The New Gender Gap: Social, Psychological, Neuro-biological, and Educational Perspectives

by Betsy Gunzelmann and Diane Connell

Patrick is a fourteen-year-old adolescent of at least above-average intellectual ability, yet his school grades do not reflect his academic gifts. Mark wants to do well in school, but he often does not complete assignments, study for exams, or even ask for help when needed.

What's going on with these young men? Are they unmotivated, possibly ADHD or learning disabled? Or are they fairly typical adolescent males unable to respond in a setting that unintentionally reinforces positive female behavior while overlooking male needs? Let us explain our thinking further: we believe the cases of Patrick and Mark illustrate complex issues that go to the very crux of our educational system and our society.

Let's take a closer look at overall current statistics and common observations about our schools:

- "Boys are becoming the Second Sex."
- "Girls are taking over the K-12 system."
- Girls constitute 57 percent of college undergraduates.
- Girls constitute 58 percent of all master's degree students.
- Seventy percent of special needs children are boys.
- Beginning in kindergarten, boys are expected to achieve a standard that favors girls. Girls used to fall behind boys on standardized tests until the curriculum was changed to meet the needs of girls. (Conlin 2003)

The multifaceted causes of gender discrepancies involve such wideranging factors as society's perceptions of boys; educational expectations; new state and federal testing policies; school climate; psychological and emotional differences; and brain-based and biological differences. Let's take a closer look at each one of these areas.

Society's Perceptions and the Impact of the Gender Gap

Confining stereotypes are a strong part of our culture and social norms. Girls are encouraged to be thin, pretty caregivers; boys are encouraged to be strong, brave, silent, and macho.

Then there is the "Boy Code," which according to William Pollack (1998) is the unwritten list of societal beliefs about how boys should act. Unfortunately, such projected behaviors often clash with expectations in school. For example, the Boy Code requires boys to act tough and hide their feelings; they are therefore less likely to speak up when experiencing difficulty or frustration. Is it possible that such boys as Mark don't want to ask for help because it goes against the code?

The Boy Code is unintentionally reinforced by parents, teachers, coaches, peers, and the media. To understand just how deep these beliefs go, walk down the aisles of a typical toy store and ask yourself:

- Can you tell which aisles are for boys and which are for girls?
- Do you really want your child playing with many of the dark and violent "boy toys"?
- Do you think such toys reinforce the Boy Code?
- Do you think they reinforce the problems we have in our society (not to mention the mini-society of cliques in our schools)?

Also consider common sayings we all have heard or even uttered without really understanding their possible impact on a male child: don't throw like a girl; don't walk like a girl; be

Ways to Help Our Boys

- Create positive and supportive home and school environments by challenging the Boy Code and confronting beliefs about how boys should behave. Boys can be genuine boys and not caught in a Catch-22 if we encourage them to express their feelings and to be true to themselves. They should not be forced into false roles to "fit in."
- · Challenge our current curriculum, which favors girls: introduce concepts to boys on their schedule. Allow for differences between children: many boys are not ready to sit still and color between the lines at young ages. They should not be made to feel inferior by receiving lower grades, reprimands, or medication because they develop at different rates

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than girls. Change the approach—not the boy!

- Confront our current testing craze: develop assessment approaches that accurately demonstrate boys' learning.
- · Maintain close, supportive, loving home environments. Boys need unconditional love and support too. They should be allowed to separate naturally, on their schedule, not on some preconceived notion based upon the pretense that they need to be tough and independent at early ages.
- Choose books that boys want to read (e.g., action, sports, science fiction, adventure, comic books, factual books). Please visit http://www.guysread.com for a fascinating list of books that boys from around the country have voted "best reads."

strong, don't cry; don't be a sissy. Clearly, these signals reinforce the Boy Code, snaring our sons in a trap from which it is most difficult to escape.

Family concerns also have a strong impact on male children. Closeness to family members, particularly between mothers and sons, often becomes taboo as boys mature. Even small boys are expected to go off to preschool and be "brave little men," while girls are allowed much more freedom to express fears and feelings. When boys reach adolescence they again are faced with further distance from family members at a crucial time when they need guidance, support, and healthy affection from their parents. Pollack (1998) believes such early separation is a source of depression in many of the young men he has interviewed.

In Our Schools

Boys are most clearly at risk emotionally in the schools in part due to educational expectations, policies, and climate. Boys are caught in a Catch-22. On the one hand, we are less tolerant of boys: we expect them to be strong and keep their concerns to themselves—not to whine or be crybabies. Yet on the other hand, we expect boys to act the way girls do in school: to sit still, color inside the lines, and learn in the same sequence and manner as girls. Clearly the emotional climate in many schools and classrooms favors girls over boys (Connell and Gunzelmann 2004).

Furthermore, both society and schools are pushing children to grow up quicker and to learn concepts earlier. David Elkind (2001) believes that our current testing obsession is in part due to the fast-paced dynamics of our schools. That trend results in no greater knowledge, but it puts added pressure on children to measure up and to hurry their learning. Additionally, the test-driven curriculum places boys at greater risk for failure: many boys are

just not ready to learn the concepts since they develop many of the necessary skills later.

It is also essential to consider the schools and the classroom climate. The typical educational experience requires that children sit still, speak fluently, color between the lines, use neat handwriting, work cooperatively, be neat and organized, learn from a verbal rather than an experiential approach, and demonstrate learning through a standardized-testing format. Although some boys excel at standardized tests, as a rule this approach is far more beneficial to girls.

Brazelton and Greenspan (2000) believe that we must meet children's individual needs to help them learn and thrive. Levine (2002) reminds us: "Different profiles are destined to make the grade at different times of life depending and when the conditions are right" (p. 37). As a result, many boys are misunderstood and even misdiagnosed—Attention Deficit Disorder, Learning Disabled, Oppositional Defiant Disorder, and Conduct Disorder—when in fact many are just frustrated, poorly taught children. Years of research show that many more boys than girls are diagnosed with such disorders.

Psychological/Emotional Differences

The psychological harm of being misunderstood can include lowered self-esteem, depression, anxiety, and motivational problems. Even young children are now frequently diagnosed with depression. Yet symptoms of depression in boys may be ignored or misinterpreted because they tend to be externalizers who appear antagonistic, aggressive, antisocial, self-indulgent, or deceitful (Wenar and Kerig 2000, 147). As a result, they may be misunderstood and labeled with Oppositional Defiant Disorder or Conduct Disorder.

Symptoms of psychological distress in boys may present differently, too, with learning

- Establish male models in home and school settings. It would be helpful if boys read with these male models. Role models can include grandfathers and male high school students who come into the school to read with the younger boys.
- Design school lessons and home games that focus on the right-brain visual-spatial and visual-motor skills of boys. Examples include Lincoln Logs, Legos, and blocks. Allow young boys to make their numbers and letters from clay instead of paper and pencil.
- Provide numerous opportunities for physical activity by building movement into lessons when possible. For example, if teaching punctuation that ends sentences, let students act out a

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- question mark or an exclamation point. Allow boys time to stretch, do yoga exercises, or jog between lessons.
- Allow opportunities for competition: many boys will rise to the challenge of math competitions, spelling bees, or geography bees.
- Use technology whenever possible for lessons: it taps into the visual-spatial and visual-motor abilities of boys. Computer learning games and research cyberhunts are effective.
- · Be thoughtful about the unique needs of boys and, when boys struggle emotionally or academically, take appropriate action to get them the support, understanding, and intervention they need to flourish. Make sure any professionals consulted are aware of boys' needs.

disabilities and with ADHD. Considerable research documents the disproportionate ratio of males and females with ADHD (Biederman et al. 2002). And there is ADHD's co-morbidity with various disorders: conduct, depressive, anxiety, learning, substance abuse, and others (Biederman, Newcorn, and Sprich 1991). Constant misunderstanding and an awkward fit with one's academic endeavors can lead to a self-defeating, downward spiral in academic performance.

Brain-based Differences/Biological Differences

Our brains' hemispheres, though intricately connected, process information differently (Baron-Cohen 2003; Springer and Deutsch 1998). The left hemisphere, processing information sequentially and analytically, focuses on details, or "individual trees." Its primary responsibility is auditory processing and verbal expression, such as listening, speaking, and writing. In contrast, the simultaneous, intuitive, holistic processing style of the right hemisphere sees the "entire forest." It has the primary responsibility for visual-spatial and visual-motor activities, such as sports, architecture, sculpture, painting, and carpentry (Connell 2002).

Boys and girls begin kindergarten and first grade with different developmental strengths and weaknesses. Biologically, girls' left hemispheres develop before boys' (Gurian 2001); in essence, brain biology enables girls to read and write using the traditional approaches at an early age. By contrast, Gurian notes, boys' right hemispheres are more developed. Boys learn best using nontraditional approaches such as movement and visual-spatial skills.

Research using norm-referenced intelligence and achievement measures has documented the differences between boys and girls. Vogel (1990) writes,

In general for the normally achieving population, a substantial body of research confirms the higher verbal ability of females (including global verbal abilities as measured by the WISC Verbal subtests, grammar, word fluency, and spelling) and higher visual-spatial and mathematical abilities of males. (p. 50)

Teachers have traditionally taught boys to read and write in a manner suited to their level of development, understanding that boys would catch up developmentally around the fourth grade. The current focus on high-stakes state and federal tests generally favors the brain strengths of girls, not boys, especially at the lower grade levels. Achievement data required by the federal No Child Left Behind (NCLB) legislation show that in every state boys lag behind girls in reading and math. However, the scores do not accurately portray boys' abilities. For example, boys can learn their letters by first making the letters out of clay; they can act out punctuation marks; and they can learn to read using technology to incorporate phonics (Connell and Gunzelmann 2004).

The saddest part of all is that boys once caught up with girls around fourth grade. That is no longer the case. Today, with teachers and students alike feeling the pressure of state and federal tests, boys are undergoing harmful stress. School is often seen by boys as "a girl thing." Instead of catching up, they are giving up!

Recommendations for Improving Boys' Prospects

We can see that there are basic psychological and biological differences between boys and girls, including the way in which society perceives them, and in turn how parents and schools interact with them. In 1972, Congress passed Title IX, which mandated gender equity in schools across America. For the past thirty years girls have been supported by the women's movement, particularly through research advanced by the American Association of University Women in the 1970s and 1980s. Today, professors, teachers, and parents encourage girls to take advanced courses, participate in sports, and do their best work.

No question, we need to continue supporting our girls; however, at the same time we must also begin to focus on ways to help our boys. The suggestions in the sidebar, "Ways to Help Our Boys," are intended to provide a starting point for such efforts.

As counselors, teachers, and parents we have our work set out for us: we must keep the girls soaring, while at the same time open the cage and let the boys fly. The key is understanding that boys' flight patterns differ from girls': we must acknowledge and encourage all our children.

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