17. *Early or avid reader* (Cox, 1977; Durkin, 1959; Gross, 1993; Kasdon, 1958; Martinson, 1961; Robinson, Roedell, & Jackson, 1979; Terman & Oden, 1951).
18. *Concerned with justice and fairness* (Roeper, 1988; Rogers, 1986; Silverman & Ellsworth, 1980).
19. *At times judgment seems mature for age* (Haier & Denham, 1976; Hollingworth, 1932; Warren & Heist, 1960).
20. *Keen powers of observation* (Carroll, 1940; Martinson, 1961; Rogers, 1986; Witty, 1958).
21. *Vivid imagination* (J. Gallagher, 1966; S. Gallagher, 1985; Lightfoot, 1951; Piechowski & Colangelo, 1984; Piechowski, Silverman, & Falk, 1985; Schiever, 1985; Terman & Oden, 1959; Wall, 1960).
22. *High degree of creativity* (Albert, 1980; Louis & Lewis, 1992; Lovecky, 1993; Rogers, 1986; White, 1985).
23. *Tends to question authority* (Hollingworth, 1940; Meckstroth, 1991; Munger, 1990; Schetky, 1981; Sebring, 1983; Whitmore, 1979).
24. *Shows ability with numbers* (Gottfried, Gottfried, Bathurst, & Guerin, 1994; Hildreth, 1966; Hollingworth, 1931; Robinson, Roedell, & Jackson, 1979; Rogers, 1986).
25. *Good at jigsaw puzzles* (Lewis, Feiring, & McGuffog, 1986; Robinson, Roedell, & Jackson, 1979; Rogers, 1986).

### **Conclusion**

The characteristics appear to be able to discriminate children who score in the superior and gifted ranges from those whose abilities are in the average range. As of this time, they have not been shown to distinguish children at different levels of giftedness. And there are some children who fit the descriptors, according to parental judgment, yet fail to achieve scores in the superior range of the tests. Many times these children have weaknesses in multiple modalities, such as vision and audition, which severely depress their IQ scores. Analysis of subtest scores or profiles of strengths and weaknesses usually reveals peaks in the gifted range in some of the measures of abstract reasoning, even if the composite scores are not in the higher ranges. In such cases, evidence of superior abilities may come from other sources than IQ tests, such as classroom performance or remarkable achievements outside of school.

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