

The Myth of Achievement Tests: The GED and the Role of Character in American Life

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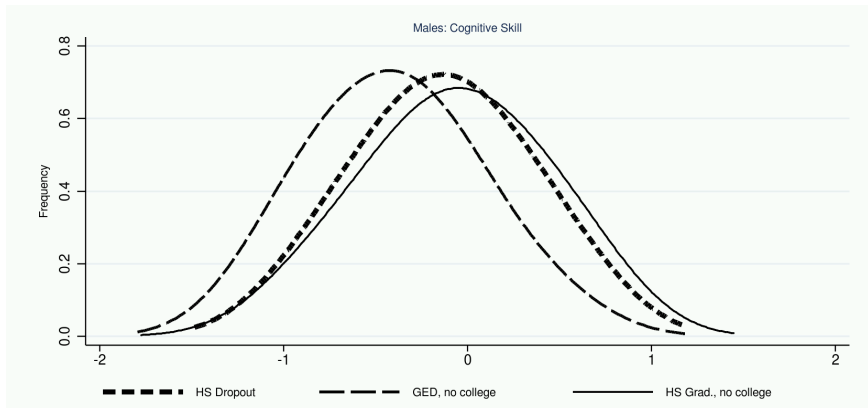
James J. Heckman, John E. Humphries, and Tim Kautz (2014). *The Myth of Achievement Tests: The GED and the Role of Character in American Life*. Chicago, IL: University of Chicago Press. Forthcoming.

The wrong skills?

- Will increasing the difficulty of the GED (or other equivalency test) help recipients?
- Assumes that the test measures the right skills but in the wrong amounts
- We argue that achievement tests miss important skills
- Increasing the difficulty will not solve the fundamental problem

GED Recipients are Relatively Smart (1)

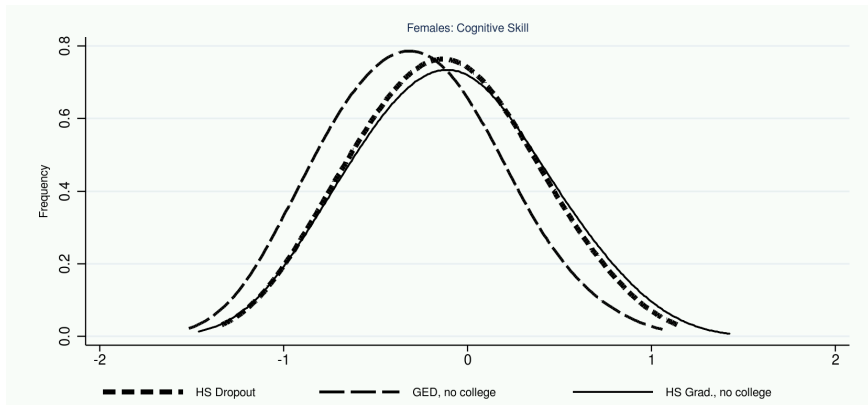
Figure 1: Distribution of Cognitive Ability (Males)



Source: Reproduced from Heckman et al. (2011), which uses data from the National Longitudinal Survey of Youth, 1979 (NLSY79). Notes: The distributions represent cognitive factors, estimated using a subset of the Armed Services Vocational Aptitude Battery (ASVAB). The factors are adjusted for educational attainment, as laid out in Hansen et al. (2004). The sample is restricted to the cross-sectional subsample for both males and females. Distributions show only those with no postsecondary educational attainment. The cognitive factors are normalized by gender to be mean zero, standard deviation one.

GED Recipients are Relatively Smart (2)

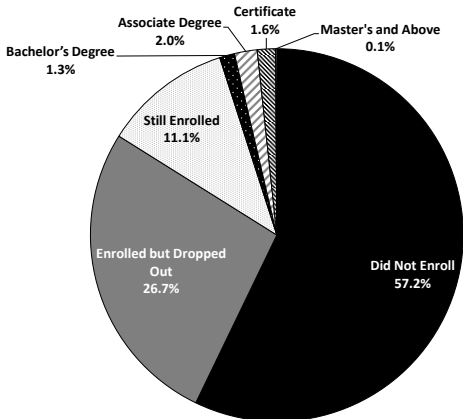
Figure 2: Distribution of Cognitive Ability (Females)



Source: Reproduced from Heckman et al. (2011), which uses data from the National Longitudinal Survey of Youth, 1979 (NLSY79). Notes: The distributions represent cognitive factors, estimated using a subset of the Armed Services Vocational Aptitude Battery (ASVAB). The factors are adjusted for educational attainment, as laid out in Hansen et al. (2004). The sample is restricted to the cross-sectional subsample for both males and females. Distributions show only those with no postsecondary educational attainment. The cognitive factors are normalized by gender to be mean zero, standard deviation one.

GED Recipients Struggle with College

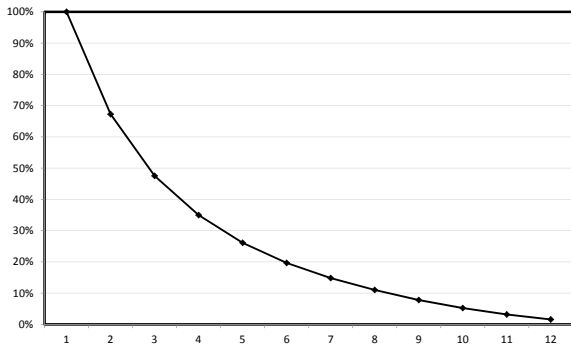
Figure 3: Postgraduate Status of GED Passers in 2004, as of October 2010



Source: Zhang et al. (2011). *Notes:* Total number of 2004 cohort of GED passers who enrolled in postsecondary education between 2004 and 2010 was 175,382. The results presented in the graph exclude the type of degree earned for 5,146 individuals due to missing information.

GED Recipients Struggle with College

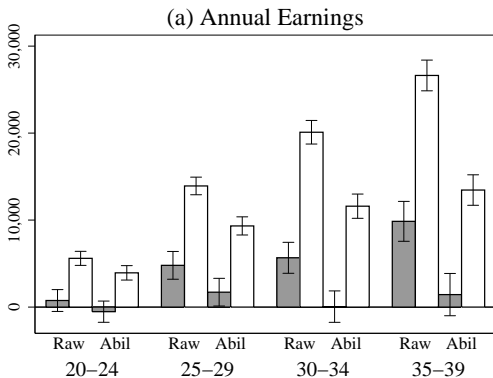
Figure 4: Survival Rates of Enrollment in Postsecondary Education by Total Number of Semesters, 2004 Cohort of GED Tests Passers, as of October 2010



Source Zhang et al. (2011). *Notes:* Total number of 2004 cohort of GED passers who enrolled in postsecondary education between 2004 and 2010 was 175,382. 13,646 individuals were excluded from the graph due to missing data. The survival rate represents the proportion of GED test passers who enrolled into postsecondary education for a given number of semesters. The survival rate changes with changes in both graduation and dropout rates.

The GED Does Not Add Much in the Labor Market (1)

Figure 5: Annual Earnings Relative to Dropouts - Males

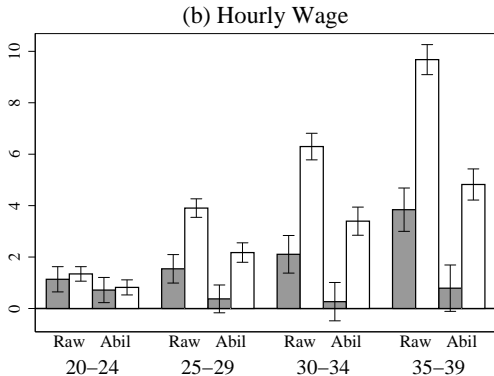


Source: Heckman et al. (2014), National Longitudinal Survey of Youth, 1979.

Notes: Controls: "Raw"—age and region or state of residence; "Abil"—AFQT adjusted for schooling at time of test. Regressions exclude those reporting earning more than \$300,000 or working more than 4,000 hours. The intervals around each bar are standard errors centered around the mean—a measure of sampling variability. All regressions allow for clustered standard errors at the individual level.

The GED Does Not Add Much in the Labor Market (2)

Figure 6: Hourly Wages Relative to Dropouts - Males

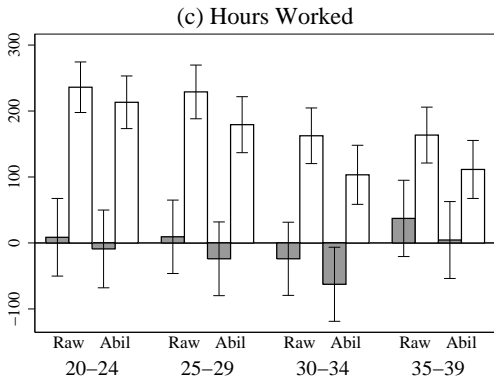


Source: Heckman et al. (2014), National Longitudinal Survey of Youth, 1979.

Notes: Controls: "Raw"—age and region or state of residence; "Abil"—AFQT adjusted for schooling at time of test. Regressions exclude those reporting earning more than \$300,000 or working more than 4,000 hours. The intervals around each bar are standard errors centered around the mean—a measure of sampling variability. All regressions allow for clustered standard errors at the individual level.

The GED Does Not Add Much in the Labor Market (3)

Figure 7: Hours Worked Relative to Dropouts - Males

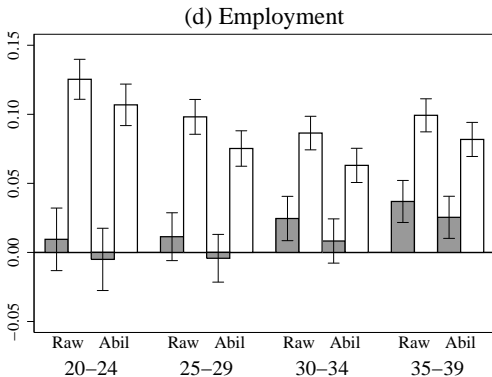


Source: Heckman et al. (2014), National Longitudinal Survey of Youth, 1979.

Notes: Controls: "Raw"—age and region or state of residence; "Abil"—AFQT adjusted for schooling at time of test. Regressions exclude those reporting earning more than \$300,000 or working more than 4,000 hours. The intervals around each bar are standard errors centered around the mean—a measure of sampling variability. All regressions allow for clustered standard errors at the individual level.

The GED Does Not Add Much in the Labor Market (4)

Figure 8: Employment Rates - Males



Source: Heckman et al. (2014), National Longitudinal Survey of Youth, 1979.

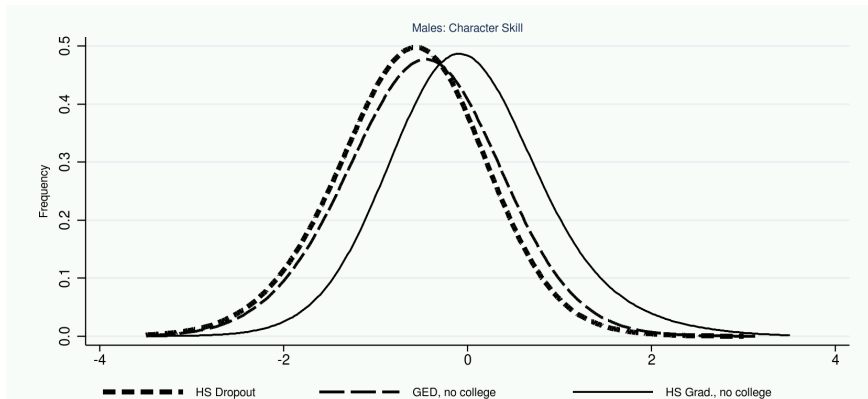
Notes: Controls: "Raw"—age and region or state of residence; "Abil"—AFQT adjusted for schooling at time of test. Regressions exclude those reporting earning more than \$300,000 or working more than 4,000 hours. The intervals around each bar are standard errors centered around the mean—a measure of sampling variability. All regressions allow for clustered standard errors at the individual level.

Achievement Tests Miss Character Skills

- Tests do not capture skills that matter in school and in the labor market
- Character skills like persistence, curiosity, and self control rival IQ in predicting success
- On average GED recipients lack these skills

GED Recipients Tend to Lack Character Skills (1)

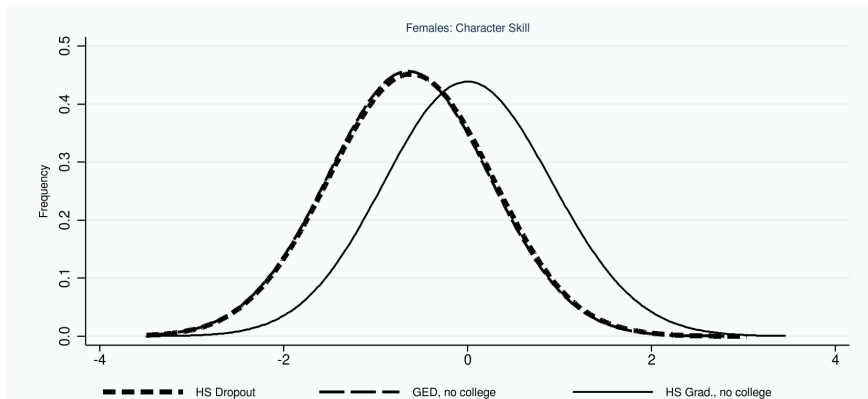
Figure 9: Distribution of Character Skills (Males)



Source: Reproduced from Heckman et al. (2011), which uses data from the National Longitudinal Survey of Youth, 1979 (NLSY79). Notes: The distributions represent noncognitive factors, estimated using measures of early violent crime, minor crime, marijuana use, regular smoking, drinking, and early sexual intercourse. Sample restricted to the cross-sectional subsample for both males and females. Distributions show only those with no postsecondary educational attainment. The noncognitive factors are normalized to be mean zero, standard deviation one.

GED Recipients Tend to Lack Character Skills (2)

Figure 10: Distribution of Character Skills (Females)



Source: Reproduced from Heckman et al. (2011), which uses data from the National Longitudinal Survey of Youth, 1979 (NLSY79). *Notes:* The distributions represent noncognitive factors, estimated using measures of early violent crime, minor crime, marijuana use, regular smoking, drinking, and early sexual intercourse. Sample restricted to the cross-sectional subsample for both males and females. Distributions show only those with no postsecondary educational attainment. The noncognitive factors are normalized to be mean zero, standard deviation one.

Concerns with having a high school equivalency degree

- Causes students to drop out of high school – about 40% of GED recipients report that they earned a GED in part because it was easier than graduating high school (National Center for Education Statistics, 2006)
- Causes people to think they are ready for college when they might not be prepared
- Distorts social statistics

What should be done?

- 1 Ensure that people at all levels understand what the GED and other achievement tests measure (students, teachers, policy-makers)
- 2 Recognize that simply making the test harder might not solve the fundamental problems with the GED
- 3 Complement school curricula and basic education programs with programs that enhance character skills (early childhood, work-based training)

- Hansen, K. T., J. J. Heckman, and K. J. Mullen (2004, July–August). The effect of schooling and ability on achievement test scores. *Journal of Econometrics* 121(1–2), 39–98.
- Heckman, J. J., J. E. Humphries, and T. Kautz (2014). *The Myth of Achievement Tests: The GED and the Role of Character in American Life*. Chicago, IL: University of Chicago Press. Forthcoming.
- Heckman, J. J., J. E. Humphries, S. Urzúa, and G. Veramendi (2011). The effects of educational choices on labor market, health, and social outcomes. Unpublished manuscript, University of Chicago, Department of Economics.
- National Center for Education Statistics (2006). Education Longitudinal Study of 2002, First Follow-up, Student Survey. Report ELS:2004/04, National Center for Education Statistics, Washington, DC.
- Zhang, J., A. Guison-Dowdy, M. B. Patterson, and W. Song (2011). Crossing the Bridge: GED Credentials and Postsecondary Educational Outcomes. Year two report, GED Testing Services.