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Thomas A. DiPrete and Claudia Buchmann’s *The Rise of Women: The Growing Gender Gap in Education and What it Means for American Schools* presents a comprehensive overview of education attainment by gender. Written from the perspective and in the style of quantitative sociology, the book begins by setting the stage with the current state of affairs, demonstrating that women have outpaced men in higher education completion. The authors then systematically address the trends in education attainment by gender from the perspective of the macro environment; the role of academic performance in K-12 education,

student engagement, and family influence on education by
gender; and the role of schools in producing gender gaps
in education attainment. The authors clearly delineate their
goals: first, to describe the changes in female education
attainment relative to males in the past several decades
(i.e. the reversal of the gender gap in education) and
second, to examine gender differences in educational
performance and attainment over the life course. DiPrete
and Buchmann readily acknowledge very early in the text
that women continue to suffer a wage gap in the labor
force, and that women have not gained equality in most
realms of American society. With this acknowledgement
in mind, the authors begin to present evidence of the
previous gender gap in education and its reversal in recent
times.

After having been provided a wide base of support for the
concept that girls have overtaken boys in terms of
educational attainment, the reader is reminded of
persistent inequities between men and women in society –
such as the persistent wage gap and lack of women
graduating from college with degrees in STEM fields –
that the authors do not disparage. The premise of the book
emerges towards the end of the introduction, when the
reader is finally forced to ask: “So what that girls ha
outpaced boys in educational attainment?” DiPrete and
Buchmann write that their argument is not of the “what
about the boys?!” ilk, and that they are not interested in
the reversal of the gender gap in education simply because
males now seem disadvantaged in education. The authors
write:

Our fundamental orientation is pro-education.
We care about the gender gap and want to reduce
it, not because inequality per se is bad (though
we have a pro-equality bias), and certainly not
because girls have unfairly gained an advantage
from a “war on boys,” but because greater
insight into the reasons for the male shortfall can
help develop policies that improve educational
outcomes for both girls and boys (p. 19 Italics
added)

This stance brings the agenda of the authors and their
research into a space more palatable to feminist education
researchers who might consider this book an artifice of
backslash to the gains women have made in education. The
authors make clear early on that a better understanding of the gender gap in education, as it was in the past and as it is today, is necessary to improving education for all in the future. Overall, the book seeks to provide a solid base of evidence for an empirical understanding of what has happened in society and in schools that has led to the reversal in the gender gap in educational attainment.

To that end, DiPrete and Buchmann offer a plethora of statistical evidence in support of the thesis that the gender gap in education has reversed. In the first section of the book, the authors examine aspects of the macro environment in which this reversal has taken place.

Drawing from large data sets including IPUMS, the American Community Survey, the National Science Foundation, and OECD, the authors provide a veritable research synthesis on college completion by gender and race from the 1940-2000. From this extensive presentation of descriptive statistics, there are a few items of note. First, the authors demonstrate that while women have overtaken men in rates of college completion in the United States, these trends parallel those of many other industrialized countries. Second, the authors begin to draw attention to the “female advantage” in the descriptive statistics, highlighting that it exists for all racial groups but that there is important variation within racial groups.

One graph that is particularly interesting is Figure 3.1 showing the proportion of twenty-eight to thirty-two-year-olds with a Bachelor’s Degree who are employed, by race, gender, and census year for the years 1940-2000 (p. 56). What is interesting about this graph is that it shows that the trend rises the most for White women, and that trends also rise for Black women and men; however, none of these groups ever reaches parity with White Men. While the authors use the data to effectively show how groups have increased college completion and employment, they fail to address the fact that despite these enormous gains White women, Black women, and Black men never achieve the same level of college-educated employment as White men.

In this first section of the book, the authors do begin to address the heterogeneity of returns to education at various levels of education. They provide evidence that returns to
higher education, for women, extend beyond the labor market to include higher probability of marriage and higher standard of living through the process of assortative mating, and that this leads to a higher “insurance” against future poverty. The authors point out that, except for personal earnings in the labor market, returns to higher education have increased faster for women than for men, and that while this is unlikely the only, or even necessarily a substantial, driving factor, it is important to note when examining the reasons for women’s rapid gains in higher education. Additionally, but of importance, the female advantage in higher education is very context-dependent; the advantage is larger in less-selective colleges and universities. Top-tier institutions continue to seek gender balance in their student populations, making it more difficult for women to enroll in significantly larger numbers than men and thus difficult for women to outperform men in college completion at highly selective universities. However, the majority of colleges and universities are not highly-selective, top-tier institutions – hence the female advantage in higher education in aggregate across the United States.

The second section of the book turns a critical eye to the role of K-12 performance in college completion, along with student engagement in school and family influences. The authors acknowledge long-standing research that indicates males perform somewhat better on standardized measures of mathematics and females perform better on standardized measures of reading. However, DiPrete and Buchmann bring a new focus to this discussion through an examination of course grades – a measure that has historically been overlooked due to the inherent variance of grades because they are subjectively assigned in a variety of ways across a multitude of classrooms with different standards and expectations associated with different grades. The authors analyzed four panel data sets for gender differences: NLS72, HSB, NELS88, and ESL. Most of the data included transcript information that corroborated course taking and GPA for students; however, the authors do address the limitations of the NLS72 data that does not include this information. They supplement the NLS72 data with student self-reported

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1 These data all can be found through the National Center for Educational Statistics.
GPA. In their analysis, DiPrete and Buchmann demonstrate that from 1972-2004 female GPAs were statistically significantly higher than male GPAs throughout the entire time period and remained relatively stable. However, in course taking, a change in patterns emerges in this time period. In 1972 there was a statistically significant male advantage in course taking of math and science courses, but by 2004 this reversed and female students were taking statistically significantly more math and science courses. In addition to the math and science course-taking pattern, female foreign language course taking was higher than males at a statistically significant level for the entire time period, but the gap between males and females has increased.

These findings become important to understanding the reversal in the education attainment gender gap when the authors connect GPA and course-taking to propensity to enroll in college and to complete college. Using some of the same longitudinal data from the National Center for Education Statistics, the authors compare these educational attributes to ASVAB scores -- a multiple-aptitude test that measures developed abilities and helps predict future academic and occupational success in the military. Based on this analysis, DiPrete and Buchmann provide evidence that course grades, as early as middle school, have a strong relationship to college completion. This is very significant not only for understanding what is currently happening with the gender gap in higher education, but also for anyone interested in the mechanisms related to college completion.

From this demonstration of the importance of course grades, the authors then turn to the question of how it is that female students obtain higher GPAs. The authors examine the behavioral and social components of school-level achievement (i.e. course grades), citing previous research by others as well as themselves on the relationship of non-cognitive traits such as student effort, disruptiveness, and absenteeism to education achievement. The authors also investigate gender differences in “attachment” to education – how females and males differ in their overall feelings about education. To their credit, DiPrete and Buchmann do not skirt the issues of social reproduction brought forth by the work of Pierre Bourdieu, and readily admit that even their in-depth, extensive
statistical analysis simply cannot answer questions about male attachment to schooling and the concept of educational expectations as a causal mechanism. As they turn to examining the effect of parents’ education and influence on male and female education attainment, the authors echo similar cautions, citing ethnographic research into familial gender expectations around education. In sum, both the quantitative and qualitative research presented supports the thesis that male student culture does not support strong attachment to schooling and that parental influence is highly contextualized by the larger sociocultural environment.

The last section of the book focuses on the role of schools, both K-12 and higher education, in both reifying the gender gap and in dismantling it. It is in this final section of the book that DiPrete and Buchmann bring their very thorough review of the empirical literature to bear on policies and practices within schools. The authors address issues of school effects, teacher effects and peer effects. They posit that:

… boys’ academic achievement rises when they can develop an adult conception of masculinity that fosters an instrumental orientation toward school as a route to labor market success. Similarly, we believe that schools with strong academic climates can reduce the gender gap by raising boys’ performance without harming girls’ performance (p. 159).

The authors, encouragingly, do not construct educational attainment as a zero sum game whereby female students must be brought down in order for male students to be brought into parity. Citing the most current research on single-sex schooling and the effects of same-sex teacher assignment, the authors conclude that there is not enough evidence that either of these strategies is useful or appropriate in the American school setting. The most compelling evidence that all-male classrooms with male teachers result in higher college completion rates comes from research conducted in South Korea – an area with significantly different cultural norms around education that may or may not generalize to American settings.

In the arena of higher education, the authors address school effects as well, and take on the topic of women’s
continued absence in STEM fields. That is, even though women have outpaced men in college completion, when college graduates are disaggregated by major, there are clear gendered patterns still in place whereby women graduates in math and hard sciences remain substantially lower than that of men. The authors revisit the high school course-taking data, reasserting that the percentage of women who declare an interest in a STEM field in high school parallels the percentage of women who graduate from college in one of those fields. If the intention to enter a STEM field occurs in middle school or earlier, women and men have an equal probability of completing college in a STEM field. The authors highlight the gender stereotyping in lower grades that impacts students’ attraction to STEM fields and call for more attention to the role of school and teacher effects in this area for students before high school.

In conclusion, the authors provide four suggestions for policy interventions to improve the gender gap in college completion. First, the authors recommend that all schools improve the overall quality of education for both girls and boys. Second, the authors recommend that schools work to increase student willingness to invest more time and energy in learning through positive reinforcement through short-term goals and rewards. Third, the authors call on schools to better educate students about the long-term effects of investing more time and energy into their education in terms of school performance, ability to get into college, and the probability that they will complete college. Lastly, the authors recommend that schools provide students with more information about specific skills and credentials to better help students chart an achievable course to college, through college, and eventually to employment.

This book is an excellent resource for anyone interested in gender differences in education broadly or for those interested particularly in gender differences in higher education. The authors do a great job of providing ample information about gender differences in education from K-12 through post-secondary education. The evidence presented is of high quality and rigor, and reads like a research synthesis at times. This makes for a conveniently compiled resource of statistical analyses of gender differences in education. The authors thoughtfully denote
all data sources and original publications where applicable, making the book a roadmap for anyone interested in replicating the statistical findings.

Overall the authors provide a balanced view of the issues and do not overlook conflicting paradigms. While the book is not about unequal returns to education between women and men (i.e. wage differences in the labor market), the authors do not dismiss this major issue and the role education plays in creating social equality between men and women. Additionally, while the book relies heavily on quantitative analysis—some descriptive and some causal—the authors acknowledge the shortcomings of these analyses and provide evidence from ethnographic research that substantiates their quantitative findings. The Rise of Women: The Growing Gender Gap in Education and What it Means for American Schools is a comprehensive work that encompasses the many factors related to college graduation, and how male students now lag behind female students in this regard. It should be an essential reading for scholars of masculinity studies in the field of education.

Lastly, though the authors’ focus is on gender differences in educational attainment, some of their findings have broader implications that should be acknowledged and further explored. First, the authors demonstrate that there exists a strong relationship between course grades as early as middle school and the propensity to graduate from a four-year college. As the field of education research moves forward, it will be important to examine policies and practices that affect course grades of students and to ensure that they do not disproportionately, negatively impact any group of students by race, gender, socio-economic status, or any combination of the three. Second, the authors provide important findings on the leaky STEM pipeline—that there is no “leak” between high school and college; female students who have a stated interest in STEM in high school are just as likely to follow through on that interest as male students. This means that future policy interventions ought to focus on breaking down gender stereotypes that steer girls away from STEM in earlier grades, prior to high school.
About the Reviewer

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