# A Review Study of the "Boy Crisis" 

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#### Abstract

This article examines the 'boy crisis', which is now becoming a global phenomenon. Boy crisis focuses on boy's underperformance and underachievement compared to girls. The review has analyzed the present studies from the behavior of the boy crisis, the gender gap in attendance, and the gender gap in achievement where aims to determine the cause of the boy crisis and treatments can be used for boy crisis. Moreover, this paper also pointed out the potential cause of the boy crisis: the one-child policy, teacher gender gap, social environment, and education for quality. Finally, the treatments, including androgyny and single-sex school, were also reviewed to analyze the methods of reducing the cause by boy crisis in the society. However, they may need further research to confirm.


Keywords: Boy Crisis, Androgyny, Gender Gap, One-child Policy.

## 1. INTRODUCTION

Boys are thought to be more favored than girls in school, yet the fact is opposite to traditional cognition of the two genders. It is shown that boys are falling behind girls in recent years. In school, girls surpass various aspects, which means that boys are the second population compared to girls [1]. The "boy crisis" means boys' underperformance in school, mainly the academic underachievement compared to girls in a global context. In the U.S., this phenomenon includes lower scores on the American National Assessment of Educational Progress, a higher proportion of dropouts and suspensions, and behavioral or ability problems such as learning disabilities [2-4]. The boys' failure above is concluded compared to either girls' data or boys' previous record.

### 1.1. Behavior of the "Boy Crisis"

To a certain extent, there are differences between the behavior of boy crisis and traditional male ideology (mainly in terms of masculinity and femininity). The traditional masculinity ideology makes boys gain invisible privileges in boyhood, but it also brings them isolation and chronic anxiety [5]. As for them, being a boy can mean the isolation and chronic anxiety of having
to prove your manhood every second [2]. The costs of boyhood begin early and seep deeply into all boys' selfconcepts, ambitions, and accomplishments [5].

In this context, the consequences of these behavioral differences are also hotly discussed. In the United States, the behavior differences caused by gender policing, that is, the emergence of the boy crisis is even related to the demeaning of homosexuality. This shows that in the United States, the consequences of failing to conform will be even more serious than being regarded as homosexual. What's more, the existence of campus bullying makes the stereotypic notions of masculinity and femininity more compulsive, even cause emotional disturbance and self-injurious behaviors four times more than girls [6], strengthening the severity of the boy crisis [5].

### 1.2. Gender Gap in Attendance

Although achieving gender equality in the classroom is still a problem in many countries, women are more educated today compare to fifty years ago in every country [7]. The number of female enrollment not only catches up to males but also overtakes males in decades.

This statement can be reflected through both attendance and graduation rates. Take the United States

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as an example, compared to men, 2.4 million more women were pursuing some form of postsecondary education (universities, colleges, etc.) in 2017 [8]. The research from Paul indicates that women have a slightly higher graduation rate compare to men across Organisation for Economic Co-operation and Development countries, about 8 percent in 2008 data [9].

It is estimated that female accounts for $59 \%$ in all bachelor's degree [2]. Males obtain fewer degrees (community college, bachelor, master, and doctoral) than females among whites and blacks [2]. On achievement, males perform worse than females from secondary education to higher education. $41 \%$ of boys earn A or B in middle school, while the number of girls is $55 \% .21 \%$ of males earn A or above in the university, and the corresponded number of females is $28 \%$ [2].

However, according to our world data, the natural sex ratio between boys and girls at birth is around 105: 100 [10]. It is not hard to notice that women are doing better in today's education with a higher attendance and graduation rate from data. At the same time, the majority of the population in the world is male.

### 1.3. Gender Gap in Achievement

The "boy crisis" can be found in the growing gender gap in academic achievement.

In the United States, it is found that boys' academic performance is falling behind girls across multiple dimensions. The popular press, educators, and policymakers have posed that the US educational system is in the midst of a "boy crisis" [11]. According to the National Assessment of Educational Progress (NAEP) report, boys' performance in reading is significantly worse than girls in grades 4, 8 , and 12; in traditional boydominated subjects, such as math and science, boys' performance has also been on a downward trend [3]. 55\% of girls at secondary school get A or B grades, compared with $41 \%$ of boys; $28 \%$ of girls go to university with A or A+, compared with $21 \%$ of men [12].

Nowadays, in China, it is also gradually common that boys have relatively poor academic performance compared to girls, according to many studies on test scores, the number of students in higher education, and the number of awards they receive. In less than a decade, from 1999 to 2008, the percentage of top male scorers in the college entrance examination (China's Gaokao) dropped from $66.2 \%$ to $39.7 \%$, while that of top female scorers increased from $33.8 \%$ to $60.3 \%$ [13].

The "boy crisis" can be found in the number of students in higher education. According to China's Ministry of Education statistics, the gap has gradually widened since the proportion of female students in Undergraduate in Regular HEIs ( $10,825,501$, accounting for $50.48 \%$ ) exceeded that of male students $(10,621,069)$
for the first time in 2009. The data from 2015 to 2019 shows that the number of female undergraduates in Regular HEIs has increased ( 13.71 million in 2015 to 15.68 million in 2019), accounting for around $52 \%$ [14].

National scholarship is the highest honor of national scholarship that students of Chinese colleges and universities can obtain at present. One research in 2009 indicates that the male winners of the National Scholarship were significantly less than the female winners, no matter in institutions of higher education affiliated to the central departments or local institutions. Even in the top 20 key universities, the male students lag behind the female students in proportion. The male-tofemale ratios of two consecutive years were nearly 1:2 [15].

All in all, the "boy crisis" has been a global phenomenon. Males are less educated than females between 25-34 in 20 out of 30 countries [5]. In developed countries, the crisis is apparent. Boys are diagnosed to have behavior problems three times more than females in Britain. Developing countries also face similar problems. In China, the crisis includes boys' academic failure, bodily health, mental health, and social adaptation [6]. Therefore, the "boy crisis" has been a serious global problem that needs analysis and solutions.

## 2. CAUSES OF THE "BOY CRISIS"

### 2.1. The One Child Policy

The One-Child Policy in China plays a significant role in affecting boys' performances. The old Chinese generation favors boys historically and might discard daughters upon birth which caused an unbalanced gender ratio in China ( 105.302 male per 100 females) [10, 16]. Traditional Chinese has a saying of men for the outside, women for the inside [17]. Although more investments were put towards boys, the favor from the society at that time defines that boys can have a relatively broader stage and relatively lower pressure to grow up in.

But for girls, those unfaired biases towards them will give them more resistance from society [6]. For example, if a girl growing up in an environment where has a favor towards boys. She needs to sacrifices more to achieve the same level as boys due to the fewer investments and lower expectations. To sum up, China's One-Child Policy has caused a favor towards boys in the society, and more boys were spoiled, which caused their underperformance in school. Such policy was aimed directly at lowering the population increase rate but neglected society's influence on girls.

### 2.2. Teacher Gender Gap

Boys' underperformance in school also partly resulted from the high proportion of females among teachers. It causes the feminized mode and the superficial explanation for boys' performance. The whole system of teaching and learning is designed by female teachers and for female students. From curriculum to standard behaviors, females are more inclined to be rewarded because of their inborn characters [18]. Boys' learning styles such as the use of space and movement are considered rude and impolite, and cooperative learning such as group work is easier for girls to master because it requires sensitivity and emotional interaction, which are girls' inborn advantages [19].

In contrast to common perception, female teachers are probable to be restricted to stereotypes of boys as a result of patriarchal society as well as masculinity. For instance, a female nursery teacher justified the male students' aggression towards her body because the words such as "take off clothes" foresees men's masculinity [20]. In this way, boys' misbehaviors are not treated appropriately. Thus, the guidance on behavioral growth lacks. To sum up, the feminized mode and the assumpted masculinity explain boys' behavior construct boys' underperformance in school.

### 2.3. Social Environment

Society plays an important role in individual growth [21]. The "boy crisis" has been inevitably affected by today's social environment. The negative impact of mass media is the main cause.

With the rapid development of modern media technology, people have access to "popular culture" through various channels. In recent years, talent shows and idol culture have become popular among young Chinese. The role models provided by the mass media are of good attraction, especially to children and teenagers whose minds have not yet been fully developed and mature [21]. Some media exaggerate and hype behaviors that are different from traditional gender role cognition to boost their audience ratings, making the abnormal sexrole behaviors normal as time passes and is likely to change the public's perception of gender roles [21]. For example, the public's acceptance of "cross-dressing" and "tomboy" is increasing, and the idols of many primary and middle school students are "beautiful boys" and "tomboy", which leads to many boys imitating their external characteristics and lacking masculinity. Thus, boys' gender cognition and behavior are unconsciously affected by the misdirection of mass media to aesthetic culture [21].

### 2.4. Education for Quality

As mentioned in 2.1, China has always been persistent and biased towards boys, believing that they should take responsibility and for the family, so boys' performance has been extremely critically judged. The increasing investments are put into their education, hoping that they can develop comprehensive talents with ability and education. As a salient policy of China's education system, education for quality leads to the boy crisis to a certain extent. The focus of the education for quality is on the all-round development of human beings, emphasizing moral character, physique, aesthetics, and labor education, strengthening both intelligence and quality [22]. With the profound transformation of China's social economy and the focus on improving the quality of the whole population, education for quality has become an important concept of education reform [6]. However, the pressure caused by the mentioned boy preference and this educational reform has been attributed to specific groups of boys, who tend to be marginalized by race, ethnicity, class, and sexuality. It leads to the gap between reality and hope and results in the so-called global phenomenon of boys' underperformance and girls' overproduction. That is regarded as "boy crisis" [6].

## 3. TREATMENTS OF THE "BOY CRISIS"

### 3.1. Androgyny

It is necessary for boys to be more androgynous, i.e., to gain more feminine characteristics to better suit the gender role and the social desire of boys. It is not enough for boys to be traditional males only because people who conform to typical gender roles more have been found to have a lower level of intelligence, lower spatial ability, and lower creativity [23]. Therefore, it is important to integrate the merits of the two genders to improve boys' performance. Androgyny means the characters of both masculinity and feminal: Being assertive in the decisive moments and yielding in compromised one, instrumental like traditional males and expressive as traditional females, all depend on the needs of situations [24]. It is shown that the feminal behaviors of boys that incur social critics have their positive inclination [25]. In school, being androgynous enables boys to better deal with school tasks and adjust their behaviors, which is one of the solutions under the feminal teaching framework caused by the teacher gap [18]. For example, boys can learn emotional expression from their female peers to improve their mental health, which can be harmed by the traditional male role that requires silent tolerance. Also, a study suggests that androgyny is likely to fulfill the social requirements of boys [26]. Therefore, androgyny is one prosperous solution to the "boy crisis".

### 3.2. Single-Sex School

Proponents of single-sex education cite various reasons why single-sex classes or schools are more appropriate than coed schools [27]. Based on empirical knowledge, ideological beliefs, and data, these reasons include the "boy crisis", biological differences, achievement gaps, and distractions [27].

In terms of biological differences, girls enter school with higher levels of language and fine-motor skills, longer attention spans, and greater impulse control, which puts many young boys at a disadvantage in the early grades [27]. The curriculum of a single-sex school is designed according to boys' and girls' different physical and brain structures so that students of different genders can develop the strong points and avoid the weak points to the full extent.

Another reason for single-sex education is related to the achievement gap of performance between boys and girls [27]. A survey conducted by Gurian and Henley found fewer disciplinary problems evidently in singlesex classes [28]. A study by Ferrara and Ferrara found that, in single-sex classes, participation was wider, and students rarely felt self-consciousness [29]. Implementing single-sex education programs can improve girls' self-esteem, confidence, and leadership skills; it also can increase attention to significant gender differences in education, especially in brain function, and better control the boy's behavior [30].

However, some critics of single-sex education point out that segregation is actually "inherent inequality" or "an invitation to discriminate" [27]. The National Coalition for the Education of Women and Girls opposed single-sex education [27]. In addition, proponents of coeducation argue that single-sex schools separate boys and girls from normal communication and interaction and limit the opportunities for boys and girls to cooperate and socialize [27].

In conclusion, the effect of single-sex education on alleviating the "boy crisis" still needs to be further studied.

## 4. CONCLUSION

In summary, this paper argued that nowadays, boys' underperformance and underachievement had become a global issue. It is wildly acknowledged as the "boy crisis". We have concluded that the boy crisis is reflected in boy's academic failures in attendance and achievement, together with other behaviors that are different from the traditional ideology of men and even cause miserable effects on themselves. As for the causes, this work provided that the One Child Policy and Education for Quality play important roles in the forming of the crisis, as well as the female mode created by the high proportion of female teachers. Meanwhile, the misdirection of mass media to aesthetic culture may also lead to a boy crisis.

To rectify this problem, androgyny and single-sex school are feasible treatments, although they may need further research to confirm. Overall, this work can provide knowledge for researchers to further study the boy crisis and figure out practicable alternatives to this phenomenon.

## REFERENCES

[1] Sommers, C. (2000, May). The war against boys. Atlantic Monthly, 28, 59-74.
[2] National Center for Educational Statistics. (2005). The nation's report card: NAEP 2004 trends in academic progress. Washington, DC: U.S. Department of Education. Retrieved June 27, 2008, from
http://nces.ed.gov/nationsreportcard/pdf/main2005/ 2005464.pdf
[3] Mead, S. (2006). The truth about boys and girls. Washington, DC: Education Sector.
[4] Anfara Jr, V. A., \& Mertens, S. B. (2008). Do single-sex classes and schools make a difference? Middle School Journal, 40(2), 52-59.
[5] Kimmel, M. S. (2010). Boys and School: A Background Paper in the" Boy Crises". Stockholm, Sweden: Fritze.
[6] Lin, X., \& Mac an Ghaill, M. (2019). Shifting discourses from boy preference to boy crisis: educating boys and nation building in neoliberal China. Discourse: Studies in the Cultural Politics of Education, 40(3), 281-293.
[7] Evans, D. K., Akmal, M., \& Jakiela, P. (2020). Gender gaps in education: The long view (No. 523). Center for Global Development.
[8] Stoet, G., \& Geary, D. C. (2020). Gender differences in the pathways to higher education. Proceedings of the National Academy of Sciences, 117(25), 1407314076.
[9] Cappon, P. (2011). Exploring the" Boy Crisis" in Education. Canadian Council on Learning, 1-52.
[10] Ritchie, H., \& Roser, M. (2019, June 13). Gender Ratio. Our World in Data. https://ourworldindata.org/gender-ratio.
[11] Husain, M., \& Millimet, D. L. (2009). The mythical 'boy crisis'? Economics of Education Review, 28(1), 38-48.
[12] WU, Q., \& ZHENG, X. (2012). The Boy Crisis in the US-The Debate and its Inspiration. Studies in Foreign Education, 39(6), 69-77.

PRESS
[13] Xia, Z., \& Wendao, L. (2010). Boy Crisis and the Problems of Education it Reflected. Research in Educational Development, Z2, 39-42.
[14] Ministry of Education of the People's Republic of China. (2009-2019). Number of Female Students of Schools by Type and Level. Retrieved June 12, 2021, from
http://www.moe.gov.cn/s78/A03/moe_560/jytjsj_2 019/
[15] Wendao, L., Yunxiao, S., \& Xia, Z. (2009). Gender Difference among National Scholarship Winners. Youth Studies, 6, 39-45.
[16] Ebenstein, A. (2010). The "missing girls" of China and the unintended consequences of the one child policy. Journal of Human resources, 45(1), 87-115.
[17] Fei, H. T., \& Malinowski, B. (2013). Peasant life in China. Read Books Ltd.
[18] Titus, J. J. (2004). Boy trouble: Rhetorical framing of boys' underachievement. Discourse: studies in the cultural politics of education, 25(2), 145-169.
[19] Gurian, M., Henley, P., \& Trueman, T. (2001). Boys and girls learn differently! A guide for teachers and parents. San Francisco: Jossey-Bass.
[20] Walkerdine, Valerie. (1990). Schoolgirl Fictions. London: Verso.
[21] Ming-ya, Y. U. (2012). An Education Thought About the 'Boy Crisis'-_From the angle of the family and the society. Journal of University of South China (Social Science Edition), 02.
[22] Lu Y. (2020). Strong Intelligence and Strong Quality: New Understanding of Quality Education Reform. Journal of National Academy of Education Administration, (12), 76-89.
[23] Maccoby, E. E. (Ed.). (1966). The development of sex differences. Stanford, CA: Stanford University Press.
[24] Bem, S. L. (1974). The measurement of psychological androgyny. Journal of consulting and clinical psychology, 42(2), 155-162.
[25] Bem, S. L., \& Lewis, S. A. (1975). Sex role adaptability: One consequence of psychological androgyny. Journal of personality and Social Psychology, 31(4), 634.
[26] Spence, J. T., Helmreich, R., \& Stapp, J. (1975). Ratings of self and peers on sex role attributes and their relation to self-esteem and conceptions of masculinity and femininity. Journal of personality and social psychology, 32(1), 29-39.
[27] Anfara Jr, V. A., \& Mertens, S. B. (2008). Do singlesex classes and schools make a difference?. Middle School Journal, 40(2), 52-59.
[28] Gurian, M., \& Henley, P. (with Trueman, T.). (2001). Boys and girls learn differently! A guide for teachers and parents. San Francisco: Jossey-Bass.
[29] Ferrara, P. J., \& Ferrara, M. M. (2004). SingleGender Classrooms: Lessons from a New York Middle School. ERS Spectrum, 22(3), 26-32.
[30] Bracey, G. W. (2006). Separate but superior? A review of issues and data bearing on single-sex education. Tempe: Educational Policy Research Unity (EPRU).

