Going to College to Avoid the Draft: The Unintended Legacy of the Vietnam War

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Between 1965 and 1975 the enrollment rate of college-age men in the United States rose and then fell abruptly. Many contemporary observers (e.g., James Davis and Kenneth Dolbeare, 1968) attributed the surge in college attendance to draft-avoidance behavior. Under a policy first introduced in the Korean War, the Selective Service issued college deferments to enrolled men that delayed their eligibility for conscription. These deferments provided a strong incentive to remain in school for men who wanted to avoid the draft. For example, the college entry rate of young men rose from 54 percent in 1963 to 62 percent in 1968 (the peak year of the draft). Moreover, both the college entry rate and the number of inductions dropped sharply between 1968 and 1973 as the draft was being phased out. Although these parallel trends are suggestive, they do not necessarily prove that draft avoidance raised the education of men who were at risk of service during the Vietnam War. Such an inference requires an explicit specification of the "counterfactual": What would have happened to schooling outcomes in the absence of the draft?

In this paper we use trends in enrollment and completed schooling of men relative to those of women to measure the effects of draft-avoidance behavior during the Vietnam War. Our maintained hypothesis is that, in the absence of gender-specific factors such as the draft, the relative schooling outcomes of men and women from the same cohort would follow a smooth trend. In light of the sharp discontinuity in military induction rates between 1965 and 1970, we look for similar patterns in the relative enrollment rate of men, and in the relative college graduation rate of men from cohorts that were at risk of induction during this period.

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I. The Draft and College Deferments

During most of the Vietnam War the draft operated under procedures similar to those used in World War II and the Korean War (National Advisory Commission on Selective Service, 1967 pp. 17–29). Men who reached the age of 18 were required to report to their local draft board for classification. The board could issue deferments for a variety of reasons, including school attendance or the presence of dependent children, or it could classify a registrant as "available for service" and require that he undergo pre-induction testing. Men who passed the tests were liable for induction and could be ordered to report for duty depending on the needs of the military and the allocation of national manpower requirements to the local draft boards. Those who were drafted were nearly all assigned to the Army and served for up to three years. Registrants who were liable for induction could volunteer for service and thereby obtain a potential choice of which service to enter; volunteers could also qualify for a shorter period of service.

The process of deciding which men were actually drafted was controversial from the earliest days of the Vietnam War. Until the institution of the draft lottery, the sequence of induction was set by order of the President, with highest priority for "delinquents," second priority for volunteers, and third priority for non-volunteers between the ages of 19 and 25, in order of their dates of birth (i.e., from oldest to youngest) (see U.S. Selective Service, 1966 p. 19, 1969 p. 16).[1] Although other groups could be called, most draft boards were able to fill

[1] Delinquents were men who failed to register or failed to report for pre-induction testing or otherwise violated Selective Service laws.

their quotas from these three categories, even at the peak of the draft (see U.S. Selective Service, 1969 p. 8). Technically, men who had held college or other deferments were eligible for induction until age 35. Since few men between the ages of 26 and 35 were ever drafted, however, men who were able to maintain a college deferment until their 26th birthday could avoid service. Those who finished a bachelor's degree before reaching age 25 could apply for a graduate deferment until 1968, and could apply for occupational or dependent deferments throughout the period from 1965 to 1970.

Although contemporary observers agreed that college attendance was an effective draft-avoidance technique during the early and middle years of the Vietnam War,[2] it is surprisingly difficult to find evidence on the relative probability of induction faced by men with different levels of education. We used data from the 1973 Occupational Change in a Generation (OCG) survey to construct a rough estimate of the risk of military service for men who had obtained a college degree prior to service relative to those who had not. Among men born between 1945 and 1947 (50 percent of whom served in the military), we estimate that men with a college degree were only one-third as likely to serve as those without a degree. Considering that a high fraction of men with low levels of education were found unfit for service, this ratio confirms that college attendance was a powerful, albeit imperfect, way to avoid the draft.

The draft process was substantially changed by the introduction of the draft lottery in late 1969. The first lottery, held 1 December 1969, assigned numbers by month and day of birth to men born between 1944 and 1950. Priority for induction in 1970 was based on these random-sequence numbers, and was in principle independent of age. Importantly, however, educational deferments continued to be issued until September 1971, and men who were in college at that time were allowed to maintain their deferment until age 24. Thus, individuals enrolled in college could delay their risk of induction through most of the years of the draft lottery. Since the rate of inductions slowed to a trickle after June 1971, most individuals who obtained deferments in 1970 or 1971 permanently avoided military service.

Another key feature of the lottery was that each cohort was at risk of induction for only a single year, rather than for the entire period between the ages of 19 and 25. Individuals born between 1944 and 1950 who had not already served in the military were at risk in 1970, and thereafter each successive birth cohort was only at risk during the year of its 20th birthday. In fact, the period of exposure was even shorter, since the Selective Service announced a ceiling (a maximum lottery number that would be called) at some point during the year. The limited period of exposure, coupled with the relatively low rate of inductions after 1969, substantially reduced the incentives for enrolling or staying in college to avoid the draft. In contrast to the pre-lottery draft, only men with low random-sequence numbers were at any risk of induction: the majority of men had no need to pursue draft-avoidance strategies. Moreover, after age 20, men who had not been called had no need to prolong their stay in college. Evidence presented below suggests that draft-avoidance behavior had little or no effect on the average schooling outcomes of men born after 1950. Even among men who were assigned low lottery numbers and faced the highest risk of conscription, Joshua Angrist and Alan Krueger (1992) found no indication of elevated schooling levels relative to those who were assigned higher numbers and faced negligible risk of being drafted.

II. Educational Outcomes of Men and Women

The universal character of the pre-lottery draft constrains the feasible set of evaluation strategies that can be used to measure its effect on educational outcomes. Since draft avoidance was essentially a cohort-wide phenomenon, any evaluation has to rely on differences in education outcomes for cohorts that were more or less likely to pursue draft-avoidance strategies relative to some baseline specification for these outcomes in the absence of the draft. In this paper we make the counterfactual assumption

[2] For example, the National Advisory Commission on Selective Service (1967 p. 41) noted that "··· what starts out as a temporary deferment for college enrollment is easily extended into a de facto exemption—by graduate school, by occupation, by fatherhood, and ultimately by the passage of time and advance of age."

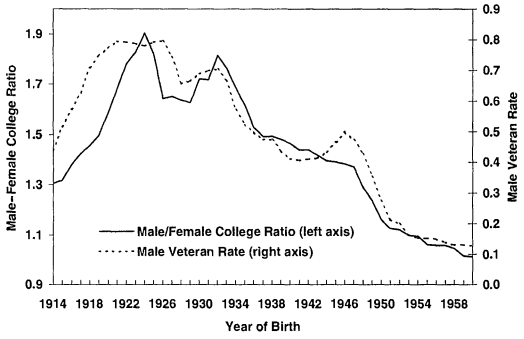

FIGURE 1. MALE–FEMALE COLLEGE GRADUATION RATE AND MALE VETERAN RATE, BY BIRTH COHORT

that the relative schooling choices of men and women would follow a smooth inter-cohort trend in the absence of gender-specific factors such as the draft. We also assume that draft avoidance was proportional to the risk of induction faced by a cohort. Under these assumptions, draft-avoidance effects can be measured by regressing the relative education outcomes of men and women in the same cohort on a measure of the risk of induction faced by men in the cohort and an inter-cohort trend function.

As an illustration of the potential insights that can be gleaned from a comparison of male and female relative education outcomes across cohorts, Figure 1 plots the relative graduation rate of white men versus white women for cohorts born between 1914 and 1960, along with the fraction of men in each cohort who served in the military. (The data in this figure are drawn from the 5-percent public use samples of the 1980 and 1990 Censuses). The relative graduation rates show an interesting pattern of deviations between men and women, with "spikes" in the relative graduation rates of men born in the early 1920's and early 1930's, and a smaller but noticeable upward deflection for men born in the late 1940's. All three of these departures were associated with a rise in male veteran rates. The 1920–1925 cohort includes men who had a high rate of service in World War II but were young enough to easily return to school under the GI Bill program (John Bound and Sarah Turner, 1999). The 1930–1935 cohort includes men who were likely to be drafted during the Korean War and were eligible for GI Bill benefits (Marcus Stanley, 1999). Finally,

TABLE 1—ESTIMATED MODELS FOR MALE-FEMALE RELATIVE SCHOOLING

Independent variable (A) or cohort (B)	Fraction enrolled at ages 20–21	Fraction completed college degree	Fraction completed some college
A. *Regression:*			
Linear trend (×100)	−2.73 (0.23)	−1.70 (0.08)	−0.89 (0.05)
Induction risk	1.16 (0.20)	0.46 (0.09)	0.43 (0.05)
R^2	0.96	0.98	0.98
B. *Excess Male Enrollment Rate/Graduation Rate Due to Draft Avoidance* (Percent):			
1941 cohort	2.91	1.00	1.80
1947 cohort	6.47	2.22	4.01
1951 cohort	1.45	0.50	0.90

Notes: Standard errors are in parentheses. The model in column 1 is fit to data for cohorts born during 1939–1959; other models are fit to data for cohorts born during 1935–1959. Induction risk is the number of inductions during ages 19–22, divided by number of men in the cohort. The risk is 0.082 for the 1941 cohort, 0.178 for the 1947 cohort, and 0.041 for the 1951 cohort. See the text for more details.

the 1944–1950 cohort includes men who were at high risk of service in the Vietnam War and were potentially affected by draft-avoidance behavior (as well as the availability of GI Bill benefits after service). Apart from these three groups, the male–female relative college graduation rate follows a smooth (hump-shaped) inter-cohort trend.

To estimate the effect of draft-avoidance behavior, we assume that draft avoidance was proportional to the risk of induction perceived by men in a cohort. Given our focus on the incentive to stay in college, we use the average number of inductions when the cohort was between 19 and 22 years of age, divided by an estimate of the size of the cohort, as our measure of induction risk. The estimated risk of induction is declining for cohorts born between 1935 and 1942 (from 8 percent to 4 percent), rises quickly to a peak of 11 percent for the 1946 cohort, and then drops steadily to 0 for men born after 1953.

Table 1A presents a series of regression models which relate the log of the ratio of male to female education outcomes for a cohort to a linear inter-cohort trend and our index of

induction risk. We consider three outcomes for cohorts born from 1935 to 1959: the enrollment rate at ages 20–21 (estimated using October Current Population Survey enrollment rates); the fraction who completed a college degree (estimated from 1990 Census micro-data) and the fraction with at least some college education (also estimated from 1990 Census data). The three dependent variables are graphed in Figure 2. All three series show steady downward trends, interrupted by a rise in male schooling for cohorts born in the 1942–1950 period. Apart from this, the trends are approximately linear: hence, the models in Table 1A include only a linear inter-cohort trend.

For all three educational outcomes, the estimated coefficient of the risk variable is positive and significant, confirming the high degree of correlation between the relative education outcomes of men and the relative risk of induction. Part B of Table 1 shows the implications of the estimated induction-risk coefficients. The entries are estimates of the percentages of men in three cohorts (1941, 1947, and 1951) who were enrolled in school, completed some college, or completed a college degree as a result of draft-avoidance behavior. Our estimated models imply that draft avoidance raised enrollment at ages 20–21 by about 6.5 percentage points for men in the 1947 cohort, raised the fraction with some college by about 4 percentage points, and raised the fraction with a college degree by just over 2 percentage points.

We fit several alternative specifications to evaluate the robustness of the estimates in Table 1. For example, the addition of a quadratic inter-cohort trend has virtually no effect. Similarly, switching the dependent variable to the male–female college ratio (rather than the log of the ratio) leads to very similar inferences about the magnitude of draft-avoidance behavior. We also obtained similar results when we used an adjusted induction-risk measure based on the assumption that draft avoidance was negligible before July 1965, when it became clear that draftees would be sent to a "shooting war." Finally, the addition of a dummy variable for cohorts born between 1942 and 1950 has little effect on the results. This confirms that it is our induction-risk measure, as opposed to other unmeasured cohort-specific factors, that accounts for the inter-cohort patterns in male–female educational outcomes.

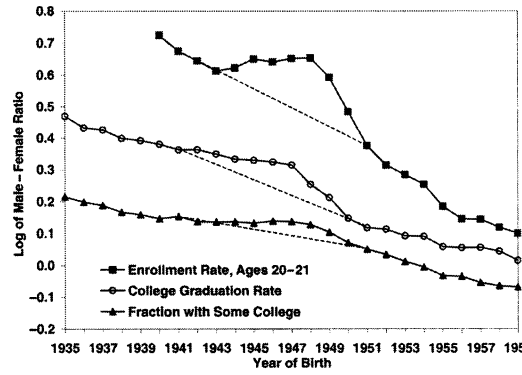

FIGURE 2. MALE–FEMALE RELATIVE EDUCATION OUTCOMES BY BIRTH COHORT

Notes: The dotted line shows linear interpolation between 1941 and 1951 cohorts.

One puzzling feature of the estimates in Table 1 is the larger estimated effect of draft avoidance on enrollment at ages 20 and 21 than on the likelihood of obtaining some college. We suspect that is explained by the fact that active military servicemen are excluded from the Current Population Survey (the source of the enrollment data). At the peak of the Vietnam War, the fraction of young men in the military was relatively high, leading to an upward bias in the CPS enrollment rate. For example, if an extra 400,000 20–21-year-olds were in the military in 1968 (relative to the trend from 1965 to 1975), the CPS enrollment rate would be upward-biased by 11 percent. As a check on the implication of such a bias, we constructed an adjusted enrollment rate for men which assumes a peak upward bias of 11 percent in 1968, with no bias before 1965 or after 1972. We then reestimated the model in the first column of Table 1A and found that the coefficients on the induction-risk variable were reduced in magnitude by about one-half. With this adjustment, the estimated draft-avoidance effects on enrollment of 20–21-year-olds are comparable to the effects on the probability of completing some college.

III. Draft Avoidance or the GI Bill?

As noted in the discussion of Figure 1, men who were at risk of service in World War II and the Korean War also had elevated relative schooling levels. The effects of these earlier

conflicts are generally attributed to post-service schooling incentives provided by the GI Bill, rather than to draft avoidance.[3] Veterans of the Vietnam era were also eligible for GI Bill benefits. In particular, veterans who enrolled in college or training programs could receive a monthly stipend for up to three years, depending on their length of service. Administrative data suggest that a relatively large number of Vietnam veterans received at least some benefits, raising the possibility that some of the higher relative education of men who were at high risk of service in the Vietnam War is attributable to post-service GI Bill benefits, rather than to draft avoidance.

Nevertheless, two key pieces of evidence lead us to conclude that draft avoidance is the main explanation for the patterns in Figure 2 and the results in Table 1. First, the estimates in Table 1 point to a significant effect of the risk of induction on enrollment at ages 20 and 21. Although some of the enrollment of 20–21-year-olds is attributable to men who had already completed their military service, in 1968–1970, less than 10 percent of this group (and only 5 percent of enrollees) were veterans. Thus, most of the excess enrollment of a 20–21-year-old man was attributable to men who had not yet served in the military. Even after adjusting for the undercount of men in active service, the estimated draft-avoidance effect on enrollment at ages 20 and 21 is about equal to the estimated effect on obtaining some college, suggesting that most of the extra education gained by men at high risk of induction during the Vietnam War was gained prior to their military service.

Second, although many Vietnam veterans attended school after their military service, this was also true of veterans who served before the Vietnam War. Tabulations from the OCG show that about 5.5 percent of veterans born between 1936 and 1938 entered the military without a college degree and obtained one afterward. A similar calculation for men in the peak Vietnam cohort (born 1944–1947) shows that only about 4 percent completed college after their service. If anything, the rate of post-service degree attainment was *lower* for Vietnam-era veterans than for those who served 10 years earlier. Even assuming a constant rate of post-service degree attainment among veterans, however, the rise and fall in the fraction of veterans can only explain a tiny fraction of the observed rise and fall in the fraction of men with a college degree from the late-1930's cohort to the early-1950's cohort.

[3] The World War II draft had no college deferments: thus going to college to avoid the draft was not an issue. College deferments were available during most of the Korean War and may have led to some draft-avoidance behavior.

IV. Summary

Throughout most of the Vietnam War, men who were in college could obtain deferments that delayed their eligibility for conscription. It was widely believed by contemporaneous observers that college deferment was an effective means of draft avoidance, and that draft avoidance led to a rise in the college enrollment rates of young men. We use data on the enrollment and completed education of men relative to women to estimate the effect of draft-avoidance behavior on the education choice of men who were at high risk of being drafted during the Vietnam War. We find a strong correlation between the risk of induction faced by a cohort and the relative enrollment and completed education of men. Our estimates suggest that draft avoidance raised college attendance rates by 4–6 percentage points in the late 1960's, and raised the fraction of men born in the mid-1940's with a college degree by up to 2 percentage points. While significant, these effects are modest relative to the overall slowdown in the rate of growth of educational attainment that occurred between cohorts born in the 1940's and those born in the 1950's (see Card and Lemieux, 2001a). The end of conscription is therefore only part of the explanation for the slowdown in educational trends that affected the baby-boom generation. In fact, similar slowdowns in college attendance and completion rates occurred in the United Kingdom and in Canada (Card and Lemieux, 2001b). Other factors such as cohort-size effects and changes in the perceived economic returns to education presumably played a role in depressing college enrollment rates in the late 1960's and throughout the 1970's.

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