

What Happens to Gifted Girls?

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*Girls are the only group who begin school
scoring ahead and leave behind,
a theft occurring so quietly that
most people are unaware of its impact.
Myra & David Sadker*

The gender gap is not present at birth. Girls actually have a developmental edge over boys: they tend to be somewhat more robust babies; they learn to talk, count and read earlier. Until approximately age 12, they surpass boys in grades and achievement tests. Bright girls start school feeling highly competent. Ready at an earlier age, they are more successful than boys as early entrants to school. Equal numbers of gifted girls and boys are found on IQ tests in the preschool and primary grades, and some studies have shown that girls score higher than boys on intelligence tests during preschool years. What happens to gifted girls between childhood and adulthood? The answer lies in cultural expectations.

Females have been perceived as inferior in intelligence to males for eons. Societal perceptions influence girls' self-perceptions. Gifted girls develop earlier than boys; however, this precocity has been either ignored or interpreted in a grossly distorted manner, as shown in these quotations from Starr (1991):

In human beings, the female foetus is not perfected equally with the male.... For females are weaker and colder in nature, and we must look upon the female character as being a sort of natural deficiency. Accordingly while it is within the mother it develops slowly because of its coldness...but after birth it quickly arrives at maturity and old age on account of its weakness, for all inferior things come sooner to their perfection or end... (Aristotle, 4th Century B.C.E./1962 translation, Chapter 6 of Book IV)

Girls begin to talk and to stand on their feet sooner than boys because weeds always grow up more quickly than good crops. (Martin Luther, 1533/1967, p. 187)

The nobler and more perfect a thing is, the later and slower it is in arriving at maturity. A man reaches the maturity of his reasoning powers and mental faculties hardly before the age of twenty-eight; a woman at eighteen. And then, too, in the case of woman, it is only reason of a sort—very niggardly in its dimensions. That is why women remain children their whole life long... (Schopenhauer, 1851/1914, p. xxvii)

The Variability Hypothesis

These biased views gained support in the late 19th century with Charles Darwin's assertion of the "variability hypothesis." In his 1871 book, *The Descent of Man and Selection in Relation to Sex*, Darwin concluded that male members of all species were more advanced on the evolutionary scale than female members because of greater variability of secondary sex characteristics. The reason so few women had attained eminence (recognized achievement) was clear to Darwin—they were less variable than males; therefore, far fewer were extremely bright or extremely dull. From his perspective, women were all pretty much the same.

The chief distinction in the intellectual powers of the two sexes is shown by man's attaining to a higher eminence, in whatever he takes up, than can woman—whether requiring deep thought, reason, or imagination, or merely the use of the senses and hands. (Darwin, 1871/1897, p. 564)

Edward L. Thorndike (1906), a devotee of Darwin, warned that postgraduate instruction for women was a poor investment. "A slight excess of male variability would mean that of the hundred most gifted individuals in this country not two would be women, and of the thousand most gifted, not one in twenty" (p. 213). In the second edition of his classic text, *Educational Psychology*, released in 1910, Thorndike presented the following sentiments:

In the great achievements of the world in science, art, invention, and management, women have been far excelled by men. ...

The probably true explanation is to be sought in the greater variability within the male sex...

In particular, if men differ in intelligence and energy by wider degrees than do women, eminence in and leadership of world's affairs of whatever sort will inevitably belong oftener to men. They will oftener deserve it. (p. 35)

Four years later, imagine a gutsy young feminist, Leta Stetter Hollingworth, having the venerable E. L. Thorndike as her graduate advisor!

IQ Testing Detects Giftedness in Girls

Equating giftedness with eminence has always prevented the discovery of gifted females, because women do not have equal opportunity to gain recognition. The advent of intelligence testing of children delivered empirical proof of high intelligence in females (Hollingworth, 1926). Leta Stetter Hollingworth (1926) wrote, "mental tests proved the existence of gifted girls" (p. 347). Before IQ testing was constructed, it was assumed that the average intelligence of females was considerably lower than the average intelligence of males. But the evidence furnished by IQ tests was irrefutable—even to E. L. Thorndike.

He had to concede that mean IQ scores of males and females were very similar, thus, providing no explanation for their differences in achievement.

It is generally assumed that IQ tests have been engineered for gender equity, but this was not true at their inception. The *Stanford-Binet Intelligence Scale (Form L-M)*, still in use today to assess severely delayed and highly gifted children, only mentions males. Yet, Terman (1916) reported that when the first 1,000 Stanford-Binets were administered, “there was found a small but fairly constant superiority of the girls up to the age of 13 years. At 14, however, the curve for the girls dropped below that for boys” (p. 70). Surprised at how well the girls performed, Terman checked all the supplementary data collected from teachers “for evidence as to the genuineness of the apparent superiority of the girls” (Terman, 1916, p. 70):

The results of all these lines of inquiry support the tests in suggesting that the superiority of the girls is probably real even up to and including age 14, the apparent superiority of the boys at this age being fully accounted for by the more frequent elimination of 14-year-old girls from the grades by promotion to the high school. (p. 70)

These findings were an even greater shock to Terman’s colleagues, Yerkes and Bridges, who were so certain that the girls would perform poorly in comparison to the boys that they had advised Terman to use different sets of norms for boys and girls. Not only did the girls surpass the boys in every age group from 2 1/2 to 13, but the highest IQ scores, above 190, were achieved by *girls*. Peter and Stern (1922) in Germany found similar results.

IQ tests remain the most reliable and valid method of locating gifted girls (Silverman & Miller, 2009). Current research at the Gifted Development Center (GDC) continues to find equivalent numbers of gifted girls and boys, even though far more boys are referred. Over the last 33 years, approximately 60% of the 6000+ children brought to GDC for assessment were male and 40% female, which matches the gender distribution in the exceptionally gifted range (above 160 IQ). Parents are more likely to bring their sons for assessment and overlook their daughters. From 1979 to 1989, 57% of our clients were male and 43% were female. From 2009 to 2012, only 41% were female.

This discrepancy in referral rate is common in other assessment centers worldwide. Approximately two-thirds of the clients brought to psychologists for private testing to determine giftedness in the U.S. are male (Silverman & Miller, 2009). Centers in Australia report that three-fourths of their referrals are boys (H. Dudeney, personal communication, January 7, 2007). Rosemary Cathcart, in New Zealand, observed that “the ratio of boys to girls was consistently between two to three boys for every girl referred for assessment. That stayed the same over a ten-year period” (R. Cathcart, personal communication, January 20, 2007).

Not only do parents overlook giftedness in their daughters, but teachers also fail to recognize gifted girls. Gender bias has been demonstrated in referrals to gifted programs by teachers (Bianco, Harris, Garrison-Wade, & Leech, 2011). This contributes to declining self-concepts of gifted girls over time (Rudasill, Capper, Foust, Callahan & Albaugh, 2009).

Gifted boys who are acting out in school elicit their parents' concern; gifted girls who are quietly hiding their intelligence may not be seen as needing assessment. And in difficult economic times, testing of adaptable girls may appear unimportant. However, girls need this documentation of their abilities before they go underground. Knowledge of their giftedness can prevent underachievement, and kindle their ambitions.

In addition, society needs a record of the number of highly gifted girls in the population to refute the disturbing belief that there are more gifted males than gifted females. The variability hypothesis continues to haunt us. Some claim that there is a greater spread of IQ scores among males than females. In the October, 2005, issue of *Discover* magazine, Professor Horst Hameister of the University of Ulm in Germany was quoted as saying, "Females tend to do better overall on IQ tests; they average out at about 100, while men average about 99... More men are mentally retarded. But when you look at IQs at 135 or above, you see more men" (Shell, 2005, p. 43). On the contrary, the carefully constructed studies of Leta Stetter Hollingworth (1913, 1914) 100 years ago should have put an end to this supposition.

Our research at the Gifted Development Center over the last 33 years supports Hollingworth. We have tested over 6,000 children and nearly 1,100 of them had IQ scores above 160 (at least 15%). Karen Rogers found no significant differences between the scores of 241 boys and girls scoring above 160 IQ. The mean of the girls was 169.43 IQ and the mean of the boys was 170.71 IQ (Rogers & Silverman, 1997). We have found well over 100 girls with IQ scores of 180 or above. From 2009 to 2012, we have found 5 boys and 4 girls who scored above 200 IQ. The differences in recognized achievement between males and females obviously cannot be attributed to innate gender differences.

"Who cares if I'm smart? Am I thin enough?"

Capable girls shine during their early years. Then, without warning, confidence fades and is replaced with self-doubt and lowered aspirations. The turning point is often puberty. A large scale study of 3,000 students as they progressed through school, conducted by the American Association of University Women (1990), documents considerable loss in self-confidence and achievement in girls—twice that of boys—as they move from childhood to adolescence. What happens to these girls in adolescence?

Adolescence is a precarious period for highly able girls. It is a time of self-doubt, narrowing aspirations, observing instead of fully participating, accepting limitations, learning what it means to be feminine and how to fit into the prescribed roles of women in our society. It is a time of lost dreams. In the early years, all things seem possible. But something happens to girls between 11 and 17 that robs them of their sense of power.

To understand the dampening of aspirations in talented young women requires an awareness of the societal messages that become incorporated into feminine self-concept. The doctrine of the natural inferiority of women has been so thoroughly ingrained in our psyches

for thousands of years it is little wonder that as they approach womanhood, once-confident girls begin to have serious doubts about their abilities. Women have been told that they are innately less intelligent than men—incapable of invention, genius, eminence—by the most revered men in history (e.g., Buddha, Confucius, Hippocrates, Plato, Aristotle, St. Augustine, Mohammed, Martin Luther, Shakespeare, Milton, Immanuel Kant, Darwin, Freud).

Given the few women who are publicly recognized for their contributions, no matter how extraordinary, even the most capable girls come to believe that achieving distinction is a hopeless goal. Women do not fare well in the race for eminence. Only 8% of Nobel Prize winners were female. Of the 549 Nobel prizes awarded between 1901 and 2011, 44 were awarded to women, with two of them going to the same woman in the fields of physics and chemistry: Marie Sklodowska Curie. Only 2% were in the sciences (Charyton, Elliott, Ahman, Woodard, & DeDios, 2011).

In gifted education as well, gender equality is not a priority. Most of the prominent definitions of giftedness focus on achievement or the potential for acclaim in adult life (e.g., Subotnik, Olszewski-Kubilius, & Worrell, 2011). Since few women achieve eminence, these definitions favor males. Even in perspectives that seem more inclusive, such as the concept of multiple intelligences, women are marginalized. Less than 10% of the names indexed in Gardner's (1983) *Frames of Minds* are female, and most of them, except the dancers, were researchers studying the contributions of males. In *Creating Minds*, Gardner (1993) describes only one woman—Martha Graham—a famed choreographer.

As girls reach puberty, gender-role socialization makes its mark on their psyches, telling them that they are only valued for their appearance and sociability. This changes the priorities of talented girls; since they are less valued for their achievements than for their attractiveness, they place less value on those achievements themselves. Newspapers worldwide relate the increasing concern with appearance and weight among even younger girls. According to an article published in a New Zealand newspaper, nearly half of 5- to 8-year-old girls believe that greater popularity can be gained by being slimmer. Nearly half of 9- to 11-year-old girls report that they are on diets and more than half of them feel better about themselves if they are on a diet. Over 80% of 10 year olds are afraid of being fat (Alliance for Eating Disorders Awareness, 2013).

Women's magazines and even children's textbooks perpetuate the obsession with thinness in teens. The average model is 5' 11" and weighs 117 pounds, while the average woman is 5' 4" and weighs 140 pounds (Alliance for Eating Disorders Awareness, 2013). Beauty contestants and *Playboy* centerfolds weigh at least 15 percent below their expected weight. And the pictures of girls in third grade textbooks have gotten relentlessly thinner while the weight of the boys depicted has not changed in a century (Sadker & Sadker, 1994).

Perhaps as many as three-fourths of adolescent girls are on diets at any given time. "Girls and women discuss losing weight the same way boys and men talk about sports" (Sadker & Sadker, 1994, p. 103). Eating disorders, such as anorexia and bulimia, are at an all-time high among adolescents and young women, afflicting a million females and seizing the lives of 150,000 annually. Eating disorder clinics are now serving even younger clientele. Much of the low self-esteem and depression experienced by teenage girls can be attributed to

negative body image. Adolescent girls who are trying desperately to look prepubescent to match an underweight conception of beauty eat barely enough to keep them alive, let alone sufficient amounts to support sustained concentration on their studies.

At thirteen I was taking in the caloric equivalent of the food energy available to the famine victims of the siege of Paris.... My teachers approved of me... They saw nothing wrong with what I was doing... There was no interference in my self-directed science experiment: to find out just how little food could keep a human body alive. (Wolf, 1991, p. 202)

By comparison, teenage boys often consume enormous portions of food, providing extra energy for both mental and physical endeavors. Excessive dieting is an unrecognized threat to the achievement of vast numbers of girls.

But the preoccupation with weight and appearance is not the only problem faced by highly capable girls. All but the most brilliant, determined young women find it necessary to downplay their intelligence when they are in their teens. Rachel Simmons (2002) asked a group of teen-age girls to name the qualities of a perfect girl and the qualities of a girl no one would want to be. Highest in the list of qualities for the ideal girl were “very thin,” “pretty,” and “blond.” Among the traits in the opposite list were “brainy,” “opinionated,” “professional,” “serious,” “strong,” “independent,” and “bookish” (pp. 124-125). It is little wonder that girls’ self-esteem is negatively related to their achievement (AAUW Educational Foundation, 1992). For boys, the opposite pattern occurs: high achievement leads to high self-concept.

Essentially, the highly able young woman is faced with a Sophie’s Choice: If she chooses to be true to herself, to honor her drive for achievement and self-actualization, she breaks some unspoken rule and faces disconnection, taunts and rejection from both male and female peers. If she chooses to give up her dreams, to hold herself back, to redirect her energies into feminine spheres—preoccupation with boys, clothes, appearance, observing her tone of voice, choice of words and body language, remaking herself to become attractive to the opposite sex—she is accepted and rewarded for her efforts. Since there is little immediate value in choosing achievement over social acceptance, a girl would have to have incredible self-assurance to make that choice.

Research indicates that few bright girls have the strength to cope with these social pressures. Locksley and Douvan (1980) reported that girls with high grade point averages were significantly more depressed, had more psychosomatic symptoms and had lower self-esteem than their male counterparts. Petersen (1988) found that self-image scores in high achieving pre-teen girls increased as their grades decreased, whereas the opposite was true for boys. In their early teens bright girls often sacrifice their intelligent friends to gain acceptance by less capable classmates (Buescher, Olszewski, and Higham, 1987).

Just at the point at which once-confident gifted girls appear to “plateau,” their male counterparts suddenly experience a “growth spurt,” which thrusts them into the lead in academic achievements—a lead sustained throughout the rest of their school years and in their achievements in adult life. Despite the fact that girls maintain higher grades, boys

outperform girls on the American College Board examinations, thereby securing admission to the most selective colleges in the United States and obtaining a substantial portion of scholarships. While some would argue that males have a different time table of maturity, starting out slower but then taking their “natural” lead over females, one cannot help but wonder if their female counterparts of equal ability simply moved over and gave them the lead. “I’d rather diet.” It is not a real competition if half of the players give up the race.

Studies of Gender-Role Socialization

Denmark is a global leader in gender equality. The Global Gender Gap Report 2012 (Hausmann, Tyson, & Zahidi, 2012) ranks Denmark seventh in the world out of 2016 countries in terms of closing the gender gap. The United States is in 22nd place. Americans often fail to recognize gender inequality. A study was conducted by the Institute for Equality in Education at the University of Colorado under the direction of Dr. Alice Baumgartner Papageorgiou (1982). Approximately 2,000 Colorado students in grades 3 through 12, from large metropolitan and small rural districts, were asked to write essays on the following question: “If you woke up tomorrow and discovered that you were a (boy) (girl), how would your life be different?” Her findings were discouraging; the title of her report was “My Daddy Might Have Loved Me.”

Boys:

“I couldn’t be a slob anymore. I’d have to smell pretty.”

“If I were a girl I’d be stupid and weak as a string.”

“If I were a girl, I would want to be a boy.”

“If I were a girl, I would not be able to help my dad fix the car and the truck and his two motorcycles.”

“I couldn’t play football or basketball.”

Girls:

“If I was a boy I’d drop my typing class and start taking really hard classes, since my dad would let me go to college and he won’t now.”

“If I were a boy I’d get called on more to answer questions.”

“Teachers expect more from guys.”

I would probably act different toward my teachers, being less cutesy and vulnerable. Boys have to make it on their own.”

“If I woke up tomorrow and I was a boy. I would go back to bed since it would not take very long to get ready for school.”

“I wouldn’t have to put up with leers while walking down the street.”

“People would take my decisions and beliefs more seriously.”

“I’d have to put down all the girls.”

"If I were a boy, my father would be closer, because I'd be the son he always wanted."

Between 1988 and 1990, Baumgartner Papageorgiou's study was replicated in Michigan's public schools with approximately 1,100 children, and similar results were obtained. Both males and females believed that gender—more than attitude, interests, skills or aptitude—determined their achievements, behaviors, activities and treatment from others. Almost all of the students said that life would be significantly different if they were the opposite sex. More than 40% of the girls felt that there were many advantages about being male, while 95% of the boys saw no advantages to being female, and *16% of the boys described ways that they would escape from the condition of being female—usually by suicide*. In analyzing the essays, four major themes emerged related to appearance, activities, behaviors and treatment from others. As in the original study, girls said that they wouldn't have to be worried about their appearance and boys said that they would have to be concerned about the way they looked. Girls indicated that they would have greater freedom in athletics, household chores and everyday activities, while boys mentioned all the restrictions they would face as girls. Girls believed they would have more self-confidence, fewer worries and more fun. Both boys and girls indicated that their parents would treat them differently (Office for Sex Equity and Education, 1990).

Others have also used Baumgartner Papageorgiou's revealing question with predictable results. For example, the Sadkers (1994) found that girls see many advantages in being male, such as being able to be governor or president, being taken seriously, having a secretary, and making more money. "For boys the thought of being female is appalling, disgusting, and humiliating; it is completely unacceptable" (Sadker & Sadker, 1994, p. 83).

Although we have read hundreds of boys' stories about waking up as a girl, we remain shocked at the degree of contempt expressed by so many. If the students were asked to consider waking up as a member of a different religious, racial, or ethnic group, would rejection be phrased with such horror or loathing? (p. 85)

Baumgartner Papageorgiou (1982) advised educators to ask their students the same question that was asked of the students surveyed in her study. This provides an excellent way to initiate discussions of gender-role socialization with students, teachers, parents or counselors. Several years ago, I posed the question in a counseling course I was teaching and a tall, lean fellow from Australia replied, "If I woke up tomorrow and discovered that I was a woman, I would be on a diet, but I don't know why!"

Socialization of Able Girls

Gifted girls are chameleons. From the time they enter preschool, they learn how to behave exactly like the other girls in the group so that they will be accepted. If their classmates are developmentally less mature, gifted girls will frequently don the mental attire of their friends, and soon will be imperceptible from them in thought, manner and achievement. A preschool director who was very interested in identifying gifted children in her school remarked that she had no difficulty spotting the boys, but she could not pick out

the girls. At the age of four, they had already gone into hiding.

Gifted boys are more visible, as they attempt to gain teacher attention or annoy the other students or demonstrate leadership or withdraw. They usually reject classmates who are not as capable as themselves. By way of contrast, gifted girls treat school as a social experience and they use their considerable talents to gain acceptance, blending into the group and becoming invisible. When mothers describe girls' advanced abilities at home that are not demonstrated in school, they are often patronized: "All parents think their children are gifted." Teachers easily discount the early signs of giftedness reported by parents, unless they see confirmation of these skills at school. Gifted girls will not show their true capabilities at school unless several of their classmates are equally capable.

Parents usually provide a safe environment in the home for gifted girls to reveal their abilities. Only one indication of gender bias has been found at our Center with any regularity. The parent questionnaires ask if the child shows any signs of leadership. Mothers respond that their young son "likes to be the boss," "is the captain of the ship," "assigns roles to other children," "takes the lead in games," "decides what games to play, who should be what character," etc. Responses for girls (and exceptionally gifted boys) often include the word, "bossy." "She's so bossy I'm afraid she isn't going to have any friends." Preschool and primary teachers respond similarly, even asking for advice as to how to correct the "bossiness" they observe in gifted girls. In children's literature, such as *Little Miss Bossy* (Hargreaves, 1981), the term "bossy" appears only in relation to girls. It seems improbable that the leadership skills of gifted four-year-old girls vary to such a degree from that of the boys that the term "bossy" is warranted to describe them. It is more likely that these differences are in the eyes of the beholder, with boys being socialized to be leaders and girls being socialized to be followers.

The peer group is a major factor in the socialization of girls. "Most girls know deep down that standing out can get you in big trouble" (Simmons, 2002, p. 106). Nine year olds can be particularly cruel to girls who are different from the pack in any way, shape or form. "The other girls watch and talk about everything: what she eats and wears, whom she plays with" (Simmons, 2002, p. 170). If the group turns on her, the gifted girl becomes "poison." No one will play with her, invite her to parties, look at her, or acknowledge her existence. They will make fun of her, tell rumors about her, and find other ways to humiliate her. Anyone who dares to be nice to her will find that they are "poison" too. This is a very effective method of squelching giftedness. Lee Anne Bell (1989) found that by fourth or fifth grade, girls who exhibit outstanding academic ability begin to lose self-confidence, become extremely self-critical and often lower their effort and aspirations to conform to gender stereotyped expectations.

If acceleration is being considered, boys are more likely to leave their peer group at any stage of development in hopes of learning more at higher grade levels, but girls usually need to be accelerated before the age of eight. From that point forward, they are at the mercy of their peer group and will not leave them, no matter how unhappy they might be at their grade level. The risks involved for girls are higher than for boys.

Early entrance is an ideal alternative for girls, as the peer group of children slightly

older than themselves is established from the beginning of school. Research support for acceleration, especially early entrance, is strong (Colangelo, Assouline & Gross, 2004; Feldhusen, Proctor & Black, 2002). A review concluded, “We can lay firmly to rest the myth that acceleration is inherently dangerous for gifted students” (Robinson, 2004, p. 64). This key option for gifted girls is impossible without access to early identification.

At the stage of development when gifted girls are most vulnerable and begin to doubt their intelligence, a term creeps into educators’ vocabulary that does untold damage: “overachiever.” When educators of the gifted are asked to visualize an underachiever and write down the first name that comes to mind, and then they are asked to write down the first name of an overachiever, two-thirds of the underachievers invariably are male and two-thirds of the overachievers are female. When asked to define “overachievement,” participants describe typical traits of high achievers, such as working exceptionally hard or devoting excessive time to a project. Marie Curie and Sergei Rachmaninoff definitely fit those descriptions; does that mean they were overachievers? Fennema (1990) found that mathematics teachers attributed the success of their best male math students to ability and the success of their best female math students to hard work. Gifted girls share the belief system of their math teachers that boys have ability and girls just work really hard.

Underachievement is a psychological reality: it is always possible to have a significant discrepancy between one’s ability and one’s performance. In fact, a case can be made that most gifted children are forced into patterns of underachievement because the level of work they are required to do in school is usually much lower than their capabilities. But “overachievement” is an oxymoron: no one can achieve more than she is capable of achieving. The term implies that the person makes up for lack of ability by hard work. It is a sexist expression that serves no useful purpose; it simply demoralizes, weakens the confidence of gifted females and leaves scars that last a lifetime.

Although some theorize that boys’ abilities are more real than girls because they correlate with adult achievement, there is strong reason to believe that the progressive loss of talent in girls can be traced to the effects of socialization, which steadily erode gifted girls’ self confidence and undermine their aspirations. Gifted girls appear to “plateau” in their abilities as soon as they turn their attention to dieting, clothes, and preoccupation with boys. Suddenly, boys take the lead in academic achievements—a lead sustained throughout the rest of their lives.

Societal pressures are subtle. As parents and educators, we need to be on guard so that we do not participate unconsciously in the socialization of bright girls to be less than they are capable of being.

What Needs to Be Accomplished

Girls need not become victims of societal pressures and media values. Parents and teachers should talk openly with girls about maintaining their individuality in the face of the onslaught of media images of anorexic women. The exercise, “If you woke up tomorrow and discovered you were a (boy) (girl), how would your life be different?” promotes awareness in

both genders. Same-sex education has been shown to develop leadership in girls who might otherwise have deferred to boys (Riordan, 1990; Sax, 2005).

Women need to be aware of the messages they give to girls with their own preoccupation with diets. How often do girls observe women complimenting each other for their achievements rather than for their weight loss and choice of clothing? All girls need to be counseled about the impact of dieting on health and achievement. Beware of complimenting a girl who has lost a considerable amount of weight in a short time. This should be cause for concern and counseling, rather than praise. Be alerted to the signs that a girl may be starving herself. Eating disorders are deadly serious and need immediate therapeutic intervention. Once a girl has developed an eating disorder, she battles that demon for the rest of her life.

Developmental advancement in girls needs to be identified in the preschool and primary years, and all the early indicators of giftedness, such as advanced progression through the developmental milestones, early reading ability, and high IQ scores obtained during preschool years, need to be taken seriously instead of dismissed as simply the result of early childhood enrichment. Nine year olds obviously have had much more enrichment than preschool children, so why are IQ scores of nine year olds considered more valid? Many nine-year-old bright girls have already gone underground and will refuse to let anyone know how intelligent they are; they often bat their eyelashes during IQ tests and say, "I don't know" in response to questions they could easily answer. By the time they are eight or nine, girls know that it's smart not to be too smart.

The barrier of speed in testing, which is weighted in favor of males, needs to be removed. This applies to IQ tests, achievement tests and college entrance examinations. When girls take tests untimed, the gender gap is greatly diminished. Scholarship opportunities should be based as much on grades as on scores on timed aptitude and achievement tests. Girls with high grade point averages in mathematics, but lower mathematics aptitude scores on College Board exams than their male counterparts, have demonstrated higher performance in college courses (Sadker & Sadker, 1994).

The terms *bossy* and *overachiever* should be banned. It is important for parents and teachers to hold high expectations for girls as well as for boys, and to provide challenging experiences for them early in life so that they know they can handle difficult challenges. Fathers, in particular, play a vital role in the formation of their daughters' aspirations.

When gifted girls are educated together, they provide mutual support. Counselors are needed who are sensitive to the vulnerabilities of talented teens. Female support groups should be available to all girls. Girls need support for goal setting and risk taking, and inoculation against societal pressure to hide their gifts. Gifted girls need to be encouraged to take challenging coursework—especially advanced math. Although these girls underestimate their abilities, they are actually happier when they are intellectually challenged.

Callahan (1991) points out that funding is based on tacit beliefs and values. Boys suffer from reading disabilities to a greater extent than do girls, but it is assumed that boys

should not lag behind girls in reading ability. The belief system that all children are capable of learning to read undergirds funding of thousands of remedial reading classes composed almost entirely of boys. However, the belief that girls are inherently less capable than boys in mathematics precludes funding of remedial mathematics teachers to correct the problem. There should be as many remedial mathematics teachers available to adolescent girls as there are remedial reading teachers available to young gifted boys.

In *Odd Girl Out: The Hidden Culture of Aggression in Girls*, Simmons (2002) offers strategies for parents, teachers and counselors to combat covert aggressions in girls. It is essential for educators and parents to be aware of the subtleties of its expression, as well as its devastating impact on girls' self-concept.

It is time to recognize the profound loss to self and society when the needs of talented young women are ignored. These losses can be prevented if the females in our lives are valued enough to receive support in their struggle for personhood.

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BIO

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