

Identification of Preschool Gifted Children Characteristics Based on Parents' Observations

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Abstract

Identification of gifted children during preschool period is very important issue. Observations of parents about their children's skills and behaviors provide critical and sufficient information to identify gifted children. This study is aimed to identify characteristics of gifted children who are preschool age based on observations of parents in this study. The participants in the research is 87 parents whose preschool-age children passed group intelligence test in Tokat, one of the cities of Turkey in 2010. Data was gathered with semi-structured interview form. Research data is analyzed by descriptive analysis is one of the qualitative research methods. There is a high consistency between parents' observations about their children cognitive, social/emotional and physical characteristics and characteristics of gifted children in the gifted education literature.

Keywords: Preschool, gifted and talented, parent observation

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Nowadays, lots of researches have been conducted about physical and cognitive developments, interests, school success and social relations of gifted children. Identification of young gifted and talented at preschool age is important to give opportunity for their talents development (Porter, 1999:86). Parents' observation is one of the richest data source for skills and behaviors of their children (Metin, 1999).

Researches show that parents are successful about judgment their child's giftedness 76% of the time (Porter, 1999: 86). It can be obtained wide data about characteristics of gifted and talented children based on information from parents at early ages. Studies on parents point out that parents can judge whether or not their child is gifted (Gross, 1999). Contrary to some myths about parents' exaggeration of their child's success, Farmer (1997) found that identifications by parents are usually accurate (Dağlıoğlu, 1995).

Harrison (2000) stated that according to parents' observations there are some distinctive behaviors of their gifted children occurred at early ages. For the identification process of preschool gifted children some similar characteristics are emphasized. Developmental unevenness or asynchronous development has been noted by a number of researchers (Delisle, 1992; Webb, Meckstroth, & Tolan, 1982).

According to their parents' descriptions, preschool gifted children are divergent thinkers, highly focused on their interests, curious, becoming early readers, and persistent. Additionally, they described them as possessing: high verbal ability at an early age, an unusual sense of humor, an unusual ability to make abstract connections in learning, and a wide range of interests, yet ability in a single area (Louis & Lewis, 1992; Web et al, 1982).

Kitano (1985) found that gifted preschoolers have high levels of accumulated knowledge and thinking abilities, spontaneous incorporation of academic activities in free play, and pre-logical thinking. Also they discomforted with ambiguity and tried to keep away from it.

The most noted characteristic of these children is early advanced language skill. Early reading skills, early empathy development and emotional intensity are among characteristics frequently cited by parents (Robinson, 1993). It should not be forgotten asynchronous development in their nature. According to Tannebaum (1992), preschool gifted children do always not follow Piaget's developmental stages.

Their advanced vocabulary and fluency can make a negative effect on relation with others. But, Lehman and Erdwins (1981) found that young gifted children feel more comfortable with them and report more positive feelings regarding themselves and others than their peers

Morelock (1996) distinguished gifted children as children who tend to process information rapidly, enjoy playing with abstract and complex ideas. They like playing alone, or if they play with others, they prefer older children, but they have difficulty finding mental peers (Gallagher, 1990; Silverman, 1993). These children are often independent and nonconforming (Silverman, 1993). Several studies showed that these children have intrinsically motivation, they feel pleasure from work, and they often have high self-esteem about their intellectual capacities (Gross, 1993)

Gifted preschool children are not as egocentric as their peers. They tend to be quite sensitive to their own needs and those of others and are more responsive to nonverbal cues of emotions (Silverman, 1988). They may be highly imaginative and have the ability to generate many original ideas and solutions. Their creativity may also be seen in their unusual or original uses of daily materials (Frasier, 1995).

They may be leader in a group, have responsibility, like telling stories and funnies, like schools very much, are patient, tend to make incorporation. For them, dealing with challenges seems a play. They are curious; ask lots of questions, express their feelings easily (Roedell et al 1980). The attention span and the energy level, of young gifted children tends to be longer than peers (Silverman, 1988). These children are heavier and taller than other children at birth. They often start to walk and demonstrate some motor skills earlier than other children. But it does not mean that giftedness in any area requires giftedness in motor skills. According to Dağlıoğlu (2004) characteristics of gifted and talented children at early age may include:

- Unusual energy at infancy
- Long attention span
- Early recognition of parents or caregiver
- Extra reaction to senses
- Fast development at developmental (walking, speaking etc.) stages
- Unusual memory
- Rapid learning and enjoyment from learning
- Early language skills
- More interest in books
- Curiosity
- Sense of humor
- Abstract thinking and problem solving skills
- Vivid imagination

-Sensitivity and lovely

- Constant questioning

-Being leader in a play (Akarsu, 2004; Metin 1999; Dağlıoğlu 1995; Morelock 1992; Renzulli 1986; Freeman 1986).

Mothers usually want to know how their children's performance is, while fathers often viewed the assessment with skepticism (Silverman, 1993b) According to Cornell's (1984) study, when the school had labeled the child, gifted, the mothers believed the label and the fathers denied it, which led to marital conflict. So, mothers and fathers were defining giftedness differently.

In this study, it is aimed to identify the characteristics of preschool gifted students according to mothers' and fathers' views. Observations of mothers and fathers about preschool gifted and talented children will be analyzed to determine characteristics of preschool gifted students.

Method

Participants

Firstly, in 2010 Primary Mental Abilities Test (PMAT) 5-7 is administered to 1560 preschool students in Tokat, Turkey. The study was conducted on 87 parents (41 fathers and 46 mothers) of preschool children that are within 95 percentages according to PMAT results. Primary Mental Abilities Test 5-7 is the most frequently applied group intelligence test to 5-7-year-old children in Turkey (Ministry of National Education, 1994). This test was developed by Thurstone (1938), and has been used in Turkey since 1953. Having been revised in 1994, normative studies have also been conducted for Turkish samples. The test is used for selecting students to assess individually (Ministry of National Education, 1994). The test includes four subtests. These are:

1. Language: to determine the level of language development
2. Discrimination Rate : to determine the speed to distinguish the differences between figures
3. Numbers: to measure the ability to comprehend digital abstractness
4. Space: to measure the ability to comprehend relationships between the whole and parts (Ministry of National Education, 1994).

Procedure

During individual assessment of students who were successful in the group test, a semi-structured interview form was handed to parents and then following direction was given to parents:

“Could you write prominent characteristics of your child that you observe?”

Parents wrote considerable characteristics they observe on the forms without any time restriction and contribution

Analysis

Qualitative research techniques that allow in-dept understanding of case, context and events were used in this research. Inductive descriptive analysis was used in the analysis of obtained data. Inductive analysis is carried out to reveal the underlying concepts and the relationships between these concepts of the data by coding (Yıldırım & Şimsek, 2005). Both mothers' and fathers' observations about their children are analyzed according to their descriptions. Findings of the study were demonstrated with frequency and percentage tables

Findings

Characteristics of the children obtained from parents observations those are different from their peers grouped into 3 titles: cognitive characteristics, social-emotional characteristics and physical characteristics. Then subtitles were formed under the titles. These titles were written detailed in Table 1, Table 2, and Table 3

Table 1: Frequency and Percentages of Cognitive Characteristics

Cognitive Characteristics	Mother		Father		Total	
	f	%	f	%	f	%
Unusual memory	12	38,7	19	61,2	31	35,6
Better mathematical skills	12	44,4	15	55,5	27	31,0
Creative	15	62,5	9	37,5	24	27,5
Developed reasoning ability	12	60	8	40	20	22,9
Asking more questions	13	68,4	6	31,5	19	21,8
Curious	13	72,2	5	27,7	18	20,6
Rapid and early learning	7	38,8	11	61,1	18	20,6
Developed language skills	11	68,7	5	31,2	16	18,3
Early language skills	8	53,3	7	46,6	15	17,2
Interested in wide and different areas	10	66,6	5	33,3	15	17,2
Long attention span	9	69,2	4	30,7	13	14,9
Enjoyment from scientific studies	7	58,3	5	41,6	12	13,7
High imagination	9	75	3	25	12	13,7
Early reading and writing	6	75	2	25	8	9,1

N=87

One of the developmental characteristics of gifted children that differentiate from other children based on parent observations is cognitive characteristics. Parents address some attributes like curiosity, strong memory, early and rapid learning. According to table, fathers stated characteristics such as unusual memory, better mathematical skill, rapid and early learning more frequently than mothers but in terms of other characteristics at the table mothers mentioned much more than fathers. Parents' comments are given detailed below:

Parents (M: mother, F: father) in the sample express their children's cognitive abilities like these:

30 coded M: ...very curious, likes to scrutinize everything.wonders life styles of animals.

48 coded M: ...wonders why smoke from chimney goes up, why wind blows after car runs

66 coded M: ...asks too much questions and sometimes we can not answer the questions

73 coded M:... asks too much question and expects logical answers. ...gets angry when dissatisfy

4 coded M:interested in numbers, colors, geometric shapes, story books and space.

44 coded M: ...interested in space, planets, gravity, outer space.interested with Jalal al-Din al-Rumi and likes whirling dervishes.

6 coded F: tells some recalls from stories that were told him/her at 1 age

65 coded F: ...is good at visual intelligence and memory. ..never forget a place or thing if ...saw once and this surprises us. ...remembers events.

20 coded F:answers questions on lesson books without reading instructions and says "I've already know it"

34 coded F: ...learned English words from English cartoons

37 coded F: ...started to talk with regular sentences when s/he at 1,5 ages .

28 coded M:makes unexpected meaningful, and long sentences those include main ideas

6 coded F: ...likes self- developing plays and puzzles

40 coded F: ...solves how to play new games on computer by the help of previous games.

9 coded M: ...was watching some objects long and very carefully when at 4 or 5 months age.

18 coded M:likes to set up imaginative games with own toys.likes soldier and knight games.

66 coded M:tries put into practice his/her imaginations

2 coded F: ...sets up own room plan and eats on his/her own

24 coded M: ...watches science and natural events on TV. ...applies the experiments at home

84 coded F: ...watches experiments on TV and wants to carry out them.

69 coded F: ...made utterance earlier. ..was able to make long sentences when 1 year old. .

73 coded M: ...was talking fully at 1 age and making clear sentences at 1,5

45 coded M: ...learned letters on his own at age 4, and learned to read at 4,5

80 coded M: ...recognized letters before going to school. ...could write his and sisters names.

11 coded F: Despite going to kindergarten, ...can do mathematical operations. ...can count one by one, two by two and three by three

28 coded M: ...can do writing and recognizing numbers, making additions, subtraction....enjoys studying Math.

79 coded F: ...loves to imagine something by looking the pictures of it. ...produces games on his own.

24 coded M: ...produces different techniques on his paintings. ..did sheep figure by sticking cosmetic cottons.

Social emotional characteristics that parents observe their preschool children are given at the following table.

Table 2: Frequency and Percentages of Social Emotional Characteristics

Social emotional characteristics	Mother		Father		Total	
	f	%	f	%	f	%
Leaders	6	42,8	8	57,1	14	16,0
Sensual	5	38,4	8	61,5	13	14,9
Effective and quick communication	5	38,4	8	61,5	13	14,9
Determined	4	36,3	7	63,6	11	12,6
Sensitive	7	63,6	4	36,3	11	12,6
Responsible	6	66,6	3	33,3	9	10,3
Prefer working independently	4	50	4	50	8	9,1
Friendship and playing with older	4	57,1	3	42,8	7	8,0
High-self-confidence	3	42,8	4	57,1	7	8,0
Loyalty to rules	4	66,6	2	33,3	6	6,8
More mature than peers	1	16,6	5	83,3	6	6,8
Socially adjusted	3	50	3	50	6	6,89
Perfectionist	0	0	3	100	3	3,44
Developed sense of humor	1	50	1	50	2	2,29

N=87

Another characteristic of gifted children that differentiate from other children according to family observations is about social-emotional characteristics. It can be seen that these children have lots of social-emotional traits on the observation forms. Parents mention that their gifted children are leader, perfectionist, sensitive, adjusted and responsible. As the table shows, fathers pointed out more often than mothers for following characteristics: leadership, sensuality, effective communication, determination, self- confidence, maturity and perfectionism. Both mothers and fathers stated equally some social emotional characteristics like sense of humor, adjustment, independence. Parents' mentions are demonstrated detailed below:

Parents (M: mother, F: father) in the sample write their children's general social-emotional development in the following:

26 coded F: ...prays for granddad who is in prison for one year. If we don't mention the name of creator on the dinner table, ...warns us and does it himself.

48 coded M:gets very angry when sees garbage on the ground and says "they are polluting our world, our world will be garbage, ozone layer will get a hole, why they don't think about it".

50 coded F: ...sleeps late at night to speak with father. When watching films, ...cries on emotional scenes

77 coded F: ...is emotional, respectful, has extensive inner world. ...was very happy when heart to have a brother. ...says they will sleep together when he born. ...got sick when left from kindergarten teacher and friends.

18 coded M: When playing with same age cousins, I saw that s/he was managing and leading the game.

76 coded M: ...generally has manager style. In mood of "I will direct, do what I say"

51 coded F: Tries to do homework perfectly which are given from kindergarten, if can't ...gets sad. ...wants everything to be perfect.

43 coded F: ...makes jokes about lyrics and current events.

46 coded M:easily communicate with peers and surrounding people. For example, when we go to park,finds a friend immediately.

33 coded F: ...communicates with people very easily, it doesn't matter they are 50 or 5 years old.

36 coded M: ..enjoys being with older people and playing with older children.

25 coded M: Ifdecides to do something, ...exactly does. it's useless to try to dissuade him.

35 coded M: When at 2.5 age, ...tried to wear his socks on his own , s/he tried a few times and couldn't do exactly. I helped but s/he got angry, took the socks off and wore them on his own.

82 coded F: Kindergarten teacher said s/he obeys the rules fully and is accepted by other friends.

26 coded F: After wake up, ..does his bed, wears own clothes and puts his/her brothers clothes on radiator to make them warm, and awakes his/her brother.

87 coded M: ..has too much self- confidence. ..believes s/he can achieve everything

79 coded F: when I tried to teach something, ...says "I've already know it"

49 coded F: ..started to attend kindergarten at 2.5 years old. First day s/he said: "mom, you go home and prepare dinner, I will come evening".very mature.

77 coded F: You can get unexpected answer from him/her. You can think there is a big, mature man in front of you.

2 coded F: ..adapts himself everything that interests him/her.

Characteristics about physical development that parents state are showed at the Table

Table 3: Frequency and Percentages of Physical Characteristics

Physical characteristics	Mother		Father		Total	
	f	%	f	%	f	%
High energy level	6	37,5	10	62,5	16	18,3
Faster physical development than peers	5	33,3	10	66,6	15	17,2
Sensitive senses	3	42,8	4	57,1	7	8,0
N=87						

Gifted children also demonstrate differences in terms of physical development. They are often energetic, active, and enthusiastic children. Their motor skill development such as walking, sitting, and standing is earlier than peers. Fathers used more physical descriptions for their children than mothers. Parents in the sample state their gifted children physical developments as following:

Families (M: mother, F: father) in the sample point out their children's physical development like these:

72 coded F: It was very difficult to stop him/her from 8 months.

67 coded F: ...is very active so we always warn her/him to stop

24 coded M: ...active. ...dances on his own at home.

5 coded M: When at 4,5 ages, s/he did not want to stand in the front of the barn door.

When father asked why, s/he said: "here is smelling marsh gas"

50 coded F: ...is very sensitive to light and sound and never suck beside others

58 coded F: From 4-5 months, ...has senses perceiving earlier

69 coded F: ...was aware and followed surrounding objects, moving things in the short time

64 coded M: At 8 months ...walked without assistance and at 11 months teeth appeared

79 coded F:... ...walked 2 months earlier without more crawling. At 5 months tooth went out

87 coded M: ...has strong muscle coordination, at 8 months ..walked without crawling

75 coded F: ... Although ...was born 2 weeks earlier his development are more regular than peer

Earlier speaking, earlier walking, earlier teething, earlier making toilet habits and earlier motor development are parents' some observation in terms of physical characteristics

Discussion

Gifted children in the preschool period demonstrate cognitive, social emotional and physical differences from their peers. The most prevalent cognitive ability observed by the families of the gifted children is the capacity of their memory. Gifted children have an excellent memory capacity at an early age (Silverman, 1988; Wolfle, 1989).

Sankar-DeLeeuw (1999) listed the characteristics of gifted children according to reports from their families and teachers. Families described their children as having various traits such as divergent thinking, focused attention, early reading skills, high-verbal ability, highly developed sense of humor, curiosity, determination and making abstract connections in the learning process. Parents participated in the research also defined their gifted children as being curious and determined and having high math skills, highly developed sense of humor and early literacy skills.

Gifted children parents stated that early language development and extraordinary curiosity are the characteristics of gifted children (Creel & Karnes, 1988). Preschool gifted children ask thought-provoking questions, discuss about topics and ideas, and make broad and rich descriptions (Smutny, 2000:9). The research group also acknowledged that gifted children have a developed ability of judgment, early language development and ask many questions. Moreover gifted children are able to communicate effectively and quickly.

According to the families, gifted children have long attention span and enjoy scientific studies. Gifted children frequently ask “how” and “why” questions demonstrate higher concentration levels above their age on their interest areas and have highly developed problem solving skills (Tucker & Hafenstein, 1997).

Families in the sample think that their children are very imaginative, creative and learn quickly. Gifted children are indeed very good observers, very imaginative, very creative and learn quickly. Some of these children can learn to read and write without any help before starting school (Porter, 1999:74).

Renzulli and colleagues (1981) argued that gifted children have: (1) above-average general and/or specific abilities (2) high levels of creativity (3) high task commitment (high motivation level) potential. Children in the research are identified as having a sense of responsibility and acting more mature than their peers.

According to Clark (1997) gifted children in young age exhibit leadership skills and many of them prefer working independently. Children in the research have also leadership skills and prefer working independently. Besides, families observed high self-confidence in their children. Coleman & Fults (1983) postulated that children with high intelligence have high self-confidence as well.

According to Porter (1999: 70), because of their independent nature, gifted children tend to resist external interventions which might control their behavior (Delisle, 1992). However young gifted children wish rules to be followed (Kitano, 1985). They learn games earlier than their peers. Gifted children prefer more complex and challenging games than their peers. They are perfectionists and set high standards for themselves. Gifted children are less self-centered and more sensitive to the feelings and needs of others than their peers (Porter, 1999, 65). Families participated in the study also described gifted children as perfectionist, sensitive and prescriptive.

Mc Carney (1988:2-3) stated that gifted children can find educational mistakes or flaws easily (e.g. a printing error in a book). Mc Carney (1988:2-3) also described that gifted children are interested in a variety of hobbies, collections and activities. Children in the research group have different, wide, and varied interests.

Gifted and talented children's friendship expectations differ from their peers. According to the studies, gifted and talented children prefer friends amongst their gifted peers or those older than their peers (Gross, 2002). There are similar results in this study as well.

According to the research results, families define gifted children as socially adjusted. A range of different studies (Freeman 1979; 1983, Grossberg & Cornell, 1988; Kaufmann, 1981; McCallister, Nash, & Meckstroth, 1996; Metha, McWhirter, 1997; Neihart, 1991; Reynolds & Bradley, 1983; Scholwinski & Reynolds, 1985; Witty, 1951; 1955) also suggest that gifted children have better social adjustment (Neihart, 1999). Sensitivity and sensuality are characteristics of pre-school gifted children (Kitano, 1990, Tucker&Hafenstein, 1997).

Gifted children are usually very energetic, lively and enthusiastic. (Tucker & Hafenstein, 1997:70). Gifted children are generally heavier and taller than their peers. Especially it is more prominent when they are born and it is maintained in the following years (Ömeroğlu, 1993:116). Children in the research group also observed to be energetic and develop physically faster.

The characteristics of pre-school gifted children in this study were found to be similar with pre-school gifted children in the literature. Most of the characteristics of gifted children Dağlıoğlu (2004) listed are also described by the families participated in this research.

As the research shows, fathers and mothers view their children from different points. Fathers describe their children with the view of physical and partially social-emotional aspects. But mothers see early development signs of their children like early reading and writing, asking more questions, imaginations, curiosity.

Some characteristics of a gifted child can be more prominent whereas some characteristics can be weaker. On the other hand, two gifted children with the same giftedness level may show variation of characteristics. One might have certain prominent gifted characteristics and the other might not have the same gifted characteristics but rather, may have some distinct conspicuous characteristics. Individual differences need to be taken into account.

Recommendations

Parents have important role in the identification of gifted pre-school children. Families can make exact observation about children's behaviors, attitudes, interests and skills and then evaluate them correctly. According to the research results, it can be said that families' observations reflect the general characteristics of gifted and talented children. The families, who are aware of the social and emotional needs of gifted and talented children, can contribute their children to actualize their potential. Early identification of these children can give them opportunity to enroll in gifted education program early and foster their special abilities.

In the identification process, the information obtained from parents is considerable data source but it cannot be adequate alone. Therefore, we should take into consideration other identification criteria like group and individual IQ tests, creativity tests, teacher checklists. Also, not only formal tools but also qualitative assessment techniques should be used in the process. Instead of quantitative terms, qualitative techniques like observations and interviews should be used for more detailed and in-depth results

It takes more consideration to keep records about the children by parents and teachers. Because these records may give clues about identification of gifted and talented children characteristics and determination of critical periods. Parents' awareness about giftedness facilitates the identification of gifted children and will be an important support to meet the educational needs of children. Therefore, training programs should be organized for parents about the characteristics and educational needs of gifted children.

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