

Student and Parent Attitudes Before and After the Gifted Identification Process

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Questionnaires were given to students prior to testing for giftedness to assess how the gifted identification process changes attitudes toward gifted programs and parent-child relationships. After those identified as gifted had been participating in a pullout gifted program for one semester, another questionnaire was administered to all original participants. Comparable data were also collected from the students' parents. Results suggest that prior to identification, gifted and nongifted students and their parents shared similar attitudes toward giftedness. After identification, attitudes showed either no change or decreased. Compared to their gifted counterparts, nongifted students and their parents tended to report lower attitudes after identification. The impact of this attenuation and the use of preidentification data are also discussed.

Previous research on gifted youth has typically been conducted by investigating students who have already been labeled and are already participating in gifted programs (e.g., Lubinski, Webb, Morelock, & Benbow, 2001). This occurs even when the identification process itself is one of the primary areas of interest (e.g., VanTassel-Baska, Feng, & Evans, 2007). This may unintentionally lead to an assumption of a tautology: If a student is in a gifted program, she is considered gifted; if she is not in a gifted program, she is not gifted. Relying solely on data gathered from students who are already participating in gifted programs fails to account for selection biases for membership into that group. Further, it could prevent an accurate analysis of differences—preexisting or otherwise—between gifted and nongifted youth. It is reasonable to assume that, prior to identification, the two groups have cognitive differences. However, if other differences (e.g., attitudes toward school or social relationships) exist, analyses restricted to post-identification of gifted youth should consider that restriction—but they typically do not.

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This paper proposes that there are four distinct and relevant events related to the gifted identification process that could cause significant change in attitudes toward giftedness. These four events are nomination, testing, labeling, and participation. Although I could not locate a study that addresses how each event influences students, it is predicted that any and all of these events can potentially be highly influential. One student could burst with pride upon being nominated for a gifted program, whereas others could feel immense pressure. Similarly, a student being tested for giftedness could leave the testing situation confident or unsure. The event that most explicitly divides students is that of labeling; some are told they are gifted, whereas others are told they are not. Finally, as eligible students begin participating in gifted programming, some may respond positively while others may struggle.

As noted above, not all previous research has focused entirely on postidentification gifted youth. For example, in the Fullerton Longitudinal Study (FLS; Gottfried, Gottfried, Bathurst, & Guerin, 1994), the investigators did not label participants as gifted or nongifted. The FLS consisted of an array of developmental, cognitive, and behavioral measures administered to 107 one-year-old infants and their parents. Parents were also asked to rate their children's performance and abilities. At age 8, children were given the Wechsler Intelligence Scale–Revised (WISC–R; Wechsler, 1974) and determined to be gifted ($n = 20$) or nongifted ($n = 87$). The investigators then retrospectively compared group differences across the measures they had been collecting in real time for the previous 7 years. At no point of the data collection were participants notified of the results of any measures or of gifted status. Thus, the FLS was a study that wholly sampled preidentified youth and eliminated potential effects possibly solely due to being labeled gifted.

Gottfried et al. (1994) found cognitive performance differences as early as 18 months. Gifted participants generally performed higher than nongifted participants.¹ Parents of gifted youth rated their child's performance higher than did the parents of nongifted participants. Additionally, parents of gifted children provided more enriching and stimulating environments (e.g., more books in the home). However, as Gottfried et al. pointed out, the parent-child relationship is bidirectional; youth help shape their environment by way of requesting and reacting to parent actions.

While Gottfried and colleagues (1994) studied gifted youth prior to identification, other researchers have investigated how student attitudes change as they begin to participate in gifted programs. For example, Gibbons, Benbow, and Gerrard (1994) compared the changes in student attitudes before, during, and after participation in a summer program for gifted youth. Although their initial measure occurred prior to participation in the gifted program, it was *after* the student had been accepted to the program. Thus, any changes that may have taken place during the identification process were not revealed. In general, as opposed to attitudes prior to participation in the summer program, they found that male students who were not performing well in the gifted program (relative to their peers) reported that academics were not as important to them; however, academic importance returned to initial levels during the third measurement. Hardly any change was reported for female students (Gibbons et al., 1994).

In a similar fashion, Coleman and Fults (1985) contrasted the self-concept of gifted students with relatively low IQ scores (e.g., a student whose IQ was slightly above the cut-off score) who had begun participating in a gifted program with a comparable group who had not yet begun participating in a gifted program. The group who had begun participating reported slightly lower self-concept scores than the yet-to-participate group. Other researchers (e.g., Marsh & Hau, 2003; Marsh, Kong, & Hau, 2000) have developed numerous theories explaining how students' self-concept changes as a result of participating in gifted programs.

However, numerous social, emotional, and cognitive factors need to be taken into account when investigating how attitudes change over time. Researchers (e.g., Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002) have investigated students' competence beliefs (i.e., belief in possessing the ability to perform a task) and subjective task value (i.e., the degree to which a student values being able to perform a task). In multiple domains (e.g., math or language learning), both competence beliefs and subjective task value have been found to decline starting as early as first grade. However, much of the task value decline could be accounted for by controlling for competence beliefs. Additionally, students were more likely to value a task if they considered themselves competent at it.

Others (e.g., Fredericks, Blumenfeld, & Paris, 2004) have suggested that school engagement or commitment (in terms of behaviors, emotions, and cognition), may play a significant role in student attitudes and can be facilitated (or impeded) by specific learning environments. It may be that the gifted identification process acts as a catalyst for (or cushion against) the decline in student engagement (and thus their attitudes as well) in school. If this is the case, participating in the gifted identification process could have extensive impact on attitudes toward school in general as well as toward gifted programs.

To assess the impact of participating in the gifted identification process, the current study analyzed how students' and parents' attitudes toward gifted programs and school in general changed while participating in the gifted identification process. Two notable additions are made in the current study. First, this study expands on traditional methods of analysis by comparing attitudes prior to being tested for giftedness with attitudes after the labeling process. Second, students tested for, but not identified as, gifted are included in the analysis. This group is relevant because it is unknown whether merely participating in the gifted identification process influences student attitudes toward, and performance in, school. In schools that have separate testing for giftedness, this unique group is officially told, "You are not gifted." Such a statement could have numerous significant long-term effects. Thus, telling a third grader that she is not gifted could create a self-fulfilling prophecy wherein she performs worse than she would have had she not participated in the gifted identification process. The purpose of the current research is to investigate how the identification process is associated with the attitude change of (a) gifted youth, (b) youth who are deemed ineligible for participation in a gifted program, and (c) the parents of both groups of students.

Method

Participants

Letters seeking participation were sent to all families in a suburban school district in the Midwestern United States who had nominated

a child to be tested for giftedness. The gifted program serves third-through sixth-grade students; thus, second- through fifth-grade students were eligible to participate in the testing process. To test for giftedness, the school district used the Cognitive Abilities Test Form 6 (CogAt; Lohman & Hagen, 2001). The cutoff score used by the school district for participation in the gifted program was the 92nd percentile. Of the 142 families that were sent letters, 49 returned forms. Nine participants were deemed eligible to participate in the gifted program ($n = 4$ girls) and thus labeled gifted; 36 ($n = 23$ boys) were deemed ineligible. Henceforth, the two groups will be referred to as gifted and nongifted students respectively.

Measures

Questionnaires of student and parent attitudes and perceptions were developed specifically for this study in order to maximize the correspondence between items and the objectives of this investigation. These questionnaires consisted of items on a 5-point Likert scale ranging from 1 *Never* to 5 *Always*, quantifying how each item described the participant. The questionnaires had five subscales. The Gifted Program–Academic subscale measured attitudes toward the academic aspect of participating in a gifted program (e.g., “Being in a gifted program will make me like school more than I do now”). The Gifted Program–Social subscale measured attitudes toward the social aspect of participating in a gifted program (e.g., “Being in a gifted program will help me make friends”). The General Academic subscale measured general perceptions of academic ability and school performance (e.g., “School is easy for me”). The Parent–Academic subscale measured perception of the child-parent relationship on academic issues (e.g., “My parents think I try hard in school”). The Parent–Social subscale measured perceptions of the child-parent relationship on social issues (e.g., “I get along with my parents”). See Tables 1 and 2 for a complete list of the subscales and items.

The internal reliability of each subscale was calculated via Cronbach’s alpha level. In general, Cronbach’s alpha levels were low (see Tables 1 and 2 for Cronbach alpha levels). However, for the most part, they were not so low as to not merit further analysis (Feldhusen & Dai, 1997). One notable aberration was the Gifted Program–Social

Table 1
Student Subscales

Subscale (α)	Item
Gifted Program–Academic (.76)	Being in a gifted program will make me like school more than I do now.
	Being in a gifted program would be fun.
	School would be more fun if I was in a gifted program.
General Academic (.46)	I like school.
	I am smarter than my friends.
	I am smart.
	I get bored in class. (R)
	I try hard in school.
Parent–Academic (.62)	School is easy for me.
	My parents ask me about school.
	My parents tell me I am smart.
Parent–Social (.58)	My parents think I try hard in school.
	I have fun with my parents.
	My parents like my friends.
	My parents and I have arguments about school. (R)
	My parents and I agree on things.
	My parents let me have fun.
	I get along with my parents.
	If I have a problem, I can talk to my parents about it.

Note. (R) reverse scored item. Cronbach alpha values are in parentheses.

subscale. Reliability for this subscale was so low that its results do not merit further discussion in the Results section.

Procedure

As stated previously, all students who had been nominated by their parents to be tested for giftedness were sent a letter informing them that a research study was being conducted on student and parent attitudes toward school. Enclosed with the letter were consent forms as well as the first parent questionnaire. I then visited each of the district's six elementary schools to administer the Time 1 student attitude questionnaire. Two weeks later, students participated in the district's testing

Table 2
Parent Subscales

Subscale (α)	Item
Gifted Program–Academic (.87)	My child would prefer being in gifted classes.
	My child would enjoy participating in a gifted program.
	Participating in a gifted program would make school more fun for my child.
General Academic (.60)	My child is smart.
	My child is smarter than his/her friends.
	School is easy for my child.
	My child likes school.
	My child gets bored in class. (R)
Parent–Academic (.54)	My child tries hard in school.
	I tell my child he/she is smart.
	I speak with my child about what happens to her/him at school.
Parent–Social (.61)	My child and I agree on things
	My child and I get into arguments about school. (R)
	I like my child's friends.
	My child and I get along.
	My child has fun with me.
	If my child has a problem, she/he feels comfortable talking to me or another parent about it.

Note. (R) reverse scored item. Cronbach alpha values are in parentheses.

for giftedness. About 6 weeks afterward, the district notified those tested whether they had been identified as gifted. The following fall, eligible students began participating in the gifted program. One year after the first questionnaire, after one semester of potential participation in a gifted program, the Time 2 questionnaires were administered using the same procedure as Time 1.

Between-subjects and within-subjects analyses were conducted with respect to the subscales. The nonparametric Wilcoxon signed-ranks and Wilcoxon rank-sum tests were used for all analyses that contained a group with an $n < 30$ (i.e., any analysis involving a gifted group) because normality could not be assumed with such a small sample. Independent sample and paired-sample t -tests were conducted

for all other analyses. Bias corrected effect sizes \hat{g} (Hedges & Olkin, 1985) were calculated for all analyses. Because the sample size was small, some findings that were nonsignificant but had large effect sizes are also reported. Because this was an exploratory study seeking potential differences, it was decided that limiting Type II errors was more important than limiting Type I errors. Consequently, no corrections for multiple tests were made when analyzing the data.

Results

Four parents returned Time 1 forms after the student Time 1 measures had been administered. Seven parents did not return Time 2 questionnaires. All eligible students participated at Time 2. Between Time 1 and Time 2, four families moved out of the school district and thus their (Time 1 only) data were omitted from analyses. Data from 45 parents (38 mothers) and 45 children (28 boys) were analyzed.

Student Results

All student means and standard deviations are reported in Table 3. At Time 1, gifted students reported significantly higher General Academic subscale perceptions than did their nongifted peers ($M = 4.31$ and 3.93 respectively), $z = -1.973$, $p < .05$, $\hat{g} = .86$. There were no other statistically significant between-subjects student differences at Time 1. However, despite nonsignificant findings, the difference between gifted and nongifted students on scores at Time 1 for the Parent–Academic subscale had a large effect size ($\hat{g} = .98$). At Time 2, gifted students reported higher attitudes than nongifted students in the Gifted Program–Academic subscale ($M = 4.00$ and 3.33 respectively), $z = -2.27$, $p < .05$, $\hat{g} = .99$. There were no other statistically significant differences between gifted and nongifted students.

At Time 2, gifted students reported statistically significant lower attitudes on the Parent–Academic subscale than they had at Time 1 ($M = 4.81$ and 4.33 for Times 1 and 2 respectively), $z = -2.06$, $p < .05$, $\hat{g} = 1.93$. Nongifted students reported lower attitudes on the Gifted Program–Academic subscale at Time 2 than they had at Time 1 ($M = 4.25$ and 3.33 for Time 1 and 2 respectively), $t(33) = -6.14$, $p < .001$,

Table 3
Means (and Standard Deviations)
for Student Attitude Subscales

Subscale	G Time 1	G Time 2
	(<i>n</i> = 7)	(<i>n</i> = 9)
Gifted Program–Academic	4.48 (.60)	4.00 (.77)*
General Academic	4.31 (.40)*	3.91 (.21)†
Parent–Academic	4.81 (.18)	4.33 (.27)‡
Parent–Social	4.49 (.36)	4.12 (.31)†
	NG Time 1	NG Time 2
	(<i>n</i> = 35)	(<i>n</i> = 37)
Gifted Program–Academic	4.25 (.80)	3.33 (.64)***
General Academic	3.93 (.44)	3.87 (.28)
Parent–Academic	4.31 (.54)	4.40 (.55)
Parent–Social	4.31 (.43)	4.20 (.59)

Note: G = Gifted; NG = Nongifted. * $p < .05$ Between-subjects. † $p < .10$ Within-subjects change from Time 1 to Time 2. ‡ $p < .05$ Within-subjects change from Time 1 to Time 2. *** $p < .001$ Within-subjects change from Time 1 to Time 2.

$\hat{g} = 1.26$. Also of potential interest, gifted students showed negative trends on the General Academic subscale; the effect size of the change was large ($\hat{g} = 1.23$).

Parent Results

All parent means and standard deviations are reported in Table 4. There were no statistically significant differences between the parent groups at Time 1. At Time 2, the parents of gifted students reported higher attitudes on the General Academic subscale than the parents of nongifted youth ($M = 4.13$ and 3.76 respectively), $z = -2.27$, $p < .05$, $\hat{g} = 1.09$. At Time 2, parents of nongifted students showed negative trends on the Gifted Program–Academic ($M = 3.83$ and 3.53 for Times 1 and 2 respectively), $t(29) = -2.0$, $p = .055$, $\hat{g} = .34$, and General Academic subscales ($M = 3.96$ and 3.76 for Times 1 and 2 respectively), $t(29) = -2.03$, $p = .052$, $\hat{g} = .57$. Additionally, despite

Table 4
Means (and Standard Deviations) for
Parent Attitude Subscales

Subscale	G Time 1	G Time 2
	(<i>n</i> = 7)	(<i>n</i> = 9)
Gifted Program–Academic	3.39 (.73)	4.00 (.63)
General Academic	4.00 (.30)	4.13 (.30)*
Parent–Academic	4.46 (.35)	4.28 (.25)
Parent–Social	4.08 (.24)	4.14 (.19)
	NG Time 1	NG Time 2
	(<i>n</i> = 35)	(<i>n</i> = 37)
Gifted Program–Academic	3.83 (.88)	3.53 (.87)†
General Academic	3.96 (.35)	3.76 (.34)†
Parent–Academic	4.21 (.56)	4.20 (.57)
Parent–Social	4.11 (.37)	3.97 (.36)

Note: G = gifted; NG = Nongifted. * $p < .05$ Between-subjects. † $p < .10$ Within-subjects change from Time 1 to Time 2.

being nonsignificant, the change reported by the parents of gifted students on the Gifted Program–Academic subscale had a large effect size ($\hat{\phi} = .85$).

Discussion

Previous research on the effects of giftedness typically focus solely on those participating in gifted programs. The current study sought to expand upon this by using a broader population (all those participating in the gifted identification process) and a broader time frame (prior to testing and after participation had begun). In general, this study found only cognitive performance differences between gifted and nongifted students prior to the gifted identification process. These findings suggest that attitudes of youth who will be labeled gifted are not necessarily separated from their nongifted peers by a gulf of (standard) deviations. However, participating in the gifted identification process

yielded several within-group attitudinal differences in both gifted and nongifted students. Similarly, several within-group differences arose for parents of gifted students and parents of nongifted students.

These changes suggest that expanding the traditional methods used to study the effects of giftedness could yield valuable information concerning how participation in the gifted identification process influences student and parent attitudes. Of course, general declines in attitudes over time are not necessarily cause for alarm as it is common to find deflation in attitudes toward school and perceived self-ability as time passes (Jacobs et al., 2002; Olszewski, Kulieke, & Willis, 1987; Wright & Leroux, 1997). The noteworthy issue is the relationship of changes in attitude to whether the student is identified as gifted. In this particular case, gifted students received reinforcement for their competence beliefs whereas nongifted students received feedback that may have lowered theirs.

Discussion of Student Data

The between-subjects difference on the General Academic subscale for students at Time 1 was not surprising given that shortly after completing the questionnaire, a difference in actual cognitive performance was shown objectively via performance on the CogAT. The mean for the gifted students on the CogAT was the 95th percentile whereas the mean for the nongifted students was the 73rd percentile. Given that both student groups reported equivalent attitudes on all other subscales at Time 1, this suggests that, for the most part, the groups did not appear to differ prior to being tested for giftedness.

The difference on the Gifted Program–Academic subscale between the two student groups at Time 2 suggests that after being identified as nongifted, nongifted students may believe that a gifted program would be a less appropriate learning environment for them than did gifted students. Similarly, the significantly lower attitudes on the Gifted Program–Academic subscale reported by nongifted students at Time 2 may reflect an increase in the accuracy of their belief in how well a gifted program suits them academically. Indeed, Nicholls and Miller (1984) and Stipek (1984; Stipek & MacIver, 1989) found that young children frequently have inflated self-perceptions and may depend on simple wishful thinking as the basis for their beliefs.

At Time 2, the initial General Academic subscale between-subject difference is no longer apparent. This may be explained by what Marsh (1987; Marsh & Hau, 2003) has labeled the big-fish-little-pond effect. Prior to identification, gifted students may have been accustomed to outperforming their peers. However, participating in a gifted program with similar performing peers may have brought into question their belief in their academic superiority. This interpretation is supported tentatively by the trend toward lower perceptions of academic ability reported by gifted students on the General Academic subscale at Time 2. The large effect size of this trend implies that given a larger sample, the effect would likely have been statistically significant.

Discussion of Parent Data

Previous research (e.g., Gottfried et al., 1994) has shown that parents are typically good at accurately assessing the ability level of their children. It therefore comes as little surprise that the incidence of giftedness in this study was higher than expected in the general population. Because participants were students who had been nominated to be tested for giftedness by their parents, the incidence of giftedness in the present study was artificially elevated (9 out of 45, or 20%—versus the 8% incidence of giftedness the 92nd percentile cutoff would predict). However, relying on parent nominations prevents the analysis of youth whose parents fail to recognize or act upon signs of giftedness. Thus, relying on parent nominations biases the gifted identification process in favor of students whose parents are already actively involved in their education and heed signs of potential giftedness. This further illustrates the importance of extending the timeframe in which researchers assess the impact of giftedness. A way to circumvent this bias would be either to educate parents on how to recognize (and take action to assess) giftedness or to test all students for giftedness. However, both methods require the devotion of substantial finances and effort.

The lack of a between-subjects difference on the General Academic subscale at Time 1 is inconsistent with the findings of Gottfried et al. (1994), who found that parents appeared to estimate accurately their child's performance. Similarly, parents of nongifted students reported slightly lower attitudes on the Gifted Program–Academic subscale (though not statistically significant, $p = .055$) at Time 2 than they had

at Time 1. It may be that parents of nongifted students no longer felt that a gifted program suited their child at Time 2. At the same time, the parents of gifted students showed a nonsignificant change on the Gifted Program–Academic subscale, but the large effect size suggests the nonsignificance may be a factor of the small sample size. Also, similar to the decline in nongifted student perceptions on the General Academic subscale, the negative trend on the General Academic subscale for parents of nongifted students may be an indication that after the gifted identification process, parents recognize better their child's ability in comparison to her or his peers. These attenuations are noteworthy because parents can set the tone for how school is viewed (Gottfried et al., 1994; Karnes & Shwedel, 1987). Parents holding less positive views on school may negatively influence how their children feel toward, and thus perform in, school. To test such an assertion, one would have to compare parent Time 1 and Time 2 responses to those of their child along with her or his actual academic performance. Such a comparison was not conducted in the current study because of the small sample.

Limitations

Several limitations must be noted. Most notably, all analyses and conclusions involving gifted students and their parents were based on a small sample and should be interpreted with caution until they are replicated. Moreover, these participants consisted of only those families who self-nominated to be tested for gifted programming. Additionally, due to the small sample size overall, a factor analysis was not statistically feasible; subscales were thus constructed via conceptual, rather than statistical, similarity.

This research would likely benefit from the use of standardized measures. A Principal Components Analysis was conducted post hoc to see whether the current items could be better organized. Results showed that items primarily fell into two components, with the vast majority of items in the first component. However, this result did not lend itself to a clear theoretical interpretation. The use of validated instruments for school engagement, self-concept, and self-esteem would likely offset this limitation. Such measures could illuminate whether more specific changes occurs and would allow for

comparisons to studies outside the gifted literature (i.e., with the general population of students). Additionally, with a larger sample, variables such as age, gender, race, economic status, and parent-child comparisons can be analyzed.

It is important to note that this study did not differentiate changes related to participation (or lack thereof) in a gifted program from those associated with the identification process itself. Though a year transpired between Time 1 and Time 2 assessments, only a single semester of gifted programming occurred in this span (the fall semester). It is unknown whether the between-subjects differences are temporary variations that will vanish with time, persistent minimal discrepancies, or the beginning of greater divergence. As the identification/labeling process fades into the past, between-subjects differences could escalate as a result of those labeled gifted receiving alternative coursework as well as differential (and some might say deferential) treatment from teachers, parents, and peers. Alternately, the differences could subside as students settle into the roles appropriate to their new labels. Moreover, even if the changes remain significant, the effects may be so small that the resources needed to implement appropriate changes to our educational system may not be feasible.

Future Research

To better understand the impact of how participating in the gifted identification process influences gifted youth, future research should attempt three primary methodological changes. First, as discussed above, the timeframe in which research is conducted needs to be substantially expanded. Current research does not fully encompass children's experiences with giftedness. I have proposed here that there are five distinct periods in the gifted identification process. Differences could result from changes in going from preidentification, to nomination, to testing, to labeling, and to participation. Most research is conducted after participation has already begun. The current study spanned the nomination to participation time period. Only studies that measure changes at each time can clearly illuminate how the gifted identification process influences its participants.

Second, further attention should be given to those students who participate in the gifted identification process but are not labeled

gifted. This group has no organized lobby dedicated to helping them. If participation in the identification process has any effect on non-gifted students, be it positive (more accurate self-appraisal) or negative (accelerated disinterest in school or negative self-appraisal) it could and should influence how the gifted identification process is implemented, especially if this effect was extremely negative. One subgroup that would likely be influenced is those students nearest the cutoff score, who are “on the cusp “ of giftedness. Such issues have recently received significant attention regarding the diagnosis of mental retardation and the Flynn Effect (Ceci, Scullin, & Kanaya, 2003; Kanaya, Scullin, & Ceci, 2003) but have not been discussed extensively in the gifted research literature.

Third, future researchers should strive to make use of appropriate matched control groups of students who are eligible to participate in a gifted program but have not participated. Manipulating an environment to suit such a requirement would be unethical, given the extent of potential negative outcomes related to not serving gifted youth properly. However, such an investigation could be approximated by using as a matched control group the students in a school (system) that has no gifted program. Inclusion of this control group would allow stronger inferences about a causal relationship between the identification process and the changes in attitudes reported in the current study. Further, analyzing this control group would allow a test of the hypothesis that the gifted identification process facilitates or inhibits the general regression of student and parent attitudes related to school.

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Author Note

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End Note

1 It should be noted that just because Gottfried et al. (1994) did not dub any of their participants gifted does not eliminate the possibility of the participants being labeled gifted by their individual schools. Thus, it is possible that the students the FLS labeled gifted could have been identified by others, thereby introducing unintentional confounds. Nevertheless, it is highly unlikely that any formal external identification would have occurred by age 18 months.